Department of Defense
Fiscal Year (FY) 2016 President's Budget Submission
February 2015

Army
Justification Book of
Aircraft Procurement, Army

UNCLASSIFIED
The following Justification Books were prepared at a cost of $1,187,353.84: Aircraft (ACFT), Missile (MSLS), Weapons & Tracked Combat Vehicles (WTCV), Ammunition (AMMO), Other Procurement Army (OPA) 1 - Tactical & Support Vehicles, Other Procurement Army (OPA) 2 - Communications & Electronics, Other Procurement Army (OPA) 3 & 4 - Other Support Equipment & Spares, Research, Development, Test and Evaluation (RDTE) for: Budget Activity 1, Budget Activity 2, Budget Activity 3, Budget Activity 4, Budget Activity 5A, Budget Activity 5B, Budget Activity 6, and Budget Activity 7.
AIRCRAFT PROCUREMENT, ARMY

Appropriation Language

For construction, procurement, and modification of aircraft and equipment, including armor and armament, specialized ground handling equipment, and training devices, spare parts, and accessories therefore; specialized equipment; expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things, $5,689,357,000 Base and 164,987,000 OCO to remain available for obligations until September 30, 2019.
<table>
<thead>
<tr>
<th>Appropriation</th>
<th>FY 2014 (Base &amp; OCO)</th>
<th>FY 2015 Base Enacted</th>
<th>FY 2015 OCO Enacted</th>
<th>FY 2015 Total Enacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Procurement, Army</td>
<td>5,082,533</td>
<td>5,216,225</td>
<td>196,200</td>
<td>5,412,425</td>
</tr>
<tr>
<td>Total Department of the Army</td>
<td>5,082,533</td>
<td>5,216,225</td>
<td>196,200</td>
<td>5,412,425</td>
</tr>
<tr>
<td>Appropriation</td>
<td>FY 2016 Base</td>
<td>FY 2016 OCO</td>
<td>FY 2016 Total</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>-------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>Aircraft Procurement, Army</td>
<td>5,689,357</td>
<td>164,987</td>
<td>5,854,344</td>
<td></td>
</tr>
<tr>
<td>Total Department of the Army</td>
<td>5,689,357</td>
<td>164,987</td>
<td>5,854,344</td>
<td></td>
</tr>
</tbody>
</table>
### Appropriation: Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Budget Activity</th>
<th>FY 2014 (Base &amp; OCO)</th>
<th>FY 2015 Base Enacted</th>
<th>FY 2015 OCO Enacted</th>
<th>FY 2015 Total Enacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Aircraft</td>
<td>3,956,708</td>
<td>3,965,716</td>
<td>196,200</td>
<td>4,161,916</td>
</tr>
<tr>
<td>02. Modification of Aircraft</td>
<td>772,161</td>
<td>877,724</td>
<td></td>
<td>877,724</td>
</tr>
<tr>
<td>04. Support Equipment and Facilities</td>
<td>353,664</td>
<td>372,785</td>
<td></td>
<td>372,785</td>
</tr>
<tr>
<td>Total Aircraft Procurement, Army</td>
<td>5,082,533</td>
<td>5,316,225</td>
<td>196,200</td>
<td>5,412,425</td>
</tr>
</tbody>
</table>
Appropriation: Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Budget Activity</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Aircraft</td>
<td>4,560,479</td>
<td>116,037</td>
<td>4,676,516</td>
</tr>
<tr>
<td>02. Modification of Aircraft</td>
<td>770,745</td>
<td>48,950</td>
<td>819,695</td>
</tr>
<tr>
<td>04. Support Equipment and Facilities</td>
<td>358,133</td>
<td></td>
<td>358,133</td>
</tr>
</tbody>
</table>

Total Aircraft Procurement, Army: 5,689,357 + 164,987 = 5,854,344
## Appropriation: 2031A Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line No</th>
<th>Item Nomenclature</th>
<th>FY 2014 Base (OCC)</th>
<th>FY 2015 Base Enacted</th>
<th>FY 2015 OCC Enacted</th>
<th>FY 2015 Total Enacted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Quantity</td>
<td>Cost</td>
<td>Quantity</td>
<td>Cost</td>
</tr>
<tr>
<td>1</td>
<td>Saturn Arch (MIP)</td>
<td>64,000</td>
<td>10,797</td>
<td>1</td>
<td>10,787</td>
</tr>
<tr>
<td>2</td>
<td>Utility F/W Aircraft</td>
<td>2</td>
<td>18,052</td>
<td>1</td>
<td>10,797</td>
</tr>
<tr>
<td>3</td>
<td>Aerial Common Sensor (ACS) (MIP)</td>
<td>4</td>
<td>54,700</td>
<td>2</td>
<td>36,000</td>
</tr>
<tr>
<td>4</td>
<td>MQ-1 UAV</td>
<td>15</td>
<td>500,547</td>
<td>10</td>
<td>165,890</td>
</tr>
<tr>
<td>5</td>
<td>MQ-11 (RAVEN)</td>
<td>10,372</td>
<td>3,964</td>
<td>19</td>
<td>238,081</td>
</tr>
</tbody>
</table>

### Fixed Wing

| 6       | Helicopter, Light Utility (LUH) | 37 | 256,434 | 55 | 401,617 |
| 7       | AH-64 Apache Block IIIA Reman Less: Advance Procurement (FY) | 42 | (715,911) | 6 | (144,000) |
|         | Less: Advance Procurement (FY) | 601,669 | 572,009 | 144,000 | 716,009 |
| 8       | AH-64 Apache Block IIIA Reman Advance Procurement (CY) | 150,931 | 157,338 | 157,338 |
| 9       | AH-64 Apache Block IIIB New Build Less: Advance Procurement (FY) | 4 | (298,999) | 142,000 |
|         | Less: Advance Procurement (FY) | 142,000 |
| 10      | Kiowa Warrior WRA | 9 | 142,000 |
| 11      | UH-60 Blackhawk M Model (MYP) Less: Advance Procurement (FY) | 70 | (1,212,916) | 86 | (1,452,834) |
|         | Less: Advance Procurement (FY) | 1,112,976 | 1,340,027 | 16,200 | 1,356,227 |
| 12      | UH-60 Blackhawk M Model (MYP) Advance Procurement (CY) | 116,001 | 117,138 | 117,138 |
Appropriation: 2031A Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line No</th>
<th>Item Nomenclature</th>
<th>FY 2016 Base Code</th>
<th>FY 2016 OCO Code</th>
<th>FY 2016 Total Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Quantity</td>
<td>Cost</td>
<td>Quantity</td>
</tr>
<tr>
<td>1</td>
<td>Saturn Arch (MIP)</td>
<td>A</td>
<td>879</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Utility F/W Aircraft</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Aerial Common Sensor (ACS) (MIP)</td>
<td>A</td>
<td>5</td>
<td>99,500</td>
</tr>
<tr>
<td>4</td>
<td>MQ-1 UAV</td>
<td>A</td>
<td>15</td>
<td>260,436</td>
</tr>
<tr>
<td>5</td>
<td>RQ-11 (RAVEN)</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fixed Wing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Helicopter, Light Utility (LH)</td>
<td>A</td>
<td>28</td>
<td>187,277</td>
</tr>
<tr>
<td>7</td>
<td>AH-64 Apache Block IIIA Reman Less: Advance Procurement (FY)</td>
<td>A</td>
<td>64</td>
<td>(1,325,799)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>AH-64 Apache Block IIIA Reman Advance Procurement (CY)</td>
<td>A</td>
<td>209,930</td>
<td>209,930 U</td>
</tr>
<tr>
<td>9</td>
<td>AH-64 Apache Block IIIIB New Build Less: Advance Procurement (FY)</td>
<td>A</td>
<td>0</td>
<td>0 U</td>
</tr>
<tr>
<td>10</td>
<td>Kiowa Warrior WRA</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>UH-60 Blackhawk M Model (MYP) Less: Advance Procurement (FY)</td>
<td>94</td>
<td>(1,556,277)</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>UH-60 Blackhawk M Model (MYP) Advance Procurement (CY)</td>
<td>127,079</td>
<td>127,079 U</td>
<td></td>
</tr>
</tbody>
</table>

P-1C1: FY 2016 President's Budget (Published Version of P3 Position), as of January 15, 2015 at 15:21:57
### Appropriation: 2031A Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line</th>
<th>Item Nomenclature</th>
<th>FY 2014 (Base &amp; OCO)</th>
<th>FY 2015 Base Enacted</th>
<th>FY 2015 OCO Enacted</th>
<th>FY 2015 Total Enacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>UH-60 Black Hawk A and L Models</td>
<td>A</td>
<td>13 (915,791) (-77,141)</td>
<td>32 (982,880) (-90,376)</td>
<td>32 (982,880) (-90,376)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>838,650</td>
<td>892,504</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>CH-47 Helicopter</td>
<td>A</td>
<td>39</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Less: Advance Procurement (FY)</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>CH-47 Helicopter</td>
<td></td>
<td>90,376</td>
<td>102,361</td>
<td>102,361</td>
</tr>
<tr>
<td></td>
<td>Advance Procurement (CY)</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Aircraft</td>
<td>A</td>
<td>3,956,708</td>
<td>3,965,716</td>
<td>196,200</td>
</tr>
</tbody>
</table>

### Budget Activity 02: Modification of Aircraft

<table>
<thead>
<tr>
<th>Line</th>
<th>Item Nomenclature</th>
<th>FY 2014 (Base &amp; OCO)</th>
<th>FY 2015 Base Enacted</th>
<th>FY 2015 OCO Enacted</th>
<th>FY 2015 Total Enacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>MQ-1 Payload (MIP)</td>
<td>A</td>
<td>25,313</td>
<td>25,313</td>
<td>25,313</td>
</tr>
<tr>
<td>17</td>
<td>MQ-1 Payload - UAS</td>
<td>A</td>
<td>97,781</td>
<td></td>
<td>97,781</td>
</tr>
<tr>
<td>18</td>
<td>Guardrail Mods (MIP)</td>
<td>A</td>
<td>10,262</td>
<td>14,182</td>
<td>14,182</td>
</tr>
<tr>
<td>19</td>
<td>Multi Sensor ABN Recon (MIP)</td>
<td>A</td>
<td>10,467</td>
<td>131,892</td>
<td>131,892</td>
</tr>
<tr>
<td>20</td>
<td>AH-64 Mods</td>
<td>A</td>
<td>48,487</td>
<td>181,869</td>
<td>181,869</td>
</tr>
<tr>
<td>21</td>
<td>CH-47 Cargo Helicopter Mods (MIP)</td>
<td>A</td>
<td>91,064</td>
<td>32,092</td>
<td>32,092</td>
</tr>
<tr>
<td>22</td>
<td>GRCS SENA Mods (MIP)</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>ARL SENA Mods (MIP)</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>KMARSS SENA Mods (MIP)</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Utility/Cargo Airplane Mods</td>
<td>A</td>
<td>11,500</td>
<td>15,029</td>
<td>15,029</td>
</tr>
<tr>
<td>26</td>
<td>Utility Helicopter Mods</td>
<td>A</td>
<td>88,095</td>
<td>76,515</td>
<td>76,515</td>
</tr>
<tr>
<td>27</td>
<td>Kiowa Mods Warrior</td>
<td>A</td>
<td>108,282</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Network and Mission Plan</td>
<td>A</td>
<td>59,326</td>
<td>105,380</td>
<td>105,380</td>
</tr>
</tbody>
</table>

P-1CL: FY 2016 President's Budget (Published Version of PB Position), as of January 15, 2015 at 15:21:57
<table>
<thead>
<tr>
<th>Line No</th>
<th>Item Nomenclature</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ident Code</td>
<td>Quantity</td>
<td>Cost</td>
<td>Quantity</td>
<td>Cost</td>
</tr>
<tr>
<td>13</td>
<td>UH-60 Black Hawk A and L Models</td>
<td>A</td>
<td>40</td>
<td>46,641</td>
<td>40</td>
</tr>
<tr>
<td>14</td>
<td>CH-47 Helicopter</td>
<td>A</td>
<td>39</td>
<td>(1,126,948)</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Less: Advance Procurement (FY)</td>
<td></td>
<td>(-102,361)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,024,587</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>CH-47 Helicopter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advance Procurement (CY)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>99,344</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Aircraft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4,560,479</td>
<td>116,037</td>
<td></td>
</tr>
</tbody>
</table>

Budget Activity 02: Modification of Aircraft

<table>
<thead>
<tr>
<th>Modification of Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 MQ-1 Payload (MIP)</td>
</tr>
<tr>
<td>17 MQ-1 Payload - UAS</td>
</tr>
<tr>
<td>18 Guardrail Mods (MIP)</td>
</tr>
<tr>
<td>19 Multi Sensor ABN Recon (MIP)</td>
</tr>
<tr>
<td>20 AH-64 Mods</td>
</tr>
<tr>
<td>21 CH-47 Cargo Helicopter Mods (MIP)</td>
</tr>
<tr>
<td>22 GRC5 SMEA Mods (MIP)</td>
</tr>
<tr>
<td>23 ARL SMEA Mods (MIP)</td>
</tr>
<tr>
<td>24 EMARSS SMEA Mods (MIP)</td>
</tr>
<tr>
<td>25 Utility/Cargo Airplane Mods</td>
</tr>
<tr>
<td>26 Utility Helicopter Mods</td>
</tr>
<tr>
<td>27 Kiowa Mods Warrior</td>
</tr>
<tr>
<td>28 Network and Mission Plan</td>
</tr>
</tbody>
</table>

P-1Cl: FY 2016 President's Budget (Published Version of PB Position), as of January 15, 2015 at 15:21:57
### Appropriation: 2031A Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line No</th>
<th>Item Nomenclature</th>
<th>FY 2014 (Base &amp; OCO)</th>
<th>FY 2015 Base Enacted</th>
<th>FY 2015 OCC Enacted</th>
<th>FY 2015 Total Enacted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ident Code</td>
<td>Quantity</td>
<td>Cost</td>
<td>Quantity</td>
</tr>
<tr>
<td>29</td>
<td>Comms, Nav Surveillance</td>
<td>A</td>
<td>74,613</td>
<td>115,795</td>
<td>115,795</td>
</tr>
<tr>
<td>30</td>
<td>GATM Rollup</td>
<td>A</td>
<td>50,382</td>
<td>54,277</td>
<td>54,277</td>
</tr>
<tr>
<td>31</td>
<td>RO-7 UAV MODS</td>
<td>A</td>
<td>121,902</td>
<td>125,380</td>
<td>125,380</td>
</tr>
<tr>
<td></td>
<td><strong>Total Modification of Aircraft</strong></td>
<td></td>
<td>772,161</td>
<td>877,724</td>
<td>877,724</td>
</tr>
<tr>
<td></td>
<td><strong>Budget Activity 04: Support Equipment and Facilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Aircraft Survivability Equipment</td>
<td></td>
<td>47,610</td>
<td>89,059</td>
<td>89,059</td>
</tr>
<tr>
<td>33</td>
<td>Survivability CM</td>
<td></td>
<td>5,700</td>
<td>7,800</td>
<td>7,800</td>
</tr>
<tr>
<td>34</td>
<td>CMWS</td>
<td>A</td>
<td>103,021</td>
<td>60,401</td>
<td>60,401</td>
</tr>
<tr>
<td></td>
<td><strong>Other Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Avionics Support Equipment</td>
<td></td>
<td>6,809</td>
<td>6,847</td>
<td>6,847</td>
</tr>
<tr>
<td>36</td>
<td>Common Ground Equipment</td>
<td></td>
<td>45,999</td>
<td>29,231</td>
<td>29,231</td>
</tr>
<tr>
<td>37</td>
<td>Aircrew Integrated Systems</td>
<td></td>
<td>45,841</td>
<td>48,081</td>
<td>48,081</td>
</tr>
<tr>
<td>38</td>
<td>Air Traffic Control</td>
<td></td>
<td>94,192</td>
<td>127,232</td>
<td>127,232</td>
</tr>
<tr>
<td>39</td>
<td>Industrial Facilities</td>
<td></td>
<td>1,615</td>
<td>1,203</td>
<td>1,203</td>
</tr>
<tr>
<td>40</td>
<td>Launcher, 2.75 Rocket</td>
<td>273</td>
<td>2,877</td>
<td>2,931</td>
<td>2,931</td>
</tr>
<tr>
<td></td>
<td><strong>Total Support Equipment and Facilities</strong></td>
<td></td>
<td>353,664</td>
<td>372,785</td>
<td>372,785</td>
</tr>
<tr>
<td></td>
<td><strong>Total Aircraft Procurement, Army</strong></td>
<td></td>
<td>5,082,533</td>
<td>5,216,225</td>
<td>5,216,225</td>
</tr>
</tbody>
</table>
# Appropriation: 2031A Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line No</th>
<th>Item Nomenclature</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>S Budget Activity 04: Support Equipment and Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Comms, Nav Surveillance</td>
<td>A</td>
<td>82,904</td>
<td></td>
<td>82,904</td>
</tr>
<tr>
<td>30</td>
<td>GATM Rollup</td>
<td>A</td>
<td>33,890</td>
<td></td>
<td>33,890</td>
</tr>
<tr>
<td>31</td>
<td>RQ-7 UAV MODS</td>
<td>A</td>
<td>81,444</td>
<td>8,250</td>
<td>89,694</td>
</tr>
<tr>
<td>Total</td>
<td>Modification of Aircraft</td>
<td></td>
<td>770,745</td>
<td>48,950</td>
<td>819,695</td>
</tr>
<tr>
<td>32</td>
<td>Aircraft Avionics Equipment</td>
<td></td>
<td>56,215</td>
<td></td>
<td>56,215</td>
</tr>
<tr>
<td>33</td>
<td>Survivability CM</td>
<td></td>
<td>8,917</td>
<td></td>
<td>8,917</td>
</tr>
<tr>
<td>34</td>
<td>CMWS</td>
<td>A</td>
<td>78,348</td>
<td></td>
<td>78,348</td>
</tr>
<tr>
<td>35</td>
<td>Avionics Support Equipment</td>
<td></td>
<td>6,937</td>
<td></td>
<td>6,937</td>
</tr>
<tr>
<td>36</td>
<td>Common Ground Equipment</td>
<td></td>
<td>64,867</td>
<td></td>
<td>64,867</td>
</tr>
<tr>
<td>37</td>
<td>Aircrew Integrated Systems</td>
<td></td>
<td>44,085</td>
<td></td>
<td>44,085</td>
</tr>
<tr>
<td>38</td>
<td>Air Traffic Control</td>
<td></td>
<td>94,545</td>
<td></td>
<td>94,545</td>
</tr>
<tr>
<td>39</td>
<td>Industrial Facilities</td>
<td></td>
<td>1,207</td>
<td></td>
<td>1,207</td>
</tr>
<tr>
<td>40</td>
<td>Launcher, 2.75 Rocket</td>
<td></td>
<td>3,012</td>
<td></td>
<td>3,012</td>
</tr>
<tr>
<td>Total</td>
<td>Support Equipment and Facilities</td>
<td></td>
<td>358,133</td>
<td></td>
<td>358,133</td>
</tr>
<tr>
<td>Total</td>
<td>Aircraft Procurement, Army</td>
<td></td>
<td>5,689,357</td>
<td>164,987</td>
<td>5,854,344</td>
</tr>
</tbody>
</table>

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 15, 2015 at 15:21:57
Table of Contents

Line Item Table of Contents (by Appropriation then Line Number)................................................................. ii
Line Item Table of Contents (Alphabetically by Line Item Title)........................................................................... v
Exhibit P-40s......................................................................................................................................................... 1
## Appropriation 2031A: Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line #</th>
<th>BA</th>
<th>BSA</th>
<th>Line Item Number</th>
<th>Line Item Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01</td>
<td>10</td>
<td>A11301</td>
<td>SATURN ARCH (MIP)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>01</td>
<td>10</td>
<td>A11300</td>
<td>Utility F/W Aircraft</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>01</td>
<td>10</td>
<td>A02005</td>
<td>Aerial Common Sensor (ACS) (MIP)</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>01</td>
<td>10</td>
<td>A00005</td>
<td>MQ-1 UAV</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>01</td>
<td>10</td>
<td>A00010</td>
<td>RQ-11 (RAVEN)</td>
<td>37</td>
</tr>
<tr>
<td>6</td>
<td>01</td>
<td>20</td>
<td>A05001</td>
<td>Helicopter, Light Utility (LUH)</td>
<td>41</td>
</tr>
<tr>
<td>7</td>
<td>01</td>
<td>20</td>
<td>A05111</td>
<td>AH-64 Apache Block IIIA Reman</td>
<td>51</td>
</tr>
<tr>
<td>8</td>
<td>01</td>
<td>20</td>
<td>A05111</td>
<td>AH-64 Apache Block IIIA Reman, Advance Procurement</td>
<td>59</td>
</tr>
<tr>
<td>9</td>
<td>01</td>
<td>20</td>
<td>A05133</td>
<td>AH-64 Apache Block IIIB New Build</td>
<td>63</td>
</tr>
<tr>
<td>10</td>
<td>01</td>
<td>20</td>
<td>AA0005</td>
<td>UH-60 Blackhawk M Model (MYP)</td>
<td>70</td>
</tr>
<tr>
<td>11</td>
<td>01</td>
<td>20</td>
<td>AA0005</td>
<td>UH-60 Blackhawk M Model (MYP), Advance Procurement</td>
<td>80</td>
</tr>
<tr>
<td>12</td>
<td>01</td>
<td>20</td>
<td>A05009</td>
<td>UH-60 BLACK HAWK A AND L MODELS</td>
<td>84</td>
</tr>
<tr>
<td>13</td>
<td>01</td>
<td>20</td>
<td>A05101</td>
<td>CH-47 Helicopter</td>
<td>90</td>
</tr>
<tr>
<td>14</td>
<td>01</td>
<td>20</td>
<td>A05101</td>
<td>CH-47 Helicopter, Advance Procurement</td>
<td>104</td>
</tr>
</tbody>
</table>
### Appropriation 2031A: Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line #</th>
<th>BA</th>
<th>BSA</th>
<th>Line Item Number</th>
<th>Line Item Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>02</td>
<td>10</td>
<td>A01001</td>
<td>MQ-1 Payload (MIP)</td>
<td>108</td>
</tr>
<tr>
<td>16</td>
<td>02</td>
<td>10</td>
<td>A00020</td>
<td>MQ-1 Payload - UAS</td>
<td>127</td>
</tr>
<tr>
<td>17</td>
<td>02</td>
<td>10</td>
<td>AZ20000</td>
<td>Guardrail Mods (MIP)</td>
<td>136</td>
</tr>
<tr>
<td>18</td>
<td>02</td>
<td>10</td>
<td>AZ20001</td>
<td>Multi Sensor ABN Recon (MIP)</td>
<td>143</td>
</tr>
<tr>
<td>19</td>
<td>02</td>
<td>10</td>
<td>AA6605</td>
<td>AH-64 MODS</td>
<td>159</td>
</tr>
<tr>
<td>20</td>
<td>02</td>
<td>10</td>
<td>AA0252</td>
<td>CH-47 Cargo Helicopter Mods (MYP)</td>
<td>188</td>
</tr>
<tr>
<td>21</td>
<td>02</td>
<td>10</td>
<td>A02111</td>
<td>GRCS SEMA Mods (MIP)</td>
<td>209</td>
</tr>
<tr>
<td>22</td>
<td>02</td>
<td>10</td>
<td>A02110</td>
<td>ARL SEMA Mods (MIP)</td>
<td>214</td>
</tr>
<tr>
<td>23</td>
<td>02</td>
<td>10</td>
<td>A02112</td>
<td>EMARSS SEMA Mods (MIP)</td>
<td>219</td>
</tr>
<tr>
<td>24</td>
<td>02</td>
<td>10</td>
<td>AA0270</td>
<td>Utility/Cargo Airplane Mods</td>
<td>224</td>
</tr>
<tr>
<td>25</td>
<td>02</td>
<td>10</td>
<td>AA0480</td>
<td>Utility Helicopter Mods</td>
<td>230</td>
</tr>
<tr>
<td>26</td>
<td>02</td>
<td>10</td>
<td>AZ22000</td>
<td>Kiowa Mods Warrior</td>
<td>242</td>
</tr>
<tr>
<td>27</td>
<td>02</td>
<td>10</td>
<td>AA0712</td>
<td>Network And Mission Plan</td>
<td>244</td>
</tr>
<tr>
<td>28</td>
<td>02</td>
<td>10</td>
<td>AA0723</td>
<td>Comms, Nav Surveillance</td>
<td>257</td>
</tr>
<tr>
<td>29</td>
<td>02</td>
<td>10</td>
<td>AA0711</td>
<td>GATM Rollup</td>
<td>272</td>
</tr>
<tr>
<td>30</td>
<td>02</td>
<td>10</td>
<td>A00018</td>
<td>RQ-7 UAV MODS</td>
<td>292</td>
</tr>
</tbody>
</table>
Appropriation 2031A: Aircraft Procurement, Army

<table>
<thead>
<tr>
<th>Line #</th>
<th>BA</th>
<th>BSA</th>
<th>Line Item Number</th>
<th>Line Item Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>04</td>
<td>10</td>
<td>AZ3504</td>
<td>Aircraft Survivability Equipment</td>
<td>303</td>
</tr>
<tr>
<td>32</td>
<td>04</td>
<td>10</td>
<td>AZ3507</td>
<td>Survivability CM</td>
<td>319</td>
</tr>
<tr>
<td>33</td>
<td>04</td>
<td>10</td>
<td>AZ3517</td>
<td>CMWS</td>
<td>322</td>
</tr>
<tr>
<td>34</td>
<td>04</td>
<td>30</td>
<td>AZ3000</td>
<td>Avionics Support Equipment</td>
<td>331</td>
</tr>
<tr>
<td>35</td>
<td>04</td>
<td>30</td>
<td>AZ3100</td>
<td>Common Ground Equipment</td>
<td>338</td>
</tr>
<tr>
<td>36</td>
<td>04</td>
<td>30</td>
<td>AZ3110</td>
<td>Aircrew Integrated Systems</td>
<td>342</td>
</tr>
<tr>
<td>37</td>
<td>04</td>
<td>30</td>
<td>AA0050</td>
<td>Air Traffic Control</td>
<td>350</td>
</tr>
<tr>
<td>38</td>
<td>04</td>
<td>30</td>
<td>AZ3300</td>
<td>Industrial Facilities</td>
<td>355</td>
</tr>
<tr>
<td>39</td>
<td>04</td>
<td>30</td>
<td>A50100</td>
<td>Launcher, 2.75 Rocket</td>
<td>358</td>
</tr>
</tbody>
</table>
## Line Item Table of Contents (Alphabetically by Line Item Title)

<table>
<thead>
<tr>
<th>Line Item Title</th>
<th>Line Item Number</th>
<th>Line #</th>
<th>BA</th>
<th>BSA</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH-64 Apache Block IIIA Reman</td>
<td>A05111</td>
<td>7</td>
<td>01</td>
<td>20</td>
<td>51</td>
</tr>
<tr>
<td>AH-64 Apache Block IIIA Reman, Advance Procurement</td>
<td>A05111</td>
<td>8</td>
<td>01</td>
<td>20</td>
<td>59</td>
</tr>
<tr>
<td>AH-64 Apache Block IIIB New Build</td>
<td>A05133</td>
<td>9</td>
<td>01</td>
<td>20</td>
<td>63</td>
</tr>
<tr>
<td>AH-64 MODS</td>
<td>AA6605</td>
<td>19</td>
<td>02</td>
<td>10</td>
<td>159</td>
</tr>
<tr>
<td>ARL SEMA Mods (MIP)</td>
<td>A02110</td>
<td>22</td>
<td>02</td>
<td>10</td>
<td>214</td>
</tr>
<tr>
<td>Aerial Common Sensor (ACS) (MIP)</td>
<td>A02005</td>
<td>3</td>
<td>01</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Air Traffic Control</td>
<td>AA0050</td>
<td>37</td>
<td>04</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td>Aircraft Survivability Equipment</td>
<td>AZ3504</td>
<td>31</td>
<td>04</td>
<td>10</td>
<td>303</td>
</tr>
<tr>
<td>Aircrew Integrated Systems</td>
<td>AZ3110</td>
<td>36</td>
<td>04</td>
<td>30</td>
<td>342</td>
</tr>
<tr>
<td>Avionics Support Equipment</td>
<td>AZ3000</td>
<td>34</td>
<td>04</td>
<td>30</td>
<td>331</td>
</tr>
<tr>
<td>CH-47 Cargo Helicopter Mods (MYP)</td>
<td>AA0252</td>
<td>20</td>
<td>02</td>
<td>10</td>
<td>188</td>
</tr>
<tr>
<td>CH-47 Helicopter</td>
<td>A05101</td>
<td>13</td>
<td>01</td>
<td>20</td>
<td>90</td>
</tr>
<tr>
<td>CH-47 Helicopter, Advance Procurement</td>
<td>A05101</td>
<td>14</td>
<td>01</td>
<td>20</td>
<td>104</td>
</tr>
<tr>
<td>CMWS</td>
<td>AZ3517</td>
<td>33</td>
<td>04</td>
<td>10</td>
<td>322</td>
</tr>
<tr>
<td>Common Ground Equipment</td>
<td>AZ3100</td>
<td>35</td>
<td>04</td>
<td>30</td>
<td>338</td>
</tr>
<tr>
<td>Comms, Nav Surveillance</td>
<td>AA0723</td>
<td>28</td>
<td>02</td>
<td>10</td>
<td>257</td>
</tr>
<tr>
<td>EMARSS SEMA Mods (MIP)</td>
<td>A02112</td>
<td>23</td>
<td>02</td>
<td>10</td>
<td>219</td>
</tr>
<tr>
<td>Line Item Title</td>
<td>Line Item Number</td>
<td>Line #</td>
<td>BA</td>
<td>BSA</td>
<td>Page</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------</td>
<td>--------</td>
<td>----</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>GATM Rollup</td>
<td>AA0711</td>
<td>29</td>
<td>02</td>
<td>10</td>
<td>272</td>
</tr>
<tr>
<td>GRCS SEMA Mods (MIP)</td>
<td>A02111</td>
<td>21</td>
<td>02</td>
<td>10</td>
<td>209</td>
</tr>
<tr>
<td>Guardrail Mods (MIP)</td>
<td>AZ2000</td>
<td>17</td>
<td>02</td>
<td>10</td>
<td>136</td>
</tr>
<tr>
<td>Helicopter, Light Utility (LUH)</td>
<td>A05001</td>
<td>6</td>
<td>01</td>
<td>20</td>
<td>41</td>
</tr>
<tr>
<td>Industrial Facilities</td>
<td>AZ3300</td>
<td>38</td>
<td>04</td>
<td>30</td>
<td>355</td>
</tr>
<tr>
<td>Kiowa Mods Warrior</td>
<td>AZ2200</td>
<td>26</td>
<td>02</td>
<td>10</td>
<td>242</td>
</tr>
<tr>
<td>Launcher, 2.75 Rocket</td>
<td>A50100</td>
<td>39</td>
<td>04</td>
<td>30</td>
<td>358</td>
</tr>
<tr>
<td>MQ-1 Payload (MIP)</td>
<td>A01001</td>
<td>15</td>
<td>02</td>
<td>10</td>
<td>108</td>
</tr>
<tr>
<td>MQ-1 Payload - UAS</td>
<td>A00020</td>
<td>16</td>
<td>02</td>
<td>10</td>
<td>127</td>
</tr>
<tr>
<td>MQ-1 UAV</td>
<td>A00005</td>
<td>4</td>
<td>01</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Multi Sensor ABN Recon (MIP)</td>
<td>AZ2001</td>
<td>18</td>
<td>02</td>
<td>10</td>
<td>143</td>
</tr>
<tr>
<td>Network And Mission Plan</td>
<td>AA0712</td>
<td>27</td>
<td>02</td>
<td>10</td>
<td>244</td>
</tr>
<tr>
<td>RQ-11 (RAVEN)</td>
<td>A00010</td>
<td>5</td>
<td>01</td>
<td>10</td>
<td>37</td>
</tr>
<tr>
<td>RQ-7 UAV MODS</td>
<td>A00018</td>
<td>30</td>
<td>02</td>
<td>10</td>
<td>292</td>
</tr>
<tr>
<td>SATURN ARCH (MIP)</td>
<td>A11301</td>
<td>1</td>
<td>01</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Survivability CM</td>
<td>AZ3507</td>
<td>32</td>
<td>04</td>
<td>10</td>
<td>319</td>
</tr>
<tr>
<td>UH-60 BLACK HAWK A AND L MODELS</td>
<td>A05009</td>
<td>12</td>
<td>01</td>
<td>20</td>
<td>84</td>
</tr>
<tr>
<td>UH-60 Blackhawk M Model (MYP)</td>
<td>AA0005</td>
<td>10</td>
<td>01</td>
<td>20</td>
<td>70</td>
</tr>
<tr>
<td>UH-60 Blackhawk M Model (MYP), Advance Procurement</td>
<td>AA0005</td>
<td>11</td>
<td>01</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Utility F/W Aircraft</td>
<td>A11300</td>
<td>2</td>
<td>01</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Line Item Title</td>
<td>Line Item Number</td>
<td>Line #</td>
<td>BA</td>
<td>BSA</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------</td>
<td>--------</td>
<td>----</td>
<td>-----</td>
<td>--------------</td>
</tr>
<tr>
<td>Utility Helicopter Mods</td>
<td>AA0480</td>
<td>25</td>
<td>02</td>
<td>10</td>
<td>230</td>
</tr>
<tr>
<td>Utility/Cargo Airplane Mods</td>
<td>AA0270</td>
<td>24</td>
<td>02</td>
<td>10</td>
<td>224</td>
</tr>
</tbody>
</table>
**Description:**
The Saturn Arch and Desert Owl aircraft are Airborne Intelligence, Surveillance and Reconnaissance (AISR) aircraft that support a suite of imaging sensors designed to provide persistent surveillance to accomplish day and night image collection and exploitation of Improvised Explosive Devices (IEDs) in designated Named Areas of Interest (NAIs).

The Saturn Arch and Desert Owl systems are under the operational control of the Task Force Observe, Detect, Identify, and Neutralize (TF ODIN), Afghanistan.

### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
<td>24,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24,000</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>24,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24,000</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>24,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24,000</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - |
| Flyaway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | - | 12,000.000 | - | - | - | - | - | - |

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>24,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>24,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**Exhibit P-40, Budget Line Item Justification: PB 2016 Army**

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing

**P-1 Line Item Number / Title:**
A11301 / SATURN ARCH (MIP)

**Date:** February 2015

**ID Code** (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prior Years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FY 2014</td>
<td>FY 2015</td>
</tr>
<tr>
<td>Exhibit Code</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
</tr>
<tr>
<td>A11301 / SATURN ARCH (MIP)</td>
<td>P-5, P-5a, P-21</td>
<td>- / -</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>- / -</td>
<td>2 / 24.000</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**

No FY16 Funds requested.

“In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.”
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 10  
**P-1 Line Item Number / Title:** A11301 / SATURN ARCH (MIP)  
**Item Number / Title [DODIC]:** A11301 / SATURN ARCH (MIP)

**Date:** February 2015

#### Resource Summary

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready):</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td></td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td></td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td></td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td></td>
</tr>
</tbody>
</table>

### Prior Years

<table>
<thead>
<tr>
<th></th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System</td>
<td>-</td>
<td>24.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Proc</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1)</td>
<td>-</td>
<td>24.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Proc</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>24.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(For informational purposes only. The corresponding budget requests are documented elsewhere.)

#### Note:
Subtotals or Totals in this exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

<table>
<thead>
<tr>
<th></th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Wing Aircraft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procurement (†)</td>
<td>-</td>
<td>-</td>
<td>12,000.000</td>
<td>24.000</td>
<td>24.000</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>-</td>
<td>-</td>
<td>12,000.000</td>
<td>24.000</td>
<td>24.000</td>
</tr>
<tr>
<td>Subtotal: Flyaway</td>
<td>-</td>
<td>-</td>
<td>12,000.000</td>
<td>24.000</td>
<td>24.000</td>
</tr>
<tr>
<td>Gross/Weapon System</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>-</td>
<td>-</td>
<td>12,000.000</td>
<td>24.000</td>
<td>24.000</td>
</tr>
</tbody>
</table>

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>24.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Army</td>
<td>Quantity</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>24.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
Exhibit P-5a, Procurement History and Planning: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10

P-1 Line Item Number / Title: A11301 / SATURN ARCH (MIP)

Item Number / Title [DODIC]: A11301 / SATURN ARCH (MIP)

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Wing Aircraft Procurement(†)</td>
<td>2014</td>
<td>TBD / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Jun 2014</td>
<td>Jun 2014</td>
<td>2</td>
<td>12,000.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A11301 / SATURN ARCH (MIP)

**Item Number / Title [DODIC]:**
A11301 / SATURN ARCH (MIP)

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>O M C R O # FY SERVICE PROC</td>
<td>ACCEPT PRIOR TO 1 OCT 2013</td>
<td>BAL DUE AS OF 1 OCT</td>
<td>ACCEPT PRIOR TO 1 OCT 2013</td>
<td>BAL DUE AS OF 1 OCT</td>
</tr>
<tr>
<td>Fixed Wing Aircraft Procurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2014 ARMY 2 - 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

```
<table>
<thead>
<tr>
<th>Date</th>
<th>Service</th>
<th>Procurement</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>ARMY</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A2</td>
</tr>
</tbody>
</table>
```

**Fixed Wing Aircraft Procurement**

<table>
<thead>
<tr>
<th>Date</th>
<th>Service</th>
<th>Procurement</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>ARMY</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A2</td>
</tr>
</tbody>
</table>
Exhibit P-21, Production Schedule: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 10

P-1 Line Item Number / Title:
A11301 / SATURN ARCH (MIP)

Item Number / Title [DODIC]:
A11301 / SATURN ARCH (MIP)

Date: February 2015

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>Production Rates (Each / Year)</th>
<th>Procurement Leadtime (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MSR For 2016</td>
<td>1-8-5 For 2016</td>
</tr>
<tr>
<td>1 TBD - TBD</td>
<td></td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
### Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020 To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>31</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>9 Continuing</td>
<td>Continuing</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>281.137</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
<td>0.879</td>
<td>58.213</td>
<td>118.271</td>
<td>108.114</td>
<td>135.298 Continuing</td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>281.137</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
<td>0.879</td>
<td>58.213</td>
<td>118.271</td>
<td>108.114</td>
<td>135.298 Continuing</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>281.137</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
<td>0.879</td>
<td>58.213</td>
<td>118.271</td>
<td>108.114</td>
<td>135.298 Continuing</td>
</tr>
</tbody>
</table>

(Prepared at 2015-02-15)

### Initial Spares ($ in Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Flyaway Unit Cost ($ in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9,068.935</td>
<td>9,026.000</td>
<td>10,787.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Description:

The budget line funds the acquisition of Army fixed wing aircraft to include the procurement of fixed wing aircraft to support Special Electronic Mission Aircraft (SEMA), Mission Support Aircraft (MSA), Transport and Operational Support Airlift (OSA) requirements, training, and other fixed wing support aircraft. This budget line also provides for the acquisition of new commercial-off-the-shelf (COTS), modified COTS, and non-developmental fixed wing aircraft systems including used aircraft systems.

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
<td>0.879</td>
<td>58.213</td>
</tr>
</tbody>
</table>

Total:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
<td>0.879</td>
<td>58.213</td>
</tr>
</tbody>
</table>
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing
A11300 / Utility F/W Aircraft

P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items:

Justification:
FY16 Base procurement dollars in the amount of $0.879 million is for Program Management Support of PM Fixed Wing at Redstone Arsenal AL.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A11300 / Utility F/W Aircraft

**Item Number / Title [DODIC]:**
A11300 / Utility F/W Aircraft

**Date:** February 2015

**ID Code (A=Service Ready, B=Not Service Ready):**

**MDAP/MAIS Code:**

---

**Resource Summary**

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>31</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>281.137</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>281.137</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>281.137</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
</tr>
</tbody>
</table>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

**Note:** Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

---

**Cost Elements**

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fixed Wing Aircraft Procurement (1)</td>
<td>7,358.581</td>
<td>31</td>
<td>228.116</td>
<td>5,576.000</td>
<td>2</td>
</tr>
<tr>
<td>Engineering Change Proposal/Modification</td>
<td>-</td>
<td>-</td>
<td>2.261</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Spares</td>
<td>-</td>
<td>-</td>
<td>12.697</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Test &amp; Evaluation</td>
<td>-</td>
<td>-</td>
<td>1.746</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Program Management</td>
<td>-</td>
<td>-</td>
<td>26.914</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Publication Tech Data</td>
<td>-</td>
<td>-</td>
<td>6.446</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Airworthiness Release</td>
<td>-</td>
<td>-</td>
<td>2.739</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>281.137</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>281.137</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>9,068.935</td>
<td>31</td>
<td>281.137</td>
<td>9,026.000</td>
<td>2</td>
</tr>
</tbody>
</table>

---

**Secondary Distribution**

<table>
<thead>
<tr>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>18.052</td>
<td>10.787</td>
<td>0.879</td>
<td>-</td>
</tr>
<tr>
<td>ID Code (A=Service Ready, B=Not Service Ready)</td>
<td>MDAP/MAIS Code:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(†) indicates the presence of a P-5a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10

P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft

Item Number / Title [DODIC]: A11300 / Utility F/W Aircraft

Date: February 2015
### Exhibit P-5a, Procurement History and Planning: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A11300 / Utility F/W Aircraft

**Item Number / Title [DODIC]:**
A11300 / Utility F/W Aircraft

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>OCO</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date of Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Wing Aircraft Procurement(1)</td>
<td>2014</td>
<td>Beechcraft / Wichita</td>
<td>C / FFP</td>
<td>Wright Patterson Airforce Base</td>
<td>Aug 2014</td>
<td>Jul 2015</td>
<td>2</td>
<td>5,576.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Wing Aircraft Procurement(1)</td>
<td>2015</td>
<td>TBD / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Mar 2015</td>
<td>Nov 2015</td>
<td>1</td>
<td>8,989.000</td>
<td>N</td>
<td>May 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) indicates the presence of a P-21
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 10  
**P-1 Line Item Number / Title:** A11300 / Utility F/W Aircraft  
**Item Number / Title [DODIC]:** A11300 / Utility F/W Aircraft

**Item Number / Title [DODIC]:** A11300 / Utility F/W Aircraft

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>O M C R O # F Y SERVICE</strong></td>
<td><strong>PROC QTY</strong></td>
<td><strong>ACCEPT PRIOR TO 1 OCT 2013</strong></td>
<td><strong>BAL DUE AS OF 1 OCT</strong></td>
<td><strong>BAL DUE AS OF 1 OCT</strong></td>
</tr>
<tr>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fixed Wing Aircraft Procurement

**Prior Years Deliveries:** 31

```
1 2014 ARMY 2 - 2
2 2015 ARMY 1 - 1
```

**Fixed Wing Aircraft Procurement**

```
<table>
<thead>
<tr>
<th>O M C R O # F Y SERVICE</th>
<th><strong>PROC QTY</strong></th>
<th><strong>ACCEPT PRIOR TO 1 OCT 2013</strong></th>
<th><strong>BAL DUE AS OF 1 OCT</strong></th>
<th><strong>BAL DUE AS OF 1 OCT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```
## Exhibit P-21, Production Schedule: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 10

### P-1 Line Item Number / Title:
A11300 / Utility F/W Aircraft

### Item Number / Title [DODIC]:
A11300 / Utility F/W Aircraft

### Date:
February 2015

#### Exhibit P-21, Production Schedule: PB 2016 Army

**Cost Elements (Units in Each)**

<table>
<thead>
<tr>
<th>O/C/R/O #</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROC QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2015</th>
<th>BAL DUE AS OF 1 OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2014</td>
<td>ARMY</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>2015</td>
<td>ARMY</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- **Fixed Wing Aircraft Procurement**
- **Prior Years Deliveries:** 31

<table>
<thead>
<tr>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Cost Elements (Units in Each)**
- **Fixed Wing Aircraft Procurement**
- **Prior Years Deliveries:** 31

<table>
<thead>
<tr>
<th>O/C/R/O #</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROC QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2015</th>
<th>BAL DUE AS OF 1 OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2014</td>
<td>ARMY</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>2015</td>
<td>ARMY</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**Exhibit P-21, Production Schedule: PB 2016 Army**

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A11300 / Utility F/W Aircraft

**Item Number / Title [DODIC]:**
A11300 / Utility F/W Aircraft

**Date:** February 2015

**Date:** February 2015

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Production Rates (Each / Month)</th>
<th>Initial</th>
<th>Procurement Leadtime (Months)</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
<td>Mfg PLT</td>
<td>Total After Oct 1</td>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
<td>Mfg PLT</td>
</tr>
<tr>
<td>1</td>
<td>Beechcraft - Wichita</td>
<td>1</td>
<td>6</td>
<td>18</td>
<td>-</td>
<td>12</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>TBD - TBD</td>
<td>1</td>
<td>6</td>
<td>18</td>
<td>-</td>
<td>12</td>
<td>8</td>
<td>20</td>
</tr>
</tbody>
</table>

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing

P-1 Line Item Number / Title:
A02005 / Aerial Common Sensor (ACS) (MIP)

ID Code (A=Service Ready, B=Not Service Ready): 0605626A

Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>4</td>
<td>10</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>19</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
<td>99.500</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>320.090</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
<td>99.500</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>320.090</td>
</tr>
<tr>
<td>Plus FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
<td>99.500</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>320.090</td>
</tr>
</tbody>
</table>

Initial Spares ($ in Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Flyaway Unit Cost ($ in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Gross/Weapon System Unit Cost ($ in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13,675.000</td>
<td>16,589.000</td>
<td>-</td>
<td>19,900.000</td>
<td>19,900.000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Description:
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 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.

The Army Acquisition Objective for EMARSS is 36 systems, with an Army Procurement Objective of 24, to include the following variants: EMARSS-G (Constant Hawk & TACOP LiDAR); EMARSS-V (VaDER); EMARSS-M (Liberty Project Aircraft (LPA)); and EMARSS-S (Engineering and Manufacturing Development (EMD)) systems.
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing

P-1 Line Item Number / Title:
A02005 / Aerial Common Sensor (ACS) (MIP)

ID Code (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Obligation Authority</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
<td>99.500</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Secondary Distribution: Other Related Program Elements: 0605626A
Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing
P-1 Line Item Number / Title: A02005 / Aerial Common Sensor (ACS) (MIP)

ID Code (A=Service Ready, B=Not Service Ready): 

Program Elements for Code B Items:

<table>
<thead>
<tr>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements: 0605626A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A02005 / Aerial Common Sensor (ACS) (MIP)</td>
<td></td>
</tr>
<tr>
<td>P-5, P-5a, P-21</td>
<td></td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td><strong>Exhibits</strong></td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 may not be exact or add due to rounding.

Justification:

There is no FY 2016 Base Funding on this line. FY 2016 OCO procurement funding in the amount of $99,500 million procures 4 EMARSS-G and 1 EMARSS-M Variant.

FY 2014 $28 million OCO procured one EMARSS-V variant; however, the funding level noted on the P-40 does not include this $28M. The actual FY14 quantity is 2. PB14 requested $142.1M to procure 4 EMARSS systems. The Appropriations Committees reduced the amount to $84.7M and 2 EMARSS systems. Current plan for FY14 is 2 systems.

P40 quantities should read as follows: FY14 Base qty 1, FY14 OCO qty 1, FY15 Base qty 8, FY15 OCO qty 2, and FY16 OCO qty 5; however, the Program Office currently does plan to procure 11 aircraft in FY15 as noted in the Cost Element section of the P-5.

For FY 2016 forward, the overall EMARSS efforts are found in the following two lines; AZ2054 EMARSS Payloads (Project Manager Sensors - Aerial Intelligence (PM SAI)) and A02112 EMARSS SEMA (Project Manager Fixed Wing (PM FW)). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne Intelligence systems to Program Executive Officer for Aviation (PEO-AVN); and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors (PEO-IEWS).

The purpose of AZ2054 is to procure, upgrade, test and integrate sensors; communications architecture for sensor information exploitation and dissemination; test, nonrecurring engineering, and integration in support of the following EMARSS variants: EMARSS-G (Constant Hawk & TACOP LiDAR); EMARSS-V (VaDER); EMARSS-M (Liberty Project Aircraft (LPA)); and EMARSS-S (Engineering and Manufacturing Development (EMD) systems.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

All COMPO 1 Active
## Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 10  
**P-1 Line Item Number / Title:** A02005 / Aerial Common Sensor (ACS) (MIP)  
**Item Number / Title [DODIC]:** A02005 / Aerial Common Sensor (ACS) (MIP)

### Resource Summary

<table>
<thead>
<tr>
<th>Resource Summary</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>4</td>
<td>10</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
<td>99.500</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
<td>99.500</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
<td>99.500</td>
</tr>
</tbody>
</table>

(Initial Spares ($ in Millions) - - - - - -)

(Gross/Weapon System Unit Cost ($ in Thousands) - - - - - - 13,675.000 16,589.000 - 19,900.000 19,900.000)

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

#### Prior Years

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($ K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
<th>Unit Cost ($ K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
<th>Unit Cost ($ K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
<th>Unit Cost ($ K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| ACFT & MEP Integ for QRC to POR 
Mods(G)†  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 27,000.000     | 1          | 27.000           |
| ACFT & MEP Testing 
(G)  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 2,500          | -          | 2.500            |
| ACFT & MEP Integ for QRC to POR 
Mods(M)†  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 13,000.000     | 6          | 78.000           |
| ACFT & MEP Testing 
(M)  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 6.000          | -          | 6.000            |
| VADER 5 Radar Hardware  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 2,500          | -          | 2.500            |
| ECPs - MEP/PED  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 1,000          | -          | 1.000            |
| Production of 
EMARSS-S†  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 1,500.000      | 4          | 6.000            |
| MEP/PED Reset  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 1,500.000      | 4          | 6.000            |
| Subtotal: Recurring Cost  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 35,500         | -          | 35.500           |
| Non Recurring Cost  |                |            |                  |                |            |                  |                |            |                  |                |            |                  |
| Non-Recurring Engineering  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 5.000          | -          | 5.000            |
| Subtotal: Non Recurring Cost  | -              | -          | -                | -              | -          | -                | -              | -          | -                | 5.000          | -          | 5.000            |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>13,675,000</td>
<td>4</td>
<td>54,700</td>
<td>16,589,000</td>
<td>10</td>
<td>165,890</td>
</tr>
<tr>
<td>Hardware Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support Equipment</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Hardware Cost</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Software Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software Licenses</td>
<td>3,000</td>
<td>-</td>
<td>-</td>
<td>3,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>3,000</td>
<td>-</td>
<td>-</td>
<td>3,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Software Cost</td>
<td>3,000</td>
<td>-</td>
<td>-</td>
<td>3,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Logistics Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Spares &amp; Repairs</td>
<td>2,000</td>
<td>-</td>
<td>-</td>
<td>7,700</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Data</td>
<td>0,500</td>
<td>-</td>
<td>-</td>
<td>0,500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>2,500</td>
<td>-</td>
<td>-</td>
<td>7,700</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Non Recurring Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Ops / Manuals / NET</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
<td>2,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Facilitation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Non Recurring Cost</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
<td>3,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Logistics Cost</td>
<td>3,500</td>
<td>-</td>
<td>-</td>
<td>10,700</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Support Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMO / SETA Support</td>
<td>4,200</td>
<td>-</td>
<td>-</td>
<td>9,500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interim Contractor Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Engineering &amp; Test Support</td>
<td>2,500</td>
<td>-</td>
<td>-</td>
<td>2,500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Support Cost</td>
<td>6,700</td>
<td>-</td>
<td>-</td>
<td>20,490</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>13,675,000</td>
<td>4</td>
<td>54,700</td>
<td>16,589,000</td>
<td>10</td>
<td>165,890</td>
</tr>
</tbody>
</table>
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 10

**P-1 Line Item Number / Title:**
A02005 / Aerial Common Sensor (ACS) (MIP)

**Item Number / Title [DODIC]:**
A02005 / Aerial Common Sensor (ACS) (MIP)

**ID Code** (A=Service Ready, B=Not Service Ready): 

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>4</td>
<td>10</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>4</td>
<td>10</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>54.700</td>
<td>165.890</td>
<td>-</td>
<td>99.500</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>O C O</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($ K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACFT &amp; MEP Integ for QRC to POR</td>
<td>2014</td>
<td></td>
<td>TBS / TBS</td>
<td>SS / CPFF</td>
<td>ACC-APG</td>
<td>Feb 2015</td>
<td>Aug 2016</td>
<td>1</td>
<td>27,000.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mods(G)[†]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACFT &amp; MEP Integ for QRC to POR</td>
<td>2015</td>
<td></td>
<td>TBS / TBS</td>
<td>SS / CPFF</td>
<td>ACC-APG</td>
<td>Apr 2015</td>
<td>Oct 2016</td>
<td>1</td>
<td>23,000.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mods(G)[†]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>2016</td>
<td></td>
<td>TBS / TBS</td>
<td>SS / TBD</td>
<td>ACC-Redstone</td>
<td>Jan 2016</td>
<td>Jun 2017</td>
<td>4</td>
<td>14,975.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACFT &amp; MEP Integ for QRC to POR</td>
<td>2015</td>
<td></td>
<td>TBS / TBS</td>
<td>C / CPFF</td>
<td>ACC-Redstone</td>
<td>Apr 2015</td>
<td>Oct 2016</td>
<td>6</td>
<td>13,000.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mods(M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>2016</td>
<td></td>
<td>TBS / TBS</td>
<td>C / CPFF</td>
<td>ACC-Redstone</td>
<td>Jan 2016</td>
<td>Jun 2017</td>
<td>1</td>
<td>13,500.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productization of EMARSS-S[†]</td>
<td>2015</td>
<td></td>
<td>TBS / TBS</td>
<td>C / TBD</td>
<td>ACC-APG</td>
<td>Sep 2015</td>
<td>Jan 2016</td>
<td>4</td>
<td>1,500.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[†] indicates the presence of a P-21

Remarks:
Multiple entries above per fiscal year are representative of separate acquisition and contracting efforts for Aircraft & Integration (PEO AVN/PM FW) and MEP & PED (PEO IEWS/PM SAI).
Exhibit P-21, Production Schedule: PB 2016 Army

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACFT &amp; MEP Integ for QRC to POR Mods(G)</td>
<td>1</td>
<td>2014</td>
<td>ARMY</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>2015</td>
<td>ARMY</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>✓</td>
<td>1</td>
<td>2016</td>
<td>ARMY</td>
<td>1</td>
</tr>
<tr>
<td>ACFT &amp; MEP Integ for QRC to POR Mods(M)</td>
<td>✓</td>
<td>2</td>
<td>2016</td>
<td>ARMY</td>
</tr>
<tr>
<td>Productionization of EMARSS-S</td>
<td>3</td>
<td>2015</td>
<td>ARMY</td>
<td>1</td>
</tr>
</tbody>
</table>

LI A02005 - Aerial Common Sensor (ACS) (MIP)
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A02005 / Aerial Common Sensor (ACS) (MIP)

**Item Number / Title [DODIC]:**
A02005 / Aerial Common Sensor (ACS) (MIP)

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACFT &amp; MEP Integ for QRC to POR Mods(G)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2014 ARMY</td>
<td>1 1 -</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2015 ARMY</td>
<td>1 - 1</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ 1 2016 ARMY</td>
<td>4 - 4</td>
<td>-</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ACFT &amp; MEP Integ for QRC to POR Mods(M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ 2 2016 ARMY</td>
<td>1 - 1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Productization of EMARSS-S</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 2015 ARMY</td>
<td>4 4 -</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### UNCLASSIFIED

**Exhibit P-21, Production Schedule**: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A02005 / Aerial Common Sensor (ACS) (MIP)

**Item Number / Title [DODIC]:**
A02005 / Aerial Common Sensor (ACS) (MIP)

**Date:** February 2015

---

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Initial</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TBS - TBS</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>ALT</td>
<td>ALT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prior to Oct 1</td>
<td>After Oct 1</td>
</tr>
<tr>
<td>2</td>
<td>TBS - TBS</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>ALT</td>
<td>ALT</td>
</tr>
<tr>
<td>3</td>
<td>TBS - TBS</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>ALT</td>
<td>ALT</td>
</tr>
</tbody>
</table>

**Production Rates (Each / Month)***

**Procurement Leadtime (Months)***

---

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing

P-1 Line Item Number / Title: A00005 / MQ-1 UAV

Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
<td>99</td>
<td>23</td>
<td>19</td>
<td>15</td>
<td>2</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>158</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,823.156</td>
<td>500.547</td>
<td>238.081</td>
<td>260.436</td>
<td>16.537</td>
<td>276.973</td>
<td>55.886</td>
<td>10.890</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,905.533</td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,823.156</td>
<td>500.547</td>
<td>238.081</td>
<td>260.436</td>
<td>16.537</td>
<td>276.973</td>
<td>55.886</td>
<td>10.890</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,905.533</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,823.156</td>
<td>500.547</td>
<td>238.081</td>
<td>260.436</td>
<td>16.537</td>
<td>276.973</td>
<td>55.886</td>
<td>10.890</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,905.533</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
Flyaway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |
Gross/Weapon System Unit Cost ($ in Thousands) | 18,415.717 | 21,762.913 | 12,530.579 | 17,362.400 | 8,268.500 | 16,292.529 | - | - | - | - | - | 18,389.449 |

Description:

Gray Eagle provides Reconnaissance, Surveillance, Target Acquisition (RSTA), command and control, communications relay, Signals Intelligence (SIGINT), battle damage assessment, and manned-unmanned teaming capability. Gray Eagle is a dedicated, assured, multi-mission Unmanned Aircraft System (UAS) fielded to all ten Army Divisions to support the commander's combat operations. The Army Special Operations Aviation Command (ARSOAC) Gray Eagle units and Aerial Exploitation Battalions (AEB) Gray Eagle units are self-contained Intelligence, Surveillance and Reconnaissance capabilities teamed with organic Processing, Exploitation and Dissemination that are a global rapidly deployable force that contribute to the Department of Defense Global ISR mission. A Gray Eagle unit consists of either 9 or 12 Aircraft, Universal Ground Control equipment, Standard Equipment Package and Payloads to include: Electro-Optical/Infrared Laser Range Finder/Laser Designator, synthetic aperture radar/ground moving target indicator, communication relay, and up to 4 HELLFIRE Missiles.

The Gray Eagle extended range modification is a Congressional add that transitions the current Gray Eagle to a new configuration extending the range and endurance of the aircraft.

This budget line also includes procurement of, Ground Based Sense and Avoid (GBSAA) hardware, training devices, and new equipment training and fielding. GBSAA provides alternate means of compliance to FAA See and Avoid (SAA) regulations required for access to the National Airspace System (NAS).

AAO is 167.

Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>23</td>
<td>19</td>
<td>15</td>
<td>2</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>500.547</td>
<td>238.081</td>
<td>260.436</td>
<td>16.537</td>
<td>276.973</td>
<td>55.886</td>
<td>10.890</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>23</td>
<td>19</td>
<td>15</td>
<td>2</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>500.547</td>
<td>238.081</td>
<td>260.436</td>
<td>16.537</td>
<td>276.973</td>
<td>55.886</td>
<td>10.890</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing

P-1 Line Item Number / Title: A00005 / MQ-1 UAV

ID Code (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A00005</td>
<td></td>
<td>0305204A, 0305219A</td>
</tr>
</tbody>
</table>

Exhibit Schedule

<table>
<thead>
<tr>
<th>ID CD</th>
<th>Exhibits Schedule</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A00005 / MQ-1 UAV</td>
<td>P-5, P-5a, P-21</td>
<td>99 / 1,823.156</td>
<td>23 / 500.547</td>
<td>19 / 238.081</td>
<td>15 / 260.436</td>
<td>2 / 16.537</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:
FY2016 Gray Eagle Base funding of $260.439 million procures 15 Aircraft with associated ground equipment, New Equipment Training (NET), and Interim Contractor Support.

Gray Eagle enables MUM-T capability as an alternate means of performing the scout mission under the Aviation Restructure Initiative (ARI).

FY2016 OCO funding of $16.537 million procures 2 Attrition Aircraft.

All COMPO 1 Active
## Resource Summary

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior Years</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flyaway Cost</td>
<td>4,457,293</td>
<td>99</td>
<td>441,272</td>
<td>23</td>
<td>108,235</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4,705,870</td>
<td>19</td>
<td>94,542</td>
<td>5,075,000</td>
<td>15</td>
<td>76,125</td>
<td>5,075,000</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>10.955</td>
<td>2</td>
<td>5,075,000</td>
<td>17</td>
<td>86,275</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recurring Cost</strong></td>
<td>775.500</td>
<td>10</td>
<td>7.755</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ground Control Station</strong></td>
<td>3,172.400</td>
<td>10</td>
<td>31.724</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Universal Ground Control Station</strong></td>
<td>3,277.943</td>
<td>35</td>
<td>114.728</td>
<td>10</td>
<td>42.665</td>
<td>4,483.500</td>
<td>6</td>
<td>26,901</td>
</tr>
<tr>
<td><strong>Ground Data Terminal (GDT)</strong></td>
<td>1,229.071</td>
<td>14</td>
<td>17.207</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Universal Ground Data Terminal (UGDT)</strong></td>
<td>1,404.756</td>
<td>45</td>
<td>63.214</td>
<td>3</td>
<td>5.917</td>
<td>1,304.556</td>
<td>9</td>
<td>11,741</td>
</tr>
<tr>
<td><strong>Portable Ground Data Terminal (PGDT)</strong></td>
<td>379.250</td>
<td>4</td>
<td>1.517</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Automatic Take-Off &amp; Landing Sys (ATLS)</strong></td>
<td>869.500</td>
<td>26</td>
<td>22.607</td>
<td>7</td>
<td>11.207</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Satellite Ground Data Terminal (SGDT)</strong></td>
<td>1,786.370</td>
<td>27</td>
<td>48.232</td>
<td>5</td>
<td>12.923</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ground Support Equipment Kits (GSE)</strong></td>
<td>2,456.938</td>
<td>16</td>
<td>39.311</td>
<td>2</td>
<td>5.470</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SATCOM Airborne Data Terminal(SADT)</strong></td>
<td>504.626</td>
<td>91</td>
<td>45.921</td>
<td>23</td>
<td>41.678</td>
<td>1,897.842</td>
<td>19</td>
<td>38,059</td>
</tr>
<tr>
<td><strong>Mobile GCS (MGCS)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

(†) Data not available at this time.
### Prior Years

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2014</th>
<th></th>
<th>FY 2015</th>
<th></th>
<th>FY 2016 Base</th>
<th></th>
<th>FY 2016 OCO</th>
<th></th>
<th>FY 2016 Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($K)</td>
<td>Qty</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
</tr>
<tr>
<td>USGDT Kits</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Extended Range Modification</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tower Trailers</td>
<td>-</td>
<td>-</td>
<td>15.353</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.393</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares</td>
<td>12.153</td>
<td>15</td>
<td>182.299</td>
<td>6.194</td>
<td>333</td>
<td>18.583</td>
<td>-</td>
<td>-</td>
<td>21.918</td>
<td>-</td>
</tr>
<tr>
<td>Battle Loss Payloads (OCO)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Change Order</td>
<td>-</td>
<td>103.226</td>
<td>115.391</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.376</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GA Prog Mgmt/Integration/MMF</td>
<td>-</td>
<td>148.058</td>
<td>18.762</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Training Devices - UMS</td>
<td>-</td>
<td>65.274</td>
<td>-</td>
<td>16.057</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Data (Fielding Manuals)</td>
<td>-</td>
<td>2.486</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.503</td>
<td>-</td>
<td>1.332</td>
<td>-</td>
</tr>
<tr>
<td>Interim Contractor Logistics Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7.041</td>
<td>-</td>
<td>11.760</td>
<td>-</td>
</tr>
<tr>
<td>Air Beam Shelter</td>
<td>-</td>
<td>6.403</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Critical Safety Item</td>
<td>-</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hardware-Retrofit</td>
<td>-</td>
<td>104.316</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Non-Recurring Production</td>
<td>-</td>
<td>20.587</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Government Furnished Equipment (GFE)</td>
<td>-</td>
<td>25.771</td>
<td>-</td>
<td>8.242</td>
<td>-</td>
<td>-</td>
<td>6.172</td>
<td>-</td>
<td>5.709</td>
<td>-</td>
</tr>
<tr>
<td>Program Management / OGA</td>
<td>-</td>
<td>67.891</td>
<td>-</td>
<td>3.127</td>
<td>-</td>
<td>-</td>
<td>2.582</td>
<td>-</td>
<td>2.493</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Support</td>
<td>-</td>
<td>49.748</td>
<td>-</td>
<td>9.382</td>
<td>-</td>
<td>-</td>
<td>7.747</td>
<td>-</td>
<td>7.478</td>
<td>-</td>
</tr>
<tr>
<td>Logistics Support</td>
<td>-</td>
<td>36.220</td>
<td>-</td>
<td>8.339</td>
<td>-</td>
<td>-</td>
<td>6.887</td>
<td>-</td>
<td>6.646</td>
<td>-</td>
</tr>
<tr>
<td>Universal Mission Simulators Spares</td>
<td>-</td>
<td>0.254</td>
<td>-</td>
<td>0.164</td>
<td>-</td>
<td>-</td>
<td>0.153</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>First Destination Transportation</td>
<td>-</td>
<td>0.305</td>
<td>-</td>
<td>0.137</td>
<td>-</td>
<td>-</td>
<td>0.951</td>
<td>-</td>
<td>1.249</td>
<td>-</td>
</tr>
<tr>
<td>Software Maintenance</td>
<td>-</td>
<td>17.728</td>
<td>-</td>
<td>5.415</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NET Training</td>
<td>-</td>
<td>30.188</td>
<td>-</td>
<td>19.464</td>
<td>-</td>
<td>-</td>
<td>18.121</td>
<td>-</td>
<td>17.924</td>
<td>-</td>
</tr>
<tr>
<td>Test and Evaluation</td>
<td>-</td>
<td>40.442</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Modifications</td>
<td>-</td>
<td>36.455</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### NET Training

- Unit Cost ($K): 49,000
- Qty: -
- Total Cost ($M): 983.267
- FY 2015: 15
- FY 2016: 14.749
- FY 2016 OCO: 15
- FY 2016 Total: 14.749

### Engineering Change Order

- Unit Cost ($K): 0.376
- Qty: -
- Total Cost ($M): -
- FY 2015: -
- FY 2016: -
- FY 2016 OCO: -
- FY 2016 Total: -
## Exhibit P-5, Cost Analysis: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 10

### P-1 Line Item Number / Title:
A00005 / MQ-1 UAV

### Item Number / Title [DODIC]:
A00005 / MQ-1 UAV

### ID Code (A=Service Ready, B=Not Service Ready):

### MDAP/MAIS Code:

### Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Exhibit P-5, Cost Analysis:

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Ground Base Sense and Avoid (GBSAA)</td>
<td>-</td>
<td>-</td>
<td>45.571</td>
<td>-</td>
<td>-</td>
<td>14.181</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>1,823.156</td>
<td>-</td>
<td>-</td>
<td>500.547</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>1,823.156</td>
<td>-</td>
<td>-</td>
<td>500.547</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>18,415.717</td>
<td>99</td>
<td>1,823.156</td>
<td>21,762.913</td>
<td>23</td>
<td>500.547</td>
</tr>
</tbody>
</table>

### Secondary Distribution

<table>
<thead>
<tr>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>23</td>
<td>19</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>500.547</td>
<td>238.081</td>
<td>260.436</td>
<td>16.537</td>
</tr>
</tbody>
</table>

### Total:

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>Quantity</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Obligation Authority</td>
<td>500.547</td>
<td>238.081</td>
<td>260.436</td>
<td>16.537</td>
<td>276.973</td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
## Exhibit P-5a, Procurement History and Planning

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 10  
**P-1 Line Item Number / Title:** A00005 / MQ-1 UAV  
**Item Number / Title [DODIC]:** A00005 / MQ-1 UAV

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>OCO</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>Date RFP Issue Date</th>
</tr>
</thead>
</table>

(†) indicates the presence of a P-21

**Remarks:**  
FY2012 deliveries are based upon actual contract.
### Exhibit P-21, Production Schedule: PB 2016 Army

#### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 10

#### Item Number / Title / Item Number / Title [DODIC]:
A00005 / MQ-1 UAV

<table>
<thead>
<tr>
<th>Date: February 2015</th>
</tr>
</thead>
</table>

**P-1 Line Item Number / Title:**
A00005 / MQ-1 UAV

**Item Number / Title [DODIC]:**
A00005 / MQ-1 UAV

---

**Cost Elements**

<table>
<thead>
<tr>
<th>(Units in Each)</th>
<th>Fiscal Year 2011</th>
<th>Calendar Year 2011</th>
<th>Fiscal Year 2012</th>
<th>Calendar Year 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiscal Year 2011</strong></td>
<td><strong>Calendar Year 2011</strong></td>
<td><strong>Fiscal Year 2012</strong></td>
<td><strong>Calendar Year 2012</strong></td>
<td></td>
</tr>
<tr>
<td><strong>O C M F R # F Y</strong></td>
<td><strong>P R O C</strong></td>
<td><strong>A C C E P T</strong></td>
<td><strong>B A L D U E A S O F 1 O C T 2 0 1 0</strong></td>
<td><strong>P R O C</strong></td>
</tr>
<tr>
<td><strong>2011</strong></td>
<td><strong>ARMY</strong></td>
<td><strong>29</strong></td>
<td><strong>-</strong></td>
<td><strong>29</strong></td>
</tr>
<tr>
<td><strong>2012</strong></td>
<td><strong>ARMY</strong></td>
<td><strong>29</strong></td>
<td><strong>-</strong></td>
<td><strong>29</strong></td>
</tr>
<tr>
<td><strong>2013</strong></td>
<td><strong>ARMY (I)</strong></td>
<td><strong>15</strong></td>
<td><strong>-</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td><strong>ARMY (II)</strong></td>
<td><strong>23</strong></td>
<td><strong>-</strong></td>
<td><strong>23</strong></td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td><strong>ARMY (I)</strong></td>
<td><strong>19</strong></td>
<td><strong>-</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td><strong>ARMY (II)</strong></td>
<td><strong>17</strong></td>
<td><strong>-</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Aircraft

**Prior Years Deliveries:** 26
### Exhibit P-21, Production Schedule: PB 2016 Army

#### Appropriation / Budget Activity / Budget Sub Activity:

<table>
<thead>
<tr>
<th>2031A / 01 / 10</th>
<th>P-1 Line Item Number / Title:</th>
<th>Item Number / Title [DODIC]:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A00005 / MQ-1 UAV</td>
<td>A00005 / MQ-1 UAV</td>
</tr>
</tbody>
</table>

#### Date:

February 2015

#### P-1 Line Item Number / Title:

A00005 / MQ-1 UAV

#### Item Number / Title [DODIC]:

A00005 / MQ-1 UAV

---

### Cost Elements

(Units in Each)

<table>
<thead>
<tr>
<th>O</th>
<th>M</th>
<th>C</th>
<th>F</th>
<th>R</th>
<th>O</th>
<th>#</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROC</th>
<th>QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2012</th>
<th>BAL DUE AS OF 1 OCT 2012</th>
</tr>
</thead>
</table>

#### Fiscal Year 2013

- **Cost Elements**
  - **Fiscal Year 2013**
  - **Calendar Year 2013**
  - **Fiscal Year 2014**
  - **Calendar Year 2014**

### Aircraft

Prior Years Deliveries: 26

- **2011**
  - ARMY
  - QTY: 29
  - QTY: 29

- **2012**
  - ARMY
  - QTY: 29

- **2013**
  - ARMY
  - QTY: 15

- **2014**
  - ARMY
  - QTY: 23

- **2015**
  - ARMY
  - QTY: 19

- **2016**
  - ARMY
  - QTY: 17

---

LI A00005 - MQ-1 UAV

Army

UNCLASSIFIED

Page 8 of 12

P-1 Line #4

---

32
### Exhibit P-21, Production Schedule: PB 2016 Army

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>O</td>
<td>E</td>
<td>A</td>
<td>E</td>
</tr>
<tr>
<td>T</td>
<td>V</td>
<td>C</td>
<td>N</td>
<td>B</td>
</tr>
</tbody>
</table>

### Aircraft

Prior Years Deliveries: 26

<table>
<thead>
<tr>
<th>Y</th>
<th>2011</th>
<th>ARMY</th>
<th>29</th>
<th>29</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>2012</td>
<td>ARMY</td>
<td>29</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Y</td>
<td>2013</td>
<td>ARMY</td>
<td>15</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Y</td>
<td>2014</td>
<td>ARMY</td>
<td>23</td>
<td>-</td>
<td>23</td>
</tr>
<tr>
<td>Y</td>
<td>2015</td>
<td>ARMY</td>
<td>19</td>
<td>-</td>
<td>19</td>
</tr>
<tr>
<td>Y</td>
<td>2016</td>
<td>ARMY</td>
<td>17</td>
<td>-</td>
<td>17</td>
</tr>
</tbody>
</table>
## Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A00005 / MQ-1 UAV

**Item Number / Title [DODIC]:**
A00005 / MQ-1 UAV

### Cost Elements (Units in Each)

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proc QTY</td>
<td>ACCEPT PRIOR TO 1 OCT 2016</td>
<td>BAL DUE AS OF 1 OCT</td>
<td>ACCEPT PRIOR TO 1 OCT 2016</td>
<td>BAL DUE AS OF 1 OCT</td>
</tr>
<tr>
<td></td>
<td>PROC</td>
<td>QTY</td>
<td>PROC</td>
<td>QTY</td>
</tr>
</tbody>
</table>

### Aircraft Prior Years Deliveries: 26

<table>
<thead>
<tr>
<th>Year</th>
<th>SERVICE</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>ARMY</td>
<td>29</td>
</tr>
<tr>
<td>2012</td>
<td>ARMY</td>
<td>29</td>
</tr>
<tr>
<td>2013</td>
<td>ARMY (I)</td>
<td>15</td>
</tr>
<tr>
<td>2014</td>
<td>ARMY (II)</td>
<td>23</td>
</tr>
<tr>
<td>2015</td>
<td>ARMY (III)</td>
<td>19</td>
</tr>
<tr>
<td>2016</td>
<td>ARMY (IV)</td>
<td>17</td>
</tr>
</tbody>
</table>

## Prior Years Deliveries: 26
### Cost Elements

<table>
<thead>
<tr>
<th>FY</th>
<th>M/C OR D#</th>
<th>SERVICE</th>
<th>ACCEPT PRIOR TO 1 OCT 2018</th>
<th>BAL DUE AS OF 1 OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O/C/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 2011</td>
<td>ARMY</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>ARMY</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>ARMY (I)</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>ARMY (II)</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>ARMY (III)</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>1 2016</td>
<td>ARMY (IV)</td>
<td>17</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Aircraft

**Prior Years Deliveries:** 26

<table>
<thead>
<tr>
<th>FY</th>
<th>M/C OR D#</th>
<th>SERVICE</th>
<th>ACCEPT PRIOR TO 1 OCT 2018</th>
<th>BAL DUE AS OF 1 OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O/C/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>ARMY</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>ARMY</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>ARMY (I)</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>ARMY (II)</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>ARMY (III)</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>1 2016</td>
<td>ARMY (IV)</td>
<td>17</td>
<td>4</td>
</tr>
</tbody>
</table>

**Exhibit P-21, Production Schedule:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 10

**P-1 Line Item Number / Title:** A00005 / MQ-1 UAV

**Item Number / Title [DODIC]:** A00005 / MQ-1 UAV

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2019</th>
<th>Calendar Year 2019</th>
<th>Fiscal Year 2020</th>
<th>Calendar Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>QTY</td>
<td>PROC</td>
<td>SERVICE</td>
<td>ACCEPT PRIOR TO 1 OCT 2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Production Schedule

**Exhibit P-21, Production Schedule: PB 2016 Army**

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 10

**P-1 Line Item Number / Title:**
A00005 / MQ-1 UAV

**Item Number / Title [DODIC]:**
A00005 / MQ-1 UAV

**Date:** February 2015

<table>
<thead>
<tr>
<th>MFR Ref</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Production Rates (Each / Year)</th>
<th>Initial</th>
<th>Procurement Leadtime (Months)</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ALT</td>
<td>ALT Mfg PLT</td>
<td>ALT Mfg PLT</td>
</tr>
<tr>
<td>1</td>
<td>GENERAL ATOMICS / ASI - SAN DIEGO</td>
<td>12</td>
<td>24</td>
<td>60</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>7</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mfg PLT</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>After Oct 1</td>
<td>ALT</td>
<td>ALT</td>
<td>ALT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prior to Oct 1</td>
<td>Mfg PLT</td>
<td>Mfg PLT</td>
<td>Mfg PLT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>After Oct 1</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prior to Oct 1</td>
<td>30</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>8</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

*"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
Description:
The Small Unmanned Aircraft System (SUAS) provides the battalion and below ground maneuver elements with an organic, on-demand, asset to develop situational awareness, enhance force protection, and secure routes, points, and areas. The system provides the small unit commander an organic and responsive tactical Reconnaissance, Surveillance, and Target Acquisition capability through the ability to view real-time Full Motion Video and sensor data via the system ground control stations. Other compatible receivers, such as the One System Remote Video Terminal and appropriately equipped manned platforms, may also receive the SUAS products. The SUAS includes a combination of three separate hand-launched mission specific configurable aircraft that do not require an improved launch/recovery location. The ground control equipment includes a hand controller interoperable with each of the system's aircraft. The SUAS employs a gimbaled payload that combines daytime color and infrared sensors with a laser illuminator. This equipment is fully transportable in or on rucksack type packs that are organic to the unit. In FY14 a total of 374 gimbaled payloads were procured. FY15 includes fielding and training of previously procured gimbaled payloads.
### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
- 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing

**P-1 Line Item Number / Title:**
- A00010 / RQ-11 (RAVEN)

**Program Elements for Code B Items:**
- Other Related Program Elements: 0305204A, 0305232A

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A00010 / RQ-11 (RAVEN)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Exhibits Schedule

<table>
<thead>
<tr>
<th>Exhibits</th>
<th>Title*</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ID CD</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

### Justification:

Justification: No program funding in FY2016.
### Resource Summary

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost</td>
<td>Qty</td>
<td>Total Cost</td>
<td>Unit Cost</td>
<td>Qty</td>
<td>Total Cost</td>
</tr>
<tr>
<td>Flyaway Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Vehicles</td>
<td>26.979</td>
<td>2,421</td>
<td>65.316</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares Package (ISP)</td>
<td>-</td>
<td>-</td>
<td>16.735</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other System Hardware</td>
<td>-</td>
<td>-</td>
<td>22.620</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Digital Data Link Retrofit</td>
<td>59.972</td>
<td>930</td>
<td>55.774</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gimbal Payload Retrofit</td>
<td>17.871</td>
<td>1,422</td>
<td>25.413</td>
<td>17.626</td>
<td>374</td>
<td>6.592</td>
</tr>
<tr>
<td>Operator Training</td>
<td>-</td>
<td>-</td>
<td>16.118</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Government Furnished Equipment (GFE)</td>
<td>-</td>
<td>-</td>
<td>6.937</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Program Management</td>
<td>-</td>
<td>-</td>
<td>10.305</td>
<td>-</td>
<td>-</td>
<td>1.144</td>
</tr>
<tr>
<td>Technical</td>
<td>-</td>
<td>-</td>
<td>7.354</td>
<td>-</td>
<td>-</td>
<td>1.406</td>
</tr>
<tr>
<td>Logistics</td>
<td>-</td>
<td>-</td>
<td>7.062</td>
<td>-</td>
<td>-</td>
<td>1.230</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>233.634</td>
<td>-</td>
<td>-</td>
<td>10.372</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>233.634</td>
<td>-</td>
<td>-</td>
<td>10.372</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>96.503</td>
<td>2,421</td>
<td>233.633</td>
<td>-</td>
<td>-</td>
<td>10.372</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 10  

**P-1 Line Item Number / Title:** A00010 / RQ-11 (RAVEN)  

**Item Number / Title [DODIC]:** A00010 / RQ-11 (RAVEN)

<table>
<thead>
<tr>
<th>ID Code</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A00010 / RQ-11 (RAVEN)</td>
</tr>
</tbody>
</table>

**Date:** February 2015

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Army</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Distribution</td>
<td>FY 2014</td>
</tr>
<tr>
<td>Army</td>
<td>10.372</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td></td>
</tr>
</tbody>
</table>

| Secondary Distribution                       | FY 2014 | FY 2015 | FY 2016 Base | FY 2016 OCO | FY 2016 Total |
| Total:                                       | 10.372  | 3.964   |              |              |              |

**Total Obligation Authority**

| ID Code (A=Service Ready, B=Not Service Ready) | 40 |
UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

P-1 Line Item Number / Title:
A05001 / Helicopter, Light Utility (LUH)

ID Code (A=Service Ready, B=Not Service Ready):
ID Code (Program Elements for Code B Items: Other Related Program Elements:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>305</td>
<td>37</td>
<td>55</td>
<td>28</td>
<td>-</td>
<td>28</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>425</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,879.049</td>
<td>256.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,724.277</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,879.049</td>
<td>256.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,724.277</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,879.049</td>
<td>256.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,724.277</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - | - |
Flyaway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - | - |
Gross/Weapon System Unit Cost ($ in Thousands) | - | - | - | 6,684.893 | - | 6,684.893 | - | - | - | - | - | 6,410.064 |

Description:
The UH-72A platform will provide the flexibility to respond to Homeland Security (HLS) requirements, conduct civil search and rescue operations, support damage assessment, support test and training centers, perform generating force missions, augment the HH-60 Medical Evacuation (MEDEVAC) aircraft, and provide support to CONUS counterdrug operations. The UH-72A will conduct general support utility helicopter missions and execute tasks as part of an integrated effort with other joint services, government agencies, and non-governmental organizations. The UH-72A provides time-sensitive transport of supplies or key personnel, air mobility to assist civil authorities through the execution of search and rescue or disaster relief operations, advanced warning/detection of external threats to include threats to our borders, augmentation of air ambulance capabilities, and limited command and control operations in the conduct of HLS. As part of the Aviation Restructure Initiative (ARI) the UH-72A will become the primary training aircraft at the US Army Aviation Center of Excellence (USAACE) in Ft. Rucker. The UH-72A program is currently in full rate production.
**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

**P-1 Line Item Number / Title:**
A05001 / Helicopter, Light Utility (LUH)

---

### ID Code (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID - Code</th>
<th>SCHEDULE</th>
<th>ID - CD</th>
<th>PRIOR YEARS</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05001</td>
<td>P-5, P-5a, P-21</td>
<td>305 / 1,879.049</td>
<td>37 / 256.434</td>
<td>55 / 401.617</td>
<td>28 / 187.177</td>
<td>- / -</td>
<td>28 / 187.177</td>
<td>28 / 187.177</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>305 / 1,879.049</td>
<td>37 / 256.434</td>
<td>55 / 401.617</td>
<td>28 / 187.177</td>
<td>- / -</td>
<td>28 / 187.177</td>
<td>28 / 187.177</td>
</tr>
</tbody>
</table>

**Exhibits Schedule**

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits</th>
<th>ID - CD</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05001 / Helicopter, Light Utility (LUH)</td>
<td>P-5, P-5a, P-21</td>
<td>305 / 1,879.049</td>
<td>37 / 256.434</td>
<td>55 / 401.617</td>
<td>28 / 187.177</td>
<td>- / -</td>
<td>425 / 2,724.277</td>
<td>425 / 2,724.277</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>305 / 1,879.049</td>
<td>37 / 256.434</td>
<td>55 / 401.617</td>
<td>28 / 187.177</td>
<td>- / -</td>
<td>425 / 2,724.277</td>
<td>425 / 2,724.277</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

**Justification:**

FY16 Base procurement dollars in the amount of $187.177 million support aircraft procurement, fielding, program management for one year, and production modifications for UH-72A aircraft.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>305</td>
<td>37</td>
<td>55</td>
<td>28</td>
<td>-</td>
<td>28</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,879.049</td>
<td>256.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,879.049</td>
<td>256.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,879.049</td>
<td>256.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Cost Elements

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Airframes/Includes non-recurring(7)</td>
<td>5,094,226</td>
<td>305</td>
<td>1,553,739</td>
<td>5,240,162</td>
<td>37</td>
</tr>
<tr>
<td>B Kits (MEDEVAC &amp; Host)</td>
<td>200,449</td>
<td>78</td>
<td>15,635</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Charges</td>
<td>-</td>
<td>-</td>
<td>156,890</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>System Engineering &amp; Program Management</td>
<td>-</td>
<td>-</td>
<td>52,265</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Systems Test &amp; Evaluation</td>
<td>-</td>
<td>-</td>
<td>2,054</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Services</td>
<td>-</td>
<td>-</td>
<td>13,980</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Procedural Trainers</td>
<td>2,989,000</td>
<td>2</td>
<td>5,978</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fielding</td>
<td>-</td>
<td>-</td>
<td>78,484</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other program Requirements</td>
<td>-</td>
<td>-</td>
<td>0,024</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>1,879,049</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>1,879,049</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Exhibit P-5, Cost Analysis: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
- 2031A / 01 / 20

### P-1 Line Item Number / Title:
- A05001 / Helicopter, Light Utility (LUH)

### Item Number / Title [DODIC]:
- A05001 / Helicopter, Light Utility (LUH)

### MDAP/MAIS Code:

### Date:
- February 2015

<table>
<thead>
<tr>
<th>ID Code</th>
<th>MDAP/MAIS Code:</th>
<th>(A=Service Ready, B=Not Service Ready)</th>
</tr>
</thead>
</table>

### FY 2017

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Airframes/Includes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-recurring(†)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B Kits (MEDEVAC &amp; Hoist)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Engineering &amp; Program Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems Test &amp; Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural Trainers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural Trainers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fielding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other program Requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FY 2018

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
</tr>
<tr>
<td>55</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

### FY 2019

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>181.434</td>
</tr>
<tr>
<td>401.617</td>
</tr>
<tr>
<td>187.177</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>187.177</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

### FY 2020

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>75.000</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>27</td>
<td>55</td>
<td>28</td>
<td>-</td>
<td>28</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>181.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### ANG

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>75.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Total: Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>37</td>
<td>55</td>
<td>28</td>
<td>-</td>
<td>28</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>256.434</td>
<td>401.617</td>
<td>187.177</td>
<td>-</td>
<td>187.177</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a

LI A05001 - Helicopter, Light Utility (LUH)

**UNCLASSIFIED**
### Exhibit P-5a, Procurement History and Planning: PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title: A05001 / Helicopter, Light Utility (LUH)**

#### Cost Elements

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>OCO</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost (K$)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airframes/Includes non-recurring(†)</td>
<td>2012</td>
<td>2012</td>
<td>EADS-NA / Columbus MS</td>
<td>C / FFP</td>
<td>EADS-NA Columbus, MS</td>
<td>Dec 2011</td>
<td>Sep 2012</td>
<td>39</td>
<td>5,375,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airframes/Includes non-recurring(†)</td>
<td>2013</td>
<td>2013</td>
<td>EADS-NA / Columbus MS</td>
<td>C / FFP</td>
<td>EADS-NA Columbus, MS</td>
<td>Dec 2012</td>
<td>Sep 2013</td>
<td>35</td>
<td>5,090,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airframes/Includes non-recurring(†)</td>
<td>2014</td>
<td>2014</td>
<td>EADS-NA / Columbus MS</td>
<td>C / FFP</td>
<td>EADS-NA Columbus, MS</td>
<td>Dec 2013</td>
<td>Sep 2014</td>
<td>37</td>
<td>5,240,162</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airframes/Includes non-recurring(†)</td>
<td>2015</td>
<td>2015</td>
<td>EADS-NA / Columbus MS</td>
<td>C / FFP</td>
<td>EADS-NA Columbus, MS</td>
<td>Dec 2013</td>
<td>Dec 2015</td>
<td>55</td>
<td>5,500,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airframes/Includes non-recurring(†)</td>
<td>2016</td>
<td>2016</td>
<td>Airbus Helicopter Inc / Grand Prairie TX</td>
<td>C / FFP</td>
<td>AHI Grand Prairie, TX</td>
<td>Dec 2015</td>
<td>Dec 2016</td>
<td>28</td>
<td>5,757,036</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21
### Cost Elements

<table>
<thead>
<tr>
<th>UNIT IN EACH</th>
<th>Fiscal Year 2012</th>
<th>Calendar Year 2012</th>
<th>Fiscal Year 2013</th>
<th>Calendar Year 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airframes/Includes non-recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Prior Years Deliveries: 231

<table>
<thead>
<tr>
<th>Year</th>
<th>QTY</th>
<th>DUE AS OF 1 OCT</th>
<th>BAL</th>
<th>ACCEPT PRIOR TO 1 OCT</th>
<th>PROC QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>39</td>
<td>-</td>
<td>39</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>2013</td>
<td>35</td>
<td>-</td>
<td>35</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>2014</td>
<td>37</td>
<td>-</td>
<td>37</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>2015</td>
<td>55</td>
<td>-</td>
<td>55</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>2016</td>
<td>28</td>
<td>-</td>
<td>28</td>
<td>A</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**
- **Army (V)**: Indicates the funding source for fiscal years 2012 to 2016.
<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>M C R O # FY SERVICE PROC QTY ACCEPT PRIOR TO 1 OCT 2013 BAL DUE AS OF 1 OCT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2012</td>
<td>ARMY (V)</td>
<td>39</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>1 2013</td>
<td>ARMY (VI)</td>
<td>35</td>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>1 2014</td>
<td>ARMY (VII)</td>
<td>37</td>
<td>37</td>
<td>A</td>
</tr>
<tr>
<td>1 2015</td>
<td>ARMY (VIII)</td>
<td>55</td>
<td>55</td>
<td>A</td>
</tr>
<tr>
<td>2 2016</td>
<td>ARMY (IX)</td>
<td>28</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Cost Elements</td>
<td>Fiscal Year 2016</td>
<td>Calendar Year 2016</td>
<td>Fiscal Year 2017</td>
<td>Calendar Year 2017</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
<td>-------------------</td>
<td>----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>O F C R O # F Y</td>
<td>ACCEPT PRIOR TO 1 OCT 2015</td>
<td>BAL DUE AS OF 1 OCT</td>
<td>ACCEPT PRIOR TO 1 OCT</td>
<td>BAL DUE AS OF 1 OCT</td>
</tr>
<tr>
<td></td>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T V C N B R R Y N L G P T V C N B R R Y N L G P L</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Airframes/Includes non-recurring

Prior Years Deliveries: 231

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2012</td>
<td>ARMY (V)</td>
<td>39</td>
<td>39</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2013</td>
<td>ARMY (VI)</td>
<td>35</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2014</td>
<td>ARMY (VII)</td>
<td>37</td>
<td>29</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>2015</td>
<td>ARMY (VIII)</td>
<td>55</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>2016</td>
<td>ARMY (IX)</td>
<td>28</td>
<td>-</td>
<td>28</td>
</tr>
</tbody>
</table>

C O E A E A P A U U U E C O E A E A P A U U U E A
T V C N B R R Y N L G P T V C N B R R Y N L G P L

LI A05001 - Helicopter, Light Utility (LUH)

UNCLASSIFIED

Page 8 of 10

P-1 Line #6
### Exhibit P-21, Production Schedule: PB 2016 Army

#### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 20

#### P-1 Line Item Number / Title:
A05001 / Helicopter, Light Utility (LUH)

#### Item Number / Title [DODIC]:
A05001 / Helicopter, Light Utility (LUH)

#### Date:
February 2015

---

#### Cost Elements

<table>
<thead>
<tr>
<th>O/C/R/O #</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROC QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2017</th>
<th>BAL DUE AS OF 1 OCT</th>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Calendar Year 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2012</td>
<td>ARMY (V)</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2013</td>
<td>ARMY (VI)</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2014</td>
<td>ARMY (VII)</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2015</td>
<td>ARMY (VIII)</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2016</td>
<td>ARMY (IX)</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Airframes/Includes non-recurring

Prior Years Deliveries: 231

<table>
<thead>
<tr>
<th>Year</th>
<th>QTY</th>
<th>FY</th>
<th>QTY</th>
<th>FY</th>
<th>QTY</th>
<th>FY</th>
<th>QTY</th>
<th>FY</th>
<th>QTY</th>
<th>FY</th>
<th>QTY</th>
<th>FY</th>
<th>QTY</th>
<th>FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>39</td>
<td>39</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2013</td>
<td>35</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2014</td>
<td>37</td>
<td>37</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2015</td>
<td>55</td>
<td>55</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2016</td>
<td>28</td>
<td>22</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

---

LI A05001 - Helicopter, Light Utility (LUH) Army

UNCLASSIFIED

Page 9 of 10

P-1 Line #6
<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>ALT Initial Prior to Oct 1 Mfg PLT Total After Oct 1 ALT Initial Prior to Oct 1 Mfg PLT Total After Oct 1 ALT Reorder</th>
<th>ALT Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EADS-NA - Columbus MS</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>Airbus Helicopter Inc - Grand Prairie TX</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>-</td>
<td>9</td>
</tr>
</tbody>
</table>

Remarks:
FY14 delivery schedule appears to extend beyond the 12 month period for the following reason: Yearly procurement consists of UH-72A and supplemental aircraft. Each of them are awarded on different contract line items. While each of these efforts deliver all of their aircraft within a 12 month span, they do not deliver within the same 12 month time period.

*A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Service/Agency Suffixes:
(V) 39
(VI) 35
(VII) 37
(VIII) 56
(IX) 28
Description:
AH-64E Apache Reman is an aircraft remanufacture program that refurbishes aging Longbow Apaches to extend their service life and upgrades the aircraft with updated technologies and performance enhancements to keep the Apache viable throughout its lifecycle. AH-64E Apache addresses obsolescence and reliability challenges as well as adds significant combat capability to the aircraft. Upgrades include: Unmanned Aircraft System (UAS) Level III-IV Control, Improved Situational Awareness, Upgraded Communications Suite, Improved Drive and Propulsion Systems, Improved Targeting Capability, Increased Computer Processing Capability and Speed, Improved Navigation Systems, and Improved Diagnostics and Maintainability. Upgrades are integrated as incremental block modifications. The program addresses operational shortfalls identified during real-world combat missions and meets Longbow Apache Capability Production Document (CPD) requirements for modernization. AH-64E aircraft entered the fleet in 2012.
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

P-1 Line Item Number / Title:
A05111 / AH-64 Apache Block IIIA Reman

Program Elements for Code B Items:

ID Code (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05111 / AH-64 Apache Block IIIA Reman</td>
<td>P-5, P-5a, P-21</td>
<td>88 / 1,834.861</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35 / 709.376</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35 / 866.909</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64 / 1,325.799</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / -</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>64 / 1,325.799</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:

FY16 Base procurement dollars supports Advance Procurement (AP), Full Rate Production (FRP) of AH-64E Apache Reman aircraft and associated support. This program was restructured in 2010 from the single AH-64E Apache (A05111) into two separate programs, AH-64E Apache Reman (A05111) and AH-64E Apache New Build (A05133).

The Apache Reman Program assumes a cost sharing with the New Build Program in accordance with the New Build APB.

Funding goes to the Active component.

The current AH-64E Apache Remanufacture Acquisition Program Baseline procurement objective is 634 aircraft.

The Apache Reman Program quantities and associated funding assume approval for a Multi-year contract starting in FY2017, to continue through FY2021. The Apache Reman Program is planning continued production of aircraft through FY2025 to meet the Army Acquisition Objective (AAO).

Currently the total lead time (time from when first materials must be committed to aircraft delivery) is in excess of 24 months. The Apache Project Management Office (PMO) and Boeing are working to reduce all lead times to within the 24 month timeframe. The Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) utilized 18% to 22% for Advance Procurement (AP) for single year contracts. Each year's AP can be divided into 2 segments: 1) Government Furnished Equipment (GFE) such as engines, sensors and avionics and 2) Contractor Furnished Equipment (CFE). Material includes production components to support deliveries, provisioning material, pre-modification effort, and any potential termination liability costs. Long lead items include the Main Rotor Drive Shaft, Composite Main Rotor Blade, Improved Drive System, and Composite Stabilator.

FY14 Procurement Quantity shows 42, but actual procurement quantity put on contract was 35 aircraft due to realizing savings and buying additional aircraft in FY13. FY17 Procurement Quantity shows 57 but does not reflect a reduction of 5 aircraft. Those 5 aircraft and funds were moved forward to FY16 due to a decision to accelerate those aircraft buys. This increased planned FY16 procurement quantity from 59 to 64 aircraft.
**Exhibit P-5, Cost Analysis: PB 2016 Army**

**P-1 Line Item Number / Title:**
A05111 / AH-64 Apache Block IIIA Reman

**Item Number / Title [DODIC]:**
A05111 / AH-64 Apache Block IIIA Reman

**Date:** February 2015

**Resource Summary**

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Procurement Quantity (Units in Each)</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross/Weapon System Unit Cost ($)</td>
<td>20,850.693</td>
<td>20,267.886</td>
<td>15,570.229</td>
<td>-</td>
<td>13,140.000</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($)</td>
<td>-</td>
<td>24,768.829</td>
<td>-</td>
<td>6,089.266</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($)</td>
<td>1,936.434</td>
<td>752.576</td>
<td>1,168.461</td>
<td>-</td>
<td>1,378.391</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($)</td>
<td>4,866.193</td>
<td>1,373.042</td>
<td>35</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td>Total Obligation Authority ($)</td>
<td>20,850.693</td>
<td>20,267.886</td>
<td>15,570.229</td>
<td>-</td>
<td>13,140.000</td>
</tr>
</tbody>
</table>

**Cost Elements**

<table>
<thead>
<tr>
<th>Flyaway Cost</th>
<th>Recurring Cost</th>
<th>Non-Recurring Costs</th>
<th>Support Equipment</th>
<th>Other Costs</th>
<th>Initial Spares</th>
<th>Total: Recurring Cost</th>
<th>Total: Flyaway Cost</th>
<th>Gross/Weapon System Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFE(1)</td>
<td>14,766.886</td>
<td>88</td>
<td>1,299.486</td>
<td>15,570.229</td>
<td>35</td>
<td>2,478</td>
<td>2,478</td>
<td>20,850.693</td>
</tr>
<tr>
<td>GFE</td>
<td>4,866.193</td>
<td>88</td>
<td>428.225</td>
<td>2,463.543</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>20,850.693</td>
</tr>
<tr>
<td>Non-Recurring Costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Support Equipment</td>
<td>-</td>
<td>-</td>
<td>35.717</td>
<td>-</td>
<td>-</td>
<td>18.765</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Costs</td>
<td>-</td>
<td>-</td>
<td>33.400</td>
<td>-</td>
<td>-</td>
<td>42.334</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares</td>
<td>-</td>
<td>-</td>
<td>38.033</td>
<td>-</td>
<td>-</td>
<td>14.617</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>1,834.861</td>
<td>-</td>
<td>-</td>
<td>709.376</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>1,834.861</td>
<td>-</td>
<td>-</td>
<td>709.376</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>20,850.693</td>
<td>88</td>
<td>1,834.861</td>
<td>20,267.886</td>
<td>35</td>
<td>1,325.799</td>
<td>-</td>
<td>1,325.799</td>
</tr>
</tbody>
</table>

**Secondary Distribution**

<table>
<thead>
<tr>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>35</td>
<td>35</td>
<td>64</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>712.576</td>
<td>873.347</td>
<td>1,378.391</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**
- (†) indicates the presence of a P-5a
- Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
- The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.
## Exhibit P-5a, Procurement History and Planning: PB 2016 Army

### Date: February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
A05111 / AH-64 Apache Block IIIA Reman

**Item Number / Title [DODIC]:**
A05111 / AH-64 Apache Block IIIA Reman

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>O C O</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFE(†)</td>
<td>2015</td>
<td>The Boeing Company / Mesa, AZ</td>
<td>SS / FPIF</td>
<td>AMCOM</td>
<td>Dec 2014</td>
<td>Jan 2016</td>
<td>35</td>
<td>16,657.486</td>
<td>Y</td>
<td>Jul 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFE(†)</td>
<td>2016</td>
<td>The Boeing Company / Mesa, AZ</td>
<td>SS / FPIF</td>
<td>AMCOM</td>
<td>Dec 2015</td>
<td>Feb 2017</td>
<td>64</td>
<td>13,140.000</td>
<td>Y</td>
<td>Jul 2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Advance Procurement**

- **Apache Block III - Reman**
  - 2014: See End Item P-5A/NA / See End Item P-5A
  - Various
  - See End Item P-5A
  - Jan 2015 / Jan 2016
  - 35
  - 3,280.156

- **Apache Block III - Reman**
  - 2015: See End Item P-5A/NA / See End Item P-5A
  - Various
  - See End Item P-5A
  - Jan 2016 / Jan 2017
  - 35
  - 3,280.156

- **Apache Block III - Reman**
  - 2016: See End Item P-5A/NA / See End Item P-5A
  - Various
  - See End Item P-5A
  - Jan 2017 / Jan 2017
  - 64
  - 3,280.156

(†) indicates the presence of a P-21

**Remarks:**

Major Contractor Furnished Equipment (CFE) cost drivers include the Fuselage, Transmission, and Composite Main Rotor Blades. Government Furnished Equipment (GFE) includes engines, Embedded Global Positioning System Inertial Navigation Systems (EGIS), Radar Electronics Unit (REU), Modernized Target Acquisition Designation System (MTADS)/Pilot Night Vision System (PNVS) and Unmanned Aerial Vehicle Tactical Common Data Link Assembly (UTA). Other Cost includes Support Equipment, Peculiar Ground Support (PGSE), and Government In-House.
### Cost Elements

| 1 2014     | ARMY (x) | A -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  1 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 9 |
| 1 2015     | ARMY (x) | A -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  35 |
| 1 2016     | ARMY (x) | A -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  64 |

**Prior Years Deliveries:** 51

<table>
<thead>
<tr>
<th>CFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Years Deliveries: 51</td>
</tr>
</tbody>
</table>

---

**Exhibit P-21, Production Schedule:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 20

**P-1 Line Item Number / Title:** A05111 / AH-64 Apache Block IIIA Reman

**Item Number / Title [DODIC]:** A05111 / AH-64 Apache Block IIIA Reman

**Date:** February 2015
<table>
<thead>
<tr>
<th>O C</th>
<th>R #</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROCUREMENT</th>
<th>ACCEPT PRIOR TO 1 OCT</th>
<th>BAL DUE AS OF 1 OCT</th>
<th>COST ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>F</td>
<td>QTY</td>
<td>Proc QTY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fiscal Year 2016

**Prior Years Deliveries:** 51

<table>
<thead>
<tr>
<th>Year</th>
<th>QTY</th>
<th>DUE</th>
<th>AS OF 1 OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>35</td>
<td>26</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>QTY</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>35</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>QTY</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>64</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fiscal Year 2017

<table>
<thead>
<tr>
<th>Year</th>
<th>QTY</th>
<th>DUE</th>
<th>AS OF 1 OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>64</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>QTY</th>
<th>DUE</th>
<th>AS OF 1 OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>64</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Exhibit P-21, Production Schedule:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
A05111 / AH-64 Apache Block IIIA Reman

**Item Number / Title [DODIC]:**
A05111 / AH-64 Apache Block IIIA Reman

**Date:** February 2015

---

LI A05111 - AH-64 Apache Block IIIA Reman

Army
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
A05111 / AH-64 Apache Block IIIA Reman

**Item Number / Title [DODIC]:**
A05111 / AH-64 Apache Block IIIA Reman

**Date:** February 2015

---

### Cost Elements (Units in Each)

<table>
<thead>
<tr>
<th>M</th>
<th>O</th>
<th>F</th>
<th>R</th>
<th>O #</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROCUREMENT QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2017</th>
<th>BAL DUE AS OF 1 OCT 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Fiscal Year 2018

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Calendar Year 2018

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Fiscal Year 2019

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Calendar Year 2019

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Prior Years Deliveries:** 51

- **2014**
  - ARMY (X)
  - QTY: 35
  - PROC: 35
  - ACCEPT PRIOR TO 1 OCT 2017: -
  - BAL DUE AS OF 1 OCT 2017: -

- **2015**
  - ARMY (X)
  - QTY: 35
  - PROC: 35
  - ACCEPT PRIOR TO 1 OCT 2017: -
  - BAL DUE AS OF 1 OCT 2017: -

- **2016**
  - ARMY (XII)
  - QTY: 64
  - PROC: 48
  - ACCEPT PRIOR TO 1 OCT 2017: 6
  - BAL DUE AS OF 1 OCT 2017: 6
  - BAL DUE AS OF 1 OCT 2019: 4

---

**CFE**
Exhibit P-21, Production Schedule: PB 2016 Army

Date: February 2015

### Production Rates (Each / Year)

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Boeing Company - Mesa, AZ</td>
<td>48</td>
<td>84</td>
<td>144</td>
</tr>
</tbody>
</table>

### Procurement Leadtime (Months)

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
<td>Mfg PLT</td>
</tr>
<tr>
<td>MFR Name - Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Boeing Company - Mesa, AZ</td>
<td>-</td>
<td>11</td>
</tr>
</tbody>
</table>

*A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Service/Agency Suffixes:

- (X) BASE
- (XI) BASE
- (XII) BASE
**Description:**
AH-64E Apache Reman is an aircraft remanufacture program that refurbishes aging Longbow Apaches to extend their service life and upgrades the aircraft with updated technologies and performance enhancements to keep the Apache viable throughout its lifecycle. AH-64E Apache addresses obsolescence and reliability challenges as well as adds significant combat capability to the aircraft. Upgrades include: Unmanned Aircraft System (UAS) Level III-IV Control, Improved Situational Awareness, Upgraded Communications Suite, Improved Drive and Propulsion Systems, Improved Targeting Capability, Increased Computer Processing Capability and Speed, Improved Navigation Systems, and Improved Diagnostics and Maintainability. Upgrades are integrated as incremental block modifications. The program addresses operational shortfalls identified during real-world combat missions and meets Longbow Apache Capability Production Document (CPD) requirements for modernization. AH-64E aircraft entered the fleet in 2012.

**Resource Summary**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td></td>
<td>-</td>
<td>209.930</td>
<td>232.860</td>
<td>201.470</td>
<td>209.590</td>
<td>183.290</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td></td>
<td>-</td>
<td>209.930</td>
<td>232.860</td>
<td>201.470</td>
<td>209.590</td>
<td>183.290</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Obligation Authority ($ in Millions)</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td></td>
<td>-</td>
<td>209.930</td>
<td>232.860</td>
<td>201.470</td>
<td>209.590</td>
<td>183.290</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td></td>
<td>-</td>
<td>209.930</td>
<td>232.860</td>
<td>201.470</td>
<td>209.590</td>
<td>183.290</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td></td>
<td>-</td>
<td>209.930</td>
<td>232.860</td>
<td>201.470</td>
<td>209.590</td>
<td>183.290</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Obligation Authority ($ in Millions)</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td></td>
<td>-</td>
<td>209.930</td>
<td>232.860</td>
<td>201.470</td>
<td>209.590</td>
<td>183.290</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>
Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

P-1 Line Item Number / Title:
A05111 / AH-64 Apache Block IIIA Reman

Program Elements for Code B Items:

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05111 / AH-64 Apache Block IIIA Reman</td>
<td>P-10</td>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td>-</td>
<td>209.930</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
<td>-</td>
<td>209.930</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:
FY16 Base procurement dollars supports Advance Procurement (AP), Full Rate Production (FRP) of AH-64E Apache Reman aircraft and associated support. This program was restructured in 2010 from the single AH-64E Apache (A05111) into two separate programs, AH-64E Apache Reman (A05111) and AH-64E Apache New Build (A05133).

The Apache Reman Program assumes a cost sharing with the New Build Program in accordance with the New Build APB.

Funding goes to the Active component.

The current AH-64E Apache Remanufacture Acquisition Program Baseline procurement objective is 634 aircraft.

The Apache Reman Program quantities and associated funding assume approval for a Multi-year contract starting in FY2017, to continue through FY2021. The Apache Reman Program is planning continued production of aircraft through FY2025 to meet the Army Acquisition Objective (AAO).

Currently the total lead time (time from when first materials must be committed to aircraft delivery) is in excess of 24 months. The Apache Project Management Office (PMO) and Boeing are working to reduce all lead times to within the 24 month timeframe. The Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) utilized 18% to 22% for Advance Procurement (AP) for single year contracts. Each year’s AP can be divided into 2 segments: 1) Government Furnished Equipment (GFE) such as engines, sensors and avionics and 2) Contractor Furnished Equipment (CFE). Material includes production components to support deliveries, provisioning material, pre-modification effort, and any potential termination liability costs. Long lead items include the Main Rotor Drive Shaft, Composite Main Rotor Blade, Improved Drive System, and Composite Stabilator.
Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2016 Army

Date: February 2015

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 20  
**P-1 Line Item Number / Title:** A05111 / AH-64 Apache Block IIIA Reman  
**P-5 Number / Title:** A05111 / AH-64 Apache Block IIIA Reman

<table>
<thead>
<tr>
<th>First System (2016) Award Date:</th>
<th>First System (2016) Completion Date:</th>
<th>Interval Between Systems:</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2009</td>
<td>November 2011</td>
<td>1 Months</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AH-64 Apache Block IIIA Reman</th>
<th>Production Leadtime (Months)</th>
<th>Prior Years (Each)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>When Rqd (Months)</th>
<th>Prior Years ($ M)</th>
<th>FY 2014 ($ M)</th>
<th>FY 2015 ($ M)</th>
<th>FY 2016 ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apache Block III - Reman (1)</td>
<td>12</td>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
</tr>
<tr>
<td>Total: Other</td>
<td></td>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
</tr>
<tr>
<td>Total Advance Procurement/Obligation Authority</td>
<td></td>
<td>563.392</td>
<td>150.900</td>
<td>157.338</td>
<td>209.930</td>
</tr>
<tr>
<td>Cost Elements</td>
<td>FY 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>QPA</td>
<td>Production Leadtime</td>
<td>Unit Cost</td>
<td>Contract Forecast Date</td>
<td>2016 Qty</td>
</tr>
<tr>
<td></td>
<td>(Each)</td>
<td>(Months)</td>
<td>($ K)</td>
<td></td>
<td>(Each)</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>3,280.156</td>
<td>Jan 2017</td>
<td>64</td>
</tr>
<tr>
<td>Total: Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Advance Procurement/Obligation Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Description:
N/A

(†) indicates the presence of Contract Data presented in the associated P-5 Item's P-5a exhibit.
### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>13</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>396,786</td>
<td>142,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>71,586</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>325,200</td>
<td>142,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>325,200</td>
<td>142,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

- **Initial Spares ($ in Millions)**: -
- **Flyaway Unit Cost ($ in Thousands)**: -
- **Gross/Weapon System Unit Cost ($ in Thousands)**: 30,522,000

### Description:

The AH-64E Apache New Build aircraft is the same configuration as the AH-64E Remanufacture aircraft and procured using the same contracts. While the AH-64E Remanufacture program inducts aging AH-64D aircraft into a remanufacture production line, the AH-64E New Build program assembles all new components resulting in completely new aircraft at the end of the production process. These aircraft are procured at a significantly higher cost because they include all new components. A new build MTADS/PNVS system will be procured and provided with each aircraft. Other associated Government Furnished Equipment (GFE) such as the Fire Control Radar (FCR), Modernized Radar Frequency Interferometer (M-RFI), Radar Electronics Unit (REU), and Unmanned Aerial Vehicle Tactical Common Data Link Assembly (UTA) will be procured and provided in accordance with the basis of issue plan.
**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army  
**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary  
**P-1 Line Item Number / Title:**  
A05133 / AH-64 Apache Block IIIB New Build  
**Date:** February 2015

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID Code</td>
<td>Program Elements for Code B Items:</td>
</tr>
<tr>
<td>Prior Years</td>
<td>FY 2014</td>
</tr>
<tr>
<td>FY 2015</td>
<td>FY 2016 Base</td>
</tr>
<tr>
<td>FY 2016 OCO</td>
<td>FY 2016 Total</td>
</tr>
<tr>
<td>A05133 / AH-64 Apache Block IIIB New Build</td>
<td></td>
</tr>
<tr>
<td>P-5, P-5a, P-21</td>
<td></td>
</tr>
<tr>
<td>13 / 396,786</td>
<td>4 / 142,000</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
</tr>
<tr>
<td>13 / 396,786</td>
<td>4 / 142,000</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

**Justification:**

The current AH-64E New Build Acquisition Program Baseline (APB) procurement objective is 56 aircraft which includes an increase to the training base capacity and establishes a new heavy combat aviation brigade in the active component. The Army has moved the New Build Aircraft and associated Advanced Procurement outside the FYDP.

Additionally, the New Build program includes Congressionally appropriated Overseas Contingency Operations (OCO) funding to procure New Build aircraft to fill aircraft shortages due to combat attrition and training loss. OCO funding does not provide advance procurement for long lead items for these aircraft.

All COMPO 1 Active.

LI A05133 - AH-64 Apache Block IIIB New Build  
Army
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 20

**P-1 Line Item Number / Title:** A05133 / AH-64 Apache Block IIIB New Build

**Item Number / Title [DODIC]:** A05133 / AH-64 Apache Block IIIB New Build

**ID Code** (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code:

### Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>13</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>396.786</td>
<td>142.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>71.586</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>325.200</td>
<td>142.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>325.200</td>
<td>142.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | - | - | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | 30,522.000 | 35,500.000 | - | - | - |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>Unit Cost ($K) Qty (Each) Total Cost ($M)</td>
<td>Unit Cost ($K) Qty (Each) Total Cost ($M)</td>
<td>Unit Cost ($K) Qty (Each) Total Cost ($M)</td>
<td>Unit Cost ($K) Qty (Each) Total Cost ($M)</td>
<td>Unit Cost ($K) Qty (Each) Total Cost ($M)</td>
</tr>
<tr>
<td>CFE(†)</td>
<td>16,537.300 10 165.373</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GFE</td>
<td>9,432.900 10 94.329</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Support Equipment</td>
<td>-</td>
<td>- 21.881</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares</td>
<td>-</td>
<td>-</td>
<td>8.704</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>War Replacement Aircraft(†)</td>
<td>35,500.000 3 106.500 35,500.000 4 142.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>- 396.787</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>- 396.787</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>30,522.000 13 396.786 35,500.000 4 142.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a

---

LI A05133 - AH-64 Apache Block IIIB New Build

UNCLASSIFIED

Army

Page 3 of 7

P-1 Line #9

65
### Exhibit P-5a, Procurement History and Planning: PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
A05133 / AH-64 Apache Block IIIB New Build

**Item Number / Title [DODIC]:**
A05133 / AH-64 Apache Block IIIB New Build

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>O C O</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFE(1)</td>
<td>2013</td>
<td>The Boeing Company / Mesa</td>
<td>SS / FPIF</td>
<td>AMCOM</td>
<td>Mar 2014</td>
<td>Sep 2014</td>
<td>10</td>
<td>14,055,667</td>
<td>Y</td>
<td>Jul 2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>War Replacement Aircraft(1)</td>
<td>2013</td>
<td>The Boeing Company / Mesa</td>
<td>SS / FPIF</td>
<td>AMCOM</td>
<td>Mar 2014</td>
<td>Jul 2015</td>
<td>3</td>
<td>35,500,000</td>
<td>Y</td>
<td>Jul 2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) indicates the presence of a P-21

**Remarks:**
Major Contractor Furnished Equipment (CFE) cost drivers include the Fuselage, Transmission, and Composite Main Rotor Blades. Government Furnished Equipment (GFE) includes engines, Embedded Global Positioning System Inertial Navigation Systems (EGIs), Radar Electronics Unit (REU), Modernized Target Acquisition Designation System (MTADS)/Pilot Night Vision System (PNVS) and Unmanned Aerial Vehicle Tactical Common Data Link Assembly (UTA). Other Cost includes Support Equipment, Peculiar Ground Support (PGSE), and Government In-House.
### Cost Elements (Units in Each)

<table>
<thead>
<tr>
<th>M</th>
<th>O</th>
<th>C</th>
<th>R</th>
<th>O #</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROC</th>
<th>QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2013</th>
<th>BAL DUE AS OF 1 OCT 2013</th>
<th>O</th>
<th>N</th>
<th>D</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2013</td>
<td>ARMY</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2013</td>
<td>ARMY</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2014</td>
<td>ARMY</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Fiscal Year 2014

- **CFE**

<table>
<thead>
<tr>
<th>O</th>
<th>N</th>
<th>D</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Fiscal Year 2015

- **CFE**

<table>
<thead>
<tr>
<th>O</th>
<th>N</th>
<th>D</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Calendar Year 2014

- **CFE**

<table>
<thead>
<tr>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Calendar Year 2015

- **CFE**

<table>
<thead>
<tr>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Exhibit P-21, Production Schedule: PB 2016 Army

- **Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 20
- **Item Number / Title:** A05133 / AH-64 Apache Block IIIB New Build
- **P-1 Line Item Number / Title:** A05133 / AH-64 Apache Block IIIB New Build
- **Date:** February 2015
- **Exhibit P-21, Production Schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Appropriation / Budget Activity / Budget Sub Activity</th>
<th>Item Number / Title [DODIC]</th>
<th>P-1 Line Item Number / Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2015</td>
<td>2031A / 01 / 20</td>
<td>A05133 / AH-64 Apache Block IIIB New Build</td>
<td>A05133 / AH-64 Apache Block IIIB New Build</td>
</tr>
</tbody>
</table>
### Exhibit P-21, Production Schedule: PB 2016 Army

#### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 20

#### P-1 Line Item Number / Title:
A05133 / AH-64 Apache Block IIIB New Build

#### Item Number / Title [DODIC]:
A05133 / AH-64 Apache Block IIIB New Build

---

**Exhibit P-21, Production Schedule:**

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O</td>
<td>C</td>
<td>F</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- **CFE:** War Replacement Aircraft
- **Proc QTY:** Units in Each
- **Accept Prior To 1 Oct:** Fiscal Year
- **Bal Due As Of 1 Oct:** Calendar Year

---

**LI A05133 - AH-64 Apache Block IIIB New Build**

**Army**

---

**UNCLASSIFIED**

Page 6 of 7
<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
<th>ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Boeing Company - Mesa</td>
<td>48</td>
<td>84</td>
<td>144</td>
<td>-</td>
<td>11</td>
<td>13</td>
<td>24</td>
<td>-</td>
<td>6</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>The Boeing Company - Mesa</td>
<td>48</td>
<td>84</td>
<td>144</td>
<td>-</td>
<td>11</td>
<td>13</td>
<td>24</td>
<td>-</td>
<td>6</td>
<td>12</td>
<td>18</td>
</tr>
</tbody>
</table>

Remarks:
The reduction in the Economical Production Rate of 96 was a number carried forward from prior year submission. 7 aircraft per month (84) is the capacity at Full Rate Production assuming a 1-8-5 shift. This requirement is driven primarily by the production rate associated with current fuselage tooling capabilities. In order to increase the 1-8-5 (single shift) production rate, additional tooling must be procured. The Min 48 A/C per year is based upon Combined Remanufacture and New Build quantities.

"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
Description:
The UH-60M Black Hawk Helicopter serves as the Army's utility helicopter for the current and future force and is in line with the Army's Modernization Strategy, the National Military Strategy, and the National Defense Strategy. The UH-60M Black Hawk is a digital networked platform with greater range and lift to support maneuver Commanders through air assault, general support command and control, and aeromedical evacuation. Full rate production for this new build helicopter began in 2007. The UH-60M Black Hawk, with the integrated Medical Evacuation (MEDEVAC) Mission Equipment Package (MEP) kit, provides day/night and adverse weather emergency evacuation of casualties. The integration of the MEDEVAC MEP into the UH-60M changes the nomenclature to HH-60M.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>609</td>
<td>70</td>
<td>87</td>
<td>94</td>
<td></td>
<td>94</td>
<td>94</td>
<td>60</td>
<td>72</td>
<td>37</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>10,563.256</td>
<td>1,221.035</td>
<td>1,475.772</td>
<td>1,558.330</td>
<td></td>
<td>1,558.330</td>
<td>881.206</td>
<td>1,590.311</td>
<td>944.194</td>
<td>943.247</td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>932.581</td>
<td>108.059</td>
<td>119.545</td>
<td>122.385</td>
<td></td>
<td>122.385</td>
<td>127.079</td>
<td>507.320</td>
<td>93.707</td>
<td>95.300</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>9,630.675</td>
<td>1,112.976</td>
<td>1,356.227</td>
<td>1,435.945</td>
<td></td>
<td>1,435.945</td>
<td>754.127</td>
<td>1,082.991</td>
<td>850.487</td>
<td>847.947</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>1,033.414</td>
<td>116.001</td>
<td>117.138</td>
<td>127.079</td>
<td></td>
<td>127.079</td>
<td>508.927</td>
<td>99.408</td>
<td>92.583</td>
<td>112.583</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>10,664.089</td>
<td>1,228.977</td>
<td>1,473.365</td>
<td>1,563.024</td>
<td></td>
<td>1,563.024</td>
<td>1,263.054</td>
<td>1,182.399</td>
<td>943.070</td>
<td>960.530</td>
</tr>
</tbody>
</table>

(Initial Spares ($ in Millions) - - - - - - - - - -)
(Flyaway Unit Cost ($ in Thousands) - - - - - - - - - -)
(Gross/Weapon System Unit Cost ($ in Thousands) 17,345.248 17,443.357 16,962.897 16,577.979 - 16,577.979 14,686.767 22,087.653 25,518.757 24,822.290)

<table>
<thead>
<tr>
<th>Description:</th>
<th>38</th>
<th>50</th>
<th>79</th>
<th>-</th>
<th>79</th>
<th>47</th>
<th>42</th>
<th>25</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army Quantity</td>
<td>655.627</td>
<td>856.870</td>
<td>1,303.574</td>
<td>-</td>
<td>1,303.574</td>
<td>970.931</td>
<td>748.585</td>
<td>671.498</td>
<td>-</td>
</tr>
<tr>
<td>ANG Quantity</td>
<td>32</td>
<td>31</td>
<td>15</td>
<td>-</td>
<td>15</td>
<td>13</td>
<td>30</td>
<td>12</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>1,228.977</td>
<td>1,473.365</td>
<td>1,563.024</td>
<td>-</td>
<td>1,563.024</td>
<td>1,263.054</td>
<td>1,182.399</td>
<td>943.070</td>
<td>960.530</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>70</td>
<td>87</td>
<td>94</td>
<td>-</td>
<td>94</td>
<td>60</td>
<td>72</td>
<td>37</td>
</tr>
<tr>
<td>ANG</td>
<td>Total Obligation Authority</td>
<td>-</td>
<td>108.210</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AR</td>
<td>Total Obligation Authority</td>
<td>1,228.977</td>
<td>1,473.365</td>
<td>1,563.024</td>
<td>-</td>
<td>1,563.024</td>
<td>1,263.054</td>
<td>1,182.399</td>
<td>943.070</td>
</tr>
</tbody>
</table>
**Unclassified**

**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

**P-1 Line Item Number / Title:** AA0005 / UH-60 Blackhawk M Model (MYP)

**Date:** February 2015

**Program Elements for Code B Items:**

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exhibits Schedule</td>
<td></td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td><strong>Exhibits</strong></td>
<td><strong>ID Code</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantity / Total Cost</strong></td>
<td><strong>Quantity / Total Cost</strong></td>
</tr>
<tr>
<td></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantity / Total Cost</strong></td>
<td><strong>Quantity / Total Cost</strong></td>
</tr>
<tr>
<td></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantity / Total Cost</strong></td>
<td><strong>Quantity / Total Cost</strong></td>
</tr>
<tr>
<td></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantity / Total Cost</strong></td>
<td><strong>Quantity / Total Cost</strong></td>
</tr>
<tr>
<td></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
<td><strong>(Each) / (Each) / ($ M)</strong></td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

**Justification:**
FY 2016 Base funding in the amount of $1,563.024 million will procure 94 aircraft.

Note: By having a Multi-year contract versus 5 single year contracts yielded a 10.9% cost avoidance ($557.418 million) FY 2012 through FY 2016.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

The FY16 funding request was reduced by $5.047 million to account for the availability of prior year execution balances.
### Resource Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>609</td>
<td>70</td>
<td>87</td>
<td>94</td>
<td>-</td>
<td>94</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>10,563.256</td>
<td>1,221.035</td>
<td>1,475.772</td>
<td>1,558.330</td>
<td>-</td>
<td>1,558.330</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>932.581</td>
<td>108.059</td>
<td>119.545</td>
<td>122.385</td>
<td>-</td>
<td>122.385</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>9,630.675</td>
<td>1,112.976</td>
<td>1,356.227</td>
<td>1,435.945</td>
<td>-</td>
<td>1,435.945</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>1,033.414</td>
<td>116.001</td>
<td>117.138</td>
<td>127.079</td>
<td>-</td>
<td>127.079</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>10,664.089</td>
<td>1,228.977</td>
<td>1,473.365</td>
<td>1,563.024</td>
<td>-</td>
<td>1,563.024</td>
</tr>
</tbody>
</table>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

### Note:
Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit Cost ($ M)</th>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>16,962.897</td>
<td>70</td>
<td>1,221.035</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>17,345.248</td>
<td>609</td>
<td>10,563.256</td>
</tr>
</tbody>
</table>

*(Each)*

### MDAP/MAIS Code:

A05002 / UH-60 BLACK HAWK (MYP)
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
AA0005 / UH-60 Blackhawk M Model (MYP)

**Item Number / Title [DODIC]:**
A05002 / UH-60 BLACK HAWK (MYP)

<table>
<thead>
<tr>
<th>ID Code</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Base</td>
<td>OCO</td>
<td>Total</td>
</tr>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>38</td>
<td>50</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>655.627</td>
<td>856.870</td>
<td>1,303.574</td>
<td>-</td>
<td>1,303.574</td>
</tr>
<tr>
<td>ANG</td>
<td>Quantity</td>
<td>32</td>
<td>31</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>573.350</td>
<td>508.285</td>
<td>259.450</td>
<td>-</td>
<td>259.450</td>
</tr>
<tr>
<td>AR</td>
<td>Quantity</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>108.210</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>Quantity</td>
<td>70</td>
<td>87</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td><strong>Secondary Distribution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>1,221.035</td>
<td>1,475.772</td>
<td>1,558.330</td>
<td>-</td>
<td>1,558.330</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>OCO FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Procurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFE Airframe</td>
<td>2014</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Feb 2014</td>
<td>Aug 2015</td>
<td>70</td>
<td>708.720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFE Airframe</td>
<td>2015</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2015</td>
<td>Jul 2016</td>
<td>70</td>
<td>708.720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFE Airframe</td>
<td>2016</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2016</td>
<td>Jan 2016</td>
<td>82</td>
<td>708.720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary Power Unit</td>
<td>2014</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Feb 2014</td>
<td>Aug 2014</td>
<td>70</td>
<td>42.902</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary Power Unit</td>
<td>2015</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2015</td>
<td>Jul 2015</td>
<td>70</td>
<td>42.902</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary Power Unit</td>
<td>2016</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2016</td>
<td>Jan 2016</td>
<td>82</td>
<td>42.902</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engines</td>
<td>2014</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Feb 2014</td>
<td>Apr 2015</td>
<td>140</td>
<td>329.695</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engines</td>
<td>2015</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2015</td>
<td>Mar 2016</td>
<td>140</td>
<td>329.695</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engines</td>
<td>2016</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2016</td>
<td>Jan 2016</td>
<td>164</td>
<td>329.695</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGI</td>
<td>2014</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Feb 2014</td>
<td>Feb 2015</td>
<td>140</td>
<td>53.256</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGI</td>
<td>2015</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2015</td>
<td>Jan 2016</td>
<td>140</td>
<td>53.256</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGI</td>
<td>2016</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2016</td>
<td>Jan 2016</td>
<td>164</td>
<td>53.256</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heads Up Display AVS-7</td>
<td>2014</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Feb 2014</td>
<td>Nov 2014</td>
<td>70</td>
<td>32.220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heads Up Display AVS-7</td>
<td>2016</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2016</td>
<td>Jan 2016</td>
<td>82</td>
<td>32.220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hover Infrared Suppressor</td>
<td>2014</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2015</td>
<td>Mar 2016</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2014</td>
<td>See End Item P-5A / NA / See End Item P-5A</td>
<td>Various</td>
<td>See End Item P-5A</td>
<td>Jan 2015</td>
<td>Jan 2016</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exhibit P-5a, Procurement History and Planning: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20

P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)

Item Number / Title [DODIC]: A05002 / UH-60 BLACK HAWK (MYP)

1†† indicates the presence of a P-21

Remarks:
FY 2012 began the next five (5) year multi-year, multi-service contract for the H-60Ms.

Delivery schedules appear to extend beyond the 12 month period for the following reasons:

Yearly procurements consist of UH-60M, HH-60M and supplemental aircraft. Each of the three are awarded on different contract line items. While each of these efforts deliver all of their aircraft within a 12 month span, they do not deliver within the same 12 month time period.
**Exhibit P-21, Production Schedule: PB 2016 Army**

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
AA0005 / UH-60 Blackhawk M Model (MYP)

**Item Number / Title [DODIC]:**
A05002 / UH-60 BLACK HAWK (MYP)

**Date:** February 2015

### Cost Elements (Units in Each)

<table>
<thead>
<tr>
<th></th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airframes/CFE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prior Years Deliveries: 609**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2015 ARMY</td>
<td>87</td>
<td>-</td>
<td>87</td>
<td>-</td>
</tr>
<tr>
<td>1 2015 NAVY(1)</td>
<td>37</td>
<td>-</td>
<td>37</td>
<td>-</td>
</tr>
<tr>
<td>1 2015 FMS(1)</td>
<td>12</td>
<td>-</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>1 2015 Total</td>
<td>136</td>
<td>-</td>
<td>136</td>
<td>-</td>
</tr>
<tr>
<td>1 2016 ARMY</td>
<td>94</td>
<td>-</td>
<td>94</td>
<td>-</td>
</tr>
<tr>
<td>1 2016 NAVY(1)</td>
<td>29</td>
<td>-</td>
<td>29</td>
<td>-</td>
</tr>
<tr>
<td>1 2016 FMS(1)</td>
<td>28</td>
<td>-</td>
<td>28</td>
<td>-</td>
</tr>
<tr>
<td>1 2016 Total</td>
<td>151</td>
<td>-</td>
<td>151</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note:**
- (‡) Indicates יח"צ (Individual) in Hebrew

**UNCLASSIFIED**
## Exhibit P-21, Production Schedule: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 20

### P-1 Line Item Number / Title:
AA0005 / UH-60 Blackhawk M Model (MYP)

### Date:
February 2015

### Item Number / Title [DODIC]:
A05002 / UH-60 BLACK HAWK (MYP)

#### Airframes/CFE

<table>
<thead>
<tr>
<th>M C O R # FY</th>
<th>SERVICE</th>
<th>PROC QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2015</th>
<th>BAL DUE AS OF 1 OCT</th>
<th>Cost Elements (Units in Each)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Cost Elements

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
</tr>
</thead>
</table>

#### Prior Years Deliveries: 609

| 1 2015 | ARMY | 87 | 14 | 73 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 7 | 8 | 8 | - | - | - | - |
| 1 2015 | NAVY (1) | 37 | 5 | 32 | 1 | 1 | 1 | - | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 |
| 1 2015 | FMS (1) | 12 | 3 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | - | - | - | - | - |
| 1 2015 | Total | 136 | 22 | 114 | 9 | 9 | 9 | 8 | 10 | 10 | 12 | 10 | 11 | 10 | 3 | 2 | 3 | 3 | 3 | 2 |

| 1 2016 | ARMY | 94 | - | 94 | A | - | - | - | - | - | - | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | - | - |
| 1 2016 | NAVY (1) | 29 | - | 29 | A | - | - | - | - | - | - | - | - | - | - | 2 | 4 | 3 | 4 | 2 | 2 | 2 |
| 1 2016 | FMS (1) | 28 | - | 28 | A | - | - | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| 1 2016 | Total | 151 | - | 151 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

**Notes:**
- (‡) Indicates non-standard deliveries.
- The table above details the delivery schedule for FY2016 and FY2017 for the Army, Navy, and FMS.
- The total deliveries for FY2016 and FY2017 are shown, with specific numbers for each quarter.
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
AA0005 / UH-60 Blackhawk M Model (MYP)

**Item Number / Title [DODIC]:**
A05002 / UH-60 BLACK HAWK (MYP)

**Date:** February 2015

**Cost Elements (Units in Each):**

<table>
<thead>
<tr>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Calendar Year 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>**O C R <img src="https://via.placeholder.com/15" alt="1" /> ** FY SERVICE</td>
<td>**O C R <img src="https://via.placeholder.com/15" alt="1" /> ** FY SERVICE</td>
<td>**O C R <img src="https://via.placeholder.com/15" alt="1" /> ** FY SERVICE</td>
<td>**O C R <img src="https://via.placeholder.com/15" alt="1" /> ** FY SERVICE</td>
</tr>
<tr>
<td><strong>M F #</strong></td>
<td><strong>ACCEPT PRIOR TO 1 OCT 2017</strong></td>
<td><strong>BAL DUE AS OF 1 OCT</strong></td>
<td><strong>M F #</strong></td>
</tr>
<tr>
<td>Airframes/CFE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2015 ARMY</td>
<td>87</td>
<td>87</td>
<td>-</td>
</tr>
<tr>
<td>1 2015 NAVY <img src="https://via.placeholder.com/15" alt="1" /></td>
<td>37</td>
<td>37</td>
<td>-</td>
</tr>
<tr>
<td>1 2015 FMS <img src="https://via.placeholder.com/15" alt="1" /></td>
<td>12</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>1 2015 Total</td>
<td>136</td>
<td>136</td>
<td>-</td>
</tr>
<tr>
<td>1 2016 ARMY</td>
<td>94</td>
<td>94</td>
<td>-</td>
</tr>
<tr>
<td>1 2016 NAVY <img src="https://via.placeholder.com/15" alt="1" /></td>
<td>29</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>1 2016 FMS <img src="https://via.placeholder.com/15" alt="1" /></td>
<td>28</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>1 2016 Total</td>
<td>151</td>
<td>138</td>
<td>13</td>
</tr>
</tbody>
</table>

---

*Prior Years Deliveries: 609*
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
AA0005 / UH-60 Blackhawk M Model (MYP)

**Item Number / Title [DODIC]:**
A05002 / UH-60 BLACK HAWK (MYP)

**Date:** February 2015

**Production Rates (Each / Year)**

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sikorsky Aircraft - Stratford CT</td>
<td>18</td>
<td>96</td>
<td>150</td>
</tr>
</tbody>
</table>

**Procurement Leadtime (Months)**

<table>
<thead>
<tr>
<th>Initial</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

(1) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999, all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999, all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000, all quantities are shown in billions (rounded to the nearest million).
Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

P-1 Line Item Number / Title:
AA0005 / UH-60 Blackhawk M Model (MYP)

Description:
The Advance Procurement for the UH-60 Black Hawk contains funding for the airframe and engine contracts as well as funding for Government Furnished Equipment (GFE) to support the UH-60 aircraft and mission kit production. GFE (in addition to the engine) currently requiring advance procurement includes numerous communication, navigation, and Aircraft Survivability Equipment items procured by the Communications and Electronics Command (CECOM).
Justification:
FY 2016 procures long lead and Economic Order Quantities (EOQ) items such as T700-GE-701D engines and avionics components for the FY 2012-FY 2016 multiyear contract.
**UNCLASSIFIED**

**Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2016 Army**

<table>
<thead>
<tr>
<th>Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20</th>
<th>P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)</th>
<th>P-5 Number / Title: A05002 / UH-60 BLACK HAWK (MYP)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date:</strong> February 2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|---|---|---|

<table>
<thead>
<tr>
<th>UH-60 BLACK HAWK (MYP)</th>
<th>Production Leadtime (Months)</th>
<th>Prior Years (Each)</th>
<th>FY 2014 (Each)</th>
<th>FY 2015 (Each)</th>
<th>FY 2016 (Each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>609</td>
<td>70</td>
<td>87</td>
<td>94</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>When Rqd (Months)</th>
<th>Prior Years ($ M)</th>
<th>FY 2014 ($ M)</th>
<th>FY 2015 ($ M)</th>
<th>FY 2016 ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFE Airframe (†)</td>
<td>6</td>
<td>506.652</td>
<td>33.389</td>
<td>31.940</td>
<td>58.115</td>
</tr>
<tr>
<td>Auxiliary Power Unit (††)</td>
<td>3</td>
<td>23.402</td>
<td>4.214</td>
<td>4.347</td>
<td>3.518</td>
</tr>
<tr>
<td>Engines (†)</td>
<td>3</td>
<td>383.019</td>
<td>64.772</td>
<td>66.798</td>
<td>54.070</td>
</tr>
<tr>
<td>EG (†)</td>
<td>3</td>
<td>60.671</td>
<td>10.462</td>
<td>10.790</td>
<td>8.734</td>
</tr>
<tr>
<td>Heads Up Display AVS-7 (†)</td>
<td>3</td>
<td>18.658</td>
<td>3.164</td>
<td>3.263</td>
<td>2.642</td>
</tr>
<tr>
<td>Hover Infrared Suppressor (††)</td>
<td>3</td>
<td>25.361</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Miscellaneous (†)</td>
<td>3</td>
<td>15.651</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total: Other</strong></td>
<td></td>
<td></td>
<td>1,033.414</td>
<td>116.001</td>
<td>117.138</td>
</tr>
<tr>
<td><strong>Total Advance Procurement/Obligation Authority</strong></td>
<td></td>
<td></td>
<td>1,033.414</td>
<td>116.001</td>
<td>117.138</td>
</tr>
</tbody>
</table>
### Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification)

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
AA0005 / UH-60 Blackhawk M Model (MYP)

**P-5 Number / Title:**
A05002 / UH-60 BLACK HAWK (MYP)

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>QPA (Each)</th>
<th>Production Leadtime (Months)</th>
<th>Unit Cost (K)</th>
<th>Contract Forecast Date</th>
<th>2016 Qty (Each)</th>
<th>For FY</th>
<th>Total Cost Request ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFE Airframe (†)</td>
<td>1</td>
<td>-</td>
<td>708.720</td>
<td>Jan 2016</td>
<td>82</td>
<td></td>
<td>58.115</td>
</tr>
<tr>
<td>Auxiliary Power Unit (†)</td>
<td>1</td>
<td>-</td>
<td>42.902</td>
<td>Jan 2016</td>
<td>82</td>
<td></td>
<td>3.518</td>
</tr>
<tr>
<td>Engines (†)</td>
<td>2</td>
<td>-</td>
<td>329.695</td>
<td>Jan 2016</td>
<td>164</td>
<td></td>
<td>54.070</td>
</tr>
<tr>
<td>EGI (†)</td>
<td>2</td>
<td>-</td>
<td>53.256</td>
<td>Jan 2016</td>
<td>164</td>
<td></td>
<td>8.734</td>
</tr>
<tr>
<td>Heads Up Display AVS-7 (†)</td>
<td>1</td>
<td>-</td>
<td>32.220</td>
<td>Jan 2016</td>
<td>82</td>
<td></td>
<td>2.642</td>
</tr>
<tr>
<td>Hover Infrared Suppressor (†)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous (†)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total: Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>127.079</td>
</tr>
</tbody>
</table>

**Total Advance Procurement/Obligation Authority:**
127.079

**Description:**
N/A

(†) indicates the presence of Contract Data presented in the associated P-5 Item's P-5a exhibit.
### Description:

UH-60 A and L Models include UH-60 A to L conversions in FY16 through FY18 and UH-60L Digital, now designated as UH-60V, production starting in FY18. The UH-60 BLACKHAWK helicopter is the Army's utility helicopter in the future force. It is a twin engine, single rotor, four bladed utility helicopter used for air assault, general support, command & control, and aero-medical evacuations (MEDEVAC). The UH-60 is joint force capable, providing 24 hour/day support including operations at night and in adverse weather conditions. The UH-60 is designed to carry a crew of four plus eleven combat equipped troops or an external load up to 9,000 pounds. The UH-60 BLACK HAWK was fielded in 1978 as a replacement for the UH-1. From 1978 to 1988, UH-60As were produced. In 1989 production of UH-60Ls with improved engines and drive train began. In 2007, full rate production of UH-60Ms began which provided a digital cockpit, digital Flight Management System (FMS), improved engine, and wide-cord main rotor blades. The UH-60V provides an integrated digital map, integrated performance planning, common functionality and commonality of training with UH-60M.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.
### Justification:

FY16 base procurement dollars in the amount of $46.641M will procure 40 UH-60 A to L conversions. The UH-60 A to L conversion program expands the current UH-60 A to A recapitalization/rebuild program to a UH-60 A to L recapitalization/rebuild program. Effective in FY16, all A to L conversions and UH-60V conversions will be procured under this line, A05009. Prior to FY16 the funding for UH-60 A to L conversions was utilized under Black Hawk Modifications line AA0492.

### Exhibits Schedule

<table>
<thead>
<tr>
<th>Title</th>
<th>Exhibits</th>
<th>ID CD</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05009 / UH-60 A and L Models (A05009) (Operational)</td>
<td>P-3a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
A05009 / UH-60 BLACK HAWK A AND L MODELS

**Modification Number / Title:**
A05009 / UH-60 A and L Models (A05009)

---

**Resource Summary**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>46.641</td>
<td>-</td>
<td>46.641</td>
<td>46.588</td>
<td>75.714</td>
<td>168.304</td>
<td>210.832</td>
<td>548.079</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>46.641</td>
<td>-</td>
<td>46.641</td>
<td>46.588</td>
<td>75.714</td>
<td>168.304</td>
<td>210.832</td>
<td>548.079</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>46.641</td>
<td>-</td>
<td>46.641</td>
<td>46.588</td>
<td>75.714</td>
<td>168.304</td>
<td>210.832</td>
<td>548.079</td>
</tr>
</tbody>
</table>

(Repeat Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Initial Spares ($ in Millions)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross/Weapon System Unit Cost ($ in Thousands)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Secondary Distribution**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>86.507</td>
</tr>
<tr>
<td>ANG</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>46.641</td>
<td>-</td>
<td>46.641</td>
<td>46.588</td>
<td>75.714</td>
<td>81.797</td>
<td>71.982</td>
</tr>
<tr>
<td>Total:</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Secondary Distribution</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>46.641</td>
<td>-</td>
<td>46.641</td>
<td>46.588</td>
<td>75.714</td>
<td>168.304</td>
<td>210.832</td>
</tr>
</tbody>
</table>

**Description:**

UH-60 A and L Models includes UH-60 A to L conversions and the UH-60L Digital conversions, now designated as UH-60V.

UH-60V aircraft cost includes all digital components and their associated cost, as well as Engineering Changes, Systems Engineering and Program Management, Trainers, Data and Fielding.
## Modification Type: Operational

### Related RDT&E PEs:

<table>
<thead>
<tr>
<th>Date</th>
<th>Prior Years FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>FY 2015</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>FY 2016 Total</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>FY 2017</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>FY 2018</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>FY 2019</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>To Complete</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
</tbody>
</table>

**Modification Item 1 of 2: UH-60A to UH-60L Conversions**

- **Decision Package:** January 2016
- **Total Cost:** $458,079

**Modification Item 2 of 2: UH-60V**

- **Decision Package:** February 2015
- **Total Cost:** $458,079
### Installation Schedule

<table>
<thead>
<tr>
<th>PYS</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>TC</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>112</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army  
Modification Number / Title: A05009 / UH-60 A and L Models (A05009)

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20
P-1 Line Item Number / Title: A05009 / UH-60 BLACK HAWK A AND L MODELS

Method of Implementation: Depot
Installation Information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

LI A05009 - UH-60 BLACK HAWK A AND L MODELS

Page 6 of 6

P-1 Line #12
The CH-47F Chinook is a twin-turbine, tandem-rotor, heavy-lift transport helicopter with a useful load of up to 25,000 pounds. As the Army's only heavy lift helicopter, the CH-47F Improved Cargo helicopter is an essential component of the Army Future Force. The mission of the CH-47F is to transport troops (including air assault), supplies, weapons, and other cargo in general support operations. The CH-47F is vital to Overseas Contingency Operations and Homeland Security needs of our nation. Secondary missions include medical evacuation, aircraft recovery, parachute drops, disaster relief, and search and rescue. These aircraft are fielded to heavy helicopter companies and Special Operations Aviation. The CH-47F is expected to remain the Army's heavy lift helicopter until at least the 2038 timeframe. The CH-47F ReNew Program will provide a more reliable, less costly to operate aircraft compatible with Joint digital connectivity requirements in the Future Force. Key product improvements integrate a new-machined airframe, a performance capability, Common Avionics Architecture System, Air Warrior, Common Missile Warning System, enhanced air transportability, Digital Advance Flight Control System (DAFCS) and an Extended Program will provide a more reliable, less costly to operate aircraft compatible with Joint digital connectivity requirements in the Future Force. Key product improvements integrate a new-machined airframe, a performance capability, Common Avionics Architecture System, Air Warrior, Common Missile Warning System, enhanced air transportability, Digital Advance Flight Control System (DAFCS) and an Extended

## Program Elements for Code B Items:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>211</td>
<td>39</td>
<td>32</td>
<td>39</td>
<td>-</td>
<td>39</td>
<td>27</td>
<td>13</td>
<td>6</td>
<td>10</td>
<td>Continuing</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>6,014.652</td>
<td>915.681</td>
<td>982.880</td>
<td>1,126.948</td>
<td>-</td>
<td>1,126.948</td>
<td>826.609</td>
<td>584.725</td>
<td>233.343</td>
<td>242.331</td>
<td>Continuing</td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>270.593</td>
<td>77.031</td>
<td>90.376</td>
<td>102.361</td>
<td>-</td>
<td>102.361</td>
<td>99.344</td>
<td>8.707</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>5,744.059</td>
<td>838.650</td>
<td>892.504</td>
<td>1,024.587</td>
<td>-</td>
<td>1,024.587</td>
<td>727.265</td>
<td>576.018</td>
<td>233.343</td>
<td>242.331</td>
<td>Continuing</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>347.624</td>
<td>90.376</td>
<td>102.361</td>
<td>99.344</td>
<td>-</td>
<td>99.344</td>
<td>8.707</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>6,091.683</td>
<td>929.026</td>
<td>994.865</td>
<td>1,123.931</td>
<td>-</td>
<td>1,123.931</td>
<td>735.972</td>
<td>576.018</td>
<td>233.343</td>
<td>242.331</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

## Other Related Program Elements:

| Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
| Flyaway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | 28,505.460 | 23,479.000 | 30,715.000 | 28,896.103 | - | 28,896.103 | 30,615.148 | 44,978.846 | 38,890.500 | 24,233.100 | Continuing |

## Description:

The CH-47F Chinook is a twin-turbine, tandem-rotor, heavy-lift transport helicopter with a useful load of up to 25,000 pounds. As the Army's only heavy lift helicopter, the CH-47F Improved Cargo helicopter is an essential component of the Army Future Force. The mission of the CH-47F is to transport troops (including air assault), supplies, weapons, and other cargo in general support operations. The CH-47F is vital to Overseas Contingency Operations and Homeland Security needs of our nation. Secondary missions include medical evacuation, aircraft recovery, parachute drops, disaster relief, and search and rescue. These aircraft are fielded to heavy helicopter companies and Special Operations Aviation. The CH-47F is expected to remain the Army's heavy lift helicopter until at least the 2038 timeframe. The CH-47F ReNew Program will provide a more reliable, less costly to operate aircraft compatible with Joint digital connectivity requirements in the Future Force. Key product improvements integrate a new-machined airframe, a performance capability, Common Avionics Architecture System, Air Warrior, Common Missile Warning System, enhanced air transportability, Digital Advance Flight Control System (DAFCS) and an Extended Range Fuel System II for self-deployment missions. The CH-47F program extends the Army's Chinook fleets useful life 20 years incorporating reliability and maintainability improvements including airframe tuning for vibration reduction, corrosion protection, digital source collectors, Transportable Flight Proficiency Simulators, Cargo Floor Handling System, Ballistic Protection System, Transformation Sets, Kits and Outfits, Aviation Training Devices, M240 Window/Door Gun Mounts and an automated maintenance program with a 400-hour phase interval. The ReNew program rebuilds and replaces CH-47Ds and 61 Special Operations Aviation MH-47s to the CH-47F/MH-47G configuration. The New Build program procures all CH-47F New Build aircraft and 8 Special Operations Aviation MH-47G New Build aircraft. The CH-47F PM is fielding and training Combat Aviation Brigades (CABs), NG/USAR units using a New Equipment Training team. The CH-47F program is currently in the third year of a second five-year Multiyear (MY) contract (FY13 to FY17) that was awarded on 10 Jun 2013.
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

P-1 Line Item Number / Title:
A05101 / CH-47 Helicopter

ID Code (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>198,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>39</td>
<td>32</td>
<td>39</td>
<td>-</td>
<td>39</td>
<td>27</td>
<td>13</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>929,026</td>
<td>994,865</td>
<td>1,123,931</td>
<td>-</td>
<td>1,123,931</td>
<td>735,972</td>
<td>576,018</td>
<td>233,343</td>
<td>242,331</td>
</tr>
</tbody>
</table>

Component Budget Years Quantity values do not sum to the represented total intentionally:
(i) Army Active - FY 2017 Quantity Delta: 0
(j) Army Active - FY 2018 Quantity Delta: 9
(k) Army Active - FY 2019 Quantity Delta: 0
(l) Army Active - FY 2020 Quantity Delta: 0

Component Budget Years Cost values do not sum to the represented total intentionally:
(m) Army Active - FY 2017 Cost Delta: 0.197 million
(n) Army Active - FY 2018 Cost Delta: 268.764 million
(o) Army Active - FY 2019 Cost Delta: 0.000 million
(p) Army Active - FY 2020 Cost Delta: 0.000 million
### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

#### Appropriation / Budget Activity / Budget Sub Activity:
- 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

#### P-1 Line Item Number / Title:
- A05101 / CH-47 Helicopter

---

#### ID Code (A=Service Ready, B=Not Service Ready):
- Program Elements for Code B Items:
- Other Related Program Elements:

---

#### Exhibits Schedule

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Title*</th>
<th>Exhibits</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05008 / CH-47 NEW BUILD</td>
<td>P-5, P-5a, P-21</td>
<td>154 / 4,318.473</td>
<td>17 / 290.005</td>
<td>4 / 236.243</td>
<td>12 / 357.820</td>
<td>- / -</td>
<td>12 / 357.820</td>
<td></td>
</tr>
<tr>
<td>A05105 / CH-47 SLEP ()</td>
<td>P-3a</td>
<td>57 / 1,696.179</td>
<td>22 / 625.676</td>
<td>28 / 746.637</td>
<td>27 / 769.128</td>
<td>- / -</td>
<td>27 / 769.128</td>
<td></td>
</tr>
<tr>
<td><strong>Total Gross/Weapon System Cost</strong></td>
<td></td>
<td>211 / 6,014.652</td>
<td>39 / 915.681</td>
<td>32 / 982.880</td>
<td>39 / 1,126.948</td>
<td>- / -</td>
<td>39 / 1,126.948</td>
<td></td>
</tr>
</tbody>
</table>

---

#### Justification:

FY16 Base procurement dollars in the amount of $1,123.931 million will procure 12 new build aircraft and 27 renew aircraft.

Note: By having a Multi-year contract versus 5 single year contracts yielded a cost avoidance ($810M) FY13 through FY17.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
### Resource Summary

<table>
<thead>
<tr>
<th>ID Code</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05101</td>
<td>CH-47 Helicopter</td>
</tr>
<tr>
<td>P-1 Line Item Number / Title:</td>
<td>A05008 / CH-47 NEW BUILD</td>
</tr>
</tbody>
</table>

#### Gross/Weapon System Unit Cost

- **Gross/Weapon System Cost ($ in Millions)**
  - FY 2015: 236,243
  - FY 2016 Base: 357,820
  - FY 2016 OCO: 357,820

- **Net Procurement (P1) ($ in Millions)**
  - FY 2017: 357,820
  - FY 2018: 357,820
  - FY 2019: 357,820
  - FY 2020: -
  - To Complete: -
  - Total: 357,820

#### Procurement Quantity (Units in Each)

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>154</td>
<td>17</td>
<td>4</td>
<td>12</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Initial Spares ($ in Thousands)

- **Gross/Weapon System Unit Cost ($ in Thousands)**
  - FY 2015: 28,042,033
  - FY 2016 Base: 290,005
  - FY 2016 OCO: 236,243

#### Cost Elements

- **Flyaway Cost**
  - **Concrete Cost**
    - **Airframes/CFE**(1)
      - Unit Cost ($ K): 17,229,000
      - Qty (Each): 154
      - Total Cost ($ M): 2,653,266
    - **Engine/Accessories**
      - Unit Cost ($ K): 953,000
      - Qty (Each): 308
      - Total Cost ($ M): 293,524
    - **CFE Avionics**
      - Unit Cost ($ K): 183,665
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **GFE**
      - Unit Cost ($ K): 397,693
      - Qty (Each): 17
      - Total Cost ($ M): 155,273
    - **ECO (Flyaway)**
      - Unit Cost ($ K): 43,323
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **Other Costs**
      - Unit Cost ($ K): 93,043
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **SOA Aircraft**
      - Unit Cost ($ K): 95,134
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **PSE**
      - Unit Cost ($ K): 23,441
      - Qty (Each): 17
      - Total Cost ($ M): 115,273
  - **Concrete Cost**
    - **Peculiar Training Equipment**
      - Unit Cost ($ K): 66,550
      - Qty (Each): 17
      - Total Cost ($ M): 2,653,266
    - **Publications/Tech Data**
      - Unit Cost ($ K): 15,004
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **ECO (Support Items)**
      - Unit Cost ($ K): 2,925
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **NET**
      - Unit Cost ($ K): 77,750
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **Other Support Costs**
      - Unit Cost ($ K): 42,445
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **Post Production Modifications**
      - Unit Cost ($ K): 308,395
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
    - **Initial Spares**
      - Unit Cost ($ K): 22,315
      - Qty (Each): 17
      - Total Cost ($ M): 9,133,710
  - **Concrete Cost**
    - **Subtotal: Recurring Cost**
      - Unit Cost ($ K): 4,318,473
      - Qty (Each): 17
      - Total Cost ($ M): 290,005
    - **Subtotal: Flyaway Cost**
      - Unit Cost ($ K): 4,318,473
      - Qty (Each): 17
      - Total Cost ($ M): 290,005

#### MDAP/MAIS Code:

<table>
<thead>
<tr>
<th>A05101</th>
<th>CH-47 Helicopter</th>
</tr>
</thead>
</table>

#### MDAP/MAIS Code:

<table>
<thead>
<tr>
<th>A05008</th>
<th>CH-47 NEW BUILD</th>
</tr>
</thead>
</table>

#### UNCLASSIFIED

_Page 4 of 14_
## Exhibit P-5, Cost Analysis: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 01 / 20

### P-1 Line Item Number / Title:
A05101 / CH-47 Helicopter

### Item Number / Title [DODIC]:
A05008 / CH-47 NEW BUILD

### ID Code (A=Service Ready, B=Not Service Ready):

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### MDAP/MAIS Code:

### Date:
February 2015

### Army

#### CH-47 Helicopter

#### Cost Analysis:

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>28,042.033</td>
<td>154</td>
<td>4,318.473</td>
<td>17,059.118</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Airframes/CFE(1)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Engine/Accessories</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CFE Avionics</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GFE</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ECO (Flyway)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SOA Aircraft</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PSE</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Peculiar Training Equipment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Publications/Tech Data</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ECO (Support Items)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NET</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Support Costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Post Production Modifications</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>18</td>
<td>4</td>
<td>12</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Obligation Authority</td>
<td>251,405</td>
<td>236,243</td>
<td>357,820</td>
<td>-</td>
<td>357,820</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### UNCLASSIFIED

**Exhibit P-5, Cost Analysis:** PB 2016 Army  
**Date:** February 2015

<table>
<thead>
<tr>
<th>Appropriation / Budget Activity / Budget Sub Activity:</th>
<th>P-1 Line Item Number / Title:</th>
<th>Item Number / Title [DODIC]:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2031A / 01 / 20</td>
<td>A05101 / CH-47 Helicopter</td>
<td>A05008 / CH-47 NEW BUILD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready):</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>38.600</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>17</td>
<td>4</td>
<td>12</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>290.005</td>
<td>236.243</td>
<td>357.820</td>
<td>-</td>
<td>357.820</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
### Cost Elements

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>O C O</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
</table>

(†) indicates the presence of a P-21
### Exhibit P-21, Production Schedule: PB 2016 Army

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2013</th>
<th>Calendar Year 2013</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>M</td>
<td>C</td>
<td>R</td>
<td>FY</td>
</tr>
<tr>
<td>1</td>
<td>2012</td>
<td>ARMY</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2013</td>
<td>ARMY</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2014</td>
<td>ARMY</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2015</td>
<td>ARMY</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2016</td>
<td>ARMY</td>
<td>12</td>
<td>-</td>
</tr>
</tbody>
</table>

**Prior Years Deliveries: 112**

**Airframes/CFE**

| 1   | 2012 | ARMY | 25  | -   | 25   | -   | A   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3   | 3   | 4   | 4   | 3   | 3   | 2   |
| 1   | 2013 | ARMY | 17  | -   | 17   | -   | A   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 17  |
| 1   | 2014 | ARMY | 17  | -   | 17   | -   | A   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 17  |
| 1   | 2015 | ARMY | 4   | -   | 4    | -   | A   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4   |
| 1   | 2016 | ARMY | 12  | -   | 12   | -   | A   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 12  |

**P-1 Line #13**

<table>
<thead>
<tr>
<th>Item Number / Title:</th>
<th>A05101 / CH-47 Helicopter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Number / Title [DODIC]:</td>
<td>A05008 / CH-47 NEW BUILD</td>
</tr>
</tbody>
</table>

**Unrelated Text**: LI A05101 - CH-47 Helicopter

**UNCLASSIFIED**

**Date**: February 2015

**Exhibit P-21, Production Schedule**: PB 2016 Army
### Airframes/CFE

#### Prior Years Deliveries: 112

<table>
<thead>
<tr>
<th>Year</th>
<th>FY</th>
<th>Service</th>
<th>QTY</th>
<th>Accept Prior To 1 Oct 2014</th>
<th>Bal Due As Of 1 Oct</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>ARMY</td>
<td>25</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2013</td>
<td>ARMY</td>
<td>17</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>ARMY</td>
<td>17</td>
<td>17</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>2015</td>
<td>ARMY</td>
<td>4</td>
<td>4</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>2016</td>
<td>ARMY</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Fiscal Year 2015

<table>
<thead>
<tr>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
<th>Fiscal Year 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>C O E A E A P A U U E C O E A E A P A U U E A</td>
<td>C O E A E A P A U U E C O E A E A P A U U E A</td>
<td>C O E A E A P A U U E A</td>
</tr>
</tbody>
</table>
**Exhibit P-21, Production Schedule: PB 2016 Army**

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
A05101 / CH-47 Helicopter

**Item Number / Title [DODIC]:**
A05008 / CH-47 NEW BUILD

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>O M C R O FY SERVICE PROC QTY</td>
<td>ACCEPT PRIOR TO 1 OCT 2016</td>
<td>BAL DUE AS OF 1 OCT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2012 ARMY</td>
<td>25</td>
<td>25</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1 2013 ARMY</td>
<td>17</td>
<td>17</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1 2014 ARMY</td>
<td>17</td>
<td>7</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>1 2015 ARMY</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>1 2016 ARMY</td>
<td>12</td>
<td>-</td>
<td>12</td>
<td>-</td>
</tr>
</tbody>
</table>

**Airframes/CFE**

Prior Years Deliveries: 112

| O M C R O FY SERVICE PROC QTY | ACCEPT PRIOR TO 1 OCT 2016 | BAL DUE AS OF 1 OCT | | |
|------------------------------|------------------|--------------------| | |
| 1 2012 ARMY | 25 | 25 | - | - |
| 1 2013 ARMY | 17 | 17 | - | - |
| 1 2014 ARMY | 17 | 7 | 10 | 10 |
| 1 2015 ARMY | 4 | - | 4 | - |
| 1 2016 ARMY | 12 | - | 12 | - |
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 01 / 20

**P-1 Line Item Number / Title:**
A05101 / CH-47 Helicopter

**Item Number / Title [DODIC]:**
A05008 / CH-47 NEW BUILD

**Date:** February 2015

### Production Rates (Each / Year)

<table>
<thead>
<tr>
<th>MFR Ref</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Boeing Company - Ridley Park, PA</td>
<td>24</td>
<td>24</td>
<td>72</td>
</tr>
</tbody>
</table>

### Procurement Leadtime (Months)

<table>
<thead>
<tr>
<th>Initial</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALT</td>
<td>ALT</td>
</tr>
<tr>
<td>Prior to Oct 1</td>
<td>After Oct 1</td>
</tr>
<tr>
<td>Mfg PLT</td>
<td>Total After Oct 1</td>
</tr>
<tr>
<td>ALT</td>
<td>ALT</td>
</tr>
<tr>
<td>Prior to Oct 1</td>
<td>After Oct 1</td>
</tr>
<tr>
<td>Mfg PLT</td>
<td>Total After Oct 1</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>28</td>
<td>33</td>
</tr>
</tbody>
</table>

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 20

**P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter

**Modification Number / Title:** A05105 / CH-47 SLEP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>57</td>
<td>22</td>
<td>28</td>
<td>27</td>
<td>-</td>
<td>27</td>
<td>27</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,696.179</td>
<td>625.676</td>
<td>746.637</td>
<td>769.128</td>
<td>-</td>
<td>769.128</td>
<td>826.412</td>
<td>315.961</td>
<td>233.343</td>
<td>242.331</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>237.834</td>
<td>77.031</td>
<td>90.376</td>
<td>102.361</td>
<td>-</td>
<td>102.361</td>
<td>99.344</td>
<td>8.707</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,458.345</td>
<td>548.645</td>
<td>656.261</td>
<td>666.767</td>
<td>-</td>
<td>666.767</td>
<td>727.068</td>
<td>307.254</td>
<td>233.343</td>
<td>242.331</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>314.865</td>
<td>90.376</td>
<td>102.361</td>
<td>99.344</td>
<td>-</td>
<td>99.344</td>
<td>8.707</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,773.210</td>
<td>639.021</td>
<td>758.622</td>
<td>766.111</td>
<td>-</td>
<td>766.111</td>
<td>735.775</td>
<td>307.254</td>
<td>233.343</td>
<td>242.331</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

(All resource summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Initial Spares ($ in Millions):**
- FY 2014: -
- FY 2015: -
- FY 2016: -
- FY 2017: -
- FY 2018: -
- FY 2019: -
- FY 2020: -

**Gross/Weapon System Unit Cost ($ in Thousands):**
- FY 2014: 29,757.526
- FY 2015: 28,439.818
- FY 2016: 26,665.607
- FY 2017: 28,486.222
- FY 2018: 30,607.852
- FY 2019: 78,990.250
- FY 2020: 24,233.100

**Description:**
The CH-47F Chinook is a twin-turbine, tandem-rotor, heavy lift transport helicopter with a useful load of up to 25,000 pounds. The ReNew program will provide a more reliable, less costly to operate aircraft compatible with Joint digital connectivity requirements in the Future Force. The ReNew Program produces an identical aircraft as the CH-47F New Build program with the exception of dynamic components including engine, transmission and drive train. During production, the aircraft receives a new airframe, cockpit, wiring and plumbing.
## Models of Systems Affected: CH-47

### Modification Type:

#### Procurement

**Modification Item 1 of 1: CH-47 D to F Conversion**

<table>
<thead>
<tr>
<th>A Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

| Recurring Production (Mods) | Qty (Each) | $ M |
| 12 / 1,493.529 | 22 / 523.566 |
| Other Flyaway | Qty (Each) | $ M |
| 0 / 89.000 | 71.386 |
| Other Support | Qty (Each) | $ M |
| 0 / 95.167 | 23.797 |
| Training | Qty (Each) | $ M |
| 0 / 12.394 | 21.340 |
| Support Equipment | Qty (Each) | $ M |
| 0 / 6.089 | 3.172 |
| Post Production (Mods) | Qty (Each) | $ M |
| 0 | 1.649 |

**Subtotal: Recurring**

| Qty (Each) | $ M |
| 1 / 1,696.179 | 2 / 625.676 |

**Subtotal: CH-47 D to F Conversion**

| Qty (Each) | $ M |
| 57 / 1,696.179 | 22 / 625.676 |

**Subtotal: Procurement, All Modification Items**

| Qty (Each) | $ M |
| 57 / 1,696.179 | 22 / 625.676 |

### Installation

**Modification Item 1 of 1: CH-47 D to F Conversion**

| Qty (Each) | $ M |
| 0 / 0.000 | 27 / 674.186 |

**Subtotal: Installation**

| Qty (Each) | $ M |
| 0 / 0.000 | 6 / 698.804 |

**Total Cost (Procurement + Support + Installation)**

| Qty (Each) | $ M |
| 1,696.179 | 625.676 |

### Related RDT&E PEs:

**Related RDT&E PEs:**

| Date | $ M |
| February 2015 | 315.961 |
| FY 2020 | 233.343 |
| FY 2021 | 242.331 |
| FY 2022 | 233.343 |
| FY 2023 | 242.331 |
| FY 2024 | 233.343 |
| FY 2025 | 242.331 |
| FY 2026 | 233.343 |
| FY 2027 | 242.331 |
| FY 2028 | 233.343 |
| FY 2029 | 242.331 |

**Li A05101 - CH-47 Helicopter**

**UNCLASSIFIED**

**Army**

**Page 13 of 14**

**P-1 Line #13**

**Date: February 2015**

**UNCLASSIFIED**
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropria­tion / Budget Activity / Budget Sub Activity:** 2031A / 01 / 20

**P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter

**Modification Number / Title:** A05105 / CH-47 SLEP

**Modification Item 1 of 1:** CH-47 D to F Conversion

**Manufacturer Information**

- **Manufacturer Name:** Boeing
- **Manufacturer Location:** Ripley, PA
- **Administrative Leadtime (in Months):** 5
- **Production Leadtime (in Months):** 12

**Method of Implementation:** Contractor

**Installation Information**

|-------------|---------|---------|---------|---------|---------|---------|---------|------------|

<table>
<thead>
<tr>
<th>Installation Schedule</th>
</tr>
</thead>
</table>

| PYS | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| In  | 52 | 5  | 5  | 6  | 5  | 6  | 7  | 7  | 7  | 6  | 7  | 7  | 6  | 7  | 7  | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 3  | 48 | 226 |
| Out | 33 | 5  | 4  | 5  | 5  | 6  | 5  | 6  | 7  | 7  | 7  | 6  | 7  | 7  | 7  | 6  | 7  | 7  | 1  | 1  | 1  | 1  | 2  | 1  | 57 | 226 |
### Description:
The CH-47F Chinnok is a twin-turbine, tandem-rotor, heavy-lift transport helicopter with a useful load of up to 25,000 pounds. The CH-47F Improved Cargo Helicopter is an essential component of the Army Future Force. The CH-47F program fills the Army's Aviation Transformation Chinnok requirement. Key product improvements integrate the CH-47F Common Avionics Architecture System (CAAS) digital cockpit which meets the Net-Ready Key Performance Parameters (KPPs) and also includes a digital data bus that permits installation of enhanced communication and navigation equipment for improved situational awareness, mission performance, and survivability. The new digital cockpit incorporates all new airframe components and modifies the aircraft to reduce vibration. New airframe structural components and modifications will reduce harmful vibrations, improving operation and support (O&S) efficiency and crew endurance. Other airframe modifications reduce by 60 percent the time required for aircraft tear down and build-up after C-5/C-17 deployment. These modifications significantly enhance the Chinnok's strategic deployment capability.


**Exhibit P-40, Advance Procurement Budget Line Item Justification:**
PB 2016 Army

**P-1 Line Item Number / Title:**
A05101 / CH-47 Helicopter

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary

**Justification:**
FY 16 Advanced procurement dollars in the amount of $99.344 million will procure avionics and airframe advance procurement.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
</table>

**Exhibits Schedule**

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
## CH-47 SLEP Production Leadtime

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Prior Years (Each)</th>
<th>FY 2014 (Each)</th>
<th>FY 2015 (Each)</th>
<th>FY 2016 (Each)</th>
<th>FY 2017 (Each)</th>
<th>FY 2018 (Each)</th>
<th>FY 2019 (Each)</th>
<th>FY 2020 (Each)</th>
<th>To Complete (Each)</th>
<th>Total (Each)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>57</td>
<td>22</td>
<td>28</td>
<td>27</td>
<td>27</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>-</td>
</tr>
</tbody>
</table>

## Cost Element

### Avionics

<table>
<thead>
<tr>
<th>When Rqd (Months)</th>
<th>Prior Years ($ M)</th>
<th>FY 2014 ($ M)</th>
<th>FY 2015 ($ M)</th>
<th>FY 2016 ($ M)</th>
<th>FY 2017 ($ M)</th>
<th>FY 2018 ($ M)</th>
<th>FY 2019 ($ M)</th>
<th>FY 2020 ($ M)</th>
<th>To Complete ($ M)</th>
<th>Total ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>118,984</td>
<td>36,150</td>
<td>40,944</td>
<td>39,722</td>
<td>3,483</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

### Airframe

<table>
<thead>
<tr>
<th>When Rqd (Months)</th>
<th>Prior Years ($ M)</th>
<th>FY 2014 ($ M)</th>
<th>FY 2015 ($ M)</th>
<th>FY 2016 ($ M)</th>
<th>FY 2017 ($ M)</th>
<th>FY 2018 ($ M)</th>
<th>FY 2019 ($ M)</th>
<th>FY 2020 ($ M)</th>
<th>To Complete ($ M)</th>
<th>Total ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>195,881</td>
<td>54,226</td>
<td>61,417</td>
<td>59,622</td>
<td>5,224</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

### Total: Other

<table>
<thead>
<tr>
<th>When Rqd (Months)</th>
<th>Prior Years ($ M)</th>
<th>FY 2014 ($ M)</th>
<th>FY 2015 ($ M)</th>
<th>FY 2016 ($ M)</th>
<th>FY 2017 ($ M)</th>
<th>FY 2018 ($ M)</th>
<th>FY 2019 ($ M)</th>
<th>FY 2020 ($ M)</th>
<th>To Complete ($ M)</th>
<th>Total ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>314,865</td>
<td>90,376</td>
<td>102,361</td>
<td>99,344</td>
<td>8,707</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

### Total Advance Procurement/Obligation Authority

<table>
<thead>
<tr>
<th>When Rqd (Months)</th>
<th>Prior Years ($ M)</th>
<th>FY 2014 ($ M)</th>
<th>FY 2015 ($ M)</th>
<th>FY 2016 ($ M)</th>
<th>FY 2017 ($ M)</th>
<th>FY 2018 ($ M)</th>
<th>FY 2019 ($ M)</th>
<th>FY 2020 ($ M)</th>
<th>To Complete ($ M)</th>
<th>Total ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>314,865</td>
<td>90,376</td>
<td>102,361</td>
<td>99,344</td>
<td>8,707</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
</tr>
</tbody>
</table>
Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 01 / 20  
**P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter  
**P-3a Number / Title:** A05105 / CH-47 SLEP

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>QPA (Each)</th>
<th>Production Leadtime (Months)</th>
<th>Unit Cost ($K)</th>
<th>Contract Forecast Date</th>
<th>2016 Qty (Each)</th>
<th>Total Cost Request ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avionics</td>
<td>1</td>
<td>-</td>
<td>1,471.000</td>
<td>Feb 2016</td>
<td>27</td>
<td>39.722</td>
</tr>
<tr>
<td>Airframe</td>
<td>1</td>
<td>-</td>
<td>2,208.000</td>
<td>Feb 2016</td>
<td>27</td>
<td>59.622</td>
</tr>
<tr>
<td><strong>Total: Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>99.344</strong></td>
</tr>
<tr>
<td>Total Advance Procurement/Obligation Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>99.344</strong></td>
</tr>
</tbody>
</table>

**Description:**
N/A
The Tactical Signals Intelligence (SIGINT) Payload (TSP) is a SIGINT sensor, currently under development for the Gray Eagle that detects radio frequency (RF) emitters. The TSP system will provide a SIGINT capability to the tactical commander. The TSP system will be a modular, scalable payload using an architecture that is software reconfigurable to allow for growth and flexibility as technology, and as the adversaries use of technology changes. This flexible architecture allows for third party software applications to be integrated into the TSP system. The TSP system processing, control and data dissemination supports the Army's transformation by procuring Reconnaissance, Surveillance and Target Acquisition (RSTA) and Intelligence, Surveillance and Reconnaissance (ISR) payload systems for Brigade Combat Teams, Divisions, and Corps Unmanned Aircraft Systems (UAS). This is in accordance with Headquarters Department of the Army (HQDA) and Training and Doctrine Command (TRADOC) UAS priorities.

Common Sensor Payload (CSP), Small TActical Radar - Lightweight (STARLite), and Tactical Signals Intelligence (SIGINT) Payload (TSP) are principal payloads for the Gray Eagle UAS. The Army Acquisition Decision Teams, Divisions, and Corps Unmanned Aircraft Systems (UAS). This is in accordance with Headquarters Department of the Army (HQDA) and Training and Doctrine Command (TRADOC) UAS priorities.

Funds in this program were realigned beginning in FY15 from the shared MQ-1 Payload-UAS funding line (SSN A00020) for more efficient, effective program management. The funds were realigned into a new shared parent SSN, MQ-1 Payloads (MIP) (SSN A01001), which includes the MQ-1 sensor payloads: Synthetic Aperture Radar/Moving Target Indicator (SAR/MTI) (SSN A01003), Signal Intelligence (SIGINT) (SSN A01004), and Common Sensor Payload Full Motion Video (CSP FMV) (SSN A01005).

MQ-1 Payload (MIP) (A01001) budget line is shared between multiple Payload programs and two Program Managers (PM Terrestrial Sensors & PM Sensors - Aerial Intelligence). These Payload programs support the Army's transformation by procuring Reconnaissance, Surveillance and Target Acquisition (RSTA) and Intelligence, Surveillance and Reconnaissance (ISR) payload systems for Brigade Combat Teams, Divisions, and Corps Unmanned Aircraft Systems (UAS). This is in accordance with Headquarters Department of the Army (HQDA) and Training and Doctrine Command (TRADOC) UAS priorities. Common Sensor Payload (CSP), Small Tactica...
is integrated into the Distributed Common Ground System - Army (DCGS-A) via the Operational Ground Station. It supports Manned/Unmanned (MUM) teaming with Brigade Combat Team ground SIGINT Terminal Guidance (STG) teams and manned airborne assets. The TSP system improves situational awareness and shortens the targeting cycle by detecting and identifying emitters associated with high value targets (HVTs). The TSP system is capable of processing conventional signals, standard military signals, and modern signals of interest. This includes detection, recognition, identification, direction finding, and high confidence geo-location.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Secondary Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)

ID Code (A=Service Ready, B=Not Service Ready) :

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title*</td>
<td>Exhibits</td>
<td>ID CD</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
</tr>
<tr>
<td>A01004 / SIGINT (MIP)</td>
<td>P-5, P-5a, P-21</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 13.218</td>
<td>- / 47.551</td>
<td>- / -</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**

CSP: FY 2016 base procurement dollars in the amount of $26.502 million supports the procurement of eighteen (18) CSP HD payloads, to include initial spares and attrition units in accordance with the updated Gray Eagle requirement to add an additional AEB company. Funding also supports Interim Contractor Support (ICS), initial fielding of 27 CSP (Standard Definition and High Definition) payloads.

CSP: FY 2016 OCO procurement dollars in the amount of $8.700 million supports the procurement of 35 Diode Pump Lasers which replace the existing fielded Flash Pump Lasers in deployed CSP's only and increases reliability.

STARLite: FY 2016 base procurement dollars in the amount of $23.490 Million supports the procurement of eighteen (18) additional payloads and the continued interim contractor support, and initial fielding of 27 STARLite.

TSP: FY 2016 base procurement dollars in the amount of $47.551 Million supports procurement of fifteen (15) TSP payloads along with initial spares and contractor logistics support.

All Quantities are for the Active component.
### Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
</table>

#### Procurement Quantity (Units in Each)
- Gross/Weapon System Cost ($ in Millions)
  - FY 2014:
  - FY 2015:
  - FY 2016 Base:
  - FY 2016 OCO:
  - FY 2016 Total:

#### Appropriation / Budget Activity / Budget Sub Activity:
- 2031A / 02 / 10

#### P-1 Line Item Number / Title:
- A01001 / MQ-1 Payload (MIP)

#### Item Number / Title [DODIC]:
- A01003 / SAR/MTI (MIP)

#### MDAP/MAIS Code:
- MDAP/MAIS Code:

#### ID Code (A=Service Ready, B=Not Service Ready):
- ID Code (A=Service Ready, B=Not Service Ready):

---

#### Initial Spares ($ in Millions)
- Initial Spares ($ in Millions):
- Gross/Weapon System Unit Cost ($ in Thousands):
- Gross/Weapon System Unit Cost ($ in Thousands):

---

**Note:** Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

---

#### Cost Elements

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
</table>

#### Flyaway Cost

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($ K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
</table>

#### Recurring Cost

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($ K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
</table>

---

#### Secondary Distribution

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
</table>

---

(†) indicates the presence of a P-5a.
<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>OCO FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>STARLite System(*)</td>
<td>2016</td>
<td>Northrop Grumman / Linthicum</td>
<td>C / IDIQ</td>
<td>APG ACC</td>
<td>Jan 2016</td>
<td>Mar 2017</td>
<td>18</td>
<td>989.000</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) indicates the presence of a P-21
<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O</td>
<td>M</td>
<td>C</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LI A01001 - MQ-1 Payload (MIP)

UNCLASSIFIED

Army
### Exhibit P-21, Production Schedule: PB 2016 Army

<table>
<thead>
<tr>
<th>Appropriation / Budget Activity / Budget Sub Activity:</th>
<th>P-1 Line Item Number / Title:</th>
<th>Item Number / Title [DODIC]:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2031A / 02 / 10</td>
<td>A01001 / MQ-1 Payload (MIP)</td>
<td>A01003 / SAR/MTI (MIP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Production Rates (Each / Month)</th>
<th>Procurement Leadtime (Months)</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Northrop Grumman - Linthicum</td>
<td>8</td>
<td>12</td>
<td>24</td>
<td>-</td>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
</tr>
</tbody>
</table>

#### Remarks:

Production rates are monthly.

*A* in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
**Exhibit P-5, Cost Analysis:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** A01001 / MQ-1 Payload (MIP)

**Item Number / Title [DODIC]:** A01004 / SIGINT (MIP)

**ID Code (A=Service Ready, B=Not Service Ready):**

**MDAP/MAIS Code:**

<table>
<thead>
<tr>
<th>Resource Summary</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>13.218</td>
<td>47.551</td>
<td>-</td>
<td>47.551</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>13.218</td>
<td>47.551</td>
<td>-</td>
<td>47.551</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>13.218</td>
<td>47.551</td>
<td>-</td>
<td>47.551</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | - | - | - | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | - | - | - | 3,170.067 | - | 3,170.067 |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring Cost</td>
<td>TSP Systems(1)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,400,000</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TSP Engineering Change Proposals</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSP Contractor PMO/ System Engineering</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSP Government PMO/System Engineering</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSP System Test and Evaluation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TSP Data/Technical Data Package</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Subtotal/ Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Logistics Cost</td>
<td>Subtotal/ Hardware Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recurring Cost</td>
<td>TSP Initial Spares</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Interim Contractor Logistic Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Subtotal/ Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Subtotal/ Logistics Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Date:** February 2015

**UNCLASSIFIED**
Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10
P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)

Item Number / Title [DODIC]: A01004 / SIGINT (MIP)

ID Code (A=Service Ready, B=Not Service Ready): 

MDAP/MAIS Code: 

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.218</td>
</tr>
</tbody>
</table>

Secondary Distribution

<table>
<thead>
<tr>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>13.218</td>
<td>47.551</td>
<td>47.551</td>
</tr>
</tbody>
</table>

Total: Secondary Distribution

| Quantity |         |              |             |              |
| Total Obligation Authority | -      | 13.218       | 47.551      | 47.551       |

(†) indicates the presence of a P-5a
## Exhibit P-5a, Procurement History and Planning: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

### P-1 Line Item Number / Title:
A01001 / MQ-1 Payload (MIP)

### Item Number / Title [DODIC]:
A01004 / SIGINT (MIP)

### Date: February 2015

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>OCO</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($ K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSP Systems†</td>
<td>2015</td>
<td>BAE Systems / Nashua</td>
<td>SS / IDIQ</td>
<td>ACC APG</td>
<td>Mar 2015, Mar 2016</td>
<td>2</td>
<td>2,400,000</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSP Systems†</td>
<td>2016</td>
<td>BAE Systems / Nashua</td>
<td>SS / IDIQ</td>
<td>ACC APG</td>
<td>May 2016, May 2017</td>
<td>15</td>
<td>1,723,000</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
A01001 / MQ-1 Payload (MIP)

**Item Number / Title [DODIC]:**
A01004 / SIGINT (MIP)

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
<th>Fiscal Year 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
<th>Fiscal Year 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **TSP Systems**
- **Army (XIII)**
- **Army (XIV)**

**Date:** February 2015

**UNCLASSIFIED**

Page 11 of 19

P-1 Line #15
## Exhibit P-21, Production Schedule: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

### P-1 Line Item Number / Title:
A01001 / MQ-1 Payload (MIP)

### Item Number / Title [DODIC]:
A01004 / SIGINT (MIP)

### Cost Elements

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>O M C R O # FY SERVICE PROC QTY</td>
<td>ACCEPT PRIOR TO 1 OCT 2016</td>
<td>BAL DUE AS OF 1 OCT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C O E A E A P A U U U E C O E A E A P A U U U E A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T V C N B R R Y N L G P T V C N B R R Y N L G P</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

TSP Systems

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2015</td>
<td>ARMY (XIII)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>2016</td>
<td>ARMY (XIV)</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

---

LI A01001 - MQ-1 Payload (MIP)

UNCLASSIFIED

Page 12 of 19

P-1 Line #15
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
A01001 / MQ-1 Payload (MIP)

**Item Number / Title [DODIC]:**
A01004 / SIGINT (MIP)

**Date:** February 2015

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Initial</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BAE Systems - Nashua</td>
<td>1</td>
<td>12</td>
<td>24</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>21</td>
</tr>
</tbody>
</table>

**Remarks:**
Admin lead time is 6 months after Oct 1, however, FY16 buy is projected in May 16 after successful Mar 16 IOT&E.

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999, all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999, all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

**Service/Agency Suffixes:**
[XIII] Base
[XIV] Base

---

LI A01001 - MQ-1 Payload (MIP)

UNCLASSIFIED

Page 13 of 19

P-1 Line #15
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** A01001 / MQ-1 Payload (MIP)  
**Item Number / Title [DODIC]:** A01005 / CSP FMV (MIP)

**Date:** February 2015

#### Resource Summary

<table>
<thead>
<tr>
<th>Procurement Quantity (Units in Each)</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>8.409</td>
<td>26.502</td>
<td>8.700</td>
<td>35.202</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>8.409</td>
<td>26.502</td>
<td>8.700</td>
<td>35.202</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Initial Spares ($ in Millions)** | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | - | - | 1,005,771 |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

#### Cost Elements

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flyaway Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSP HD Procurement (1)</td>
<td>-</td>
<td>-</td>
<td>1,098,000</td>
<td>12</td>
<td>13.176</td>
</tr>
<tr>
<td>CSP HD Initial Spares (1)</td>
<td>-</td>
<td>-</td>
<td>1,098,000</td>
<td>6</td>
<td>6.588</td>
</tr>
<tr>
<td>CSP Diode Pump Laser</td>
<td>-</td>
<td>-</td>
<td>2,810</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CSP HD Platform Retrofit/Upgrades</td>
<td>-</td>
<td>-</td>
<td>0.488</td>
<td>-</td>
<td>0.345</td>
</tr>
<tr>
<td>CSP Interim Contractor Support (SD)</td>
<td>-</td>
<td>-</td>
<td>3.101</td>
<td>-</td>
<td>3.194</td>
</tr>
<tr>
<td>CSP Interim Contractor Support (HD)</td>
<td>-</td>
<td>-</td>
<td>1.640</td>
<td>1.559</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
Exhibit P-5, Cost Analysis: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)

Item Number / Title [DODIC]: A01005 / CSP FMV (MIP)

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A01005 / CSP FMV (MIP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total:</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
## Exhibit P-5a, Procurement History and Planning: PB 2016 Army

**Date:** February 2015

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

**P-1 Line Item Number / Title:**
A01001 / MQ-1 Payload (MIP)

### Item Number / Title [DODIC]:
A01005 / CSP FMV (MIP)

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>O C O FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($ K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP HD Procurement(†)</td>
<td>2016</td>
<td>Raytheon / McKinney</td>
<td>C / FFP</td>
<td>ACC, APG</td>
<td>Mar 2016</td>
<td>Mar 2017</td>
<td>12</td>
<td>1,098.000</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSP HD Initial Spares(†)</td>
<td>2016</td>
<td>Raytheon / McKinney</td>
<td>C / FFP</td>
<td>ACC, APG</td>
<td>Mar 2016</td>
<td>Mar 2017</td>
<td>6</td>
<td>1,098.000</td>
<td>N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
A01001 / MQ-1 Payload (MIP)

**Item Number / Title [DODIC]:**
A01005 / CSP FMV (MIP)

**Cost Elements (Units in Each)**

<table>
<thead>
<tr>
<th>O M</th>
<th>C R</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROC QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2015</th>
<th>BAL DUE AS OF 1 OCT 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>C O</td>
<td>E A</td>
<td>E A</td>
<td>P A</td>
<td>U U</td>
<td>U E</td>
<td>O E</td>
</tr>
<tr>
<td>T V</td>
<td>C N</td>
<td>B R</td>
<td>R Y</td>
<td>N L</td>
<td>G P</td>
<td>T V</td>
</tr>
</tbody>
</table>

#### Fiscal Year 2016

<table>
<thead>
<tr>
<th>CSP HD Procurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

#### Fiscal Year 2017

<table>
<thead>
<tr>
<th>CSP HD Initial Spares</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

**Date:** February 2015
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A / 02 / 10

**P-1 Line Item Number / Title:**  
A01001 / MQ-1 Payload (MIP)

**Item Number / Title [DODIC]:**  
A01005 / CSP FMV (MIP)

**Date:** February 2015

**UNCLASSIFIED**

**Cost Elements**  
(Units in Each)

| 1 | 2016 | ARMY | 12 | 7 | 5 | 1 | 1 | 1 | 1 | 1 | CSP HD Procurement |
| 2 | 2016 | ARMY | 6 | 6 | - | - | - | - | - | - | CSP HD Initial Spares |

**Calendar Year 2018**


**Calendar Year 2019**


**LI A01001 - MQ-1 Payload (MIP)**

**UNCLASSIFIED**

Army

Page 18 of 19

P-1 Line #15

125
**Exhibit P-21, Production Schedule:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
A01001 / MQ-1 Payload (MIP)

**Item Number / Title [DODIC]:**
A01005 / CSP FMV (MIP)

**Date:** February 2015

**UNCLASSIFIED**

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Production Rates (Each / Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raytheon - McKinney</td>
<td>1</td>
<td>24</td>
<td>125</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Raytheon - McKinney</td>
<td>1</td>
<td>24</td>
<td>125</td>
<td>-</td>
</tr>
</tbody>
</table>

**Procurement Leadtime (Months):**

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
<th>ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raytheon - McKinney</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Raytheon - McKinney</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
<th>ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raytheon - McKinney</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td></td>
<td>12</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Raytheon - McKinney</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td></td>
<td>12</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
Terminal Guidance (STG) teams and manned airborne assets. The TSP system improves situational awareness and shortens the targeting cycle by detecting and identifying emitters associated with high value adversaries use of technology changes. This flexible architecture allows for third party software applications to be integrated into the TSP system. The TSP system processing, control and data dissemination capability to the tactical commander. The TSP system will be a modular, scalable payload using an architecture that is software reconfigurable to allow for growth and flexibility as technology, and as the platforms. It is the EO/IR/LD sensor for Gray Eagle UAS which supports force applications, battlespace awareness, force protection, and net-centric operations across the battlefield to provide wide area, near real time RSTA capabilities. It operates throughout the UAS flight mission profile in adverse weather and through battlefield obscurants. The SAR mode generates quality images for the battlefield commander for detection, classification and location of stationary commercial wheeled vehicle-size targets. The MTI mode detects moving ground targets, to include man-sized detection, and provides location information and performs cross-cue with the Electro-Optic/Infrared (EO/IR) sensors. Small TActical Radar - Lightweight (STARLite) SAR/MTI is a lightweight, high performance, all weather, multi-functional radar system for the Gray Eagle Unmanned Aircraft System (UAS). The STARLite system provides wide area, near real time RSTA capabilities. It operates throughout the UAS flight mission profile in adverse weather and through battlefield obscurants. The SAR mode generates quality images for the battlefield commander for detection, classification and location of stationary commercial wheeled vehicle-size targets. The MTI mode detects moving ground targets, to include man-sized detection, and provides location information and performs cross-cue with the Electro-Optic/InfraRed (EO/IR) sensors.

Common Sensor Payload (CSP) - Electro Optical / Infra Red / Laser Designator (EO/IR/LD) provides FMV in both the Electro Optical and Mid Wave IR spectrums with day/night capability to collect and display continuous imagery with the ability to designate targets of interest for attack by laser guided precision weapons in Standard Definition (SD) as well as High Definition (HD) for select number of Gray Eagle platforms. It is the EO/IR/LD sensor for Gray Eagle UAS which supports force applications, battlespace awareness, force protection, and net-centric operations across the battlefield to provide wide area, near real time RSTA capabilities. Additional initiatives will continue to focus on the transition of technologies directly supporting emerging requirements and the Army's Current and Future Force. CSP is being procured for the Gray Eagle UAS program and has potential application to other platforms.

The Tactical Signals Intelligence (SIGINT) Payload (TSP) is a SIGINT sensor, currently under development for the Gray Eagle that detects radio frequency (RF) emitters. The TSP system will provide a SIGINT capability to the tactical commander. The TSP system will be a modular, scalable payload using an architecture that is software reconfigurable to allow for growth and flexibility as technology, and as the adversaries use of technology changes. This flexible architecture allows for third party software applications to be integrated into the TSP system. The TSP system processing, control and data dissemination is integrated into the Distributed Common Ground System - Army (DCGS-A) via the Operational Ground Station. It supports Manned/Unmanned (MUM) teaming with Brigade Combat Team ground SIGINT Terminal Guidance (STG) teams and manned airborne assets. The TSP system improves situational awareness and shortens the targeting cycle by detecting and identifying emitters associated with high value...
targets (HVTs). The TSP system is capable of processing conventional signals, standard military signals, and modern signals of interest. This includes detection, recognition, identification, direction finding, and high confidence geo-location.

The Army Acquisition Objective for TSP is 95 systems.
Exhibit P-40, Budget Line Item Justification: PB 2016 Army  
**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft  
**P-1 Line Item Number / Title:**  
A00020 / MQ-1 Payload - UAS

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready):</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
<th>0305204A</th>
</tr>
</thead>
</table>

**Exhibits Schedule**

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits</th>
<th>ID CD</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A00020 / MQ-1 Payload - UAS</td>
<td>P-5, P-5a, P-21</td>
<td>-</td>
<td>/ 482.094</td>
<td>28 / 97.781</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

**Justification:**

No FY16 Funding exists in this line.

All Quantities are for the Active component.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
### Resource Summary

<table>
<thead>
<tr>
<th>Procurement Quantity (Units in Each)</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>482,094</td>
<td>97,781</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>482,094</td>
<td>97,781</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>482,094</td>
<td>97,781</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | - | - | - | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | - | 3,492,179 | - | - | - | - |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

<table>
<thead>
<tr>
<th>Flyaway Cost</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP SD Hardware</td>
<td>-</td>
<td>-</td>
<td>180,331</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CSP HD Hardware(1)</td>
<td>-</td>
<td>-</td>
<td>1,088,250</td>
<td>8</td>
<td>8,706</td>
<td>-</td>
</tr>
<tr>
<td>CSP HD Platform Retrofit</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5,283</td>
<td>-</td>
</tr>
<tr>
<td>CSP PMO Support</td>
<td>-</td>
<td>-</td>
<td>3,500</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CSP System Test &amp; Eval</td>
<td>-</td>
<td>-</td>
<td>0,588</td>
<td>-</td>
<td>0,450</td>
<td>-</td>
</tr>
<tr>
<td>CSP SD Initial Spares</td>
<td>-</td>
<td>-</td>
<td>10,794</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CSP HD Initial Spares</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,529</td>
<td>-</td>
</tr>
<tr>
<td>CSP Interim Contractor Support</td>
<td>-</td>
<td>-</td>
<td>5,977</td>
<td>-</td>
<td>0,304</td>
<td>-</td>
</tr>
<tr>
<td>CSP Initial Fielding Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,500</td>
<td>-</td>
</tr>
<tr>
<td>CSP Depot Facilitation</td>
<td>-</td>
<td>-</td>
<td>6,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>STARLite Hardware(2)</td>
<td>-</td>
<td>-</td>
<td>236,383</td>
<td>803,375</td>
<td>8</td>
<td>6,427</td>
</tr>
<tr>
<td>STARLite PMO Support</td>
<td>-</td>
<td>-</td>
<td>3,500</td>
<td>-</td>
<td>-</td>
<td>1,616</td>
</tr>
<tr>
<td>Program Management/Eng Support</td>
<td>-</td>
<td>-</td>
<td>0,276</td>
<td>-</td>
<td>1,000</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Changes</td>
<td>-</td>
<td>-</td>
<td>1,956</td>
<td>-</td>
<td>1,771</td>
<td>-</td>
</tr>
</tbody>
</table>

(1, 2) The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
## Exhibit P-5, Cost Analysis: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

### P-1 Line Item Number / Title:
A00020 / MQ-1 Payload - UAS

### Item Number / Title [DODIC]:
A00020 / MQ-1 Payload - UAS

### ID Code (A=Service Ready, B=Not Service Ready):

### MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>System Test &amp; Eval</td>
<td>-</td>
<td>-</td>
<td>0.588</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares</td>
<td>-</td>
<td>-</td>
<td>11.369</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Fielding Support</td>
<td>-</td>
<td>-</td>
<td>6.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Depot Facilitization</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSP Non recurring Production</td>
<td>-</td>
<td>-</td>
<td>14.832</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSP Airborne Pods†</td>
<td>-</td>
<td>-</td>
<td>2127.500</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>TSP Engineering Changes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSP Contractor Program Mgmt/Eng Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSP Government PMO/Engineering Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSP System Test &amp; Eval</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSP Data</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TSP Initial Spares</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>482.094</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>482.094</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>-</td>
<td>-</td>
<td>482.094</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>97.781</td>
</tr>
<tr>
<td></td>
<td>97.781</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>97.781</td>
</tr>
<tr>
<td></td>
<td>97.781</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
### Exhibit P-5a, Procurement History and Planning: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** A00020 / MQ-1 Payload - UAS

**Item Number / Title [DODIC]:** A00020 / MQ-1 Payload - UAS

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>OCO</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP HD Hardware(†)</td>
<td>2014</td>
<td>Raytheon / McKinney, TX</td>
<td>C / IDIQ</td>
<td>CECOM, APG</td>
<td>Mar 2014</td>
<td>Mar 2015</td>
<td>8</td>
<td>1,088.250</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STARLite Hardware(†)</td>
<td>2014</td>
<td>Northrop Grumman / Linthicum, MD</td>
<td>SS / FFP</td>
<td>CECOM, APG</td>
<td>Apr 2014</td>
<td>Jun 2015</td>
<td>8</td>
<td>803.375</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21
<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP HD Hardware</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFR O</td>
<td>PROC QTY</td>
<td>BAL DUE AS OF 1 OCT</td>
<td>ACCEPT PRIOR TO 1 OCT</td>
<td></td>
</tr>
<tr>
<td>1  2014 ARMY (XV)</td>
<td>8 - 8</td>
<td>A - - - - - - - - - - - - - -</td>
<td>2 2 1 1 1 1 -</td>
<td></td>
</tr>
<tr>
<td>STARlite Hardware</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2  2014 ARMY (XVI)</td>
<td>8 - 8</td>
<td>A - - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - - - - - - - -</td>
<td>1 1 1 1 4</td>
</tr>
<tr>
<td>TSP Airborne Pods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3  2014 ARMY (XVII)</td>
<td>12 - 12</td>
<td>A - - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - - - - - - - -</td>
<td>12</td>
</tr>
<tr>
<td>Cost Elements</td>
<td>Fiscal Year 2016</td>
<td>Calendar Year 2016</td>
<td>Fiscal Year 2017</td>
<td>Calendar Year 2017</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------</td>
<td>--------------------</td>
<td>-----------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td>(Units in Each)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>N</td>
<td>D</td>
<td>J</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>J</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>A</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>P</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>U</td>
<td>U</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>#</td>
<td>E</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>FY</td>
<td>R</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>SERVICE</td>
<td>G</td>
<td>L</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>PROC</td>
<td>P</td>
<td>T</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>QTY</td>
<td>C</td>
<td>N</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>ACCEPT</td>
<td>R</td>
<td>Y</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>BAL</td>
<td>DUE</td>
<td>AS OF</td>
<td>1 OCT</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>N</td>
<td>D</td>
<td>J</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>J</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>A</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>P</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>U</td>
<td>U</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>#</td>
<td>E</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>FY</td>
<td>R</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>SERVICE</td>
<td>G</td>
<td>L</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>PROC</td>
<td>P</td>
<td>T</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>QTY</td>
<td>C</td>
<td>N</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>ACCEPT</td>
<td>BAL</td>
<td>DUE AS OF</td>
<td>1 OCT</td>
</tr>
</tbody>
</table>

CSP HD Hardware
1 2014 ARMY (XV) 8 8 -

STARlite Hardware
2 2014 ARMY (XVI) 8 4 4 1 1 1

TSP Airborne Pods
3 2014 ARMY (XVI) 12 - 12 - 1 1 1 1 1 1 1 1 1 2 -
**Exhibit P-21, Production Schedule:** PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:** PB 2016 Army

**P-1 Line Item Number / Title:** A00020 / MQ-1 Payload - UAS

**Item Number / Title [DODIC]:** A00020 / MQ-1 Payload - UAS

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Initial ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
<th>Reorder ALT Prior to Oct 1</th>
<th>ALT After Oct 1</th>
<th>Mfg PLT</th>
<th>Total After Oct 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raytheon - McKinney, TX</td>
<td>1</td>
<td>24</td>
<td>125</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Northrop Grumman - Linthicum, MD</td>
<td>12</td>
<td>24</td>
<td>60</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>BAE Systems - Nashua, NH</td>
<td>1</td>
<td>12</td>
<td>24</td>
<td>-</td>
<td>9</td>
<td>17</td>
<td>26</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: AZ2000 / Guardrail Mods (MIP)

Modification of Aircraft

ID Code (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td></td>
<td>1,406.918</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>1,406.918</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,406.918</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,431.362</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) - - - - - - - - - - - - - - - - - -
Flyaway Unit Cost ($ in Thousands) - - - - - - - - - - - - - - - - - -
Gross/Weapon System Unit Cost ($ in Thousands) - - - - - - - - - - - - - - - - - -

Description:
Guardrail Common Sensor (GRCS), IAW the Aerial Layer 2020 Strategy, is a tactical fixed-wing, airborne, Signals Intelligence (SIGINT) collection and precision targeting location system. The GRCS systems are fielded to four Aerial Exploitation Battalions (AEBs) which are under the Intelligence and Security Command (INSCOM). GRCS provides near-real-time information to tactical commanders in the joint task force area supporting a full spectrum of operations (close in and deep look collections). It collects low-, mid-, and high-band radio signals; identifies and classifies them; determines source location; and provides near-real-time reporting, ensuring information dominance to commanders.

Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Justification:
FY15 Base procurement funding ($14.2M) provides recurring and non-recurring engineering, upgrades three (3) MX-15HDI cameras, and fields one Full Motion Video (FMV) aircraft.

AZ2000 GRCS line transitioned to AZ2052 in FY16.
### Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,406.918</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,413.362</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,406.918</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,413.362</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,406.918</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,413.362</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

### Initial Spares ($ in Millions)

| | - | - | - | - | - | - | - | - | - | - |

### Gross/Weapon System Unit Cost ($ in Thousands)

| | - | - | - | - | - | - | - | - | - | - |

### Description:

The above represents Guardrail efforts over time. Individual efforts are described in detail under corresponding modifications.

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>10.262</td>
<td>14.182</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| Total: Secondary Distribution | Quantity | - | - | - | - | - | - | - | - |
| Total Obligation Authority | 10.262 | 14.182 | - | - | - | - | - | - | - |

### Development Status/Major Development Milestones

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 2012</td>
<td>None</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Modification Item 1 of 2: Full Motion Video (FMV)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>A Kits</td>
<td></td>
<td>2 / 0.754</td>
<td>2 / 0.754</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>4 / 1.508</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 0.400</td>
<td>1 / 0.400</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 0.400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 0.104</td>
<td>1 / 0.104</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 0.104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 1.256</td>
<td>1 / 1.256</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 1.356</td>
</tr>
</tbody>
</table>

### Modification Item 2 of 2: Enhanced Situational Awareness (ESA) Subsystem

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 60.648</td>
<td>1 / 60.648</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 60.648</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 1.830</td>
<td>1 / 1.830</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 1.830</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 / 1.075</td>
<td>6 / 1.075</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>6 / 1.075</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 1.367</td>
<td>1 / 1.367</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 1.367</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 1.000</td>
<td>1 / 1.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 1.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 78.593</td>
<td>1 / 78.593</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 78.593</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 / 78.246</td>
<td>1 / 78.246</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 78.246</td>
</tr>
</tbody>
</table>
## Models of Systems Affected: 1-14

### Initial Spares Provision

<table>
<thead>
<tr>
<th>Financial Plan</th>
<th>Qty (Each)</th>
<th>FY 2014 Total Cost ($)</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subtotal:</strong> Recurring</td>
<td>- / 787.204</td>
<td>- / 8.362</td>
<td>- / 7.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>802.566</td>
</tr>
</tbody>
</table>

| Subtotal: Procurement, All Modification Items | 0 / 787.204 | 2 / 10.262 | 28 / 11.265 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | 802.566 |

<table>
<thead>
<tr>
<th>Financial Plan</th>
<th>Qty (Each)</th>
<th>FY 2014 Total Cost ($)</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modification Item 1 of 2: Full Motion Video (FMV)</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>3 / 2.887</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>3.12887</td>
</tr>
</tbody>
</table>


| **Total**                      |            |                        |          |              |              |              |         |         |         |         |             | 1,431.362|

**Installation**

**Total Cost (Procurement + Support + Installation)** 1,406.918 10.262 14.182 - - - - - - - 1,431.362
## Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**UNCLASSIFIED**

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AZ2000 / Guardrail Mods (MIP)

Modification Number / Title: AZ2000 / Guardrail MODS MIP

**Modification Item 2 of 2: Enhanced Situational Awareness (ESA) Subsystem**

Manufacturer Information

Manufacturer Name: Northrop Grumman

Manufacturer Location: TBD

Administrative Leadtime (in Months): 1

Production Leadtime (in Months): 18

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td>Jan 2014</td>
<td>Jul 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation Information

Method of Implementation: TBD

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.510</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 2.014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.373</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.323</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 616.494</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0 / 619.714</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>Out</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
</tbody>
</table>
### Description:

AZ2001 Multi Sensor ABN Recon (MIP) is the Parent Line to Airborne Reconnaissance Low - Enhanced (MIP)(ARL-E) (AZ2050). For FY16 and beyond this line continues as the Parent Line for EMARSS Payloads (MIP)(AZ2054) and Guardrail Payloads (MIP) (AZ2052), IAW the Aerial Layer 2020 Strategy.

The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) Payloads will consist of Mission Equipment Packages (MEP) and Processing Exploitation & Dissemination commercial derivative equipment such as, 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. Payloads integrated on platforms will include: niche capabilities such as Wide Area Aerial Surveillance (WAAS), Light Detection and Ranging (LiDAR) and improved Synthetic Aperture Radar / Moving Target Indicator (SAR/MTI) radar capability.

EMARSS will operate 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 transitioned from A02005.

The Airborne Reconnaissance Low - Enhanced (ARL-E) program migrates some of the current ARL sensors, purchases new and reuses some purchased under a Quick Reaction Capability (QRC) program to the meet the ARL-E Capabilities Production Document (CPD) requirements. ARL-E payload procures the hardware, software, and infrastructure to rapidly install sensors in a plug and play, quick connect/ disconnect, mounting system to allow the installation of various combinations of sensor-types in support of a wide-range of theater operations. Each Mission Equipment Packages (MEP) will include the following sensor suite; one (1) Communications Intelligence (COMINT) subsystem capable of supporting theater net centric geo-location efforts, two (2) High Definition Full Motion Video (FMV) sensors; one (1) Improved Synthetic Aperture Radar / Ground Moving Target Indicator (SAR/GMTI) radar subsystem OR one (1) Synthetic Aperture Radar / Dismounted Moving Target Indicator (SAR/DMTI) subsystems. All MEPs will include the infrastructure to plug and play a Hyper-spectral (HSI) Payload purchased under a QRC program. The MEP will also include one (1) set of Distributed Common Ground Station-Army (DCGS-A) workstations, one (1) set of communication equipment (mission radios, Beyond line of Site (BLOS) and Line of Site (LOS) Data links). Future Growth capabilities include: Wide-Area Aerial Surveillance (WAAS), Light Detection and Ranging (LiDAR) and Foliage Penetration Radar (FOPEN).

Funding also supports non-recurring engineering, integration, Logistics documentation, and training and test efforts. The ARL-E payload program procures the ARL MEP for enhancement of the current ARL-E system making it rapidly reconfigurable and deployable world-wide against current, new, and emerging threats.

---

**Resource Summary**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>765.012</td>
<td>10.467</td>
<td>131.892</td>
<td>95.725</td>
<td>-</td>
<td>-</td>
<td>95.725</td>
<td>68.878</td>
<td>62.721</td>
<td>36.247</td>
<td>13.027</td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>95.725</td>
<td>68.878</td>
<td>62.721</td>
<td>36.247</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>765.012</td>
<td>10.467</td>
<td>131.892</td>
<td>95.725</td>
<td>-</td>
<td>-</td>
<td>95.725</td>
<td>68.878</td>
<td>62.721</td>
<td>36.247</td>
<td>-</td>
</tr>
<tr>
<td>Plus FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>765.012</td>
<td>10.467</td>
<td>131.892</td>
<td>95.725</td>
<td>-</td>
<td>-</td>
<td>95.725</td>
<td>68.878</td>
<td>62.721</td>
<td>36.247</td>
<td>13.027</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
| Flyway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | - | 5,318.056 | - | 5,318.056 | - | - | - | - | - | - |

**P-1 Line Element #18**

**Program Elements for Code B Items:**

- FY 2015: $5,318.056
- FY 2016: $95.725
- FY 2017: $68.878
- FY 2018: $62.721
- FY 2019: $36.247
- FY 2020: $13.027

**Other Related Program Elements:**

- FY 2016: $13.027
- FY 2017: $13.027
- FY 2018: $13.027
- FY 2019: $13.027
- FY 2020: $13.027

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**

- 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft
Guardrail Common Sensor (GRCS) is a tactical fixed-wing, airborne, Signals Intelligence (SIGINT) collection and precision targeting location system. The GRCS systems are fielded to four Aerial Exploitation Battalions (AEBs) which are under the command of Information and Security Command (INSCOM). GRCS provides near-real-time information to tactical commanders in the joint task force area supporting a full spectrum of operations (close in and deep look collections). It collects low-, mid-, and high-band radio signals; identifies and classifies them; determines source location; and provides near-real-time reporting, ensuring information dominance to commanders. GR/Cs uses the Mission Operations Facility (MOF) for payload tasking, data processing, and mission operations.

GRCS has transitioned from AZ2000.
**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**P-1 Line Item Number / Title:**
AZ2001 / Multi Sensor ABN Recon (MIP)

**Provisions for Code B Items:**

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ2050 / ARL Mod-In-Service (Operational)</td>
<td>P-3a</td>
<td>- / 765.012</td>
<td>- / 10.467</td>
<td>- / 131.892</td>
<td>- / 68.540</td>
</tr>
<tr>
<td>AZ2052 / Guardian MODS MIP (U)</td>
<td>P-3a</td>
<td>- / 131.892</td>
<td>- / 68.540</td>
<td>- / 13.515</td>
<td>- / -</td>
</tr>
<tr>
<td>AZ2054 / EMARSS Payloads (MIP)</td>
<td>P-5</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

**Provisions for Code C Items:**

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ2050 / ARL Mod-In-Service (Operational)</td>
<td>P-3a</td>
<td>- / 48.500</td>
<td>- / 53.776</td>
<td>- / 7.668</td>
<td>- / 2.079</td>
<td>Continuing</td>
</tr>
<tr>
<td>AZ2052 / Guardian MODS MIP (U)</td>
<td>P-3a</td>
<td>- / 7.012</td>
<td>- / 5.638</td>
<td>- / 7.285</td>
<td>- / 5.896</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

**Justification:**
FY 2016 base funding to support the overall ARL-E and EMARSS efforts are found in the following four lines: AZ2050 ARL Payloads and AZ2054 EMARSS Payloads (per this form), and A02110 ARL SEMA Mods and A02112 EMARSS SEMA (separate form). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne intelligence systems to Program Executive Officer for Aviation (PEO-AVN); and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors (PEO-IEWS).

The purpose of AZ2050 is to procure, upgrade, test and integrate sensors; communications architecture for sensor information exploitation and dissemination; test, nonrecurring engineering, and integration in support of the ARL-E Payload program ensuring ARL-E is rapidly deployable world-wide against current, new, and emerging threats.

FY16 Base funding within AZ2050 - $68.540 million supports the procurement of the Mission Equipment Payload (MEP) for integration on Aircraft #3 and 4. The MEP for these systems will consist of 1 set of Distributed Common Ground Station-Army (DCGS-A) workstations, 1 set of communication equipment (mission radios, Beyond line of Site (BLOS) and Line of Site (LOS) Data links), 1 COMINT subsystem, 1 Hyper spectral subsystem, 1 Vehicle and Dismount Exploitation Radar (Vader) Radar and 2 Full Motion Video (FMV) subsystems. Funding also supports non-recurring engineering, integration, and test efforts for these systems. The ARL-E payload program procures the ARL mission equipment and new communications equipment for enhancement of the current ARL system making it rapidly deployable world-wide against current, new, and emerging threats.

The purpose of AZ2054 is to procure, upgrade, test and integrate sensors; communications architecture for sensor information exploitation and dissemination; test, nonrecurring engineering, and integration in support of the following EMARSS variants: EMARSS-G (Constant Hawk & TACOP LiDAR); EMARSS-V (VaDER); EMARSS-M (Liberty Project Aircraft (LPA)); and EMARSS-S (Engineering and Manufacturing Development (EMD) systems).

FY 2016 Base procurement dollars in the amount of $13.670 million procures Software Licenses, Interim Contractor Logistics Support, System Test & Evaluation, and Engineering Support in support of the following EMARSS variants: EMARSS-G (Constant Hawk & TACOP LiDAR); EMARSS-V (VaDER); EMARSS-M (Liberty Project Aircraft (LPA)); and EMARSS-S (Engineering and Manufacturing Development (EMD) systems.)
<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2016 Base procurement funding $13.515M provides recurring and non-recurring engineering, upgrades eight (8) MX-15HDi cameras and fields of four (4) Full Motion Video (FMV) capable aircraft.</td>
<td>Of the 14 aircraft, seven (7) will be fielded to the Republic of Korea (ROK), which requires FMV Mods in ROK to reduce mission impact to 3rd MI. The remaining seven (7) will be fielded to 204th MI at Fort Bliss, TX.</td>
<td>AZ2052 Guardrail Payloads MIP dollars are linked to A02111 GRCS SEMA Mods (MIP) dollars of $4.019 million procurement funding. All funding is in Active Component.</td>
</tr>
</tbody>
</table>
P-1 Line #18

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

P-1 Line Item Number / Title:
AZ2001 / Multi Sensor ABN Recon (MIP)

Modification Number / Title:
AZ2050 / ARL Mod-In-Service

Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>765.010</td>
<td>10.467</td>
<td>131.892</td>
<td>68.540</td>
<td>-</td>
<td>68.540</td>
<td>48.500</td>
<td>53.778</td>
<td>7.668</td>
<td>2.679</td>
<td>Continuing</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>765.010</td>
<td>10.467</td>
<td>131.892</td>
<td>68.540</td>
<td>-</td>
<td>68.540</td>
<td>48.500</td>
<td>53.778</td>
<td>7.668</td>
<td>2.679</td>
<td>Continuing</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>765.010</td>
<td>10.467</td>
<td>131.892</td>
<td>68.540</td>
<td>-</td>
<td>68.540</td>
<td>48.500</td>
<td>53.778</td>
<td>7.668</td>
<td>2.679</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) |            |         |         |         |         |         |         |         |         |             |       |
| Gross/Weapon System Unit Cost ($ in Thousands) | -         | -       |         | 6,854.000 | -       | 6,854.000 |         |         |         |             |       |

Description:

Mod-In-Service

Development Status/Major Development Milestones

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 2015</td>
<td>Sensor Contract Award</td>
<td></td>
</tr>
<tr>
<td>May 2017</td>
<td>Sensor CT/DT</td>
<td></td>
</tr>
<tr>
<td>Jun 2017</td>
<td>First Unit Equipped</td>
<td></td>
</tr>
</tbody>
</table>
### UNCLASSIFIED

#### Models of Systems Affected: ARL

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procurement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modification Item 1 of 2: ARL Enhanced (ARL-E)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upgraded MX-20HD Sensors</td>
<td>- / -</td>
<td>/ -</td>
<td>3 / 2.100</td>
<td>2 / 1.400</td>
<td>- / -</td>
<td>2 / 1.400</td>
<td>1 / 0.700</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MEP/PED System Integration Lab (SIL)</td>
<td>- / -</td>
<td>/ -</td>
<td>1.898</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program Mgt</td>
<td>- / -</td>
<td>/ 0.600</td>
<td>/ 10.551</td>
<td>/ 6.169</td>
<td>- / -</td>
<td>/ 6.169</td>
<td>/ 3.914</td>
<td>/ 5.427</td>
<td>/ 0.619</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upgrade MX-20D SWIR sensors</td>
<td>- / -</td>
<td>/ -</td>
<td>3 / 3.000</td>
<td>2 / 2.000</td>
<td>- / -</td>
<td>2 / 2.000</td>
<td>1 / 1.000</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td><strong>Modification Item 2 of 2: ARL Multifunction (ARL-M)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td>Non-Recurring</td>
<td>Work Station Architecture Upgrades</td>
<td>- / -</td>
<td>/ 0.400</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Financial Plan</td>
<td>Prior Years FY 2014 Qty (Each) / Total Cost ($M)</td>
<td>FY 2015 FY 2016 Base FY 2016 OCO FY 2016 Total FY 2017 FY 2018 FY 2019 FY 2020 To Complete Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>765.010</td>
<td>10.467</td>
<td>131.892</td>
<td>68.540</td>
<td>-</td>
<td>68.540</td>
<td>48.500</td>
<td>53.778</td>
<td>7.668</td>
<td>2.679</td>
<td>Continuing</td>
</tr>
</tbody>
</table>
### Installation Information

<table>
<thead>
<tr>
<th>Method of Implementation:</th>
<th>Contractor</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
<td>---------</td>
<td>---------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**UNCLASSIFIED**
UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)

Modification Number / Title: AZ2050 / ARL Mod-In-Service

Modification Item 2 of 2: ARL Multifunction (ARL-M)

Manufacturer Information

Manufacturer Name: LMIS
Manufacturer Location: Hagerstown, MD
Administrative Leadtime (in Months): 3
Production Leadtime (in Months): 6

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Installation Information

Method of Implementation: Contractor

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>0.765.010</td>
<td>-</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>-</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>To Complete</td>
<td>0</td>
<td>1.000</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>1.765.010</td>
<td>1</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Resource Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>13.515</td>
<td>-</td>
<td>13.515</td>
<td>7.012</td>
<td>5.638</td>
<td>7.285</td>
<td>5.896</td>
</tr>
<tr>
<td>Plus CY Advance Procurement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(Initial Spares) ($ in Millions)

<table>
<thead>
<tr>
<th>Description</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Spares</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Unit Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,689.375</td>
<td>-</td>
<td>1,689.375</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(Continuing)

**Description:**
The above represents Guardrail efforts over time. Individual efforts are described in detail under corresponding modifications.
## Exhibit P-3a, Individual Modification: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
- 2031A / 02 / 10

### P-1 Line Item Number / Title:
- AZ2001 / Multi Sensor ABN Recon (MIP)

### Modification Number / Title:
- AZ2052 / Guardrail MODS MIP

### Models of Systems Affected:
- See individual Mods

### Modification Type:
- U

### Related RDT&E PEs:

### Financial Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qty (Each) I Total Cost ($M)</strong></td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td>Qty (Each) I Total Cost ($M)</td>
<td></td>
</tr>
<tr>
<td><strong>Procurement</strong></td>
<td><strong>A Kits</strong></td>
<td><strong>Recurring</strong></td>
<td><strong>Fielding/Training</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>PM Costs</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Spare (Cameras)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subtotal: Recurring</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>B Kits</strong></td>
<td><strong>Recurring</strong></td>
<td><strong>Kit Quantity (Camera Upgrades)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Subtotal: Recurring</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subtotal: Full Motion Video (FMV)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Modification Item 2 of 2: Modernization Signal Enhancement</strong></td>
<td><strong>A Kits</strong></td>
<td><strong>Recurring</strong></td>
<td><strong>Software Installation</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Accreditation</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Test</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Network Equipment</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>PM Support</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Data</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subtotal: Recurring</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Continuing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Non-Recurring</strong></td>
<td><strong>Training</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Subtotal: Non-Recurring</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Subtotal: Modernization Signal Enhancement</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Subtotal: Procurement, All Modification Items</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Installation</strong></td>
<td><strong>Modification Item 1 of 2: Full Motion Video (FMV)</strong></td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Subtotal: Installation</strong></td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Financial Plan

- **UNCLASSIFIED**

**LI AZ2001 - Multi Sensor ABN Recon (MIP)**

**Army**

**Page 11 of 16**

**P-1 Line #18**

**153**
<table>
<thead>
<tr>
<th>Financial Plan</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related RDT&amp;E PEs:</td>
<td>To Complete</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2017</td>
<td>Continuing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2018</td>
<td>Continuing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2019</td>
<td>Continuing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2020</td>
<td>Continuing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

P-1 Line Item Number / Title:
AZ2001 / Multi Sensor ABN Recon (MIP)

Modification Number / Title:
AZ2052 / Guardrail MODS MIP

**Modification Item 1 of 2: Full Motion Video (FMV)**

### Manufacturer Information

- **Manufacturer Name:** TBD
- **Manufacturer Location:** TBD
- **Administrative Leadtime (in Months):** 1
- **Production Leadtime (in Months):** 12

### Installation Information

**Method of Implementation:** TBD

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Exhibit P-3a, Individual Modification: PB 2016 Army  
Date: February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
AZ2001 / Multi Sensor ABN Recon (MIP)

**Modification Number / Title:**
AZ2052 / Guardrail MODS MIP

**Modification Item 2 of 2:** Modernization Signal Enhancement

<table>
<thead>
<tr>
<th>Manufacturer Information</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer Name: TBD</td>
<td>Manufacturer Location: TBD</td>
<td></td>
</tr>
<tr>
<td>Administrative Leadtime (in Months):</td>
<td>Production Leadtime (in Months):</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Information**

**Method of Implementation (Organic):** Modernization Signal Enhancement  
**Installation Quantity:** 0
### UNCLASSIFIED

**Exhibit P-5, Cost Analysis:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AZ2001 / Multi Sensor ABN Recon (MIP)

**Item Number / Title [DODIC]:** AZ2054 / EMARSS Payloads (MIP)

**ID Code (A=Service Ready, B=Not Service Ready):**

|------------------|-------------|---------|---------|-------------|-------------|---------------|---------|---------|---------|---------|-------------|-------|

- **Procurement Quantity (Units in Each)**
- **Gross/Weapon System Cost ($ in Millions)**
- **Less FY Advance Procurement ($ in Millions)**
- **Net Procurement (P1) ($ in Millions)**
- **Plus CY Advance Procurement ($ in Millions)**
- **Total Obligation Authority ($ in Millions)**

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Note:** Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

**Cost Elements**

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flyaway Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recurring Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cost Elements**

<table>
<thead>
<tr>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
</table>

**Cost Elements**

- **Flyaway Cost**

(LI AZ2001 - Multi Sensor ABN Recon (MIP)

UNCLASSIFIED

Page 15 of 16
Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)

Item Number / Title [DODIC]: AZ2054 / EMARSS Payloads (MIP)

<table>
<thead>
<tr>
<th>ID Code</th>
<th>MDAP/MAIS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A=Service Ready, B=Not Service Ready)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
</tr>
<tr>
<td>Aircraft &amp; MEP integ for QRC to POR (V)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aircraft &amp; MEP Testing (V)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares &amp; Repair</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PMO and SETA Support</td>
<td>-</td>
<td>13.366</td>
<td>-</td>
<td>3.305</td>
<td>-</td>
<td>21.294</td>
</tr>
<tr>
<td>Test and Engineering Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>13.366</td>
<td>-</td>
<td>3.305</td>
<td>-</td>
<td>21.294</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>13.366</td>
<td>-</td>
<td>3.305</td>
<td>-</td>
<td>21.294</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>-</td>
<td>13.366</td>
<td>-</td>
<td>3.305</td>
<td>-</td>
<td>21.294</td>
</tr>
</tbody>
</table>

Date: February 2015
### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>116.153</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

### Description

The AH-64 MODS (AA6606) program provides for modernization of the fielded AH-64D/AH-64E Apache fleet. AH-64D/AH-64E is a tandem cockpit, twin engine, single main rotor attack helicopter. The Apache aircraft incorporates the Longbow weapon system and provides the U.S. Army with significant target acquisition and firepower effectiveness, survivability, lethality, and fighting capabilities even during adverse weather conditions. The Apache is equipped with the Fire Control Radar/Radar Frequency Interferometer (FCR/RFI) mission kit and Fire and Forget Longbow HELLFIRE missiles. The Modernized Target Acquisition Designator Sight (MTADS) assembly is an Electro-Optical system that consists of a Day television (DTV), sensor, a Forward Looking Infrared (FLIR) sensor for day and night visibility as well as limited adverse weather operations, a Laser Spot Tracker (LST), and Laser Rangefinder/Designator (LRFD). The Modernized Pilot Night Vision Sensor (M-PNVS) is a FLIR system which allows Nap-of-Earth flight operations at night by the pilot independent of the co-pilot/gunner's FLIR. The Apache is armed with the Hellfire Antitank Missile, 2.75 inch rockets and a 30mm gun capable of defeating armor.

The AH-64 Mods Program allows for near-term operationally driven improvements to the Apache fleet, focusing on deployment lessons learned, reliability improvements, and solving obsolescence issues. Improvements will occur to the Airframe, Armament, Communications, Manned / Unmanned Teaming, Navigation, Sensors, Survivability, Support Elements, and Training Systems. Examples of modifications include Selected Component Recapitalization, Airframe and Sensor Obsolescence upgrades, procurement of Modernized Day Sensor Assembly Phase II components, initial procurement of Modernized Radio-Frequency Interferometer (M-RFI), Software upgrades, Condition Based Maintenance (CBM), Trainer upgrades, and Computer/Processing and Data Display and Control upgrades. Approximately half the Apache fleet will be non AH-64E configured past 2020. These modernization efforts are required to ensure the Longbow Apache remains a ready and relevant Soldier asset.

### Program Elements for Code B Items:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Years</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2015</td>
<td>116.153</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2016 Base</td>
<td>116.153</td>
<td>133.846</td>
<td>177.919</td>
<td>145.955</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2016 OCO</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2016 Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2017</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2018</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2019</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2020 To Complete</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Other Related Program Elements:

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready) :</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Years</td>
<td>FY 2014</td>
<td>FY 2015</td>
</tr>
<tr>
<td>FY 2016 OCO</td>
<td>FY 2016 Total</td>
<td>FY 2017</td>
</tr>
<tr>
<td>FY 2017</td>
<td>FY 2018</td>
<td>FY 2019</td>
</tr>
<tr>
<td>FY 2020 To Complete</td>
<td>FY 2020</td>
<td>Total</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

### Initial Spares ($ in Millions)

- $ -

### Flyaway Unit Cost ($ in Thousands)

- $ -

### Gross/Weapon System Unit Cost ($ in Thousands)

- $ -
### Justification:


All COMPO 1 Active
UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: AA6605 / AH-64 MODS

Modification Number / Title: AA6606 / AH-64 Modifications

Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020 To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |

Gross/Weapon System Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |

Description:

Airframe includes modifications to the Structural Subsystems, Propulsion/Drive/Rotor Systems, Health Monitoring System (CBM), and Recap Support/Kits. Structural Subsystems modifications include improvements to the assembled structural and aerodynamic components of the air vehicle to include the fuselage and associated manual flight control systems, rotor equipment, landing gear and associated equipment, environmental controls, racks, mounts, intersystem cables and distribution boxes. Propulsion/Drive/Rotor Systems together with Engine Electronic Digital Engine Control Unit (EDECU) and Common Hydro-Mechanical Unit (CHMU) provides the capability to carry a heavier combat payload and allow for enhanced performance in high-altitude, hot climates. Landing Gear improvements (High Performance Shock Struts (HPSS)) will improve the aircraft crash survivability and allows for a heavier aircraft with greater combat loads. The Health Monitoring System is associated with CBM support concept and the expansion of the Modernized Signal Processing Unit (MSPU) capabilities, which will continue to evolve, reduce ownership cost and improve the maintenance posture and burden of the Soldier.

Mission Command includes modifications and/or upgrades to the various Apache processors and displays. Mission Computer / Processing modifications and/or upgrades include improvements to the master data processing unit(s) responsible for coordinating and directing the major avionics mission systems. Displays and Controls modifications and/or upgrades includes improvements to the equipment which presents processed data by specially designed electronic devices through interconnection with computer or component equipment and the associated equipment needed to control the presentation of the necessary flight and tactical information to the crew for efficient management of the aircraft during all segments of the mission profile under day and night during all weather conditions. This equipment includes multifunction displays, control display units, display processors and on-board mission planning systems. Software Upgrades include critical software enhancements that will enable Apache commanders and aircrews to better perform their combat mission.

Sensors include modifications, operational improvements, and/or mitigation of obsolescence issues to the Apache Sensor suite, which includes the MTADS/PNVS, the Modernized Day Sensor Assembly (MDSA), and the Modernized Radar Frequency Interferometer (MRFI) Processor and Receiver. MTADS/PNVS operational and logistics improvements include accelerated application of outstanding Engineering Change Proposals and the sensors overhaul through the Arizona Support Center facility to allow for proper configuration. MDSA Phase I is the Modernized Laser RangeFinder/Designator (M-LFRD) which provides enhanced laser ranging, improved target designation, and target tracking capability by holding a stabilized laser beam on a distant stationary or moving point target for highly precise handoff to precision guided weapons. M-LFRD replaces the obsolete Laser Transceiver Unit, which mitigates ongoing obsolescence risks, improves reliability and maintainability, and reduces operations and support costs. MDSA Phase II replaces the remaining legacy DSA components, adding a laser pointer and high definition color-camera capability. Phase II funding enables software integration, tooling, and test equipment procurement and system production.

Support Elements include the modification and production of those items, which are not part of the aircraft system but are required to maintain, service, or calibrate the aircraft systems or portions of the aircraft system while not directly engaged in the performance of its mission and will not be in the inventory for support of other weapon systems. Post Production Organic support establishes Depot Pilot Programs at Corpus Christi Army Depot (CCAD) and Tobyhanna Army Depot (TYAD) for selected Depot Level Repairables (DLR) as part of the Original Equipment Manufacturer (OEM) to Depot Transition. Post Production Organic Support (PPOS) provides Depot Maintenance Plant Equipment, Special Tools and Test Equipment, labor training and associated technical data for future repairs once the DLR has transitioned to the depot. PPOS improves Repair Turn Around Time and retain depot maintenance capabilities.
Training Systems include deliverable training services, devices, accessories, aids, equipment, and parts used to facilitate instruction through which personnel will learn to operate and maintain the system with maximum efficiency. Examples include Operator / Maintainer Training (aircraft/classroom), obsolescence and training concurrency to training device systems, and updates to allow individual/team training tasks and collective training. Efforts include the production and upgrade of deliverable training equipment and associated software.

Modification to the MUMT system enable fully integrated Unmanned Aerial System Level of Interoperability 4 in the C, L, S, and Ku band using both Tactical Common Data Link and Bandwidth Efficient Tactical Common Data Link; processor updates ensure Information Assurance certification and Interoperability Protocol compatibility. MUMT funding will be used for both non-recurring and recurring engineering.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**Exhibit P-3a, Individual Modification:** PB 2016 Army  
**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** AA6605 / AH-64 MODS  
**Modification Number / Title:** AA6606 / AH-64 Modifications  
**Models of Systems Affected:** Longbow Apache  
**Modification Type:** Operational & Reliability Improvements and Resolve Obsolescence Issues  

### Financial Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
<td>Qty (Each) / Total Cost (M)</td>
</tr>
</tbody>
</table>

#### Modification Item 1 of 18: Apache Sensors Life Extension & Upgrade

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kit Quantity</td>
<td>669 / 123.697</td>
<td>8 / -</td>
<td>751.590</td>
<td>204.397</td>
<td>123.697</td>
<td>861.630</td>
<td>44.900</td>
<td>677 / 123.697</td>
<td></td>
</tr>
<tr>
<td>Equipment (GFE)</td>
<td>0 / 44.900</td>
<td>0 / -</td>
<td>28.600</td>
<td>2.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

#### Modification Item 2 of 18: AH-64A MISC Mods $5M or less (no P3a set)

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim Contractor Support</td>
<td>0 / 751.590</td>
<td>0 / -</td>
<td>1 / -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Modification Item 3 of 18: Apache Transformation (no P3a set)

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sets, Kits &amp; Outfits (SKO)</td>
<td>0 / 23.990</td>
<td>0 / -</td>
<td>0 / -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Equipment, NGF</td>
<td>0 / 29.100</td>
<td>0 / -</td>
<td>0 / -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Modification Item 4 of 18: Modernized TADS/PNVS (M-TADS)

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>542 / 861.630</td>
<td>0 / -</td>
<td>0 / -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Equipment (OCO)</td>
<td>23 / 49.070</td>
<td>0 / -</td>
<td>0 / -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Models of Systems Affected: Longbow Apache

### Subtotal: Lightweight Missile Launcher (LWML)

<table>
<thead>
<tr>
<th>Modification Item</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>428</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
</tr>
<tr>
<td>Base Total Cost ($M)</td>
<td>428</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>428</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
</tr>
</tbody>
</table>

### Subtotal: Modernized TADS/PNVS (M-TADS)

<table>
<thead>
<tr>
<th>Modification Item</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>428</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
</tr>
<tr>
<td>Base Total Cost ($M)</td>
<td>428</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>428</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
<td>348.064</td>
</tr>
</tbody>
</table>

### Related RDT&E PEs:

- **A Kits**
- **Other Support**
- **Subtotal: Recurring**
- **Subtotal: Modernized TADS/PNVS (M-TADS)**

## Modification Item 5 of 18: Video from UAS Interoperability Teaming (VUIT-2)

### A Kits

**Recurring**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VUIT-2 -- FY11 OCO</td>
<td>144 / 170.600</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>144 / 170.600</td>
</tr>
<tr>
<td>Subtotal: Video from UAS Interoperability Teaming (VUIT-2)</td>
<td>192 / 262.500</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 192.500</td>
</tr>
</tbody>
</table>

## Modification Item 6 of 18: Apache Product Improvements

### A Kits

**Recurring**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CBM Services</td>
<td>0 / 49.600</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 49.600</td>
</tr>
<tr>
<td>Composite Main Rotor Blade ship sets</td>
<td>10 / 17.100</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 17.100</td>
</tr>
<tr>
<td>Other</td>
<td>0 / 563.268</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 563.268</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 774.968</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 774.968</td>
</tr>
</tbody>
</table>

## Modification Item 7 of 18: Lightweight Missile Launcher (LWML)

### A Kits

**Recurring**

<table>
<thead>
<tr>
<th>LWML Procurement</th>
<th>522 / 34.064</th>
<th>- / -</th>
<th>- / -</th>
<th>- / -</th>
<th>- / -</th>
<th>- / -</th>
<th>- / -</th>
<th>- / -</th>
<th>522 / 34.064</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 34.064</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 34.064</td>
</tr>
<tr>
<td>Subtotal: Lightweight Missile Launcher (LWML)</td>
<td>522 / 34.064</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 522.064</td>
</tr>
</tbody>
</table>
UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AA6605 / AH-64 MODS

Modification Number / Title: AA6606 / AH-64 Modifications

Models of Systems Affected: Longbow Apache

Modification Type: Operational & Reliability Improvements and Resolve Obsolescence Issues

Related RDT&E PEs:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
</tr>
<tr>
<td>Modification Item 8 of 18: Apache Upgrades and Remanufacture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bik II Reman Aircraft</td>
<td>117 / 1,293.300</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>117 / 1,293.300</td>
</tr>
<tr>
<td>NG Aircraft Procurement</td>
<td>72 / 865.851</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>72 / 865.851</td>
</tr>
<tr>
<td>NG Aircraft Procurement (OCO)</td>
<td>23 / 284.530</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>23 / 284.530</td>
</tr>
<tr>
<td>System / Software Upgrade</td>
<td>0 / 23.323</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0 / 23.323</td>
</tr>
<tr>
<td>Obsolescence</td>
<td>0 / 18.257</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0 / 18.257</td>
</tr>
<tr>
<td>NG MEP</td>
<td>0 / 122.680</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0 / 122.680</td>
</tr>
<tr>
<td>Other Support</td>
<td>0 / 170.300</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0 / 170.300</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>2,778.241</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,778.241</td>
</tr>
<tr>
<td>Subtotal: Apache Upgrades and Remanufacture</td>
<td>212 / 2,778.241</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>212 / 2,778.241</td>
</tr>
<tr>
<td>Modification Item 9 of 18: Modernized Day Side Assembly (M-DSA), Phase1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>299 / 106.263</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>299 / 106.263</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>299 / 106.263</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>299 / 106.263</td>
</tr>
<tr>
<td>Subtotal: Modernized Day Side Assembly (M-DSA), Phase1</td>
<td>299 / 106.263</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>299 / 106.263</td>
</tr>
<tr>
<td>Modification Item 10 of 18: Fire Control Radar (FCR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installation Kits</td>
<td>30 / 134.240</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>30 / 134.240</td>
</tr>
<tr>
<td>Installation Kits (OCO)</td>
<td>9 / 44.880</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9 / 44.880</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>39 / 179.120</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>39 / 179.120</td>
</tr>
<tr>
<td>Subtotal: Fire Control Radar (FCR)</td>
<td>39 / 179.120</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>39 / 179.120</td>
</tr>
<tr>
<td>Modification Item 11 of 18: Apache Block III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Lead Items</td>
<td>0 / 11.100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0 / 11.100</td>
</tr>
</tbody>
</table>
## Exhibit P-3a, Individual Modification: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

### P-1 Line Item Number / Title:
AA6605 / AH-64 MODS

### Modification Number / Title:
AA6606 / AH-64 Modifications

#### Models of Systems Affected:
Longbow Apache

#### Modification Type:
Operational & Reliability Improvements and Resolve Obsolescence Issues

#### Related RDT&E PEs:

|----------------|-------------|---------|---------|-------------|-------------|--------------|---------|---------|---------|---------|-------------|-------|

**Modification Item 12 of 18:** Apache Training Aids, Devices, Simulators & Simul

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Qty</th>
<th>(Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring</td>
<td>-</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>LCT (NGUSAACE/WAATS)</td>
<td>5 / 84.860</td>
<td>-</td>
<td>5 / 84.860</td>
</tr>
<tr>
<td>System TADSS</td>
<td>50 / 24.404</td>
<td>-</td>
<td>50 / 24.404</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 109.264</td>
<td>-</td>
<td>- / 109.264</td>
</tr>
</tbody>
</table>

**Modification Item 13 of 18:** Airframe

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Qty</th>
<th>(Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring</td>
<td>-</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>Health Monitoring System</td>
<td>- / -</td>
<td>- / 1.052</td>
<td>- / 1.052</td>
</tr>
<tr>
<td>RESET / MEP Kits</td>
<td>0 / 25.482</td>
<td>- / 10.273</td>
<td>- / 10.273</td>
</tr>
<tr>
<td>Other Support</td>
<td>- / -</td>
<td>- / 11.628</td>
<td>- / 11.628</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 38.017</td>
<td>- / 12.628</td>
<td>- / 12.628</td>
</tr>
<tr>
<td>Subtotal: Airframe</td>
<td>0 / 38.017</td>
<td>- / 12.628</td>
<td>- / 12.628</td>
</tr>
</tbody>
</table>

**Modification Item 14 of 18:** Mission Command

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Qty</th>
<th>(Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring</td>
<td>-</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>Processors</td>
<td>0 / 13.435</td>
<td>- / 22.420</td>
<td>- / 22.420</td>
</tr>
<tr>
<td>Displays</td>
<td>0 / 11.700</td>
<td>- / 12.866</td>
<td>- / 12.866</td>
</tr>
<tr>
<td>Other Support</td>
<td>- / -</td>
<td>- / 10.576</td>
<td>- / 10.576</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 5.135</td>
<td>- / 14.086</td>
<td>- / 14.086</td>
</tr>
<tr>
<td>Subtotal: Mission Command</td>
<td>0 / 5.135</td>
<td>- / 14.086</td>
<td>- / 14.086</td>
</tr>
</tbody>
</table>

**Modification Item 15 of 18:** Sensors

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Qty</th>
<th>(Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring</td>
<td>-</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>MTADS/PNVS</td>
<td>0 / 11.468</td>
<td>- / 13.500</td>
<td>- / 13.500</td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>Qty</th>
<th>(Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>144.388</td>
<td>144.388</td>
<td>105.796</td>
</tr>
<tr>
<td>109.264</td>
<td>109.264</td>
<td>84.860</td>
</tr>
<tr>
<td>22.968</td>
<td>22.968</td>
<td>166</td>
</tr>
</tbody>
</table>

---

LI AA6606 - AH-64 MODS

UNCLASSIFIED

Page 8 of 29

P-1 Line 19

---

166
### Models of Systems Affected

- **Longbow Apache**

### Appropriation / Budget Activity / Budget Sub Activity
- **2031A / 02 / 10**

### P-1 Line Item Number / Title
- **AA6605 / AH-64 MODS**

### Modification Number / Title
- **AA6606 / AH-64 Modifications**

### Financial Plan

<table>
<thead>
<tr>
<th>Modification Type</th>
<th>Operational &amp; Reliability Improvements and Resolve Obsolescence Issues</th>
<th>Related RDT&amp;E PEs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior Years</strong></td>
<td><strong>FY 2014</strong></td>
<td><strong>FY 2015</strong></td>
</tr>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
</tr>
</tbody>
</table>

**M-RFI**

- **Recurring**
  - **Other Support**
    - **Base**
      - **Subtotal: Recurring**
        - **A Kits**
          - **Qty (Each)**: 150
          - **Total Cost ($M)**: 49,834
        - **Other Support**
          - **Qty (Each)**: 1 / 49,834
          - **Total Cost ($M)**: 151,516
        - **Subtotal: Sensors**
          - **Qty (Each)**: 150 / 67,572
          - **Total Cost ($M)**: 8,669
          - **Other Support**
            - **Qty (Each)**: 1 / 49,834
          - **Subtotal: Support Elements**
            - **Qty (Each)**: 0 / 0.020

**Modification Item 16 of 18**: Support Elements

- **A Kits**
  - **Recurring**
    - **Qty (Each)**: 0 / 0.020
    - **Total Cost ($M)**: 21,455
  - **Other Support**
    - **Qty (Each)**: 0 / 5.038
    - **Total Cost ($M)**: 13,936
  - **Subtotal: Support Elements**
    - **Qty (Each)**: 0 / 0.020
    - **Total Cost ($M)**: 13,936

**Modification Item 17 of 18**: Training Systems

- **A Kits**
  - **Recurring**
    - **Qty (Each)**: 0 / 14,990
    - **Total Cost ($M)**: 21,455
  - **Other Support**
    - **Qty (Each)**: 0 / 5.038
    - **Total Cost ($M)**: 13,936
  - **Subtotal: Training Systems**
    - **Qty (Each)**: 0 / 14,990
    - **Total Cost ($M)**: 21,455

**Modification Item 18 of 18**: Manned / Unmanned Teaming (MUM-T)

- **A Kits**
  - **Recurring**
    - **Qty (Each)**: 0 / 14,990
    - **Total Cost ($M)**: 21,455
  - **Other**
    - **Qty (Each)**: 0 / 5.038
    - **Total Cost ($M)**: 13,936
  - **Subtotal: Recurring**
    - **Qty (Each)**: 0 / 14,990
    - **Total Cost ($M)**: 21,455
  - **Non-Recurring**
    - **Aviation Restructure (MUM-T-X)**
      - **Qty (Each)**: 0 / 9.42,000
      - **Total Cost ($M)**: 9.42,000
    - **Subtotal: Non-Recurring**
      - **Qty (Each)**: 0 / 42,000
      - **Total Cost ($M)**: 42,000
### Exhibit P-3a, Individual Modification: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** AA6605 / AH-64 MODS  
**Modification Number / Title:** AA6606 / AH-64 Modifications

#### Models of Systems Affected: Longbow Apache

#### Modification Type: Operational & Reliability Improvements and Resolve Obsolescence Issues

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
</tbody>
</table>

#### Installation

<table>
<thead>
<tr>
<th>Modification Item</th>
<th>Modification Type</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Apache Sensors Life Extension &amp; Upgrade</td>
<td>750 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>750 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>AH-64A MISC Mods $5M or less (no P3a set)</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Apache Transformation (no P3a set)</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Modernized TADS/PNVS (M-TADS)</td>
<td>565 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>565 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Video from UAS Interoperability Teaming (VUIT)</td>
<td>216 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>216 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Lightweight Missile Launcher (LWML)</td>
<td>522 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>522 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Apache Upgrades and Remanufacture</td>
<td>259 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>259 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Modernized Day Side Assembly (M-DSA), Phase I</td>
<td>0 / 0.000</td>
<td>62 / -</td>
<td>225 / -</td>
<td>12 / -</td>
<td>12 / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>299 / -</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Fire Control Radar (FCR)</td>
<td>27 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>27 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Apache Block III</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Apache Training Aids, Devices, Simulators &amp; Simul</td>
<td>26 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>26 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Airframe</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>72 / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>72 / -</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Mission Command</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Sensors</td>
<td>150 / 0.000</td>
<td>- / -</td>
<td>33 / -</td>
<td>49 / -</td>
<td>49 / -</td>
<td>66 / -</td>
<td>93 / -</td>
<td>82 / -</td>
<td>83 / -</td>
<td>- / -</td>
<td>556 / -</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Support Elements</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Training Systems</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 0.000</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Manned / Unmanned Teaming (MUM-T)</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>9 / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 0.000</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal: Installation**  
3,547 / 23.500  
62 / -  
339 / -  
61 / -  
61 / -  
66 / -  
93 / -  
82 / -  
83 / -  
4,333 / 23.500
Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AA6605 / AH-64 MODS

Modification Number / Title: AA6606 / AH-64 Modifications

Date: February 2015

Models of Systems Affected: Longbow Apache

Modification Type: Operational & Reliability Improvements and Resolve Obsolescence Issues

Related RDT&E PEs:

|----------------|-------------|---------|---------|---------------|-------------|---------------|---------|---------|---------|---------|-------------|-------|
**Modification Item 1 of 18:** Apache Sensors Life Extension & Upgrade

### Manufacturer Information

**Manufacturer Name:** Various  
**Manufacturer Location:** Various

**Administrative Leadtime (in Months):**  
**Production Leadtime (in Months):**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation Information

**Method of Implementation:** Modification

#### Installation Cost

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>750 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>750 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td>In</td>
<td>714 - - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Out</td>
<td>714 - - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
</tbody>
</table>

**Total:** 714
### Installation Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>PYS</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Method of Implementation

- **PB 2016 Army**
- Modification Number / Title: AA6605 / AH-64 Modifications
- **Manufacturer Information**
  - **Manufacturer Name:** Various
  - **Manufacturer Location:** Various
  - **Administrative Leadtime (in Months):**
  - **Production Leadtime (in Months):**

### Installation Cost

<table>
<thead>
<tr>
<th>Year</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>-------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>FY 2014</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2015</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2016</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2017</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2018</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2019</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2020</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>To Complete</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td></td>
</tr>
</tbody>
</table>
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FY 2020</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>Tot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FY 2019</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation Cost

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Years</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
<td>- I 0.000</td>
</tr>
</tbody>
</table>

**Total Cost**

- **Total**:
  - **FY 2014**: $0.000
  - **FY 2015**: $0.000
  - **FY 2016**: $0.000
  - **FY 2017**: $0.000
  - **FY 2018**: $0.000
  - **FY 2019**: $0.000
  - **FY 2020**: $0.000

**Summary**

- **Method of Implementation**: NA
- **Manufacturer Name**: NA
- **Manufacturer Location**: NA
- **Administrative Leadtime (in Months)**: NA
- **Production Leadtime (in Months)**: NA
### Manufacturer Information

**Manufacturer Name:** Lockheed Martin  
**Manufacturer Location:** Orlando, FL

### Administrative Leadtime (in Months):  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Production Leadtime (in Months):

- **Modernized TADS/PNVS (M-TADS)**

### Installation Information

**Method of Implementation:** Modification  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PYS</strong></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td><strong>In</strong></td>
<td>557</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Out</strong></td>
<td>557</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army  
**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** AA6605 / AH-64 MODS  
**Modification Number / Title:** AA6606 / AH-64 Modifications

**Modification Item 4 of 18:** Modernized TADS/PNVS (M-TADS)

**Dates:** February 2015
**Modification Item 5 of 18:** Video from UAS Interoperability Teaming (VUIT-2)

**Manufacturer Information**
- Manufacturer Name: Science and Engineering Services, Inc
- Manufacturer Location: Huntsville, AL

**Method of Implementation:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Total Cost**
- Total Cost: 216 (Each)
UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AA6605 / AH-64 MODS

Modification Number / Title: AA6606 / AH-64 Modifications

Modification Item 6 of 18: Apache Product Improvements

Manufacturer Information

Manufacturer Name: Various
Manufacturer Location: Various
Administrative Leadtime (in Months): Various
Production Leadtime (in Months): Various

Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In</td>
<td>1,032</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,042</td>
</tr>
<tr>
<td>Out</td>
<td>1,032</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,042</td>
</tr>
</tbody>
</table>

LI AA6605 - AH-64 MODS

UNCLASSIFIED

Page 17 of 29

P-1 Line #19
**Modification Item 7 of 18:** Lightweight Missile Launcher (LWML)

**Manufacturer Name:** Lockheed Martin  
**Manufacturer Location:** Orlando, FL

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
</tr>
<tr>
<td>In</td>
<td>522</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>522</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA6605 / AH-64 MODS

**Modification Number / Title:** AA6606 / AH-64 Modifications

**Modification Item 8 of 18:** Apache Upgrades and Remanufacture

### Manufacturer Information

**Manufacturer Name:** Boeing  
**Manufacturer Location:** Mesa, AZ

**Administrative Leadtime (in Months):**  
**Production Leadtime (in Months):**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation Information

**Method of Implementation:** Remanufacture

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td>Qty (Each) / Total Cost ($) M</td>
<td></td>
</tr>
</tbody>
</table>
| Prior Years       | 259 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 259
| FY 2014           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| FY 2015           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| FY 2016           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| FY 2017           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| FY 2018           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| FY 2019           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| FY 2020           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| To Complete       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| Total             | 259 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 259

### Installation Schedule

<table>
<thead>
<tr>
<th>PYS</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>TC</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>212</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>212</td>
</tr>
<tr>
<td>Out</td>
<td>212</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>212</td>
</tr>
</tbody>
</table>
### Installation Information

#### Method of Implementation: Modification

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>62 / 0.000</td>
<td>225 / 0.000</td>
<td>12 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>296 / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>62 / -</td>
<td>225 / -</td>
<td>12 / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>299 / -</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th>PYS</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>TC</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>17</td>
<td>26</td>
<td>45</td>
<td>52</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>158</td>
</tr>
<tr>
<td>Out</td>
<td>17</td>
<td>26</td>
<td>45</td>
<td>52</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>158</td>
</tr>
</tbody>
</table>
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>27</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>27</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
AA6605 / AH-64 MODS

**Modification Number / Title:**
AA6606 / AH-64 Modifications

**Modification Item 13 of 18:** Airframe

### Manufacturer Information

- **Manufacturer Name:** Various
- **Manufacturer Location:** Various

**Administrative Leadtime (in Months):**

|----------------|---------|---------|---------|---------|---------|---------|---------|

### Installation Information

**Method of Implementation:** Modifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>72 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>72 1 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>- 1 0.000</td>
<td>72 1 0.000</td>
</tr>
</tbody>
</table>

### Installation Schedule

| PYS | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| In  | 1  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1 |
| Out | 1  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1 |
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA6605 / AH-64 MODS

**Modification Number / Title:** AA6606 / AH-64 Modifications

**Modification Item 15 of 18:** Sensors

**Manufacturer Information**

Manufacturer Name: Lockheed Martin

Manufacturer Location: Orlando, FL

**Administrative Leadtime (in Months):** 24

**Production Leadtime (in Months):** 24

### Installation Information

**Method of Implementation:** Modifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td>Qty (Each) / Total Cost (in M)</td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>150 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>150</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Out</td>
<td>150</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

**LI AA6605 - AH-64 MODS**

**Army**

**UNCLASSIFIED**

Page 26 of 29

P-1 Line #19

---

**LI AA6605 - AH-64 MODS**

**Army**

**UNCLASSIFIED**

Page 26 of 29

P-1 Line #19

---

**LI AA6605 - AH-64 MODS**

**Army**

**UNCLASSIFIED**

Page 26 of 29

P-1 Line #19

---

**LI AA6605 - AH-64 MODS**

**Army**

**UNCLASSIFIED**

Page 26 of 29

P-1 Line #19

---

**LI AA6605 - AH-64 MODS**

**Army**

**UNCLASSIFIED**

Page 26 of 29

P-1 Line #19
### Installation Schedule

| PYS | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| In  | 1  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1  |
| Out | 1  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1  |
### Method of Implementation: Field Retrofits

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
<td>Qty (Each) / Total Cost ($)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS Q1</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td>In</td>
<td>1 - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Out</td>
<td>1 - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TC</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA6605 / AH-64 MODS

**Modification Number / Title:** AA6606 / AH-64 Modifications

**Modification Item 18 of 18:** Manned / Unmanned Teaming (MUM-T)

**Manufacturer Information**

Manufacturer Name: TBD

Manufacturer Location: TBD

Administrative Leadtime (in Months): TBD

Production Leadtime (in Months): 12

**Installation Information**

**Method of Implementation:** FY15 quantity of nine (9) will be unit-installed

<table>
<thead>
<tr>
<th>Installation Cost</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>9 / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>9 / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

LI AA6605 - AH-64 MODS

**UNCLASSIFIED**

Page 29 of 29

P-1 Line #19
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)

Date: February 2015

Exhibit P-40, Budget Line Item Justification:

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready) :</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements: 0607137A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>- - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>2,925.679 91.064 32.092 86.330 - 86.330 103.672 144.866 90.339 90.582 Continuing Continuing</td>
<td></td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>- - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>2,925.679 91.064 32.092 86.330 - 86.330 103.672 144.866 90.339 90.582 Continuing Continuing</td>
<td></td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>- - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>2,925.679 91.064 32.092 86.330 - 86.330 103.672 144.866 90.339 90.582 Continuing Continuing</td>
<td></td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) | - - - - - - - - - - - - |
Flyaway Unit Cost ($ in Thousands) | - - - - - - - - - - - - |
Gross/Weapon System Unit Cost ($ in Thousands) | - - - - - - - - - - - - |

Description:
The CH-47 Chinook is a twin-engine, tandem-rotor, heavy lift transport helicopter with a useful load of up to 25,000 pounds. As the Army's only heavy lift helicopter, the mission of the CH-47 is to transport troops (including air assault), supplies, weapons and other cargo in general support operations. The CH-47 is vital to the Overseas Contingency Operations and Homeland Security needs of our nation. Secondary missions include medical evacuation, aircraft recovery, parachute drops, disaster relief and search and rescue. These aircraft are fielded to heavy helicopter companies and Special Operations Aviation. The major modifications include the Cargo On/Off Loading System, Ballistic Protection System, Rotor Blades, Airframe Optimization and Payload Buyback, Crashworthy Seats, Cargo Platform Health Environment, Adjustable Pitch Change Link, Engine Improvement, Transformation Sets, Kits and Outfits and Aircraft Component Parts-Marking.

Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>91.064</td>
<td>32.092</td>
<td>86.330</td>
<td>-</td>
<td>86.330</td>
<td>103.672</td>
<td>144.866</td>
<td>90.339</td>
<td>90.582</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>91.064</td>
<td>32.092</td>
<td>86.330</td>
<td>-</td>
<td>86.330</td>
<td>103.672</td>
<td>144.866</td>
<td>90.339</td>
<td>90.582</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Justification:
In accordance with Section 1815 of the 2009 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the Active and Reserve Components of Armed Forces for homeland and defense missions, domestic emergency responses and providing military support to civil authorities.

The FY 16 Base procurement dollars in the amount of $86.330 million support the major modifications that include the Cargo On/Off Loading System, Ballistic Protection Systems, Rotor Blades, Airframe Optimization and Payload Buyback, Crashworthy Seats, Cargo Platform Health Environment, Adjustable Pitch Change Link, Engine Improvement, Transformation Sets, Kits and Outfits and Aircraft Component Parts-Marking.

The FY16 funding request was reduced by $.860 million to account for the availability of prior year execution balances.
### Description:

### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>2,925.679</td>
<td>91.064</td>
<td>32.092</td>
<td>86.330</td>
<td>-</td>
<td>86.330</td>
<td>103.672</td>
<td>144.866</td>
<td>90.339</td>
<td>90.582 Continuing</td>
<td>Continuing</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>2,925.679</td>
<td>91.064</td>
<td>32.092</td>
<td>86.330</td>
<td>-</td>
<td>86.330</td>
<td>103.672</td>
<td>144.866</td>
<td>90.339</td>
<td>90.582 Continuing</td>
<td>Continuing</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>2,925.679</td>
<td>91.064</td>
<td>32.092</td>
<td>86.330</td>
<td>-</td>
<td>86.330</td>
<td>103.672</td>
<td>144.866</td>
<td>90.339</td>
<td>90.582 Continuing</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
| Gross/Weapon System Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>91.064</td>
<td>32.092</td>
<td>86.330</td>
<td>-</td>
<td>86.330</td>
<td>103.672</td>
<td>144.866</td>
<td>90.339</td>
<td>90.582</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>91.064</td>
<td>32.092</td>
<td>86.330</td>
<td>-</td>
<td>86.330</td>
<td>103.672</td>
<td>144.866</td>
<td>90.339</td>
<td>90.582</td>
</tr>
</tbody>
</table>
## Models of Systems Affected: CH-47

### Modification Type: Unclassified

#### Procurement

**Modification Item 1 of 13:** Cargo On/Off Loading System (COOLS) and COOLS BPS

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargo Handling Floor System</td>
<td>$40,191</td>
</tr>
<tr>
<td>Ballistic Protection System (BPS)</td>
<td>$50,116</td>
</tr>
<tr>
<td>PM Support</td>
<td>$0.677</td>
</tr>
<tr>
<td>Cargo Handling Floor System (OCO)</td>
<td>$0.100</td>
</tr>
</tbody>
</table>

**Subtotal:** Cargo On/Off Loading System (COOLS) and COOLS BPS

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargo Handling Floor System</td>
<td>$40,191</td>
</tr>
<tr>
<td>Ballistic Protection System (BPS)</td>
<td>$50,116</td>
</tr>
<tr>
<td>PM Support</td>
<td>$0.677</td>
</tr>
<tr>
<td>Cargo Handling Floor System (OCO)</td>
<td>$0.100</td>
</tr>
</tbody>
</table>

#### Total Cost

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
</tr>
<tr>
<td>326 / 106.136</td>
<td>$40,191</td>
<td>$0.373</td>
<td>$50,116</td>
<td>$0.517</td>
<td>$0.677</td>
<td>$0.677</td>
<td>$0.100</td>
<td>$0.100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Modification Item 2 of 13:** Advanced Chinook Rotor Blade (ACRB)

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotor Blades</td>
<td>$1,703</td>
</tr>
<tr>
<td>PM Support</td>
<td>$2,680</td>
</tr>
</tbody>
</table>

**Subtotal:** Advanced Chinook Rotor Blade (ACRB)

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotor Blades</td>
<td>$1,703</td>
</tr>
<tr>
<td>PM Support</td>
<td>$2,680</td>
</tr>
</tbody>
</table>

**Modification Item 3 of 13:** Systems Optimization and Payload Buyback

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM Support</td>
<td>$2,680</td>
</tr>
</tbody>
</table>

**Modification Item 4 of 13:** Crash Resistant Troop Seats (CRTS)

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRE</td>
<td>$34,063</td>
</tr>
<tr>
<td>Subtotal: Non-Recurring</td>
<td>$35,063</td>
</tr>
</tbody>
</table>

**Subtotal:** Systems Optimization and Payload Buyback

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRE</td>
<td>$34,063</td>
</tr>
<tr>
<td>Subtotal: Non-Recurring</td>
<td>$35,063</td>
</tr>
</tbody>
</table>

**Modification Item 4 of 13:** Crash Resistant Troop Seats (CRTS)

<table>
<thead>
<tr>
<th>A Kits</th>
<th>Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRE</td>
<td>$34,063</td>
</tr>
<tr>
<td>Subtotal: Non-Recurring</td>
<td>$35,063</td>
</tr>
</tbody>
</table>

**Total Cost**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>204 / 106.136</td>
<td>$40,191</td>
<td>$0.373</td>
<td>$50,116</td>
<td>$0.517</td>
<td>$0.677</td>
<td>$0.677</td>
<td>$0.100</td>
<td>$0.100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Unclassified**

**CH-47 Cargo Helicopter Mods (MYP)**

**Army**

**February 2015**
### Models of Systems Affected: CH-47

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**P-1 Line Item Number / Title:** AA0252 / CH-47 Cargo Helicopter Mods (MYP)

**Modification Number / Title:** AA0252 / CH-47 Cargo Helicopter Mods

### Related RDT&E PEs:

**Modification Item 5 of 13:** Cargo Platform Health Environment (CPHE)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Recurring</td>
<td>Installation Kits</td>
<td>- / -</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>110 / 0.370</td>
<td>60 / 0.206</td>
</tr>
<tr>
<td></td>
<td>PM Support</td>
<td>- / -</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>10 / 0.389</td>
<td>- / -</td>
</tr>
<tr>
<td></td>
<td>Subtotal: Recurring</td>
<td>- / -</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>- / -</td>
<td>- / 0.759</td>
</tr>
</tbody>
</table>

**Modification Item 6 of 13:** Adjustable Pitch Change Link

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Recurring</td>
<td>Pitch Change Links</td>
<td>- / -</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>30 / 2.376</td>
<td>30 / 2.424</td>
</tr>
<tr>
<td></td>
<td>PM Support</td>
<td>- / -</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>10 / 0.119</td>
<td>- / -</td>
</tr>
<tr>
<td></td>
<td>Subtotal: Recurring</td>
<td>- / -</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>I / I</td>
<td>- / -</td>
<td>- / 2.405</td>
</tr>
<tr>
<td></td>
<td>NRE</td>
<td>0 / 4.900</td>
<td>- / 0.833</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1.783</td>
<td>1.783</td>
</tr>
<tr>
<td></td>
<td>Subtotal: Adjustable Pitch Change Link</td>
<td>0 / 4.900</td>
<td>- / 0.875</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>30 / 2.405</td>
<td>30 / 2.559</td>
</tr>
</tbody>
</table>
### Models of Systems Affected: CH-47

<table>
<thead>
<tr>
<th>Models of Systems Affected: CH-47</th>
<th>Modification Type: Unclassified</th>
<th>Related RDT&amp;E PEs:</th>
</tr>
</thead>
</table>

#### Financial Plan

<table>
<thead>
<tr>
<th>Modification Item 7 of 13: Engine Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Kits</td>
</tr>
<tr>
<td>Recurring</td>
</tr>
</tbody>
</table>

**T55 Engine Control Unit Prog (ECU)**
- Qty (Each): 667
- Total Cost ($M): 45.000

**New Engines**
- Qty (Each): 1,250
- Total Cost ($M): 2,495.000

**P3 Check Valve**
- Qty (Each): 373
- Total Cost ($M): 4.900

**Next Generation Torque System**
- Qty (Each): 404
- Total Cost ($M): 4.500

**Logistics**
- Qty (Each): 0.39953
- Total Cost ($M): 667 / 45.000

**ECU Upgrade**
- Qty (Each): 1
- Total Cost ($M): 1.860

**RIMFIRE**
- Qty (Each): 1
- Total Cost ($M): 1.0415

**Cabin Information Panel**
- Qty (Each): 0.95
- Total Cost ($M): 1.300

**PM Admin Support**
- Qty (Each): 1
- Total Cost ($M): 1.50

**Subtotal: Recurring**
- Qty (Each): 2.206
- Total Cost ($M): 6.487

**Non-Recurring**

<table>
<thead>
<tr>
<th>Modification Item 8 of 13: Aircraft Component Parts-Marking (UID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Kits</td>
</tr>
<tr>
<td>Non-Recurring</td>
</tr>
</tbody>
</table>

**Component Markings**
- Qty (Each): 0.230
- Total Cost ($M): 1.50

**Subtotal: Non-Recurring**
- Qty (Each): 1.578
- Total Cost ($M): 4.500

**Subtotal: Aircraft Component Parts-Marking (UID)**
- Qty (Each): 1.50
- Total Cost ($M): 1.50

**Modification Item 9 of 13: CH-47 Safety Mods $5M or Less**

<table>
<thead>
<tr>
<th>A Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring</td>
</tr>
</tbody>
</table>

**Voltage Standing Wave Ratio (VSWR)**
- Qty (Each): 0.2239
- Total Cost ($M): 1.00

**FACTS (FADEC & Aircraft Continuity Test)**
- Qty (Each): 1.0515
- Total Cost ($M): 1.0415

**Ground Spt Test Sets (IBTS)**
- Qty (Each): 1.586
- Total Cost ($M): 1.05

**Misc Mods**
- Qty (Each): 15.592

---

**LI AA0252 - CH-47 Cargo Helicopter Mods (MYP)**

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
- 2031A / 02 / 10

**P-1 Line Item Number / Title:**
- AA0252 / CH-47 Cargo Helicopter Mods (MYP)

**Modification Number / Title:**
- AA0252 / CH-47 Cargo Helicopter Mods

---

**Page 6 of 21**
## Models of Systems Affected: CH-47

### Modification Type: Unclassified

#### Financial Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>I / Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>I / Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>I / Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>I / Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>I / Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>I / Total Cost ($M)</td>
</tr>
<tr>
<td>Swashplate Assembly</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
</tr>
<tr>
<td>Hook Load Measuring System</td>
<td>0 / 10.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
</tr>
<tr>
<td>Night Vision Goggle Internal Lighting</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
</tr>
<tr>
<td>Engine Air Particle Separator (EAPS)</td>
<td>0 / 10.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
</tr>
<tr>
<td>Weapon Sys Spec Data Collection</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
</tr>
<tr>
<td>Frangible Fuel Fitting</td>
<td>0 / 10.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
<td>- / 1.0</td>
</tr>
</tbody>
</table>

### Modification Item 10 of 13: Improved Vibration Control System (IVCS)

- **A Kits**
  - Recurring
    - Kits
    - PM Support
    - Subtotal: Recurring
  - Non-Recurring
    - TADSS
    - Subtotal: Non-Recurring
    - Subtotal: Training Aids Devices Simulators and Simulations

### Modification Item 11 of 13: Training Aids Devices Simulators and Simulations

- **A Kits**
  - Recurring
    - TADSS
    - Subtotal: Recurring
  - Non-Recurring
    - TADSS
    - Subtotal: Non-Recurring
    - Subtotal: Training Aids Devices Simulators and Simulations

### Modification Item 12 of 13: Special Tools & Test Equipment

- **B Kits**
  - Recurring
    - Tools and Test Equipment
    - Subtotal: Recurring
### Models of Systems Affected: CH-47

**Modification Type:** Unclassified

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>($ M)</td>
<td>Qty (Each)</td>
<td>($ M)</td>
<td>Qty (Each)</td>
<td>($ M)</td>
<td>Qty (Each)</td>
<td>($ M)</td>
<td>Qty (Each)</td>
<td>($ M)</td>
<td>Qty (Each)</td>
<td>($ M)</td>
</tr>
<tr>
<td><strong>Subtotal: Special Tools &amp; Test Equipment</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>29 / 80.696</td>
</tr>
<tr>
<td><strong>Modification Item 13 of 13:</strong> Transformation Sets, Kits and Outfits (SKO)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>29 / 80.696</td>
</tr>
<tr>
<td>A Kits</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>29 / 80.696</td>
</tr>
<tr>
<td>SKOs</td>
<td>29 / 77.900</td>
<td>-</td>
<td>12.796</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>29 / 80.696</td>
</tr>
<tr>
<td><strong>Subtotal: Recurring</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal: Installation</strong></td>
<td>3.076 / 2,860.664</td>
<td>100 / 833.376</td>
<td>13 / 27.545</td>
<td>38 / 78.611</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>38 / 78.611</td>
<td>103 / 95.733</td>
<td>384 / 136.453</td>
<td>327 / 89.582</td>
</tr>
<tr>
<td><strong>Subtotal: Procurement, All Modification Items</strong></td>
<td>3.076 / 2,860.664</td>
<td>100 / 833.376</td>
<td>13 / 27.545</td>
<td>38 / 78.611</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>38 / 78.611</td>
<td>103 / 95.733</td>
<td>384 / 136.453</td>
<td>327 / 89.582</td>
</tr>
</tbody>
</table>

### Installation

| Modification Item 1 of 13: Cargo On/Off Loading System (COOLS) and COOLS BPS | 46 / 3.409 | 68 / 4.938 | 50 / 3.701 | 50 / 3.774 | - | - | 50 / 3.774 | 50 / 3.850 | 44 / 3.456 | - | - | - | - | 308 / 23.128 |
| Modification Item 4 of 13: Crash Resistant Troop Seats (CRTS) | 0 / 0.000 | - | - | - | - | - | - | - | - | - | - | - | - | - | 305 / 16.369 |
| Modification Item 5 of 13: Cargo Platform Health Environment (CPHE) | 210.106 | 57 / 2.750 | 16 / 0.846 | 72 / 3.882 | - | - | 72 / 3.882 | 72 / 3.960 | 86 / 4.825 | - | - | - | - | 305 / 16.369 |
| Modification Item 9 of 13: CH-47 Safety Mods $5M or Less | 35 / 3.300 | - | - | - | - | - | - | - | - | - | - | - | - | - | 35 / 3.300 |
| Modification Item 10 of 13: Improved Vibration Control System (IVCS) | 0 / 0.000 | - | - | - | - | - | - | - | - | - | - | - | - | - | 550 / 1.086 |
| **Subtotal: Installation** | 83 / 6.815 | 125 / 7.688 | 66 / 4.547 | 157 / 7.719 | - | - | 157 / 7.719 | 192 / 7.938 | 200 / 8.413 | 150 / 0.757 | 100 / 0.456 | 633 / 2.780 | 1.706 / 47.114 |
| **Total** | 2,925.679 | 91.064 | 32.092 | 86.330 | - | - | 86.330 | 103.672 | 144.866 | 90.339 | 90.582 | Continuing | Continuing |

LI AA0252 - CH-47 Cargo Helicopter Mods (MYP)
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>46</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Out</td>
<td>46</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>12</td>
</tr>
</tbody>
</table>

### Installation Information

**Method of Implementation:** Various

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>46 / 3.409</td>
<td>68 / 4.938</td>
<td>50 / 3.701</td>
<td>50 / 3.774</td>
<td>- / -</td>
<td>50 / 3.774</td>
<td>40 / 3.080</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>254 / 18.902</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>10 / 0.770</td>
<td>40 / 3.142</td>
<td>- / -</td>
<td>- / -</td>
<td>50 / 3.912</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>4 / 0.314</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>4 / 0.314</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

**Quantity:** (Each)
### Modification Item 2 of 13: Advanced Chinook Rotor Blade (ACRB)

<table>
<thead>
<tr>
<th>Manufacturer Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturer Name:</strong> Boeing</td>
</tr>
<tr>
<td><strong>Manufacturer Location:</strong> Ridley Park, PA</td>
</tr>
<tr>
<td><strong>Administrative Leadtime (in Months):</strong> 4</td>
</tr>
<tr>
<td><strong>Production Leadtime (in Months):</strong> 6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sep 2018</td>
<td>Sep 2019</td>
<td>Sep 2020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Installation Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method of Implementation (Organic):</strong> User Installed</td>
</tr>
<tr>
<td><strong>Installation Quantity:</strong> 0</td>
</tr>
</tbody>
</table>
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA0252 / CH-47 Cargo Helicopter Mods (MYP)

**Modification Number / Title:** AA0252 / CH-47 Cargo Helicopter Mods

**Modification Item 3 of 13:** Systems Optimization and Payload Buyback

**Manufacturer Information**

<table>
<thead>
<tr>
<th>Manufacturer Name: TBD</th>
<th>Manufacturer Location: TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Leadtime (in Months): 6</td>
<td>Production Leadtime (in Months):</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Information**

<table>
<thead>
<tr>
<th>Method of Implementation (Organic): Various</th>
<th>Installation Quantity: 0</th>
</tr>
</thead>
</table>

**P-1 Line #20**
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>338</td>
<td>508</td>
<td>338</td>
<td>508</td>
<td>338</td>
<td>508</td>
<td>338</td>
<td>508</td>
<td>338</td>
</tr>
</tbody>
</table>

### Method of Implementation

- **Various**

### Total Cost

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0.000</td>
</tr>
</tbody>
</table>

### Prior Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0.000</td>
</tr>
</tbody>
</table>
### Installation Schedule

| PYS | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| In  | 2  | 14 | 14 | 15 | 4  | 4  | 4  | 4  | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 21 | 21 | 22 | 22 | -  | -  | -  | -  | -  | -  | -  | 305|
| Out | 2  | 14 | 14 | 15 | 4  | 4  | 4  | 4  | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 21 | 21 | 22 | 22 | -  | -  | -  | -  | -  | -  | -  | 305|
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Modification Item 6 of 13:** Adjustable Pitch Change Link

**Manufacturer Information**
- **Manufacturer Name:** Boeing
- **Manufacturer Location:** Ridley Park, PA
- **Administrative Leadtime (in Months):** 6
- **Production Leadtime (in Months):** 6

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td>Sep 2017</td>
<td>Sep 2018</td>
<td>Sep 2019</td>
<td>Sep 2020</td>
<td></td>
</tr>
</tbody>
</table>

**Installation Information**
- **Method of Implementation (Organic):** User Installed
- **Installation Quantity:** 0
Exhibit P-3a, Individual Modification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)

Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods

Modification Item 7 of 13: Engine Improvement

Manufacturer Information

Manufacturer Name: Honeywell Inc
Manufacturer Location: Phoenix, AZ

Administrative Leadtime (in Months):
Production Leadtime (in Months):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Installation Information

Method of Implementation (Organic): Various
Installation Quantity: 0
### Modification Item 8 of 13: Aircraft Component Parts-Marking (UID)

**Manufacturer Information**

- **Manufacturer Name:** TBD
- **Manufacturer Location:** TBD
- **Administrative Leadtime (in Months):**
- **Production Leadtime (in Months):**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Information**

- **Method of Implementation (Organic):** Various
- **Installation Quantity:** 0
UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: AA0252 / CH-47 Cargo Helicopter Mods (MYP)

Modification Item 9 of 13: CH-47 Safety Mods $5M or Less

Method of Implementation: Various

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Manufacturer Location: TBD

Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

UNCLASSIFIED

Page 17 of 21

P-1 Line #20

LI AA0252 - CH-47 Cargo Helicopter Mods (MYP)

Army
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army  
**Modification Number / Title:** AA0252 / CH-47 Cargo Helicopter Mods (MYP)  
**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**Modification Item 10 of 13:** Improved Vibration Control System (IVCS)

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>17</td>
</tr>
</tbody>
</table>

### Installation Information

**Method of Implementation:** Various

**Installation Cost**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
<td>Total Cost</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Installation Schedule Continued**

**Total:** $550,000

**PYS:** procurement year start  
**Q1:** quarter 1  
**Q2:** quarter 2  
**Q3:** quarter 3  
**Q4:** quarter 4  
**Q1:** quarter 1  
**Q2:** quarter 2  
**Q3:** quarter 3  
**Q4:** quarter 4  
**TC:** total cost

---

**Manufacturer Information**

**Manufacturer Name:** Boeing  
**Manufacturer Location:** Ridley Park PA

**Administrative Leadtime (in Months):** 6  
**Production Leadtime (in Months):** 6

**Dates**

|----------------|---------|---------|---------|---------|---------|---------|---------|
Exhibit P-3a, Individual Modification: PB 2016 Army

**Modification Item 11 of 13:** Training Aids Devices Simulators and Simulations

### Manufacturer Information

| Manufacturer Name: | TBD |
| Manufacturer Location: | TBD |
| Administrative Leadtime (in Months): | 6 |
| Production Leadtime (in Months): | 12 |

### Dates

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar 2019</td>
<td>Mar 2020</td>
<td></td>
</tr>
</tbody>
</table>

### Installation Information

| Method of Implementation (Organic): | Various |
| Installation Quantity: | 0 |

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA0252 / CH-47 Cargo Helicopter Mods (MYP)

**Modification Number / Title:** AA0252 / CH-47 Cargo Helicopter Mods

**Modification Item 12 of 13:** Special Tools & Test Equipment

**Manufacturer Information**

<table>
<thead>
<tr>
<th>Manufacturer Name:</th>
<th>TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer Location:</td>
<td>TBD</td>
</tr>
</tbody>
</table>

| Administrative Leadtime (in Months): | Production Leadtime (in Months): |

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Information**

<table>
<thead>
<tr>
<th>Method of Implementation (Organic):</th>
<th>VARIOUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Quantity:</td>
<td>0</td>
</tr>
</tbody>
</table>

**Date:** February 2015
<table>
<thead>
<tr>
<th>Date:</th>
<th>February 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exhibit P-3a, Individual Modification:</strong></td>
<td>PB 2016 Army</td>
</tr>
<tr>
<td><strong>Appropriation / Budget Activity / Budget Sub Activity:</strong></td>
<td>2031A / 02 / 10</td>
</tr>
<tr>
<td><strong>P-1 Line Item Number / Title:</strong></td>
<td>AA0252 / CH-47 Cargo Helicopter Mods (MYP)</td>
</tr>
<tr>
<td><strong>Modification Number / Title:</strong></td>
<td>AA0252 / CH-47 Cargo Helicopter Mods</td>
</tr>
<tr>
<td><strong>Modification Item 13 of 13:</strong></td>
<td>Transformation Sets, Kits and Outfits (SKO)</td>
</tr>
<tr>
<td><strong>Manufacturer Information</strong></td>
<td></td>
</tr>
<tr>
<td>Manufacturer Name:</td>
<td>TBD</td>
</tr>
<tr>
<td>Manufacturer Location:</td>
<td>TBD</td>
</tr>
<tr>
<td>Administrative Leadtime (in Months):</td>
<td></td>
</tr>
<tr>
<td>Production Leadtime (in Months):</td>
<td></td>
</tr>
<tr>
<td>Contract Dates</td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
</tr>
<tr>
<td><strong>Installation Information</strong></td>
<td></td>
</tr>
<tr>
<td>Method of Implementation (Organic):</td>
<td>Various</td>
</tr>
<tr>
<td>Installation Quantity:</td>
<td>0</td>
</tr>
</tbody>
</table>
### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procurement Quantity (Units in Each)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Gross/Weapon System Cost ($ in Millions)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>4.019</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
<td>25.100</td>
</tr>
<tr>
<td><strong>Less PY Advance Procurement ($ in Millions)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Net Procurement (P1) ($ in Millions)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>4.019</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
<td>25.100</td>
</tr>
<tr>
<td><strong>Plus CY Advance Procurement ($ in Millions)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Obligation Authority ($ in Millions)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>4.019</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
<td>25.100</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

### Initial Spares ($ in Millions)

| - | - | - | - | - | - | - | - | - | - | - | - |

### Flyaway Unit Cost ($ in Thousands)

| - | - | - | - | - | - | - | - | - | - | - | - |

### Gross/Weapon System Unit Cost ($ in Thousands)

| - | - | - | 1,339.667 | - | 1,339.667 | - | - | - | - | - | 896,429 |

### Description:

This program is not a new start. FY16 and beyond, the Guardrail modification/funding will be identified between Project Manager Sensors - Aerial Intelligence (PM SAI) and Project Manager Fixed Wing (PM FW). The funding was transferred from AZ2000-Guardrail Common Sensors (GRCS).

The budget line supports updates and modernization for the Army Fixed Wing aircraft in support of the Guardrail Common Sensor (GRCS), Intelligence, Surveillance and Reconnaissance (ISR) mission. The updates and modernizations include Communication, Navigation, Surveillance (CNS), and Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Flight Standards and Engineer, Furnish and Install (EF&I) of modifications as a complete contractual effort. The budget line provides for the procurement of replacement and spare engines for the aircraft as well as the procurement and associated testing of civil and military aircraft modification equipment. Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence will be leveraged for aircraft modifications. Modifications supported by this budget line ensure continued worldwide deployment capability and safe operations. The associated modifications supported within this budget line ensure worldwide deployability for those required to deploy.
**UNCLASSIFIED**

**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**P-1 Line Item Number / Title:**
A02111 / GRCS SEMA Mods (MIP)

**Date:** February 2015

**ID Code (A=Service Ready, B=Not Service Ready):**

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements: 0313400A</th>
</tr>
</thead>
</table>

**Exhibits Schedule**

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID CD</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A02111 / Guardrail Common Sensor SEMA Modifications (Unclassified)</td>
<td>P-3a</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 4.019</td>
<td>- / -</td>
<td>- / 4.019</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID CD</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A02111 / Guardrail Common Sensor SEMA Modifications (Unclassified)</td>
<td>P-3a</td>
<td>- / 4.091</td>
<td>- / 5.556</td>
<td>- / 5.663</td>
<td>- / 5.771</td>
<td>- / -</td>
<td>- / 25.100</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>- / 4.091</td>
<td>- / 5.556</td>
<td>- / 5.663</td>
<td>- / 5.771</td>
<td>- / -</td>
<td>- / 25.100</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

**Justification:**

FY16 base procurement dollars in the amount of $4.019 million will support three (3) aircraft military/civilian modifications to include: Automatic Dependent Surveillance- Broadcast, (ADS-B) to provide digital interfacing for aircraft positioning, Universal Link- 801 data link communications management unit that provides digital communication between pilots and air traffic control (UL-801), communication radio upgrade to High Frequency/ Automatic Link Establishment (HF/ALE), beyond line of sight communication with automatic flight following and APX-119 Mode 5 to establish the ability to Identify Friend or Foe (IFF).

FY16 APA base funding dollars in the amount of $4.019 million can be linked to AZ2052, APA, Guardrail Payloads (MIP).
EXHIBIT P-3a, INDIVIDUAL MODIFICATION: PB 2016 ARMY

APPROPRIATION / BUDGET ACTIVITY / BUDGET SUB ACTIVITY:
2031A / 02 / 10

P-1 LINE ITEM NUMBER / TITLE:
A02111 / GRCS SEMA MODS (MIP)

MODIFICATION NUMBER / TITLE:
A02111 / GUARDRAIL COMMON SENSOR SEMA MODIFICATIONS

RESOURCE SUMMARY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>-</td>
<td>4.019</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>-</td>
<td>4.019</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>-</td>
<td>4.019</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
</tr>
</tbody>
</table>

(THE FOLLOWING RESOURCE SUMMARY ROWS ARE FOR INFORMATIONAL PURPOSES ONLY. THE CORRESPONDING BUDGET REQUESTS ARE DOCUMENTED ELSEWHERE.)

INITIAL SPARES ($ in Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>-</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

GROSS/WEAPON SYSTEM UNIT COST ($ in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>-</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DESCRIPTION:

FY16 base procurement dollars in the amount of $4.019 million will support three (3) aircraft military/civilian modifications to include: Automatic Dependent Surveillance- Broadcast, (ADS-B) to provide digital interfacing for aircraft positioning, Universal Link- 801 data link communications management unit that provides digital communication between pilots and air traffic control (UL-801), communication radio upgrade to High Frequency/ Automatic Link Establishment (HF/ALE), beyond line of sight communication with automatic flight following and APX-119 Mode 5 to establish the ability to Identify Friend or Foe (IFF)
### Models of Systems Affected: RC-12

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STE</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Training</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Data</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Guardrail Common Sensor SEMA Modifications</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Subtotal: Procurement, All Modification Items</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Installation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modification Item 1 of 1: Guardrail Common Sensor SEMA Modifications</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Subtotal: Installation</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
<td>- I -</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost (Procurement + Support + Installation)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.019</td>
<td>4.019</td>
<td>4.091</td>
<td>4.091</td>
<td>5.556</td>
<td>5.663</td>
<td>5.771</td>
<td>-</td>
<td>25.100</td>
</tr>
</tbody>
</table>
### Installation Information

**Method of Implementation:** Guardrail Common Sensor SEMA Modifications

**Manufacturer Information**
- **Manufacturer Name:** Various
- **Manufacturer Location:** Various
- **Administrative Leadtime (in Months):** 2
- **Production Leadtime (in Months):** 8

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td>Sep 2016</td>
<td>Sep 2017</td>
<td>Sep 2018</td>
<td>Sep 2019</td>
<td>Sep 2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Modification Number / Title:
- A02111 / Guardrail Common Sensor SEMA Modifications

### Prior Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### FY 2014

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### FY 2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### FY 2016

<table>
<thead>
<tr>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### FY 2017

<table>
<thead>
<tr>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### FY 2018

<table>
<thead>
<tr>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### FY 2019

<table>
<thead>
<tr>
<th>FY 2019</th>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### FY 2020

<table>
<thead>
<tr>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>

### Total

<table>
<thead>
<tr>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost ($)</td>
</tr>
</tbody>
</table>
**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**P-1 Line Item Number / Title:** A02110 / ARL SEMA Mods (MIP)

**UNCLASSIFIED**

**Resource Summary**

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>16.302</td>
<td>32.000</td>
<td>48.302</td>
<td>33.933</td>
<td>21.364</td>
<td>21.780</td>
<td>22.194</td>
<td>-</td>
<td>147.573</td>
</tr>
</tbody>
</table>

(Initial Spares ($ in Millions) - - - - - - - - - -)  
(Flyaway Unit Cost ($ in Thousands) - - - - - - - - - -)  
(Gross/Weapon System Unit Cost ($ in Thousands) - - - 12,075.500 - 12,075.500 - - - - 5,270,464)

**Description:**
The budget line supports the conversion of Special Electronic Mission Aircraft (SEMA) Government Owned Contractor Operated (GOCO) Quick Reaction Capability (QRC) Aerial Intelligence Surveillance & Reconnaissance (AISR) systems; four (4) Saturn Arch (SA), two (2) Desert Owl (DO) and three (3) commercially procured aircraft to be determined at a later date to Airborne Reconnaissance Low-Enhanced (ARL-E) AISR systems. The updates and modernizations include communication, navigation, surveillance, and Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Flight Standards and Engineer, Furnish and Install (EF&I) of modifications as a complete contractual effort. The budget line provides for the procurement of replacement and spare engines for the aircraft as well as the procurement and associated testing of civil and military aircraft modification equipment for ISR Mission Equipment Packages (MEP). Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and apply to STCs to the aircraft modification will be leveraged. Modifications supported by this budget line ensure continued worldwide deployment capability and safe operations. The associated modifications supported within this budget line ensure worldwide deployability for those required to deploy.

**Secondary Distribution**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>16.302</td>
<td>32.000</td>
<td>48.302</td>
<td>33.933</td>
<td>21.364</td>
<td>21.780</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>16.302</td>
<td>32.000</td>
<td>48.302</td>
<td>33.933</td>
<td>21.364</td>
<td>21.780</td>
<td>22.194</td>
</tr>
</tbody>
</table>

**UNCLASSIFIED**

LI A02110 - ARL SEMA Mods (MIP)

**Page 1 of 5**

**P-1 Line #22**

**UNCLASSIFIED**
### P-1 Line Item Number / Title:
A02110 / ARL SEMA Mods (MIP)

### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

#### Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

#### ID Code (A=Service Ready, B=Not Service Ready):
A02110 / ARL SEMA Mods (MIP)

#### Justification:
The FY 2016 OCO $32.000 million will be utilized to accelerate the installation of four (4) cockpit and aviation survivability equipment (ASE) modifications that will be ongoing for the newly acquired DeHavilland dash 8 aircraft that are replacing the legacy obsolete DeHavilland dash 7 aircraft. By accelerating these modifications with the OCO funding the base procurement dollars of $16.302 million will be utilized to procure the required spares for the DeHavilland dash 8 aircraft. This funding will aid in accelerating the fielding of the DeHavilland dash 8 aircraft, increasing the Army’s capability to detect, locate, classify/identify and track surface targets in day/night and near-all-weather conditions as well as save money by accelerating the replacement of an obsolete aircraft.

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A02110 / ARL SEMA Modifications (Unclassified)</td>
<td>P-3a</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 16.302</td>
<td>- / 32.000</td>
<td>- / 48.302</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
### Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>16.302</td>
<td>32.000</td>
<td>48.302</td>
<td>33.933</td>
<td>21.364</td>
<td>21.780</td>
<td>22.194</td>
<td>-</td>
<td>147.573</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Initial Spares ($ in Millions)**

| Quantity | - | - | - | - | - | - | - | - | - | - | - |

**Gross/Weapon System Unit Cost ($ in Thousands)**

| Quantity | 12,075.500 | 12,075.500 | - | - | - | - | - | - | - | - | - |

### Description:

The FY 2016 OCO $32.000 million will be utilized to accelerate the installation of four (4) cockpit and aviation survivability equipment (ASE) modifications that will be ongoing for the newly acquired DeHavilland dash 8 aircraft that are replacing the legacy obsolete DeHavilland dash 7 aircraft. By accelerating these modifications with the OCO funding the base procurement dollars of $16.302 million will be utilized to procure the required spares for the DeHavilland dash 8 aircraft. This funding will aid in accelerating the fielding of the DeHavilland dash 8 aircraft, increasing the Army's capability to detect, locate, classify/identify and track surface targets in day/night and near-all-weather conditions as well as save money by accelerating the replacement of an obsolete aircraft.

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>16.302</td>
<td>32.000</td>
<td>48.302</td>
<td>33.933</td>
<td>21.364</td>
<td>21.780</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>16.302</td>
<td>32.000</td>
<td>48.302</td>
<td>33.933</td>
<td>21.364</td>
<td>21.780</td>
</tr>
</tbody>
</table>
### UNCLASSIFIED

#### Exhibit P-3a, Individual Modification: PB 2016 Army

**Modification Number / Title:** A02110 / ARL SEMA Modifications

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** A02110 / ARL SEMA Mods (MIP)

**Date:** February 2015

---

**Models of Systems Affected:** ARL SEMA Modifications

**Modification Type:** Unclassified

**Related RDT&E PEs:**

---

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) I</td>
<td>Qty Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Qty Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Qty Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Qty Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Qty Total Cost ($M)</td>
<td>Qty (Each) I</td>
<td>Qty Total Cost ($M)</td>
</tr>
<tr>
<td>Procurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECP</td>
<td>-</td>
<td>/ -</td>
<td></td>
<td>/ -</td>
<td>-</td>
<td>/ -</td>
<td>17.042</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Spares</td>
<td>-</td>
<td>/ -</td>
<td></td>
<td>/ -</td>
<td>-</td>
<td>/ -</td>
<td>17.024</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DATA</td>
<td>-</td>
<td>/ -</td>
<td></td>
<td>/ -</td>
<td>-</td>
<td>/ -</td>
<td>10.017</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Support Equipment</td>
<td>-</td>
<td>/ -</td>
<td></td>
<td>/ -</td>
<td>-</td>
<td>/ -</td>
<td>10.445</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>System Test &amp; Evaluation</td>
<td>-</td>
<td>/ -</td>
<td></td>
<td>/ -</td>
<td>-</td>
<td>/ -</td>
<td>2.399</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Training</td>
<td>-</td>
<td>/ -</td>
<td></td>
<td>/ -</td>
<td>-</td>
<td>/ -</td>
<td>0.509</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sensor Integration</td>
<td>-</td>
<td>/ -</td>
<td></td>
<td>/ -</td>
<td>-</td>
<td>/ -</td>
<td>0.195</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Installation**

**Modification Item 1 of 1: ARL SEMA Mods**

- / - | - | / - | - | / - | - | / - | 27.556 | - | - | - | - | - | - | - | - | - | - | - |

Subtotal: Installation

- / - | - | / - | - | / - | - | / - | 27.556 | - | - | - | - | - | - | - | - | - | - | - |

**Total**

**Total Cost (Procurement + Support + Installation)**

- | - | - | 16.302 | 32.000 | 48.302 | 33.933 | 21.364 | 21.780 | 22.194 | - | 147.573
### UNCLASSIFIED

**Exhibit P-3a, Individual Modification:** PB 2016 Army  
**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** A02110 / ARL SEMA Mods (MIP)  
**Modification Number / Title:** A02110 / ARL SEMA Modifications  
**Date:** February 2015

#### Modification Item 1 of 1: ARL SEMA Mods

**Manufacturer Information**

<table>
<thead>
<tr>
<th>Manufacturer Name: Various</th>
<th>Manufacturer Location: Various</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Leadtime (in Months): 2</td>
<td>Production Leadtime (in Months): 12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Dates</td>
<td>Feb 2017</td>
<td>Feb 2018</td>
<td>Feb 2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Installation Information

**Method of Implementation:** ARL SEMA Modifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
<td>- I - / - I - / 0.000</td>
</tr>
</tbody>
</table>

#### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS Q1</td>
<td>Q2 Q3</td>
<td>Q4 Q1</td>
<td>Q2 Q3</td>
<td>Q4 Q1</td>
<td>Q2 Q3</td>
<td>Q4 Q1</td>
<td>TC</td>
<td>Tot</td>
</tr>
<tr>
<td>In</td>
<td>- - - -</td>
<td>2 - - -</td>
<td>4 - - -</td>
<td>1 - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Out</td>
<td>- - - -</td>
<td>2 - - -</td>
<td>4 - - -</td>
<td>1 - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

LI A02110 - ARL SEMA Mods (MIP)
Description:
The budget line supports the modification of Special Electronic Mission Aircraft (SEMA) Government-owned Quick Reaction Capability (QRC) Aerial Intelligence Surveillance & Reconnaissance (AISR) systems: Liberty Project Aircraft (LPA), Constant Hawk (CH) and Tactical Operations (TACOP), VADER (Vehicle and Dismount exploitation Radar) to Enhanced Medium Altitude Reconnaissance and Surveillance Systems (EMARSS). These modernizations will include significant aircraft and mission equipment package (MEP) communications and network changes and leverage existing integration of Intelligence sensor technologies. The budget line provides for the procurement of replacement and spare engines for the aircraft. In addition, it provides for the procurement and associated testing of civil and military aircraft modification equipment for ISR MEP. Additional modernizations include aircraft navigation, surveillance, survivability equipment enhancements and P3I (Pre-Planned Product Improvement) for EMARSS Program of Record (POR). These modifications address all Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Standards. In addition, it provides for the procurement and associated testing of civil and military aircraft modification equipment for AISR Mission Equipment Packages (MEP). This budget line will also be used to modify the aircraft to include Engineer, Furnish and Install (EF&I) of modifications as a complete contractual effort. It also leverages Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and applies to STCs to the aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.
Exhibit P-40, Budget Line Item Justification: PB 2016 Army  
Appropriation / Budget Activity / Budget Sub Activity:  
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft  
P-1 Line Item Number / Title:  
A02112 / EMARSS SEMA Mods (MIP)  
Justification:  
FY16 base procurement dollars in the amount of $13.669 million support modifications to one (1) QRC aircraft into the EMARSS POR.

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>PRIOR YEARS</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID Code</td>
<td></td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
</tr>
<tr>
<td>A02112 / EMARSS Modifications (Unclassified)</td>
<td>P-3a</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>13.669</td>
<td>- / -</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>13.669</td>
<td>- / -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID Code</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
<td>Quantity / Total Cost (Each) / ($M)</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
A02112 / EMARSS SEMA Mods (MIP)

**Modification Number / Title:**
A02112 / EMARSS Modifications

### Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

(Initial Spares ($ in Millions) are for informational purposes only. The corresponding budget requests are documented elsewhere.)

<table>
<thead>
<tr>
<th>Initial Spares ($ in Millions)</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross/Weapon System Unit Cost ($ in Thousands)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>13,669.000</td>
<td>-</td>
<td>13,669.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Description:**
FY16 base procurement dollars in the amount of $13.669 million support modifications to one (1) QRC aircraft into the EMARSS POR.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total: Secondary Distribution</th>
<th>Quantity</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
</table>
### Models of Systems Affected: EMARSS

**Modification Type:** Unclassified

**Related RDT&E PEs:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Procurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECP</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 0.207</td>
<td>- / -</td>
<td>1 / 0.214</td>
<td>1 / 0.028</td>
<td>1 / 0.270</td>
</tr>
<tr>
<td>DATA</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 0.202</td>
<td>- / -</td>
<td>1 / 0.210</td>
<td>1 / 0.027</td>
<td>1 / 0.265</td>
</tr>
<tr>
<td>Spares</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 0.330</td>
<td>- / -</td>
<td>1 / 0.343</td>
<td>1 / 0.045</td>
<td>1 / 0.432</td>
</tr>
<tr>
<td>Support Equipment</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 0.038</td>
<td>- / -</td>
<td>1 / 0.040</td>
<td>1 / 0.005</td>
<td>1 / 0.050</td>
</tr>
<tr>
<td>System Test &amp; Evaluation</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 0.255</td>
<td>- / -</td>
<td>1 / 0.260</td>
<td>1 / 0.102</td>
<td>1 / 0.466</td>
</tr>
<tr>
<td>Subtotal: Procurement, All Modification Items</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 5.708</td>
<td>- / -</td>
<td>1 / 5.837</td>
<td>1 / 2.486</td>
<td>1 / 7.555</td>
</tr>
</tbody>
</table>

### Installation

**Modification Item 1 of 1:** EMARSS Modifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Installation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: Installation</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1 / 7.961</td>
<td>- / -</td>
<td>1 / 7.529</td>
<td>1 / 0.819</td>
<td>2 / 13.739</td>
</tr>
</tbody>
</table>

### Total

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
</tr>
</tbody>
</table>
### Modification Item 1 of 1: EMARSS SEMA Modifications

#### Installation Information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Dates</td>
<td>Dec 2016</td>
<td>Dec 2017</td>
<td>Dec 2018</td>
<td>Dec 2019</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Method of Implementation: EMARSS Modifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>- / -</td>
<td>/ -</td>
<td>/ -</td>
<td>- / -</td>
<td>- / -</td>
<td>/ -</td>
<td>/ -</td>
<td>/ -</td>
<td>/ -</td>
<td>/ -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

#### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>-</td>
</tr>
</tbody>
</table>
### Description:
The budget line supports the updates and modernization of Army fixed wing aircraft communication, navigation, surveillance, survivability equipment, and Department of Defense (DoD) mandated safety equipment to current and evolving international and Army standards. The budget line provides for the procurement of replacement and spare engines for fixed wing aircraft. In addition, it provides for the procurement and associated testing of civil and military aircraft modification equipment including integration of Intelligence, Surveillance and Reconnaissance (ISR) Mission Equipment Packages (MEP). This budget line will also be used to modify fixed wing aircraft (C-12 (all variants), C-23, C-31, C-208B, E05, UV-18, C-20, C-37, T-6, RC-12 (all variants), UC-35, and B300) to include Engineer, Furnish and Install (EF&I) of modifications as a complete contractual effort. It also leverages Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>242.120</td>
<td>11.500</td>
<td>15.029</td>
<td>16.166</td>
<td>-</td>
<td>16.166</td>
<td>17.683</td>
<td>16.525</td>
<td>16.562</td>
<td>15.773</td>
<td>-</td>
<td>351.358</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Initial Spares ($ in Millions)**
- FY 2014: -
- FY 2015: -
- FY 2016: -
- FY 2017: -
- FY 2018: -
- FY 2019: -
- FY 2020: -

**Flyaway Unit Cost ($ in Thousands)**
- FY 2014: -
- FY 2015: -
- FY 2016: -
- FY 2017: -
- FY 2018: -
- FY 2019: -
- FY 2020: -

**Gross/Weapon System Unit Cost ($ in Thousands)**
- FY 2014: -
- FY 2015: 808.300
- FY 2016: 808.300
- FY 2017: -
- FY 2018: -
- FY 2019: -
- FY 2020: -

**Secondary Distribution**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td></td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>11.500</td>
<td>5.702</td>
<td>8.809</td>
<td>-</td>
<td>8.809</td>
<td>5.127</td>
<td>7.467</td>
<td>2.989</td>
<td>5.517</td>
</tr>
<tr>
<td>ANG</td>
<td></td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR</td>
<td></td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>5.434</td>
<td>-</td>
<td>-</td>
<td>8.388</td>
<td>6.818</td>
<td>6.027</td>
<td>6.322</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Exhibit P-40, Budget Line Item Justification: PB 2016 Army**

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**P-1 Line Item Number / Title:**
AA0270 / Utility/Cargo Airplane Mods

---

**Justification:**
FY16 Base procurement dollars in the amount of $16.166 million support aircraft modifications to Communications, Navigation, and Surveillance (CNS) and Aircraft Survivability Equipment (ASE) that meets current and future air traffic management requirements.

In addition, equipment included in the modifications will enhance the safety of passengers and crew. The upgrades will also permit the Army fixed wing aircraft to operate in compliance with other existing and emerging regulations. As requirement for new avionics equipment continue, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and navigation systems will enhance reliability and maintainability, thereby improving aircraft availability for mission requirements. The associated aircraft modifications will assure worldwide deployability for those required to deploy.

The FY16 funding request was reduced by $.195 million to account for the availability of prior year execution balances.
Description:
The budget line supports the updates and modernization of Army fixed wing aircraft communication, navigation, surveillance, survivability equipment, and Department of Defense (DoD) mandated safety equipment to current and evolving international and Army standards. The budget line provides for the procurement of replacement and spare engines for fixed wing aircraft. In addition, it provides for the procurement and associated testing of civil and military aircraft modification equipment including integration of Intelligence, Surveillance and Reconnaissance (ISR) Mission Equipment Packages (MEP). This budget line will also be used to modify fixed wing aircraft to include Engineer, Furnish and Install (EF&I) of modifications as a complete contractual effort. It also leverages Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

FY16 Base procurement dollars in the amount of $16.166 million support aircraft modifications to Communications, Navigation, and Surveillance (CNS) and Aircraft Survivability Equipment (ASE) that meets current and future air traffic management requirements. In addition, equipment included in the modifications will enhance the safety of passengers and crew. The upgrades will also permit the Army fixed wing aircraft to operate in compliance with other existing and emerging regulations. As requirement for new avionics equipment continue, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and navigation systems will enhance reliability and maintainability, thereby improving aircraft availability for mission requirements. The associated aircraft modifications will assure worldwide deployability for those required to deploy.
Exhibit P-3a, Individual Modification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AA0270 / Utility/Cargo Airplane Mods

Modification Number / Title: AA0270 / Fixed Wing Aircraft Modifications

|-------------------------|---------|---------|--------------|-------------|--------------|---------|---------|---------|---------|
### Exhibit P-3a, Individual Modification: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
AA0270 / Utility/Cargo Airplane Mods

**Modification Number / Title:**
AA0270 / Fixed Wing Aircraft Modifications

**Models of Systems Affected:**
All series Army fixed wing aircraft

**Modification Type:**
Rationalization, Standardization, Interoperability, Compatibility, Simplification

**Related RDT&E PEs:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qty (Each) / Total Cost ($M)</strong></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
</tr>
<tr>
<td><strong>Procurement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modification Item 1 of 1:</strong> Fixed Wing Aircraft Modifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td>0 / 0.400</td>
<td>- / 0.044</td>
<td>- / 0.104</td>
<td>- / 0.047</td>
<td>- / -</td>
<td>- / 0.047</td>
<td>- / 0.089</td>
<td>- / 0.083</td>
<td>- / 0.083</td>
<td>- / 0.079</td>
<td>- / -</td>
</tr>
<tr>
<td><strong>Installation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modification Item 1 of 1:</strong> Fixed Wing Aircraft</td>
<td>227 / 73.174</td>
<td>9 / 4.582</td>
<td>17 / 5.970</td>
<td>20 / 6.480</td>
<td>- / -</td>
<td>20 / 6.480</td>
<td>21 / 7.038</td>
<td>29 / 6.577</td>
<td>22 / 6.592</td>
<td>20 / 6.278</td>
<td>- / -</td>
</tr>
<tr>
<td>Modifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal: Installation</strong></td>
<td>227 / 73.174</td>
<td>9 / 4.582</td>
<td>17 / 5.970</td>
<td>20 / 6.480</td>
<td>- / -</td>
<td>20 / 6.480</td>
<td>21 / 7.038</td>
<td>29 / 6.577</td>
<td>22 / 6.592</td>
<td>20 / 6.278</td>
<td>- / -</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost (Procurement + Support + Installation)</strong></td>
<td>242.120</td>
<td>11.500</td>
<td>15.029</td>
<td>16.166</td>
<td>- / -</td>
<td>16.166</td>
<td>17.683</td>
<td>16.525</td>
<td>16.562</td>
<td>15.773</td>
<td>- / -</td>
</tr>
</tbody>
</table>

**Date:** February 2015

**LI AA0270 - Utility/Cargo Airplane Mods**

**UNCLASSIFIED**

**P-1 Line #24**
**Exhibit P-3a, Individual Modification: PB 2016 Army**

**Modification Item 1 of 1:** Fixed Wing Aircraft Modifications

<table>
<thead>
<tr>
<th>Installation Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method of Implementation:</strong> Contractor</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS Q1</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>In</td>
<td>227</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Out</td>
<td>222</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods

Date: February 2015

ID Code (A=Service Ready, B=Not Service Ready) :

Program Elements for Code B Items:

Other Related Program Elements:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>13.793</td>
<td>10.904</td>
<td>5.946</td>
<td>5.947</td>
<td>5.947</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,400.486</td>
<td>88.095</td>
<td>76.515</td>
<td>13.793</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,400.486</td>
<td>88.095</td>
<td>76.515</td>
<td>13.793</td>
<td>-</td>
<td>10.904</td>
<td>5.946</td>
<td>5.947</td>
<td>5.947</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,400.486</td>
<td>88.095</td>
<td>76.515</td>
<td>13.793</td>
<td>-</td>
<td>13.793</td>
<td>10.904</td>
<td>5.946</td>
<td>5.947</td>
</tr>
</tbody>
</table>

The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.

Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - |
Flyway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - |
Gross/Weapon System Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - |

Description:
Utility Helicopter Mods include modifications to the UH-60 Black Hawk and the UH-72A Lakota helicopters. The UH-60 Black Hawk helicopter is the Army's utility helicopter in the future force. It is a twin engine, single rotor, four bladed utility helicopter used for air assault, general support, command & control, and aero-medical evacuations (MEDEVAC). The UH-60 is joint force capable, providing 24 hour/day support including operations at night and in adverse weather conditions. The UH-60 is designed to carry a crew of four plus eleven combat equipped troops or an external load up to 9,000 pounds. The UH-60 Black Hawk was fielded in 1978 as a replacement for the UH-1. From 1978 to 1988, UH-60As were produced. In 1989 production of UH-60Ls with improved engines and drive train began. In 2007, full rate production of UH-60Ms began which provided a digital cockpit, digital Flight Management System (FMS), improved engine, and wide-cord main rotor blades. The UH-72A Lakota helicopter provides general aviation support for aviation units in the active and reserve components.

FY16 Base procurement dollars in the amount of $13.793 million will procure External High Speed Hoists. The External High Speed Hoist is a modification to UH-60A/L aircraft developed to supplement and eventually replace the internal rescue hoist currently in use. The existing internal hoist has significant obsolescence issues and takes up valuable cabin space in the aircraft thus the Army decided to standardize the external hoist configuration as employed on the HH-60A/L/M. The UH-60 A to L Conversion program expands the current UH-60 A to A recapitalization/rebuild. Effective in FY16 all A to L conversions and UH-60L Digital, now designated as UH-60V, conversions will be procured under line A05009. Prior to FY16 the funding for UH-60 A to L conversions was conducted under this line AA0492.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>43.220</td>
<td>51.921</td>
<td>13.793</td>
<td>-</td>
<td>13.793</td>
<td>10.904</td>
<td>5.946</td>
</tr>
<tr>
<td>ANG</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**P-1 Line Item Number / Title:**
AA0480 / Utility Helicopter Mods

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Obligation Authority</td>
<td>27.197</td>
<td>24.594</td>
</tr>
<tr>
<td>AR:</td>
<td>Quantity</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>17.678</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>88.095</td>
<td>76.515</td>
</tr>
</tbody>
</table>
### Exhibit P-40, Budget Line Item Justification:

**P-1 Line Item Number / Title:**

AA0480 / Utility Helicopter Mods

**Appropriation / Budget Activity / Budget Sub Activity:**

2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**Date:** February 2015

### Program Elements for Code B Items:

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-1 Line Item Number / Title:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Exhibits Schedule

#### FY 2017

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits</th>
<th>ID CD</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0492 / Utility Helicopter Modifications (Operational)</td>
<td>P-3a</td>
<td>-</td>
<td>10.904</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>FY 2017</td>
<td>FY 2018</td>
<td>FY 2019</td>
<td>FY 2020</td>
<td>To Complete</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### FY 2018

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits</th>
<th>ID CD</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0492 / Utility Helicopter Modifications (Operational)</td>
<td>P-3a</td>
<td>-</td>
<td>10.904</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>FY 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### FY 2019

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits</th>
<th>ID CD</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0492 / Utility Helicopter Modifications (Operational)</td>
<td>P-3a</td>
<td>-</td>
<td>10.904</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>FY 2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### FY 2020

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits</th>
<th>ID CD</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0492 / Utility Helicopter Modifications (Operational)</td>
<td>P-3a</td>
<td>-</td>
<td>10.904</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>FY 2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### To Complete

<table>
<thead>
<tr>
<th>Date*</th>
<th>Exhibits</th>
<th>ID CD</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
<th>Quantity / Total Cost (Each) / ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0492 / Utility Helicopter Modifications (Operational)</td>
<td>P-3a</td>
<td>-</td>
<td>10.904</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
<td>5.947</td>
<td>-</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Note:

- Totals in this Exhibit P-40 set may not be exact or add due to rounding.

*Title represents 1) the Number / Title for Items; 2) the Number / Title (DODIC) for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.
Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10
P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods
Modification Number / Title: AA0492 / Utility Helicopter Modifications

Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,400.486</td>
<td>88.095</td>
<td>76.515</td>
<td>13.793</td>
<td>-</td>
<td>13.793</td>
<td>10.904</td>
<td>5.946</td>
<td>5.947</td>
<td>5.947</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,400.486</td>
<td>88.095</td>
<td>76.515</td>
<td>13.793</td>
<td>-</td>
<td>13.793</td>
<td>10.904</td>
<td>5.946</td>
<td>5.947</td>
<td>5.947</td>
<td>-</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions)
| | | | | | | | | | | | |

Gross/Weapon System Unit Cost ($ in Thousands)
| | | | | | | | | | | | |

Description:
Utility Helicopter Mods include modifications to the UH-60 Black Hawk and the UH-72A Lakota helicopter.

Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>43.220</td>
<td>51.921</td>
<td>13.793</td>
<td>-</td>
<td>13.793</td>
<td>10.904</td>
<td>5.946</td>
<td>5.947</td>
<td>5.947</td>
</tr>
<tr>
<td>ANG</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>27.197</td>
<td>24.594</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AR</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>17.678</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>88.095</td>
<td>76.515</td>
<td>13.793</td>
<td>-</td>
<td>13.793</td>
<td>10.904</td>
<td>5.946</td>
<td>5.947</td>
<td>5.947</td>
</tr>
</tbody>
</table>
### Exhibit P-3a, Individual Modification: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** AA0480 / Utility Helicopter Mods  
**Modification Number / Title:** AA0492 / Utility Helicopter Modifications

**Models of Systems Affected:** UH-60L

#### Modification Type: Operational

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Procurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Modification Item 1 of 6: Crashworthy External Fuel System (CEFS)

- **A Kits**
  - Recurring
    - A-Kits (AVL) 884 / 45.857
    - A-Kits (GFE to Production) 32 / 2.700
    - A-Kits (GFE to SAR Aclar) 10 / 0.600
    - B-kits 463 / 56.200
    - Support Equipment/Other 0 / 34.605
  - Subtotal: Recurring 1,389 / 139.962
  - Subtotal: Crashworthy External Fuel System (CEFS) 1,389 / 139.962

#### Modification Item 2 of 6: UH-60A to UH-60L Conversion

- **A Kits**
  - Recurring
    - Other 127 / 221.293
    - Subtotal: Recurring 222 / 329.013
  - Non-Recurring
    - Other 0 / 822.788
    - Subtotal: Non-Recurring 822.788
  - Subtotal: UH-60A to UH-60L Conversion 222 / 1,151.801

#### Modification Item 3 of 6: External High Speed Hoist

- **A Kits**
  - Recurring
    - Other 67 / 21.140
    - Subtotal: Recurring 251 / 79.318
  - Subtotal: External High Speed Hoist 251 / 79.318

#### Modification Item 4 of 6: Enhanced Ballistics Armor Protections System

- **A Kits**
  - Recurring
    - Kit Quantity 49 / 5.946
    - Other 147 / 17.840
  - Other 15.000

---

**To Complete**:

- FY 2020: 251 / 79.318
- FY 2019: 147 / 17.840
- FY 2018: 49 / 5.947
- FY 2017: 49 / 5.947
- FY 2016: 49 / 5.947
- FY 2015: 49 / 5.947
- FY 2014: 49 / 5.947

**Total Cost**:

- FY 2020: 251 / 79.318
- FY 2019: 147 / 17.840
- FY 2018: 49 / 5.947
- FY 2017: 49 / 5.947
- FY 2016: 49 / 5.947
- FY 2015: 49 / 5.947
- FY 2014: 49 / 5.947

---

**UNCLASSIFIED**

LI AA0480 - Utility Helicopter Mods

**UNCLASSIFIED**

Page 5 of 12

P-1 Line #25

234
Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10
P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods
Modification Number / Title: AA0492 / Utility Helicopter Modifications

Models of Systems Affected: UH-60L
Modification Type: Operational
Related RDT&E PEs:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal: Recurring</td>
<td>- / -</td>
<td>0.000</td>
<td>/ /</td>
<td>- / -</td>
<td>- / -</td>
<td>15.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>15.000</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Enhanced Ballistics Armor Protections System</td>
<td>- / -</td>
<td>0.000</td>
<td>/ /</td>
<td>- / -</td>
<td>- / -</td>
<td>15.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>15.000</td>
<td>- / -</td>
</tr>
</tbody>
</table>

Modification Item 5 of 6: Upturned Exhaust System (UES)
A Kits

Modification Item 6 of 6: Backup Altitude Indicators
A Kits

Recurring

Installation

Modification Item 1 of 6: Crashworthy External Fuel System (CEFS)

Modification Item 2 of 6: UH-60A to UH-60L Conversion

Modification Item 3 of 6: External High Speed Hoist

Modification Item 4 of 6: Enhanced Ballistics Armor Protections System

Modification Item 5 of 6: Upturned Exhaust System (UES)

Modification Item 6 of 6: Backup Altitude Indicators

Subtotal: Installation

Total Cost (Procurement + Support + Installation)
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army  
**Dates:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A / 02 / 10

**P-1 Line Item Number / Title:**  
AA0480 / Utility Helicopter Mods

**Modification Number / Title:**  
AA0492 / Utility Helicopter Modifications

**Modification Item 1 of 6:** Crashworthy External Fuel System (CEFS)

**Manufacturer Information**  
Manufacturer Name: Robertson Fuel Systems, LLC  
Manufacturer Location: Tempe, AZ

**Administrative Leadtime (in Months):** 1  
**Production Leadtime (in Months):** 2

### Installation Schedule

<table>
<thead>
<tr>
<th>Method of Implementation: Various</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>81 / 1.200</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>81 / 1.200</td>
<td></td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>117 / 1.670</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>117 / 1.670</td>
<td></td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>116 / 1.739</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>116 / 1.739</td>
<td></td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td></td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td></td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>81 / 1.200</td>
<td>117 / 1.670</td>
<td>116 / 1.739</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>314 / 4.609</td>
<td></td>
</tr>
</tbody>
</table>

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>In</td>
<td>964</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>950</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

LI AA0480 - Utility Helicopter Mods  
UNCLASSIFIED  
Page 7 of 12  
P-1 Line #25  
236
Modification Item 2 of 6: UH-60A to UH-60L Conversion

|----------------|---------|---------|---------|---------|---------|---------|---------|-------------|-------|

Installation Information

Method of Implementation: Depot

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td>Qty (Each) / Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
</tbody>
</table>

Installation Schedule

<table>
<thead>
<tr>
<th>PYS</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>TC</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>181</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>276</td>
</tr>
<tr>
<td>Out</td>
<td>139</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>276</td>
</tr>
</tbody>
</table>
**Modification Item 3 of 6: External High Speed Hoist**

**Manufacturer Information**
- Manufacturer Name: Breeze Eastern, Inc
- Manufacturer Location: Whippany, NJ
- Administrative Leadtime (in Months): 1
- Production Leadtime (in Months): 4

**Method of Implementation:** Various

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
<td>Qty (Each) I Total Cost ($ M)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
<td>- / 0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Installation Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td>In</td>
</tr>
<tr>
<td>Out</td>
</tr>
</tbody>
</table>
## Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

## Installation Information

### Method of Implementation
Various

### Prior Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2014

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2017

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2019

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### Total

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Cost ($M)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>
### Installation Schedule

<table>
<thead>
<tr>
<th>Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Exhibits

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA0480 / Utility Helicopter Mods

**Modification Number / Title:** AA0492 / Utility Helicopter Modifications

**Modification Item 6 of 6:** Backup Altitude Indicators

---

### Installation Information

**Manufacturer Information**

- **Manufacturer Name:** PIF
- **Manufacturer Location:** Redstone Arsenal Alabama

- **Administrative Leadtime (in Months):** 6
- **Production Leadtime (in Months):** 6

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td>Jul 2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td>Nov 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>-</td>
<td>67</td>
<td>66</td>
<td>66</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>265</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>67</td>
<td>66</td>
<td>66</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>265</td>
</tr>
</tbody>
</table>

---

**Method of Implementation:** Various

**Installations Schedule:**

- **Installation Cost:**
  - **Prior Years**
  - **FY 2014**
    - **Installation Cost:**
      - **FY 2014**
        - Total Cost: $0.000
      - **FY 2015**
        - Total Cost: $0.000
      - **FY 2016**
        - Total Cost: $0.000
      - **FY 2017**
        - Total Cost: $0.000
      - **FY 2018**
        - Total Cost: $0.000
      - **FY 2019**
        - Total Cost: $0.000
      - **FY 2020**
        - Total Cost: $0.000

---

**Backup Altitude Indicators**

- **Appropriation / Budget Activity / Budget Sub Activity:** Various
- **Total:** $0.000
**Exhibit P-40, Budget Line Item Justification: PB 2016 Army**

**P-1 Line Item Number / Title:**
AZ2200 / Kiowa Mods Warrior

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**Date:** February 2015

### Resource Summary

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Years</td>
<td>FY 2014</td>
<td>FY 2015</td>
</tr>
<tr>
<td>FY 2016 Base</td>
<td>FY 2016 OCO</td>
<td>FY 2016 Total</td>
</tr>
<tr>
<td>FY 2016</td>
<td>FY 2017</td>
<td>FY 2018</td>
</tr>
<tr>
<td>FY 2019</td>
<td>FY 2020</td>
<td>To Complete</td>
</tr>
<tr>
<td>FY 2020 Total</td>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procurement Quantity (Units in Each)</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>4,049.746 108.282</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>- -</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>4,049.746 108.282</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>- -</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>4,049.746 108.282</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Initial Spares ($ in Millions):**
- - - - - - - -

**Flyaway Unit Cost ($ in Thousands):**
- - - - - - - -

**Gross/Weapon System Unit Cost ($ in Thousands):**
- - - - - - - -

**Description:**
The Kiowa Warrior is a two-seat, single-engine, observation, scout/attack helicopter with four main rotor blades. It utilizes a thermal-imaging system and a laser rangefinder/designator in a mast-mounted sight situated above the main rotor system. The aircraft is equipped with a variety of weapon systems including: HELLFIRE, 2.75-inch rockets, and a .50-caliber machine gun. The aircraft operates autonomously and teamed with other manned and unmanned aerial systems at standoff ranges providing armed reconnaissance, command and control, and target acquisition/designation for Apache helicopters and other airborne weapons platforms in day, night, and adverse-weather conditions. The Active Army and the National Guard fly Kiowa Warriors.

**Secondary Distribution**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>108.282</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Justification:**
As part of the Army's Aviation Restructure Initiative (ARI), only $25 million was released to the ASH PM. These funds support termination of production activities and procurement of critical safety related enhancements to the fleet.

There are no FY2016 and beyond funds requested.
<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>All COMPO 1 Active</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LI AA0712 - Network And Mission Plan

### Resource Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td></td>
<td>248.959</td>
<td>59.326</td>
<td>105.380</td>
<td>112.807</td>
<td>-</td>
<td>112.807</td>
<td>102.378</td>
<td>137.596</td>
<td>143.529</td>
<td>146.959</td>
<td>1,056.934</td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td></td>
<td>248.959</td>
<td>59.326</td>
<td>105.380</td>
<td>112.807</td>
<td>-</td>
<td>112.807</td>
<td>102.378</td>
<td>137.596</td>
<td>143.529</td>
<td>146.959</td>
<td>1,056.934</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td></td>
<td>248.959</td>
<td>59.326</td>
<td>105.380</td>
<td>112.807</td>
<td>-</td>
<td>112.807</td>
<td>102.378</td>
<td>137.596</td>
<td>143.529</td>
<td>146.959</td>
<td>1,056.934</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

<table>
<thead>
<tr>
<th>Description:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Network and Mission Plan budget line includes the Aviation Mission Planning System (AMPS), the Improved Data Modem (IDM), the Aviation</td>
</tr>
<tr>
<td></td>
<td>Data Exploitation Capability (ADEC), the Aircraft Notebook (ACN), and the Aviation Logistics Enterprise-Platform (ALE-P).</td>
</tr>
<tr>
<td></td>
<td>The AMPS is a mission planning/battle synchronization tool that automates aviation mission planning tasks, including tactical command</td>
</tr>
<tr>
<td></td>
<td>and control, mission planning, and flight planning. It interfaces with Army Mission Command Systems (AMCS) and associated networks which</td>
</tr>
<tr>
<td></td>
<td>furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust mission plans. AMPS</td>
</tr>
<tr>
<td></td>
<td>generates mission data in either hard copy or electronic formats. The electronic formats are loaded onto the aircraft platforms, initializing</td>
</tr>
<tr>
<td></td>
<td>the communication, navigation, situational awareness, and weapons systems on the aircraft including the AH-64D/E, CH-47D/F, OH-58D,</td>
</tr>
<tr>
<td></td>
<td>UH-60A/L/M/Q/V, HH-60L, LUH-72, EMARSS, and Unmanned Aircraft Systems (UAS). The AMPS program includes management of the Commander's</td>
</tr>
<tr>
<td></td>
<td>Aviation Risk Tool and the Centralized Aviation Flight Records System (CAFRS). To accommodate rapid commercial technology changes, the</td>
</tr>
<tr>
<td></td>
<td>overall system hardware is replaced after five years of use.</td>
</tr>
<tr>
<td></td>
<td>The IDM is the common solution for digitizing Army Aviation. It performs as an internet controller and gateway to Tactical Internet (TI)</td>
</tr>
<tr>
<td></td>
<td>and Fire Support (FS) internet for Army aircraft. With interfaces supporting a transmit/receive terminal, the IDM provides radio connectivity to the</td>
</tr>
<tr>
<td></td>
<td>ARC-201D/231, ARC-186, ARC-164, and the Blue Force Tracker transceiver, as well as providing 1553 and Ethernet portals for rapid data</td>
</tr>
<tr>
<td></td>
<td>transfer. This hardware/software solution also provides a flexible, software-driven digital messaging system that is interoperable with</td>
</tr>
<tr>
<td></td>
<td>existing Army and Joint forces battlefield operating systems. The IDM provides Situational Awareness and Joint Variable Message Format</td>
</tr>
<tr>
<td></td>
<td>messages capability to the cockpit. The IDM is currently utilized by the AH-64D/E, OH-58D, CH-47F, and UH/HH-60M.</td>
</tr>
<tr>
<td></td>
<td>The ADEC is an Army aviation automated information system program providing specific capabilities needed at the aviation unit level to</td>
</tr>
<tr>
<td></td>
<td>implement and support improvements within aviation operations, safety, and training to increase operational effectiveness and</td>
</tr>
<tr>
<td></td>
<td>situational awareness at all command echelons. ADEC provides a common and interoperable capability required to implement the DoD</td>
</tr>
<tr>
<td></td>
<td>mandated Military Flight Operations Quality Assurance processes. ADEC will standardize flight scheduling/management, risk management,</td>
</tr>
<tr>
<td></td>
<td>mission approval, and flight data analysis and visualization. ADEC provides interfaces to CAFRS and ALE-P to reduce data entry and</td>
</tr>
<tr>
<td></td>
<td>information technology footprint while enabling disconnected and split based operations.</td>
</tr>
<tr>
<td></td>
<td>The ACN is an Army aviation automated information system program required to streamline the completion of aviation maintenance activities</td>
</tr>
<tr>
<td></td>
<td>and the documentation required to maintain airworthiness for all Army aircraft. ACN implements The Army Maintenance Management System -</td>
</tr>
<tr>
<td></td>
<td>Aviation (TAMMS-A) digital logbook functionality and integrates with CAFRS and ALE-P to reduce manual entries and increase data accuracy.</td>
</tr>
<tr>
<td></td>
<td>ACN reduces the information technology footprint within an aviation unit by integrating multiple software applications such as platform</td>
</tr>
<tr>
<td></td>
<td>software applications, interactive electronic technical manuals, and condition based maintenance plus tools onto one hardware platform.</td>
</tr>
</tbody>
</table>
The ALE-P is the single logistics information system for all of Army aviation and serves as an extension to Global Combat Support System-Army (GCSS-Army). ALE-P replaces the Unit Level Logistics System-Aviation (Enhanced) (ULLS-A[E]) and the Unmanned Aviation Systems-Initiative (UAS-I) systems. ALE-P provides necessary interfaces to GCSS-Army and other enterprise systems at Logistics Support Activity (LOGSA), Aviation and Missile Command (AMCOM), and Program Executive Office (PEO) Aviation. ALE-P interfaces with the ACN and ADEC at the unit level to maintain continuous airworthiness and aircraft historical records and provides the maintenance/readiness posture to the commander.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>34.409</td>
<td>61.121</td>
<td>65.428</td>
<td>-</td>
<td>65.428</td>
<td>59.379</td>
<td>79.806</td>
<td>83.247</td>
<td>85.237</td>
</tr>
<tr>
<td>ANG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>22.544</td>
<td>40.044</td>
<td>42.867</td>
<td>-</td>
<td>42.867</td>
<td>38.904</td>
<td>52.286</td>
<td>54.541</td>
<td>55.844</td>
</tr>
<tr>
<td>AR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>2.373</td>
<td>4.215</td>
<td>4.512</td>
<td>-</td>
<td>4.512</td>
<td>4.095</td>
<td>5.504</td>
<td>5.741</td>
<td>5.878</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>59.326</td>
<td>105.380</td>
<td>112.807</td>
<td>-</td>
<td>112.807</td>
<td>102.378</td>
<td>137.596</td>
<td>143.529</td>
<td>146.959</td>
</tr>
</tbody>
</table>
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft
P-1 Line Item Number / Title: AA0712 / Network And Mission Plan

Exhibit Schedule

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID CD</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
</tr>
</tbody>
</table>

Exhibit Schedule

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID CD</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
</tr>
<tr>
<td>AA0712 / Network and Mission Plan (Rationalization, Standardization, Interoperability, Compatibility, Simplification)</td>
<td>P-3a</td>
<td>- / 102.378</td>
<td>- / 137.596</td>
<td>- / 143.529</td>
<td>- / 146.959</td>
<td>- / -</td>
<td>- / 1,056.934</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>- / 102.378</td>
<td>- / 137.596</td>
<td>- / 143.529</td>
<td>- / 146.959</td>
<td>- / -</td>
<td>- / 1,056.934</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:

FY 2016 Base procurement dollars in the amount of $28.230 million supports the procurement of AMPS hardware, AMPS upgrades to system software to support aviation fleet modernization programs and support of CAFRS Individual Aircrew Training Folder software modification. AMPS hardware (B-Kits) is being replaced on a 5-year cycle to maintain pace with technology. FY 2016 is the fifth year of the current cycle.

FY 2016 Base procurement dollars in the amount of $49.403 million supports the procurement of IDM-401 B Kits to mitigate parts obsolescence concerns and to provide a technology refresh to the IDM hardware. These B Kits support production line programs for the AH-64D/E, CH-47F, HH/UH-60M helicopters. The IDM enhances Army Aviation's interoperability, lethality, and operational tempo by providing a common solution for fast and accurate data-burst communications via the TI and FS internet networks. The IDM provides a capability to communicate across the digital battlefield while also providing the flexibility to adapt to technology change.

FY 2016 Base procurement dollars in the amount of $27.389 million supports the procurement, fielding, and training of ADEC systems for Army aviation units. ADEC will provide Army commanders and users the necessary operation, safety, and training information to ensure efficient mission management, reduce operations and support costs, and improve operational readiness.

FY 2016 Base procurement dollars in the amount of $7.785 million supports the procurement, fielding, and training of ACN systems for Army aviation units. ACN will replace paper based processes with the digital aircraft notebook providing necessary maintenance and airworthiness record keeping to ensure efficient and effective aircraft maintenance, integration with Interactive Electronic Technical Manuals and CBM tools, accurate record keeping and safe aircraft operations, reduce operations and support costs, and improve operational readiness.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.
Description:
The Network and Mission Plan budget line includes the Aviation Mission Planning System (AMPS), the Improved Data Modem (IDM), the Aviation Data Exploitation Capability (ADEC), the Aircraft Notebook (ACN), and the Aviation Logistics Enterprise-Platform (ALE-P).

The AMPS is a mission planning/battle synchronization tool that automates aviation mission planning tasks, including tactical command and control, mission planning, and flight planning. It interfaces with Army Mission Command Systems (AMCS) and associated networks which furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust mission plans. AMPS generates mission data in either hard copy or electronic formats. The electronic formats are loaded onto the aircraft platforms, initializing the communication, navigation, situational awareness, and weapons systems on the aircraft including the AH-64D/E, CH-47D/F, OH-58D, UH-60A/L/M/Q/V, HH-60L, LUH-72, EMARSS, and Unmanned Aircraft Systems (UAS). The AMPS program includes management of the Commander's Aviation Risk Tool and the Centralized Aviation Flight Records System (CAFRS). To accommodate rapid commercial technology changes, the overall system hardware is replaced after five years of use.

The IDM is the common solution for digitizing Army Aviation. It performs as an internet controller and gateway to Tactical Internet (TI) and Fire Support (FS) internet for Army aircraft. With interfaces supporting a transmit/receive terminal, the IDM provides radio connectivity to the ARC-201D/231, ARC-186, ARC-164, and the Blue Force Tracker transceiver, as well as providing 1553 and Ethernet portals for rapid data transfer. This hardware/software solution also provides a flexible, software-driven digital messaging system that is interoperable with existing Army and Joint forces battlefield operating systems. The IDM provides Situational Awareness and Joint Variable Message Format messages capability to the cockpit. The IDM is currently utilized by the AH-64D/E, OH-58D, CH-47F, and UH/HH-60M.

The ADEC is an Army aviation automated information system program providing specific capabilities needed at the aviation unit level to implement and support improvements within aviation operations, safety, and training to increase operational effectiveness and situational awareness at all command echelons. ADEC provides a common and interoperable capability required to implement the DoD mandated Military Flight Operations Quality Assurance processes. ADEC will standardize flight scheduling/management, risk management, mission approval, and flight data analysis and visualization. ADEC provides interfaces to CAFRS and ALE-P to reduce data entry and information technology footprint while enabling disconnected and split based operations.

The ACN is an Army aviation automated information system program required to streamline the completion of aviation maintenance activities and the documentation required to maintain airworthiness for all Army aircraft. ACN implements The Army Maintenance Management System - Aviation (TAMMS-A) digital logbook functionality and integrates with CAFRS and ALE-P to reduce manual entries and increase data accuracy. ACN reduces the information technology footprint within an aviation unit by integrating multiple software applications such as platform software applications, interactive electronic technical manuals, and condition based maintenance plus tools onto one hardware platform.

The ALE-P is the single logistics information system for all of Army aviation and serves as an extension to Global Combat Support System-Army (GCSS-Army). ALE-P replaces the Unit Level Logistics System-Enhanced (ULLS-A[E]) and the Unmanned Aviation Systems-Initiative (UAS-I) systems. ALE-P provides necessary interfaces to GCSS-Army and other enterprise systems at Logistics Support Activity.
(LOGSA), Aviation and Missile Command (AMCOM), and Program Executive Office (PEO) Aviation. ALE-P interfaces with the ACN and ADEC at the unit level to maintain continuous airworthiness and aircraft historical records and provides the maintenance/readiness posture to the commander.

FY 2016 Base procurement dollars in the amount of $28.230 million supports the procurement of AMPS hardware, AMPS upgrades to system software to support aviation fleet modernization programs and support of CAFRS Individual Aircrew Training Folder software modification. AMPS hardware (B-Kits) is being replaced on a 5-year cycle to maintain pace with technology. FY 2016 is the fifth year of the current cycle.

FY 2016 Base procurement dollars in the amount of $49.403 million supports the procurement of IDM-401 B Kits to mitigate parts obsolescence concerns and to provide a technology refresh to the IDM hardware. These B Kits support production line programs for the AH-64D/E, CH-47F, HH/UH-60M helicopters. The IDM enhances Army Aviation's interoperability, lethality, and operational tempo by providing a common solution for fast and accurate data-burst communications via the TI and FS internet networks. The IDM provides a capability to communicate across the digital battlefield while also providing the flexibility to adapt to technology change.

FY 2016 Base procurement dollars in the amount of $27.389 million supports the procurement, fielding, and training of ADEC systems for Army aviation units. ADEC will provide Army commanders and users the necessary operation, safety, and training information to ensure efficient mission management, reduce operations and support costs, and improve operational readiness.

FY 2016 Base procurement dollars in the amount of $7.785 million supports the procurement, fielding, and training of ACN systems for Army aviation units. ACN will replace paper based processes with the digital aircraft notebook providing necessary maintenance and airworthiness record keeping to ensure efficient and effective aircraft maintenance, integration with Interactive Electronic Technical Manuals and CBM tools, accurate record keeping and safe aircraft operations, reduce operations and support costs, and improve operational readiness.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>34.409</td>
<td>61.121</td>
<td>65.428</td>
<td>-</td>
<td>-</td>
<td>59.379</td>
<td>79.806</td>
<td>83.247</td>
</tr>
<tr>
<td>ANG</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>22.544</td>
<td>40.044</td>
<td>42.867</td>
<td>-</td>
<td>-</td>
<td>38.904</td>
<td>52.286</td>
<td>54.541</td>
</tr>
<tr>
<td>AR</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.512</td>
<td>4.095</td>
<td>5.504</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>59.326</td>
<td>105.380</td>
<td>112.807</td>
<td>-</td>
<td>112.807</td>
<td>102.378</td>
<td>137.596</td>
<td>143.529</td>
</tr>
</tbody>
</table>
### Financial Plan

<table>
<thead>
<tr>
<th>Procurement</th>
<th>Modification Item 1 of 5:</th>
<th>Lease Mission Planning System (AMPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Kits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kit Quantity (Computer)</td>
<td>1,617 / 16.132</td>
<td>- I -</td>
</tr>
<tr>
<td>ECPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems Engineering</td>
<td>0 / 2.261</td>
<td>- I 0.847</td>
</tr>
<tr>
<td>Other - PM Admin</td>
<td>0 / 3.219</td>
<td>- I 1.801</td>
</tr>
<tr>
<td>Subtotal: Aviation Mission Planning System (AMPS)</td>
<td>1,617 / 71.097</td>
<td>- / 28.296</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procurement</th>
<th>Modification Item 2 of 5:</th>
<th>Improved Data Modem (IDM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Kits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fielding/Training</td>
<td>0 / 0.800</td>
<td>- I 0.103</td>
</tr>
<tr>
<td>Other - PM Admin</td>
<td>0 / 6.694</td>
<td>- I 0.715</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procurement</th>
<th>Modification Item 3 of 5:</th>
<th>Aviation Data Exploitation Capability (ADEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Kits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kit Quantity - Workstation</td>
<td>- I -</td>
<td>- I -</td>
</tr>
</tbody>
</table>

UNCLASSIFIED
Exhibit P-3a, Individual Modification: PB 2016 Army  

Modification Item 4 of 5: Aircraft Notebook (ACN)  

Recuring  

- Kit Quantity  

- ECP (Sw)  

- Data  

- Systems Engineering  

- System Test & Eval  

- Fielding/Training  

- Other-PM Admin  

Subtotal: Recurring  

- Subtotal: Aviation Data Exploitation Capability (ADEC)  

Modification Item 5 of 5: Aviation Logistics Enterprise-Platform (ALE-P)  

Recuring  

- Kit Quantity (Work station)  

- Kit Quantity (Server)  

- Kit Quantity (Storage)  

- ECPs  

- Systems Engineering  

- Data  

- System Test & Eval  

- PM Admin  

Subtotal: Recurring  

Non-Recurring  

LI AA0712 - Network And Mission Plan  

P-1 Line Item Number / Title: AA0712 / Network And Mission Plan  

Modification Type: Rationalization, Standardization, Interoperability, Compatibility, Simplification  

Related RDT&E PEs:  

UNCLASSIFIED
### Financial Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[\text{Fielding} ]</td>
<td>[0 / 0.000]</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Procurement, All Modification Items</td>
<td>2,363 / 247,714</td>
<td>228 / 105,380</td>
<td>639 / 112,807</td>
<td>639 / 112,807</td>
<td>1,571 / 102,378</td>
<td>1,906 / 137,596</td>
<td>1,110 / 143,529</td>
<td>1,560 / 146,959</td>
<td>- / -</td>
<td>9.377 / 1,055,689</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation

| Modification Item 1 of 5: Aviation Mission Planning System (AMPS) | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - |
| Modification Item 2 of 5: Improved Data Modern (IDM) | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - |
| Modification Item 3 of 5: Aviation Data Exploitation Capability (ADEC) | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - |
| Modification Item 4 of 5: Aircraft Notebook (ACN) | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - |
| Modification Item 5 of 5: Aviation Logistics Enterprise-Platform (ALE-P) | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - |
| Subtotal: Installation | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - |

### Total

| Total Cost (Procurement + Support + Installation) | 248,959 | 59,326 | 105,380 | 112,807 | - | 112,807 | 102,378 | 137,596 | 143,529 | 146,959 | - | 1,056,934 |
### Method of Implementation

Not applicable

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
### Manufacturer Information

**Manufacturer Name:** Symetrics Industries, LLC  
**Manufacturer Location:** Melbourne, FL

### Administrative Leadtime (in Months):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation Information

**Method of Implementation:** Not Applicable

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Manufacturer Information

Manufacturer Name: AMRDEC Software Engineering Directorate
Manufacturer Location: Redstone Arsenal, AL

Administrative Leadtime (in Months):
Production Leadtime (in Months):

Installation Information

Method of Implementation: Not Applicable

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To Complete</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Installation Schedule

| FY 2014 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | PYS | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
| In      | 1       | -       | -       | -       | -       | -       | -   | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Out     | 1       | -       | -       | -       | -       | -       | -   | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
### Method of Implementation: Not Applicable

#### Installation Information

**Installation Schedule**

| PYS | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| In  | 1  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1  |
| Out | 1  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1  |
### Installation Cost

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prior Years</td>
<td>FY 2014</td>
<td>FY 2015</td>
<td></td>
<td>FY 2016 OCO</td>
<td>FY 2016 Total</td>
<td>FY 2017</td>
<td>FY 2018</td>
<td>FY 2019</td>
<td>FY 2020</td>
<td>To Complete</td>
<td>Total</td>
</tr>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Description:
The current Navigation Systems provide Army Aviation with extremely accurate and secure navigation and timing, assists in situational awareness, and aids in prevention of fratricide. The Global Positioning System (GPS) is installed in two configurations based upon mission profile, operational requirements, and avionics architecture of the aircraft. The Doppler GPS Navigation System (DGNS) is used for the Non-bussed Utility and Cargo helicopters. The Embedded GPS Inertial Navigation System (EGI) is integrated into the Modernized Cargo, Utility, Attack, and Special Operations fleets of helicopters. The Preplanned Product Improvement (P3I) DGNS is being installed on the Blackhawk (UH-60A/L and HH-60A/L) and Chinook (CH-47D) aircraft. The P3I EGI is being installed on UH/HH-60M, CH-47F, Apache (AH-64E), and Special Operations Aircraft (SOA). GPS based navigation systems are required as the primary means of navigation in civil airspace. The modification program to the DGNS Computer Display Unit (CDU) and software upgrade is being conducted to reduce pilot workload and fatigue through a user friendly interface as well as provide maps and charts to augment tactical and Instrument Flight Rules navigational operations.

The Aviation Tactical Communication Systems (ATCS) is an Army Aviation Program to procure A and B Kits to meet Army Aviation Communications requirements. The ATCS B-Kits include the ARC-201D and the ARC-231 radio sets along with associated power amplifiers and mounts. A-Kit hardware and software is planned to be procured through the prime contractor for each platform.

The AMF Radio Integration Program installs and qualifies Small Airborne Networking Radio/Small Airborne LINK-16 Terminal (SANR/SALT) hardware and software for production line and fielded Army Aviation Aircraft, SOA, and Unmanned Aircraft Systems (UAS) platforms to enable the operation of AMF certified radios with SINCGARS, Soldier Radio Waveform, mid-tier wideband networking waveforms, or other advanced networking waveforms. This program also provides for the procurement and installation of AMF Radio retrofit A-Kits for use on platforms that were fielded without these capabilities. AMF Radios and ancillaries are procured by PM Tactical Radios and are not part of the AMF Radio Integration effort.

The Blue Force Tracking - Aviation (BFT-A) Program integrates, qualifies, and manages the installation of BFT-2 system installation kits (A-Kit) for Army Rotary Wing Aircraft. The A-Kit utilizes the BFT-2 transceiver and KGV-72 boxes provided by PM Mission Command (MC).
### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**P-1 Line Item Number / Title:** AA0723 / Comms, Nav Surveillance

**Appropriation / Budget Activity / Budget Sub Activity:**
- 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**Date:** February 2015

**ID Code** (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements: 0604201A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary Distribution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quantity</td>
<td>Base</td>
</tr>
<tr>
<td>Army</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>74.613</td>
<td>115.795</td>
</tr>
<tr>
<td>ANG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>74.613</td>
<td>115.795</td>
</tr>
</tbody>
</table>

**Quantity**

<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>ANG</th>
<th>AR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>74.613</td>
<td>-</td>
<td>-</td>
<td>74.613</td>
</tr>
<tr>
<td>FY 2015</td>
<td>115.795</td>
<td>-</td>
<td>-</td>
<td>115.795</td>
</tr>
<tr>
<td>FY 2016</td>
<td>45.597</td>
<td>-</td>
<td>-</td>
<td>45.597</td>
</tr>
<tr>
<td>FY 2017</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2018</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2019</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2020</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Total Obligation Authority**

<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>ANG</th>
<th>AR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>74.613</td>
<td>-</td>
<td>-</td>
<td>74.613</td>
</tr>
<tr>
<td>FY 2015</td>
<td>115.795</td>
<td>-</td>
<td>-</td>
<td>115.795</td>
</tr>
<tr>
<td>FY 2016</td>
<td>82.904</td>
<td>-</td>
<td>-</td>
<td>82.904</td>
</tr>
<tr>
<td>FY 2017</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2018</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2019</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2020</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Secondary Distribution**

- FY 2014: 74.613
- FY 2015: 115.795
- FY 2016: 45.597
- FY 2017: -
- FY 2018: -
- FY 2019: -
- FY 2020: -
### Justification:

FY 2016 Base Procurement dollars in the amount of $7.680 million supports procurement and installation of B-Kits as well as systems engineering and aircraft integration support for the DGNS CDU/Software Upgrade ECPs.

FY 2016 Base Procurement dollars in the amount of $8.199 million supports procurement of EGI P31 B-Kits.

FY 2016 Base Procurement dollars in the amount of $29.869 million supports procurement of B-Kits and installation of A-Kits for the AH-64D/E, CH-47F, UH/HH-60M, LUH, UAS and SOA. The ATCS suite of aviation radios comprises a standard configuration of non-developmental and commercial off-the-shelf equipment. The standard configuration consists of two ARC-201D radios, an Improved Frequency Modulation (IFM) Power Amplifier (two IFMs for CH-47F), and a suite of ARC-231 radios and associated ancillary items.

FY 2016 Base Procurement dollars in the amount of $13.892 million provides for integration and qualification of certified AMF radios and procurement of AMF A-Kits for Shadow UAS installs and engineering services.

FY 2016 Base Procurement dollars in the amount of $23.264 million provides for the procurement and installation BFT-2 A-Kits. This funding also provides for the continued management, engineering, and logistics activities associated with BFT-1 and BFT-2 Systems.

The FY16 funding request was reduced by $7.834 million to account for the availability of prior year execution balances.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0723</td>
<td>Communications, Navigation, and Surveillance (New or Improved Operational Capability)</td>
<td>0604201A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0723 / Comms, Nav Surveillance</td>
<td>FY 2017</td>
<td>FY 2018</td>
<td>FY 2019</td>
<td>To Complete</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>AA0723 / Comms, Nav Surveillance</td>
<td>P-3a</td>
<td>P-3a</td>
<td>P-3a</td>
<td>P-3a</td>
<td>P-3a</td>
<td>P-3a</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>$206.670</td>
<td>$74.613</td>
<td>$115.795</td>
<td>$82.904</td>
<td>$82.904</td>
<td>$82.904</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>$100.638</td>
<td>$110.123</td>
<td>$107.821</td>
<td>$98.238</td>
<td>$896.802</td>
<td>$896.802</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
The current Navigation Systems provide Army Aviation with extremely accurate and secure navigation and timing, assists in situational awareness, and aids in prevention of fratricide. The Global Positioning System (GPS) is installed in two configurations based upon mission profile, operational requirements, and avionics architecture of the aircraft. The Doppler GPS Navigation System (DGNS) is used for the Non-bussed Utility and Cargo helicopters. The Embedded GPS Inertial Navigation System (EGI) is integrated into the Modernized Cargo, Utility, Attack, and Special Operations Fleets of helicopters. The Preplanned Product Improvement (P3I) DGNS is being installed on the Blackhawk (UH-60A/L and HH-60A/L) and Chinook (CH-47D) aircraft. The P3I EGI is being installed on UH/HH-60M, CH-47F, Apache (AH-64E), and Special Operations Aircraft (SOA). GPS-based navigation systems are required as the primary means of navigation in civil airspace. The modification program to the DGNS Computer Display Unit (CDU) and software upgrade is being conducted to reduce pilot workload and fatigue through a user friendly interface as well as provide maps and charts to augment tactical and Instrument Flight Rules navigational operations.

The Aviation Tactical Communication Systems (ATCS) is an Army Aviation Program to procure A and B Kits to meet Army Aviation Communications requirements. The ATCS B-Kits include the ARC-201D and the ARC-231 radio sets along with associated power amplifiers and mounts. A-Kit hardware and software is planned to be procured through the prime contractor for each platform.

The AMF Radio Integration Program installs and qualifies Small Airborne Networking Radio/Small Airborne LINK-16 Terminal (SANR/SALT) hardware and software for production line and fielded Army Aviation Aircraft, SOA, and Unmanned Aircraft Systems (UAS) platforms to enable the operation of AMF certified radios with SINCGARS, Soldier Radio Waveform, mid-tier wideband networking waveforms, or other advanced networking waveforms. This program also provides for the procurement and installation of AMF Radio retrofit A-Kits for use on platforms that were fielded without these capabilities. AMF Radios and ancillaries are procured by PM Tactical Radios and are not part of the AMF Radio Integration effort.

The Blue Force Tracking - Aviation (BFT-A) Program integrates, qualifies, and manages the installation of BFT-2 system installation kits (A-Kit) for Army Rotary Wing Aircraft. The A-Kit utilizes the BFT-2 transceiver and KGV-72 boxes provided by PM Mission Command (MC).

FY 2016 Base Procurement dollars in the amount of $7.680 million supports procurement and installation of B-Kits as well as systems engineering and aircraft integration support for the DGNS CDU/Software Upgrade ECPs.

FY 2016 Base Procurement dollars in the amount of $8.199 million supports procurement of EGI P3I B-Kits.

FY 2016 Base Procurement dollars in the amount of $29.869 million supports procurement of B-Kits and installation of A-Kits for the AH-64D/E, CH-47F, UH/HH-60M, LUH, UAS and SOA. The ATCS suite of aviation radios comprises a standard configuration of non-developmental and commercial off-the-shelf equipment. The standard configuration consists of two ARC-201D radios, an Improved Frequency Modulation (IFM) Power Amplifier (two IFMs for CH-47F), and a suite of ARC-231 radios and associated ancillary items.
FY 2016 Base Procurement dollars in the amount of $13.892 million provides for integration and qualification of certified AMF radios and procurement of AMF A-Kits for Shadow UAS installs and engineering services.

FY 2016 Base Procurement dollars in the amount of $23.264 million provides for the procurement and installation BFT-2 A-Kits. This funding also provides for the continued management, engineering, and logistics activities associated with BFT-1 and BFT-2 Systems.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>74.613</td>
<td>115.795</td>
<td>45.597</td>
<td>-</td>
<td>45.597</td>
<td>55.351</td>
<td>60.568</td>
<td>59.302</td>
<td>54.030</td>
</tr>
<tr>
<td>ANG</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>33.162</td>
<td>-</td>
<td>33.162</td>
<td>40.255</td>
<td>44.049</td>
<td>43.129</td>
<td>39.295</td>
</tr>
<tr>
<td>AR</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>-</td>
<td>4.145</td>
<td>-</td>
<td>4.145</td>
<td>5.032</td>
<td>5.506</td>
<td>5.390</td>
<td>4.913</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>74.613</td>
<td>115.795</td>
<td>82.904</td>
<td>-</td>
<td>82.904</td>
<td>100.638</td>
<td>110.123</td>
<td>107.821</td>
<td>98.238</td>
</tr>
</tbody>
</table>
### Exhibit P-3a, Individual Modification: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
AA0723 / Comms, Nav Surveillance

**Modification Number / Title:**
AA0723 / Communications, Navigation, and Surveillance

**Models of Systems Affected:**
UH/HH-60A/L, UH/HH/ MH-60M, CH-47D, CH/MH-47F, AH-64D/E, LUH, UAS

**Modification Type:**
New or Improved Operational Capability

**Related RDT&E PEs:**

---

### Financial Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
</tr>
</tbody>
</table>

**Modification Item 1 of 6:** DGNS (AN/ASN-128D) P3I

- **A Kits**
  - Recurring
    - Engineering Change Orders
      - 0 / 12.800
    - Data
      - 0 / 1.712
    - Training Equipment
      - 0 / 6.800
    - Systems Engineering
      - 0 / 8.931
    - Other - PM Admin
      - 0 / 1.500
  - Subtotal: Recurring
    - 0 / 21.743
  - Subtotal: DGNS (AN/ASN-128D) P3I
    - 0 / 21.743

**Modification Item 2 of 6:** DGNS (AN/ASN-128D) CDU/Software Upgrade ECP

- **A Kits**
  - Recurring
    - Data
      - 0 / 0.336
    - Systems Engineering
      - 0 / 0.480
    - Other - PM Admin
      - 0 / 0.513
  - Subtotal: Recurring
    - 0 / 0.599
  - Non-Recurring
    - Aircraft Integ-Nonrecurring
      - 0 / 0.480
  - Subtotal: Non-Recurring
    - 0 / 0.599

**B Kits**

- **Recurring**
  - Kit Quantity - B-Kit
    - 0 / 6.036
  - Subtotal: Recurring
    - 0 / 6.036

**Modification Item 3 of 6:** Embedded GPS Inertial Navigation System (EGI) P3I

- **A Kits**
  - Recurring
    - 0 / 0.336

---

LI AA0723 - Comms, Nav Surveillance

**UNCLASSIFIED**

Page 6 of 15

P-1 Line #28
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
</tr>
<tr>
<td>Engineering Change Orders</td>
<td>0 / 0.800</td>
<td>- / -</td>
<td>0 / 0.800</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / 3.000</td>
<td>- / 1.500</td>
<td>- / 1.886</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Data</td>
<td>0 / 0.266</td>
<td>- / 0.450</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Training Equipment</td>
<td>0 / 0.200</td>
<td>- / 0.577</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Other - PM Admin</td>
<td>0 / 1.465</td>
<td>- / 0.480</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>B Kits</td>
<td>Recurring</td>
<td>- / 2.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>0 / -</td>
<td>100 / -</td>
</tr>
</tbody>
</table>

**Modification Item 4 of 6: Aviation Tactical Communication Systems (ATCS)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td></td>
</tr>
<tr>
<td>System Test &amp; Evaluation</td>
<td>0 / 4.000</td>
<td>- / 0.404</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 15.842</td>
</tr>
<tr>
<td>Other - PM Admin SEPM</td>
<td>0 / 1.700</td>
<td>- / 5.206</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 31.542</td>
</tr>
<tr>
<td>B Kits</td>
<td>Recurring</td>
<td>- / 42.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Kit Quantity-B-Kit (ARC231)</td>
<td>573 / 57.004</td>
<td>690 / 40.176</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>2780 / 244.705</td>
</tr>
</tbody>
</table>
## Models of Systems Affected:

- **UH HH-60A/L, UH HH/MH-60M, CH-47D, CH/MH-47F, AH-64D/E, LUH, UAS**

## Modification Type:

- New or Improved Operational Capability

## Related RDT&E PEs:

- **NRE Aircraft Integration**
- **System Eng/Prog Mgmt (SEPM)**
- **Complete**

## Financial Plan:

<table>
<thead>
<tr>
<th>Modification Item 5 of 6: Airborne Maritime Fixed (AMF) Radio Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Kits</strong></td>
</tr>
<tr>
<td><strong>Recurring</strong></td>
</tr>
<tr>
<td>Kit Quantity - A-Kit</td>
</tr>
<tr>
<td>Support Equipment</td>
</tr>
<tr>
<td>System Test and Evaluation</td>
</tr>
<tr>
<td>System Eng/Prog Mgmt (SEPM)</td>
</tr>
<tr>
<td><strong>Subtotal: Recurring</strong></td>
</tr>
<tr>
<td><strong>Non-Recurring</strong></td>
</tr>
<tr>
<td>NRE Aircraft Integration</td>
</tr>
<tr>
<td><strong>Subtotal: Non-Recurring</strong></td>
</tr>
<tr>
<td><strong>Subtotal: Airborne Maritime Fixed (AMF) Radio Integration</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modification Item 6 of 6: Blue Force Tracking-Aviation (BFT-A)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Kits</strong></td>
</tr>
<tr>
<td><strong>Recurring</strong></td>
</tr>
<tr>
<td>BFT-A A-Kits</td>
</tr>
<tr>
<td>Test / Engineering</td>
</tr>
<tr>
<td>Fielding / Training</td>
</tr>
<tr>
<td>SEPM</td>
</tr>
<tr>
<td><strong>Subtotal: Recurring</strong></td>
</tr>
<tr>
<td><strong>Non-Recurring</strong></td>
</tr>
<tr>
<td>NRE-Test / Engineering</td>
</tr>
<tr>
<td><strong>Subtotal: Non-Recurring</strong></td>
</tr>
<tr>
<td><strong>Subtotal: Blue Force Tracking-Aviation (BFT-A)</strong></td>
</tr>
<tr>
<td><strong>Subtotal: Procurement, All Modification Items</strong></td>
</tr>
</tbody>
</table>

## FY 2014 / FY 2015 / FY 2016 OCO / FY 2016 Total / FY 2017

<table>
<thead>
<tr>
<th>FY 2018</th>
<th>FY 2019</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Qty (Each)</td>
<td>Total Cost ($M)**</td>
<td>**Qty (Each)</td>
<td>Total Cost ($M)**</td>
</tr>
<tr>
<td>Kit Quantity-B-Kit (IFM)</td>
<td>350 / 6.700</td>
<td>130 / 3.222</td>
<td>122 / 3.082</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 74.604</td>
<td>- / 54.072</td>
<td>- / 3.062</td>
</tr>
</tbody>
</table>

## FY 2016 / FY 2017 / FY 2018 / FY 2019

<table>
<thead>
<tr>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Qty (Each)</td>
<td>Total Cost ($M)**</td>
<td>**Qty (Each)</td>
<td>Total Cost ($M)**</td>
<td>**Qty (Each)</td>
</tr>
<tr>
<td>Kit Quantity-B-Kit (IFM)</td>
<td>350 / 6.700</td>
<td>130 / 3.222</td>
<td>122 / 3.082</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 74.604</td>
<td>- / 54.072</td>
<td>- / 3.062</td>
<td>/ /</td>
</tr>
</tbody>
</table>

## FY 2020

| **Qty (Each) | Total Cost ($M)** | **Qty (Each) | Total Cost ($M)** | **Qty (Each) | Total Cost ($M)** | **Qty (Each) | Total Cost ($M)** | **Qty (Each) | Total Cost ($M)** |
| Kit Quantity-B-Kit (IFM) | 350 / 6.700 | 130 / 3.222 | 122 / 3.082 | - | - | - | - | - | - | - | - | 602 / 13.004 |
| Subtotal: Recurring | - / 74.604 | - / 54.072 | - / 3.062 | / / | / / | / / | / / | / / | / / | 602 / 13.004 |
Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance

Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Models of Systems Affected: UH/HH-60A/L, UH/HH/MH-60M, CH-47D, CH/MH-47F, AH-64D/E, LUH, UAS

Modification Type: New or Improved Operational Capability

Related RDT&E PEs:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modification Item 2 of 6: DGNS (AN/ASN-128D) CDU/Software Upgrade ECP</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>6 / 0.033</td>
<td>6 / 0.033</td>
<td>6 / 0.033</td>
<td>40 / 0.220</td>
<td>80 / 0.440</td>
<td>120 / 0.684</td>
<td>120 / 0.684</td>
<td>394 / 2.061</td>
<td></td>
</tr>
<tr>
<td>Modification Item 3 of 6: Embedded GPS Inertial Navigation System (EGI) P3I</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Modification Item 5 of 6: Airborne Maritime Fixed (AMF) Radio Integration</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>12 / 0.055</td>
<td>16 / 0.074</td>
<td>16 / 0.074</td>
<td>20 / 0.095</td>
<td>20 / 0.097</td>
<td>24 / 0.118</td>
<td>24 / 0.121</td>
<td>2,415 / -</td>
<td>- / -</td>
<td>2,531 / 0.560</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost (Procurement + Support + Installation)</td>
<td>206.670</td>
<td>74.613</td>
<td>115.795</td>
<td>82.904</td>
<td>82.904</td>
<td>100.638</td>
<td>110.123</td>
<td>107.821</td>
<td>98.238</td>
<td>-</td>
<td>896.802</td>
<td></td>
</tr>
</tbody>
</table>
### Installation Information

**Method of Implementation:** Modification Work Order (MWO) - Contractor

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
<td>QTY</td>
</tr>
<tr>
<td>Prior Years</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>FY 2014</td>
<td>46 / 0.295</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
<tr>
<td>Total</td>
<td>46 / 0.295</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
<td>- 1.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Q1 Q2 Q3 Q4 TC Tot</td>
</tr>
<tr>
<td>In</td>
<td>46</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Out</td>
<td>46</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
</tbody>
</table>
## Installation Schedule

<table>
<thead>
<tr>
<th>PYS</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>TC</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

**LI AA0723 - Comms, Nav Surveillance**

**UNCLASSIFIED**

**Page 11 of 15**

**P-1 Line #28**

**267**
**Modification Information**

Manufacturer Name: Honeywell, Incorporated  
Manufacturer Location: Clearwater, FL

**Method of Implementation:** Aircraft Platform Funded Installation

### Installation Information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td>Dec 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td>Nov 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

LI AA0723 - Comms, Nav Surveillance

UNCLASSIFIED

Page 12 of 15
**Exhibit P-3a, Individual Modification:** PB 2016 Army  

**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A / 02 / 10  

**P-1 Line Item Number / Title:**  
AA0723 / Comms, Nav Surveillance  

**Modification Number / Title:**  
AA0723 / Communications, Navigation, and Surveillance  

**Modification Item 4 of 6:** Aviation Tactical Communication Systems (ATCS)  

### Manufacturer Information  
- **Manufacturer Name:** Various  
- **Manufacturer Location:** Various  
- **Administrative Leadtime (in Months):** 2  
- **Production Leadtime (in Months):** 10  

### Installation Information  
- **Method of Implementation:** Modification Work Order (MWO) - Contractor  

#### Installation Cost  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>87/4,487</td>
<td>25/1,418</td>
<td>24/1,031</td>
<td>28/1,226</td>
<td>-/1</td>
<td>-/1</td>
<td>28/1,226</td>
<td>-/0,000</td>
<td>-/0,000</td>
<td>-/0,000</td>
<td>-/0,000</td>
<td>-/0,000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>To Complete</td>
<td>0/0,000</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
<td>-/1</td>
</tr>
<tr>
<td>Total</td>
<td>87/4,487</td>
<td>25/1,418</td>
<td>24/1,031</td>
<td>28/1,226</td>
<td>-/1</td>
<td>-/1</td>
<td>28/1,226</td>
<td>-/0,000</td>
<td>-/0,000</td>
<td>-/0,000</td>
<td>-/0,000</td>
<td>-/0,000</td>
</tr>
</tbody>
</table>

#### Installation Schedule  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>87</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>Out</td>
<td>69</td>
<td>18</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Exhibit P-3a, Individual Modification: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

### P-1 Line Item Number / Title:
AA0723 / Comms, Nav Surveillance

### Modification Number / Title:
AA0723 / Communications, Navigation, and Surveillance

### Modification Item 5 of 6: Airborne Maritime Fixed (AMF) Radio Integration

#### Manufacturer Information
- **Manufacturer Name:** TBD
- **Manufacturer Location:** TBD
- **Administrative Leadtime (in Months):** 6
- **Production Leadtime:** TBD

#### Method of Implementation: Modification Work Order (MWO) - Contractor

#### Installation Information

<table>
<thead>
<tr>
<th>Method of Implementation</th>
<th>Modification Work Order (MWO) - Contractor</th>
</tr>
</thead>
</table>

#### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qys</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>yes</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

#### Qys

- **In:** 3 3 3 3 4 4 4 4 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 2,415 2,531
- **Out:** 3 3 3 3 4 4 4 4 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 2,421 2,531

---

LI AA0723 - Comms, Nav Surveillance

UNCLASSIFIED

Page 14 of 15

P-1 Line #28
### Installation Information

**Method of Implementation:** Modification Work Order (MWO) - Contractor

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
<td>Total Cost ($ M)</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
<td>0 / 0.00</td>
</tr>
</tbody>
</table>

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>
Description:

This budget line supports procurement of Global Air Traffic Management equipment for both Fixed Wing (FW) and Rotary Wing (RW) aircraft.

Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation and Surveillance (CNS) and air traffic management programs. GATM is a Department of Defense term that describes the equipment, training, and procedures mandated by Civilian Air Traffic Control (ATC) authorities in order to operate within 21st century airspace. Current ground based navigation aids will be phased out of service as the world transitions to digital, data (non-voice), and space based navigation systems. The modernization is designed to meet the current and future service demands posed by aviation growth. The advanced architecture will provide improved safety, accessibility, flexibility, predictability, reliability, capacity, efficiency, and security. Military aircraft will face significant flight restrictions if not GATM equipped.

GATM fixed wing requirements cannot be met with a single piece of avionics equipment. Meeting worldwide GATM fixed wing requirements will entail complete modifications that may include portions of military modifications and the upgrading of some existing avionics and displays and the procurement of new systems for the fixed wing fleet to include Engineer, Furnish and Install as a complete contractual effort. It also leverages Federal Aviation Administration Supplemental Type Certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

Meeting worldwide GATM requirements will entail the upgrading of some existing avionics and the procurement of new systems for rotary wing and Unmanned Aircraft System (UAS) fleets. Included in the GATM Program is the European mandated Mode S requirement which is being met with the fielding of the APX-118, an upgrade to the Identification Friend or Foe (IFF) to add Mode 5 capability which will be achieved through the fielding of the APX-123, worldwide mandated Automatic Dependant Surveillance-Broadcast (ADS-B) Out, which will be a Preplanned Product Improvement (P3I) to the APX-123, and upgrades to meet requirements for 8.33 kHz channel spacing being met with the ARC-231. ADS-B Out is an upgrade of the Mode S self-reporting format. The modification of the Embedded GPS Inertial (EGI) Navigation System is being conducted to provide a GPS Primary Means Instrument Flight Rules navigation (en-route through non-precision approach) in civil and military controlled airspace, and navigational requirements for ADS-B Out.
### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

**P-1 Line Item Number / Title:** AA0711 / GATM Rollup

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary Distribution</td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43.785</td>
<td>54.277</td>
</tr>
<tr>
<td>ANG</td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td>AR</td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.983</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50.382</td>
<td>54.277</td>
</tr>
</tbody>
</table>

**Secondary Distribution**

- **Army**
- **ANG**
- **AR**
- **Total: Secondary Distribution**

**Quantity**

- **FY 2014**
- **FY 2015**
- **FY 2016 Base**
- **FY 2016 OCO**
- **FY 2016 Total**
- **FY 2017**
- **FY 2018**
- **FY 2019**
- **FY 2020**
**Exhibit P-40, Budget Line Item Justification: PB 2016 Army**

**Description:**

<table>
<thead>
<tr>
<th>Appropriation / Budget Activity / Budget Sub Activity:</th>
<th>P-1 Line Item Number / Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10:</td>
<td>AA0711 / GATM Rollup</td>
</tr>
</tbody>
</table>

**UNCLASSIFIED**

**P-1 Line #29**

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready):</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
</table>

**Exhibit P-40 Schedule**

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID CD</th>
<th>Quantity / Total Cost (Each)</th>
<th>Total (Each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0703 / GATM - Fixed Wing Aircraft (Rationalization, Standardization, Interoperability, Compatibility, Simplification)</td>
<td>P-3a</td>
<td>- / 182.724</td>
<td>/ 12.072</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / 12.456</td>
<td>/ -</td>
</tr>
<tr>
<td>AA0704 / GATM Rotary Wing Aircraft (New or Improved Operational Capability)</td>
<td>P-3a</td>
<td>- / 510.221</td>
<td>/ 38.310</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / 41.821</td>
<td>/ 33.890</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>- / 692.945</td>
<td>/ 50.382</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / 54.277</td>
<td>/ 33.890</td>
</tr>
</tbody>
</table>

**Exhibit P-40 Schedule**

<table>
<thead>
<tr>
<th>Title*</th>
<th>Exhibits ID CD</th>
<th>Quantity / Total Cost (Each)</th>
<th>Total (Each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0703 / GATM - Fixed Wing Aircraft (Rationalization, Standardization, Interoperability, Compatibility, Simplification)</td>
<td>P-3a</td>
<td>- / -</td>
<td>/ -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / -</td>
<td>/ -</td>
</tr>
<tr>
<td>AA0704 / GATM Rotary Wing Aircraft (New or Improved Operational Capability)</td>
<td>P-3a</td>
<td>- / 56.500</td>
<td>/ 61.166</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / 60.528</td>
<td>/ 60.865</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>- / 56.500</td>
<td>/ 61.166</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / 60.528</td>
<td>/ 60.865</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

**Justification:**

FY 2016 Base Procurement dollars in the amount of $3.620 million supports procurement of APX-123 B-Kits and procurement and installation of APX-123 A-Kits for the UH-60A/L/M, CH-47F, MH-47G, MH-60M, A/MH-6, AH-64D/E and UAS to provide these aircraft with enhanced IFF Mode 5 capabilities.

FY 2016 Base Procurement dollars in the amount of $2.000 million supports procurement and installation of Mode 5 upgrade kits which convert previously fielded APX-118 transponders to APX-123 transponders.

FY 2016 Base Procurement dollars in the amount of $12.612 million supports procurement of A & B Kits and the associated Non-Recurring Engineering (NRE) integration which will facilitate an enhanced GPS in support of ADS-B for mandated ATC services for the applicable aviation platforms.

FY 2016 Base Procurement dollars in the amount of $15.658 million supports procurement of EGI Navigational System B-Kits and associated aircraft integration costs to meet GATM requirements.
UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10
P-1 Line Item Number / Title: AA0711 / GATM Rollup

Modification Number / Title: AA0703 / GATM - Fixed Wing Aircraft

Date: February 2015

Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>182.724</td>
<td>12.072</td>
<td>12.456</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>207.252</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>182.724</td>
<td>12.072</td>
<td>12.456</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>207.252</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>182.724</td>
<td>12.072</td>
<td>12.456</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>207.252</td>
</tr>
</tbody>
</table>

Initial Spares ($ in Millions)

Gross/Weapon System Unit Cost ($ in Thousands)

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Description:

Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation and Surveillance (CNS) and air traffic management programs. Current ground based navigation aids will be phased out of service as the world transitions to digital, data (non-voice), and space based navigation systems. Military aircraft will face some level (altitude and location dependent) of flight restrictions if not GATM equipped. GATM requirements cannot be met with a single piece of avionics equipment. Meeting worldwide GATM requirements will entail complete modifications that may include portions of military modifications and the upgrading of some existing avionics and displays and the procurement of new system for the fixed wing fleet to include Engineer, Furnish and Install (EF&I) as a complete contractual effort. It also leverages Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

FY16 Future FW GATM modifications will be funded in the FW Utility Cargo Airplane Mods line (AA0270).

Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>5.475</td>
<td>12.456</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ANG</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>4.614</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AR</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>1.983</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>12.072</td>
<td>12.456</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

UNCLASSIFIED

LI AA0711 - GATM Rollup

Page 4 of 20

Army
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
AA0711 / GATM Rollup

**Modification Number / Title:**
AA0703 / GATM - Fixed Wing Aircraft

### Models of Systems Affected:
All series of Army fixed wing aircraft

### Modification Type:
Rationalization, Standardization, Interoperability, Compatibility, Simplification

### Related RDT&E PEs:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Prior Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Procurement

**Modification Item 1 of 1:** Global Air Traffic Management - FW

<table>
<thead>
<tr>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>224 / 127.606</td>
<td>224 / 127.606</td>
</tr>
<tr>
<td>10 / 8.350</td>
<td>10 / 8.350</td>
</tr>
<tr>
<td>2 / 8.585</td>
<td>2 / 8.585</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>236 / 144.541</td>
<td>236 / 144.541</td>
</tr>
</tbody>
</table>

**Subtotal:** Global Air Traffic Management - FW

<table>
<thead>
<tr>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>224 / 128.006</td>
<td>224 / 128.006</td>
</tr>
<tr>
<td>10 / 8.450</td>
<td>10 / 8.450</td>
</tr>
<tr>
<td>2 / 8.685</td>
<td>2 / 8.685</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>236 / 145.141</td>
<td>236 / 145.141</td>
</tr>
</tbody>
</table>

#### Installation

**Modification Item 1 of 1:** Global Air Traffic Management - FW

<table>
<thead>
<tr>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>224 / 54.718</td>
<td>224 / 54.718</td>
</tr>
<tr>
<td>10 / 3.622</td>
<td>10 / 3.622</td>
</tr>
<tr>
<td>2 / 3.771</td>
<td>2 / 3.771</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>236 / 62.111</td>
<td>236 / 62.111</td>
</tr>
</tbody>
</table>

**Subtotal:** Installation

<table>
<thead>
<tr>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>224 / 54.718</td>
<td>224 / 54.718</td>
</tr>
<tr>
<td>10 / 3.622</td>
<td>10 / 3.622</td>
</tr>
<tr>
<td>2 / 3.771</td>
<td>2 / 3.771</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>236 / 62.111</td>
<td>236 / 62.111</td>
</tr>
</tbody>
</table>

#### Total

**Total Cost (Procurement + Support + Installation):**

<table>
<thead>
<tr>
<th>Qty (Each)</th>
<th>Total Cost ($ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>182.724</td>
<td>182.724</td>
</tr>
<tr>
<td>12.072</td>
<td>12.072</td>
</tr>
<tr>
<td>12.456</td>
<td>12.456</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>207.252</td>
<td>207.252</td>
</tr>
</tbody>
</table>
## Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PYS</td>
<td>TC</td>
<td>Tot</td>
<td>PYS</td>
<td>TC</td>
<td>Tot</td>
<td>PYS</td>
</tr>
<tr>
<td>In</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>224</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>223</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

|     | Total   |         |         |         |         |         |         |         |         |
|     |         | 224     | 3       | 3       | 3       | 1       | 1       | 1       | 1       | -       | -       | -       | -       | -       | -       | 236   | 236   |

**Installation Information**

**Method of Implementation:** Contractor

<table>
<thead>
<tr>
<th>Installation Cost</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
<td>Total Cost (M)</td>
</tr>
<tr>
<td>Prior Years</td>
<td>185 / 48.292</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>185 / 48.292</td>
</tr>
<tr>
<td>FY 2015</td>
<td>34 / 4.319</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>34 / 4.319</td>
</tr>
<tr>
<td>FY 2016</td>
<td>5 / 2.177</td>
<td>10 / 3.622</td>
<td>2 / 3.771</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>17 / 9.500</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>224 / 54.718</td>
<td>10 / 3.622</td>
<td>2 / 3.771</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>- 0.000</td>
<td>236 / 62.111</td>
</tr>
</tbody>
</table>

### Modification Information

**Modification Item 1 of 1:** Global Air Traffic Management - FW

**Manufacturer Information**

- **Manufacturer Name:** Multiple Commercial Lenders
- **Manufacturer Location:** TBD
- **Administrative Leadtime (in Months):** 2
- **Production Leadtime (in Months):** 6

### Dates

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td>Dec 2013</td>
<td>Dec 2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td>May 2014</td>
<td>May 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Delivery Dates**

- **Contract Dates:** Dec 2013, May 2014
- **Delivery Dates:** May 2015

**Installation Information**

- **Method of Implementation:** Contractor
Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation, Surveillance and Air Traffic Management programs. GATM is a Department of Defense (DoD) term that describes the equipment, training, and procedures mandated by Civilian Air Traffic Control (ATC) authorities in order to operate within 21st century airspace. Most ground based navigation aids will be phased out of service as the world transitions to a modernized air traffic management system. The modernization is designed to meet the current and future service demands posed by aviation growth. The advanced architecture will provide improved safety, accessibility, flexibility, predictability, reliability, capacity, efficiency, and security. Military aircraft will face significant flight restrictions if not GATM equipped. GATM requirements are driven by civil aviation authorities and are not under DoD control. Meeting worldwide GATM requirements will entail the upgrading of some existing avionics and the procurement of new systems for rotary wing and Unmanned Aircraft System (UAS) fleets. Included in the GATM Program is the European mandated Mode S requirement which is being met with the fielding of the APX-118, an upgrade to the Identification Friend or Foe (IFF) to add Mode S capability which will be achieved through the fielding of the APX-123, worldwide mandated Automatic Dependent Surveillance-Broadcast (ADS-B) Out, which will be a Preplanned Product Improvement (P3I) to the APX-123, and upgrades to meet requirements for 8.33 kHz channel spacing being met with the ARC-231. ADS-B Out is an upgrade of the Mode S self-reporting format. The modification of the Embedded GPS Inertial (EGI) Navigation System is being conducted to provide a GPS Primary Means Instrument Flight Rules navigation (en-route through non-precision approach) in civil and military controlled airspace, and navigational requirements for ADS-B Out.

GATM provides Army aircraft improved capabilities to allow them to continue to operate in civil controlled airspace without threat of exclusion. IFF Mode 5 provides enhanced security and greatly improved performance over Mode 4. It also improves compatibility with civil ATC by providing less interference. The Full Operational Capability for Mode 5 is 2020. Europe currently mandates Mode S and plans expansion of 8.33 kHz Very High Frequency - Amplitude Modulation (VHF-AM) in controlled airspace to ground level in high volume traffic areas. The Federal Aviation Administration (FAA) has mandated the use of ADS-B Out by 2020. Army aircraft will not be allowed to transit through or operate in European airspace affected by these mandates unless the necessary Mode S upgrades are made. The Mode S transponder impacts European based aircraft as well as those deploying to Europe. ADS-B Out will also impact access in worldwide airspace. The recurring procurement of Mode S kits started in FY02 and procurements and installations continue. Benefits of GATM include direct routing through civil airspace resulting in significant savings in both time and money. It allows unrestricted operations in worldwide civil controlled airspace and improves safety and operational efficiency while meeting the new worldwide frequency spectrum requirements.

FY 2016 Base Procurement dollars in the amount of $3.620 million supports procurement of APX-123 B-Kits and procurement and installation of APX-123 A-Kits for the UH-60A/LM, CH-47F, MH-47G, MH-60M, AH-64D/E and UAS to provide these aircraft with enhanced IFF Mode 5 capabilities.

FY 2016 Base Procurement dollars in the amount of $2.000 million supports procurement and installation of Mode 5 upgrade kits which convert previously fielded APX-118 transponders to APX-123 transponders.

FY 2016 Base Procurement dollars in the amount of $12.612 million supports procurement of A & B Kits and the associated Non-Recurring Engineering (NRE) integration which will facilitate an enhanced GPS in support of ADS-B for mandated ATC services for the applicable aviation platforms.
FY 2016 Base Procurement dollars in the amount of $15.658 million supports procurement of EGI Navigational System B-Kits and associated aircraft integration costs to meet GATM requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>38.310</td>
<td>41.821</td>
<td>18.640</td>
<td>-</td>
<td>18.640</td>
<td>31.075</td>
<td>33.641</td>
<td>33.290</td>
<td>33.475</td>
</tr>
<tr>
<td>ANG</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary</td>
<td>38.310</td>
<td>41.821</td>
<td>33.890</td>
<td>-</td>
<td>33.890</td>
<td>56.500</td>
<td>61.166</td>
<td>60.528</td>
<td>60.865</td>
</tr>
</tbody>
</table>

UNCLASSIFIED
## Modification Item 1 of 7: Global Air Traffic Mgmt RW APX-118

**A Kits**

### Recurring

<table>
<thead>
<tr>
<th>Description</th>
<th>Fiscal Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Fiscal Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kit Qty-APX-118 A-Kits</td>
<td>2.048 / 9.200</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Aircraft Integration</td>
<td>0 / 5.900</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Data</td>
<td>0 / 4.800</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Training Equipment</td>
<td>0 / 3.400</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Fielding</td>
<td>0 / 5.300</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Systems Eng/Prog Mgt (SEPM)</td>
<td>0 / 13.500</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>System Test &amp; Eval</td>
<td>0 / 3.500</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Other-PM Admin</td>
<td>0 / 14.500</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Other</td>
<td>0 / 5.600</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 65.700</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Non-Recurring</td>
<td>- / 7.200</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

### Non-Recurring

<table>
<thead>
<tr>
<th>Description</th>
<th>Fiscal Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Fiscal Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Change Orders</td>
<td>0 / 7.200</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Non-Recurring</td>
<td>- / 7.200</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

### B Kits

### Recurring

<table>
<thead>
<tr>
<th>Description</th>
<th>Fiscal Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Fiscal Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kit Qty-APX-118 B-Kits</td>
<td>2,635 / 113.812</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Recurring</td>
<td>- / 113.812</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

### Non-Recurring

<table>
<thead>
<tr>
<th>Description</th>
<th>Fiscal Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Fiscal Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-Kit Nonrecurring</td>
<td>0 / 6.600</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Non-Recurring</td>
<td>- / 6.600</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Global Air Traffic Mgmt RW APX-118</td>
<td>4,683 / 193.312</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

## Modification Item 2 of 7: Global Air Traffic Mgmt RW APX-123

**A Kits**

### Recurring

<table>
<thead>
<tr>
<th>Description</th>
<th>Fiscal Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Fiscal Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kit Quantity - APX-123 A-Kits</td>
<td>257 / 1.200</td>
<td>168 / 0.431</td>
<td>168 / 0.600</td>
<td>82 / 0.100</td>
<td>82 / 0.100</td>
<td>82 / 0.100</td>
<td>- / -</td>
</tr>
<tr>
<td>Aircraft Integ/RCUs/KIV77</td>
<td>0 / 16.933</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>ECP</td>
<td>0 / 5.100</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>Subtotal: Global Air Traffic Mgmt RW APX-123</td>
<td>757 / 12.431</td>
<td>16.933</td>
<td>15.100</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>
**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA0711 / GATM Rollup

**Modification Number / Title:** AA0704 / GATM Rotary Wing Aircraft

**Models of Systems Affected:** UH&HH60A/L, CH47D/F, UH60M, MH47G, MH60M, A/MH6, AH64A/D/E, UAS

**Modification Type:** New or Improved Operational Capability

**Related RDT&E PEs:**

---

### Financial Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems Eng/Prog Mgt (SEPM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qty (Each) / Total Cost ($M)</td>
<td>0 / 12.451</td>
<td>- / 0.440</td>
<td>- / 0.550</td>
<td>- / 0.150</td>
<td>- / 0.100</td>
<td>- / 0.150</td>
<td>- / 0.100</td>
<td>- / 0.035</td>
<td>- / 0.055</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 13.781</td>
</tr>
<tr>
<td>Other PM Admin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qty (Each) / Total Cost ($M)</td>
<td>0 / 4.200</td>
<td>- / 0.150</td>
<td>- / 0.256</td>
<td>- / 0.100</td>
<td>- / -</td>
<td>- / 0.100</td>
<td>- / 0.045</td>
<td>- / 0.050</td>
<td>- / 0.075</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 14.876</td>
</tr>
<tr>
<td><strong>Subtotal: Recurring</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- / 39.884</td>
<td>- / 1.021</td>
<td>- / 1.406</td>
<td>- / 0.350</td>
<td>- / -</td>
<td>- / 0.350</td>
<td>- / 0.245</td>
<td>- / 0.085</td>
<td>- / 0.130</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 43.121</td>
</tr>
<tr>
<td>B Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kit Quantity - APX-123 B-Kits</td>
<td>1,165 / 29.400</td>
<td>100 / 2.500</td>
<td>100 / 2.569</td>
<td>168 / 3.045</td>
<td>- / -</td>
<td>168 / 3.045</td>
<td>168 / 1.655</td>
<td>62 / 0.125</td>
<td>62 / 0.126</td>
<td>- / -</td>
<td>- / -</td>
<td>- / 1,825 / 39.420</td>
</tr>
<tr>
<td><strong>Subtotal: Recurring</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-Kits Nonrecurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Modification Item 3 of 7:** Global Air Traffic Mgmt RW APX-118 Upgrade Kits

| A Kits                              |             |         |         |              |              |              |         |         |         |         |             |       |
| Recurring                           |             |         |         |              |              |              |         |         |         |         |             |       |
| System Eng/Prog Mgt (SEPM)          | 0 / 9.000   | - / 0.100 | - / 0.105 | - / 0.075 | - / - | - / 0.075 | - / 0.050 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / 9.330 |
| **Subtotal: Recurring**             |             |         |         |              |              |              |         |         |         |         |             |       |
|                                      | - / 14.099  | - / 0.100 | - / 0.205 | - / 0.075 | - / - | - / 0.075 | - / 0.050 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / 14.529 |
| B Kits                              |             |         |         |              |              |              |         |         |         |         |             |       |
| Recurring                           |             |         |         |              |              |              |         |         |         |         |             |       |
| **Subtotal: Recurring**             |             |         |         |              |              |              |         |         |         |         |             |       |
| Non-Recurring                       |             |         |         |              |              |              |         |         |         |         |             |       |
| B-Kits Nonrecurring                 |             |         |         |              |              |              |         |         |         |         |             |       |
| **Subtotal: Global Air Traffic Mgmt RW APX-118 Upgrade Kits** | 2,692 / 36.701 | - / 0.100 | 589 / 7.789 | 388 / 1.975 | - / - | 388 / 1.975 | - / 0.050 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / 3,669 / 46.615 |

**Modification Item 4 of 7:** Global Air Traffic Mgmt RW ADS-B

| A Kits                              |             |         |         |              |              |              |         |         |         |         |             |       |
| Recurring                           |             |         |         |              |              |              |         |         |         |         |             |       |
| Kit Qty- ADS-B A-Kits               | - / - | - / - | - / - | - / - | 154 / 0.616 | - / - | 154 / 0.616 | 845 / 4.637 | 899 / 4.697 | 1,000 / 5.115 | 845 / 4.022 | 1,260 / - | - / 5,003 / 19.087 |

---

**LI AA0711 - GATM Rollup**

**UNCLASSIFIED**

**Page 10 of 20**

**P-1 Line #29**

281
# Army LI AA0711 - GATM Rollup

## Exhibit P-3a, Individual Modification: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

### P-1 Line Item Number / Title:
AA0711 / GATM Rollup

### Modification Number / Title:
AA0704 / GATM Rotary Wing Aircraft

## Models of Systems Affected:
UH&HH60A/L, CH47D/F, UH60M, MH47G, MH60M, A/MH6, AH64A/D/E, UAS

### Modification Type:
New or Improved Operational Capability

### Related RDT&E PEs:

<table>
<thead>
<tr>
<th>Financial Plan</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each)</td>
<td>Cost (in M)</td>
<td>Qty (Each)</td>
<td>Cost (in M)</td>
<td>Qty (Each)</td>
<td>Cost (in M)</td>
<td>Qty (Each)</td>
<td>Cost (in M)</td>
<td>Qty (Each)</td>
<td>Cost (in M)</td>
</tr>
<tr>
<td>Engineering Change Orders</td>
<td>0 / 1.150</td>
<td>/ - / -</td>
<td>1.454</td>
<td>/ 1.026</td>
<td>I</td>
<td>1.026</td>
<td>2.150</td>
<td>/ 1.249</td>
<td>1.249</td>
<td>/ 1.264</td>
</tr>
<tr>
<td>Data</td>
<td>0 / 0.945</td>
<td>/ - / -</td>
<td>1.500</td>
<td>/ 0.250</td>
<td>I</td>
<td>0.250</td>
<td>1.527</td>
<td>/ 1.627</td>
<td>1.427</td>
<td>/ 1.230</td>
</tr>
<tr>
<td>Training Equipment</td>
<td>0 / 2.140</td>
<td>/ - / -</td>
<td>1.325</td>
<td>/ 0.252</td>
<td>I</td>
<td>0.252</td>
<td>0.420</td>
<td>/ 0.422</td>
<td>0.420</td>
<td>/ 0.625</td>
</tr>
<tr>
<td>Fielding</td>
<td>0 / 0.425</td>
<td>/ - / -</td>
<td>0.200</td>
<td>/ 0.185</td>
<td>I</td>
<td>0.185</td>
<td>0.220</td>
<td>/ 0.223</td>
<td>0.222</td>
<td>/ 0.200</td>
</tr>
<tr>
<td>System Eng/Prog Mgt (SEPM)</td>
<td>0 / 2.300</td>
<td>/ - / -</td>
<td>2.264</td>
<td>/ 2.264</td>
<td>I</td>
<td>2.264</td>
<td>2.203</td>
<td>/ 3.101</td>
<td>2.053</td>
<td>/ 1.200</td>
</tr>
<tr>
<td>System Test &amp; Eval (ST&amp;E)</td>
<td>0 / 0.400</td>
<td>/ - / -</td>
<td>1.180</td>
<td>/ 1.182</td>
<td>I</td>
<td>1.182</td>
<td>1.250</td>
<td>/ 1.265</td>
<td>1.225</td>
<td>/ 1.175</td>
</tr>
<tr>
<td>Other-PM Admin</td>
<td>0 / 2.800</td>
<td>/ - / -</td>
<td>1.100</td>
<td>/ 1.175</td>
<td>I</td>
<td>1.175</td>
<td>1.037</td>
<td>/ 3.097</td>
<td>3.237</td>
<td>/ 1.100</td>
</tr>
<tr>
<td>Non-Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Recuring Engineering</td>
<td>0 / 11.877</td>
<td>/ - / 1.000</td>
<td>/ 10.250</td>
<td>/ 5.515</td>
<td>I</td>
<td>5.515</td>
<td>6.421</td>
<td>/ 6.742</td>
<td>5.750</td>
<td>/ 1.450</td>
</tr>
<tr>
<td>Subtotal: Non-Recurring</td>
<td>/ 11.877</td>
<td>/ - / 1.000</td>
<td>/ 10.250</td>
<td>/ 5.515</td>
<td>/ - / -</td>
<td>5.515</td>
<td>6.421</td>
<td>/ 6.742</td>
<td>5.750</td>
<td>/ 1.450</td>
</tr>
<tr>
<td>B Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Modification Item 5 of 7: Embedded GPS Inertial (EGI) Navigation System ECP


### Non-Recurring

### Exhibit P-3a, Individual Modification: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** AA0711 / GATM Rollup  
**Modification Number / Title:** AA0704 / GATM Rotary Wing Aircraft  
**Models of Systems Affected:** UH&HH60A/L, CH47D/F, UH60M, MH47G, MH60M, A/MH6, AH64A/D/E, UAS  
**Modification Type:** New or Improved Operational Capability  
**Related RDT&E PEs:**

#### Financial Plan

|----------------|-------------|---------|---------|--------------|-------------|--------------|---------|---------|---------|---------|-------------|-------|

#### Modification Item 6 of 7: Global Air Traffic Mgmt RW ARC-231

**A Kits**

- **Recurring**
  - Kit Qty: ARC-231 A-Kit  372 / 22.100
  - Testing  0 / 1.651
  - PM Admin / SEPM  0 / 4.950
  - Subtotal: Recurring  - / 28.701
  - Subtotal: Recurring  - / 28.701

**Non-Recurring**

- NRE (A-Kit)  0 / 2.495
- Subtotal: Non-Recurring  - / 2.495

**B Kits**

- **Recurring**
  - Kit Qty: ARC-231 B-Kit  372 / 60.300
  - Subtotal: Recurring  - / 60.300
  - Subtotal: Global Air Traffic Mgmt RW ARC-231  744 / 91.496

#### Modification Item 7 of 7: Global Air Traffic Mgmt RW Transition Doors

**A Kits**

- **Non-Recurrent**
  - Equipment, Nonrecurring  0 / 10.400
  - Subtotal: Non-Recurring  - / 10.400

**B Kits**

- **Recurring**
  - Transition Doors, Procurement  396 / 29.327
  - Subtotal: Recurring  - / 29.327
  - Subtotal: Global Air Traffic Mgmt RW Transition Doors  396 / 39.727

**Subtotal: Procurement, All Modification Items**

<table>
<thead>
<tr>
<th>Total Cost (Each)</th>
<th>Total Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>396</td>
</tr>
<tr>
<td>FY 2015</td>
<td>1,030 / 33.640</td>
</tr>
<tr>
<td>FY 2016 Base</td>
<td>21,14 / 58.126</td>
</tr>
<tr>
<td>FY 2016 OCO</td>
<td>2,21 / 55.153</td>
</tr>
<tr>
<td>FY 2017</td>
<td>4,310 / -</td>
</tr>
</tbody>
</table>

**Installation**

LI AA0711 - GATM Rollup  
Army  
February 2015  
Page 12 of 20  
P-1 Line #29
### Exhibit P-3a, Individual Modification: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 02 / 10

**P-1 Line Item Number / Title:**
AA0711 / GATM Rollup

**Modification Number / Title:**
AA0704 / GATM Rotary Wing Aircraft

**Models of Systems Affected:**
UH&HH60A/L, CH47D/F, UH60M, MH47G, MH60M, A/MH6, AH64A/D/E, UAS

**Modification Type:**
New or Improved Operational Capability

**Related RDT&E PEs:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modification Item 1 of 7:</strong> Global Air Traffic Mgmt RW APX-118</td>
<td>1,783 / 13.056</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1,783 / 13.056</td>
</tr>
<tr>
<td><strong>Modification Item 2 of 7:</strong> Global Air Traffic Mgmt RW APX-123</td>
<td>0 / 0.000</td>
<td>225 / 0.260</td>
<td>168 / 0.225</td>
<td>168 / 0.225</td>
<td>82 / 0.100</td>
<td>62 / 0.090</td>
<td>20 / 0.050</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>725 / 0.950</td>
</tr>
<tr>
<td><strong>Modification Item 3 of 7:</strong> Global Air Traffic Mgmt RW APX-118 Upgrade Kits</td>
<td>1,157 / 5.200</td>
<td>638 / 1.606</td>
<td>125 / 0.075</td>
<td>389 / 0.025</td>
<td>389 / 0.025</td>
<td>388 / 0.500</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>2,697 / 17.456</td>
</tr>
<tr>
<td><strong>Modification Item 4 of 7:</strong> Global Air Traffic Mgmt RW ADS-B</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>2,010 / -</td>
</tr>
<tr>
<td><strong>Modification Item 5 of 7:</strong> Embedded GPS Inertial (EGI) Navigation System ECP</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>3,163 / 4.256</td>
</tr>
<tr>
<td><strong>Modification Item 7 of 7:</strong> Global Air Traffic Mgmt RW Transition Doors</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td><strong>Subtotal: Installation</strong></td>
<td>3,260 / 34.264</td>
<td>863 / 1.866</td>
<td>293 / 0.300</td>
<td>557 / 0.250</td>
<td>- / -</td>
<td>557 / 0.250</td>
<td>708 / 1.819</td>
<td>1,091 / 5.040</td>
<td>1,173 / 5.370</td>
<td>1,330 / 5.712</td>
<td>4,416 / -</td>
<td>13,691 / 54.620</td>
</tr>
</tbody>
</table>

**Total**

- **Total Cost (Procurement + Support + Installation):** 1,330 / 5.712
- **To Complete:** 1,330 / 5.712
- **Total:** 863,301

---

**Note:**
- The table provides a detailed breakdown of costs and quantities for each modification item, including both prior years and FY 2014 to FY 2019 data.
- The total cost is calculated for each category, with the final totalcost shown as 863,301.

---

**UNCLASSIFIED**

LI AA0711 - GATM Rollup

Page 13 of 20

P-1 Line #29
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>1,783</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,783</td>
</tr>
<tr>
<td>Out</td>
<td>1,783</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,783</td>
</tr>
</tbody>
</table>
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** AA0711 / GATM Rollup

**Modification Number / Title:** AA0704 / GATM Rotary Wing Aircraft

**Modification Item 2 of 7:** Global Air Traffic Mgmt RW APX-123

---

### Manufacturer Information

**Manufacturer Name:** BAE Systems, Incorporated  
**Manufacturer Location:** Greenlawn, NY

**Administrative Leadtime (in Months):** 2  
**Production Leadtime (in Months):** 15

---

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>113</td>
<td>112</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>113</td>
<td>112</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

---

### Installation Information

**Method of Implementation:** Modification Work Order (MWO) - Contractor

### Installation Cost

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Years</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>225 / 0.260</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>225 / 0.260</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>225 / 0.260</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>82 / 0.100</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>82 / 0.100</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>62 / 0.090</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>82 / 0.140</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>20 / 0.050</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>82 / 0.140</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>82 / 0.100</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>82 / 0.100</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>168 / 0.225</td>
</tr>
</tbody>
</table>

---

**UNCLASSIFIED**

**Date:** February 2015

**Page 15 of 20**

**P-1 Line #29**

LI AA0711 - GATM Rollup

Army
Modification Item 3 of 7: Global Air Traffic Mgmt RW APX-118 Upgrade Kits

Manufacturer Information
Manufacturer Name: BAE Systems, Incorporated
Manufacturer Location: Greenlawn, NY

Administrative Leadtime (in Months): 2
Production Leadtime (in Months): 14

Method of Implementation: Modification Work Order (MWO) - Contractor

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Dates</td>
<td>Dec 2014</td>
<td>Dec 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Dates</td>
<td>Jan 2016</td>
<td>Jan 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Installation Information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority Years</td>
<td>1,157 / 5,200</td>
<td>638 / 1,600</td>
<td>125 / 0.075</td>
<td>- / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>2,697 / 7,456</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>1,920 / 6,881</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>389 / 0.025</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>389 / 0.025</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>388 / 0.550</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>388 / 0.550</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
</tbody>
</table>

Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>In</td>
<td>1,157</td>
<td>160</td>
<td>161</td>
<td>156</td>
<td>32</td>
<td>31</td>
<td>31</td>
<td>97</td>
</tr>
<tr>
<td>Out</td>
<td>1,068</td>
<td>89</td>
<td>160</td>
<td>161</td>
<td>156</td>
<td>32</td>
<td>31</td>
<td>97</td>
</tr>
</tbody>
</table>
### Modification Item 4 of 7: Global Air Traffic Mgmt RW ADS-B

**Manufacturer Information**

- Manufacturer Name: BAE Systems, Incorporated
- Manufacturer Location: Greenlawn, NY

**Installation Information**

- **Administrative Leadtime (in Months):** 2
- **Production Leadtime (in Months):** 16

|---------------|---------|---------|---------|---------|---------|---------|---------|-------------|-----------|

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td></td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>77</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>77</td>
</tr>
</tbody>
</table>

- Modification Work Order (MWO) - Contractor

**Method of Implementation:** Modification Work Order (MWO) - Contractor
**UNCLASSIFIED**

**Exhibit P-3a, Individual Modification:** PB 2016 Army  
**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** AA0711 / GATM Rollup  
**Modification Number / Title:** AA0704 / GATM Rotary Wing Aircraft

**Modification Item 5 of 7:** Embedded GPS Inertial (EGI) Navigation System ECP

**Manufacturer Information**
- **Manufacturer Name:** Honeywell, Incorporated  
- **Manufacturer Location:** Clearwater, FL

**Installation Information**
- **Method of Implementation:** Modification Work Order (MWO) - Contractor

### Installation Cost

<table>
<thead>
<tr>
<th></th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
<td>- I / 0.000</td>
</tr>
</tbody>
</table>

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>QYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>In</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Installation Schedule

| PYS | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| In  | 320| -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 320 |
| Out | 320| -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 320 |
### Installation Information

**Method of Implementation:** Modification Work Order (MWO) - Contractor

**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### UNCLASSIFIED

**Exhibit P-40, Budget Line Item Justification**: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**ID Code** (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,390.291</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,390.291</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,390.291</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(Initial Spares ($ in Millions)          | -          | -       | -       | -            | -            | -             | -       | -       | -       | -       | -           | -     |
| Flyaway Unit Cost ($ in Thousands)       | -          | -       | -       | -            | -            | -             | -       | -       | -       | -       | -           | -     |
| Gross/Weapon System Unit Cost ($ in Thousands) | -          | -       | -       | -            | -            | -             | -       | -       | -       | -       | -           | -     |

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

**Description:**

The TUAS provides Army Brigade Combat Teams, Aviation Brigades, and Special Operation Groups situational awareness, improved wide-area target acquisition, Laser Designation, and high value target (HVT) tracking to conduct both shaping and decisive operations with greatly increased lethality. The TUAS meets the need for a day/night, multi sensor collection system with improved connectivity to joint forces that provides real time battle information that cannot be observed from standoff airborne sensor systems, ground collection systems, and scouts. The key performance parameters are blocked into RQ-7B (production) thresholds and subsequent upgrade objectives. The RQ-7B system is a RSTA, Command, Control, Communications, and Intelligence (C3I) system that supports Brigade, Battalion, and lower level elements. The RQ-7B Shadow has logged over 924,000 flight hours support of Overseas Contingency Operations (OCO).

In 2009, the Product Office placed the last of the authorized 104 systems in 2011 (FY 2009 Funding) and entered a modifications phase. These modifications are divided into three primary sections: RQ-7B v2, System Modifications, and Payload Modifications. The RQ-7B v2 or Shadow v2 effort incorporates Type 1 Encryption, STANAG 4586 Compliant Software, a Universal Ground Control Station, a Universal Ground Data Terminal, a STANAG 4586 compliant Portable Ground Control Station, and standardizes modifications introduced during the wars in Iraq and Afghanistan. System Modifications and Payload Modifications consolidate development activities not included in the Shadow v2 Block Modification.

In 2010, the Army G8 established a RQ-7B UAV MODS Aircraft Procurement Exhibit approving several modifications for development and production. These modifications will be incrementally integrated, tested, and fielded in accordance with the technology readiness and funding profile. The major modifications are grouped as follows: (1) v2 Modifications includes TCDL and Encryption), (2) Payload Modifications, and (3) System Modifications. Threshold requirements include a Heavy Fuel Engine, increased reliability, redundant avionics, electronic shielding, and SAR/GMTI. The RQ-7B v2 will be compliant with STANAG 4586 and the Joint Interoperability Profiles. To achieve this, the system incorporates the UGCS and UGDT along with an upgraded Air Data Terminal, Airborne Computer, and onboard software.

The RQ-7B v2 Shadow upgrade program complies with the congressionally mandated TCDL and North Atlantic Treaty Organization (NATO) Standardization Agreement 4586 in order to meet requirements in the Operational Requirements Document, provide a secure data link, an enhanced propulsion system, payload improvements, avionics improvements, and ground equipment improvements.

OSRVT: The One System Remote video Terminal (OSRVT) systems require an update to an Increment II OSRVT. The OSRVT upgrade Increment II program of record began in FY2012. The OSRVT Increment II consists of a transceiver, MILTOPE tablet, Antennas, UHF Modem, Type I encryption, and an extended range antenna (MDAS). Software supports decoding Telemetry Data from multiple Unmanned Aircraft Systems (UASs), provides EO/IR payload control, and supports off-target calculations.
### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
- 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

**P-1 Line Item Number / Title:**
- A00018 / RQ-7 UAV MODS

**ID Code** (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements: 0305204A, 0305233A</th>
</tr>
</thead>
</table>

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>94.013</td>
<td>91.255</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
</tr>
<tr>
<td>ANG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>27.889</td>
<td>34.125</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total: Secondary Distribution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
</tr>
</tbody>
</table>
## Justification:

Justification: FY2016 Base funding of $81.444 million provides for production of 4 Shadow v2 retrofits, 4 Launchers, and fielding of Shadow hardware procured in prior years. FY2016 funds also procures 263 Weatherization Kits and 32 Laser Designator (LD) Payloads for the Shadow Program. Also procures 260 OSRVT Bi-Directional (BD) Antenna retrofit kits and Installation, Engineering, Logistics, Fielding and New Equipment Training (NET).

FY2016 OCO funding of $8.250 million replaces 50 OSRVT combat losses and non repairable systems from combat operations.

The FY16 funding request was reduced by $5.17 million to account for the availability of prior year execution balances.
Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A / 02 / 10

P-1 Line Item Number / Title:
A00018 / RQ-7 UAV MODS

Modification Number / Title:
A00018 / RQ-7 UAV MODS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,390.291</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
<td>-</td>
<td>2,017.708</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,390.291</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
<td>-</td>
<td>2,017.708</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,390.291</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
<td>-</td>
<td>2,017.708</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) | -          | -       | -       | -            | -           | -            | -       | -       | -       | -       | -           | -     |
Gross/Weapon System Unit Cost ($ in Thousands) | -          | -       | -       | -            | -           | -            | -       | -       | -       | -       | -           | -     |

Description:
See P40 for description.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>94.013</td>
<td>91.255</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
</tr>
<tr>
<td>ANG</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>27.889</td>
<td>34.125</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>121.902</td>
<td>125.380</td>
<td>81.444</td>
<td>8.250</td>
<td>89.694</td>
<td>89.559</td>
<td>81.351</td>
<td>97.150</td>
<td>22.381</td>
</tr>
</tbody>
</table>
### Models of Systems Affected:
- 

### Appropriation / Budget Activity / Budget Sub Activity:
- 2031A / 02 / 10

### Modification Type:
- **UNCLASSIFIED**

### Related RDT&E PEs:
- 

### Procurement

#### Modification Item 1 of 4: SHADOW Version 2 (v2)

- **A Kits**
  - **Recurring**
    - Software
      - Qty / Each: 0 / 11.648
      - Total Cost: $11.648
    - PulseTech Data
      - Qty / Each: 0 / 3.747
      - Total Cost: $3.747
    - GFE
      - Qty / Each: 0 / 38.037
      - Total Cost: $38.037
    - Training Equipment
      - Qty / Each: 22 / 26.031
      - Total Cost: $686.417
    - Training (NET)
      - Qty / Each: 0 / 26.610
      - Total Cost: $68.215
    - Program Management
      - Qty / Each: 0 / 32.278
      - Total Cost: $8.215
    - Engineering
      - Qty / Each: 0 / 11.789
      - Total Cost: $10.900
    - Logistics
      - Qty / Each: 0 / 19.007
      - Total Cost: $9.000
  - **Subtotal: Recurring**
    - Qty / Each: 169.147
    - Total Cost: $25,580

- **Non-Recurring**
  - **Nonrecurring Engineering Obsolescence**
    - Qty / Each: 0 / 52.690
    - Total Cost: $65,906
  - **Subtotal: Non-Recurring**
    - Qty / Each: 52.690
    - Total Cost: $65,906

- **B Kits**
  - **Recurring**
    - Shadow v2 Retrofit Kits
      - Qty / Each: 68 / 574.314
      - Total Cost: $383,135
    - UGCS Only System Retrofit
      - Qty / Each: 28 / 89.763
      - Total Cost: $28,876
    - Launchers
      - Qty / Each: 42 / 12.027
      - Total Cost: $65,906
    - MMF Retrofit Kits
      - Qty / Each: 13 / 10.313
      - Total Cost: $100,731
  - **Subtotal: Recurring**
    - Qty / Each: 686.417
    - Total Cost: $890,368

- **Subtotal: SHADOW Version 2 (v2)**
  - Qty / Each: 1733.908
  - Total Cost: $328,127

### Modification Item 2 of 4: SHADOW SYSTEM MODIFICATIONS

- **A Kits**
  - **Recurring**
    - Weatherization
      - Qty / Each: 30
      - Total Cost: $89.763
    - Nonrecurring Engineering (NRE)
      - Qty / Each: 0 / 2.150
      - Total Cost: $12.150
    - GPS Denied
      - Qty / Each: 0 / 0.081
      - Total Cost: $0.969
    - Program Management
      - Qty / Each: 0 / 13.630
      - Total Cost: $17,957
    - Engineering
      - Qty / Each: 0 / 1.125
      - Total Cost: $14,015
    - Logistics
      - Qty / Each: 0 / 1.177
      - Total Cost: $17,162
  - **Subtotal: SHADOW SYSTEM MODIFICATIONS**
    - Qty / Each: 30
    - Total Cost: $328,127
## Army LI A00018 - RQ-7 UAV MODS

### Models of Systems Affected: N/A

### Modification Type: UNCLASSIFIED

### Related RDT&E PEs:

<table>
<thead>
<tr>
<th>Financial Plan</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Qty (Each)</td>
</tr>
</tbody>
</table>

### Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS

| A Kits | Recurring | Training | 0 | / 5.700 | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | 1,628 |
| Program Management | 0 | / 3.508 | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | 13,180 |
| Engineering | 0 | / 1.399 | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | 1,260 |
| Logistics | 0 | / 2.698 | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | 21,425 |

### Modification Item 4 of 4: OSRVT MODIFICATIONS


### Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS

| Logistics/TPFF/NET | 0 | / 2.177 | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | - | / - | 14 |

### Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS


**LI A00018 - RQ-7 UAV MODS**

UNCLASSIFIED

Page 6 of 11

P-1 Line #30
### UNCLASSIFIED

**Exhibit P-3a, Individual Modification:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10

**P-1 Line Item Number / Title:** A00018 / RQ-7 UAV MODS

**Modification Number / Title:** A00018 / RQ-7 UAV MODS

**Date:** February 2015

**Models of Systems Affected:** N/A

**Modification Type:** UNCLASSIFIED

**Related RDT&E PEs:**

### Models of Systems Affected

<table>
<thead>
<tr>
<th>Financial Plan</th>
<th>Prior Years Qty</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017 Qty</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020 Qty</th>
<th>FY 2020</th>
<th>To Complete Qty</th>
<th>Total Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering/Technical Services</td>
<td>- / 6.024</td>
<td>- / 0.381</td>
<td>- / 1.485</td>
<td>- / 0.863</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td><strong>Subtotal: Non-Recurring</strong></td>
<td>- / 6.024</td>
<td>- / 4.073</td>
<td>- / 1.693</td>
<td>- / 1.533</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
<td>- / -</td>
</tr>
<tr>
<td>B Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: Procurement, All Modification Items</td>
<td>3,812 / 1,390.291</td>
<td>150 / 121.902</td>
<td>165 / 125.380</td>
<td>583 / 81.444</td>
<td>50 / 8.250</td>
<td>633 / 89.694</td>
<td>544 / 89.559</td>
<td>485 / 81.351</td>
<td>640 / 97.150</td>
<td>114 / 22.381</td>
<td>- / -</td>
<td>- / -</td>
<td>6,543 / 2,017.708</td>
</tr>
</tbody>
</table>

### Installation

| Modification Item 1 of 4: SHADOW Version 2 (v2) | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | 0 / - | - / - |
| Modification Item 2 of 4: SHADOW SYSTEM MODIFICATIONS | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | 0 / - | - / - |
| **Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS** | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | 0 / - | - / - |
| **Modification Item 4 of 4: OSRVT MODIFICATIONS** | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | 0 / - | - / - |
| **Subtotal: Installation** | 0 / 0.000 | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | - / - | 0 / - | - / - |
| **Total** | 1,390.291 | 121.902 | 125.380 | 81.444 | 8.250 | 89.694 | 89.559 | 81.351 | 97.150 | 22.381 | - | 2,017.708 |
### UNCLASSIFIED

**Exhibit P-3a, Individual Modification:** PB 2016 Army  
**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 02 / 10  
**P-1 Line Item Number / Title:** A00018 / RQ-7 UAV MODS  
**Modification Number / Title:** A00018 / RQ-7 UAV MODS

**Modification Item 1 of 4: SHADOW Version 2 (v2)**

### Manufacturer Information

- **Manufacturer Name:** AAI  
- **Manufacturer Location:** Hunt Valley, MD  
- **Administrative Leadtime (in Months):** 7  
- **Production Leadtime (in Months):** 18

|------------------------|---------|---------|---------|---------|---------|---------|---------|

### Installation Information

**Method of Implementation:** FFP Contract

### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Cost**

- **Prior Years**  
  - FY 2014: 0 (0.000)  
  - FY 2015: 0 (0.000)  
  - FY 2016: 0 (0.000)  
  - FY 2017: 0 (0.000)  
  - FY 2018: 0 (0.000)  
  - FY 2019: 0 (0.000)  
  - FY 2020: 0 (0.000)  
- **Total**  
  - FY 2014: 0 (0.000)  
  - FY 2015: 0 (0.000)  
  - FY 2016: 0 (0.000)  
  - FY 2017: 0 (0.000)  
  - FY 2018: 0 (0.000)  
  - FY 2019: 0 (0.000)  
  - FY 2020: 0 (0.000)  

**To Complete**  
- FY 2014: 0 (0.000)  
- FY 2015: 0 (0.000)  
- FY 2016: 0 (0.000)  
- FY 2017: 0 (0.000)  
- FY 2018: 0 (0.000)  
- FY 2019: 0 (0.000)  
- FY 2020: 0 (0.000)  

**Total**  
- FY 2014: 0 (0.000)  
- FY 2015: 0 (0.000)  
- FY 2016: 0 (0.000)  
- FY 2017: 0 (0.000)  
- FY 2018: 0 (0.000)  
- FY 2019: 0 (0.000)  
- FY 2020: 0 (0.000)  

**PYS:** 0  
**Q1:** 0  
**Q2:** 0  
**Q3:** 0  
**Q4:** 0  

**Total:** 0
## Modification Item 2 of 4: SHADOW SYSTEM MODIFICATIONS

### Manufacturer Information

- **Manufacturer Name:** AAI
- **Manufacturer Location:** Hunt Valley, MD
- **Administrative Leadtime (in Months):** 18
- **Production Leadtime (in Months):** 18

### Installation Information

- **Method of Implementation:** FFP Contract

#### Installation Cost

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>To Complete</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
<td>Qty (Each) / Total Cost ($M)</td>
</tr>
<tr>
<td>FY 2014</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>To Complete</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
<td>0 / 0.000</td>
</tr>
</tbody>
</table>

#### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS Q1</td>
<td>Q2 Q3 Q4 Q1</td>
<td>Q2 Q3 Q4 Q1</td>
<td>Q2 Q3 Q4 Q1</td>
<td>Q2 Q3 Q4 Q1</td>
<td>Q2 Q3 Q4 Q1</td>
<td>Q2 Q3 Q4 Q1</td>
</tr>
<tr>
<td>In 1</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Out 1</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
</tbody>
</table>
**Installation Schedule**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PYS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td><strong>In</strong></td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Out</strong></td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**UNCLASSIFIED**

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10

P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS

Modification Number / Title: A00018 / RQ-7 UAV MODS

Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS

Manufacturer Information

- Manufacturer Name: AAI
- Manufacturer Location: Hunt Valley, MD
- Administrative Leadtime (in Months): 6
- Production Leadtime (in Months): 6

**Method of Implementation:** FFP Contract

**Installation Cost**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior Years</strong></td>
<td>0</td>
<td>0.000</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>FY 2014</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2015</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2016</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2017</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2018</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2019</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FY 2020</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>To Complete</td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**UNCLASSIFIED**

LI A00018 - RQ-7 UAV MODS

**Army**
### Installation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Out</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA

P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment

Date: February 2015

Description:
The Aircraft Survivability Equipment (ASE) budget line includes ASE Trainers (AZ3506), ASE Laser Countermeasures (AZ3508), and ASE Radio Frequency Countermeasures (AZ3511).

AZ3506 ASE Trainers

The Man-portable Aircraft Survivability Trainer (MAST) is a systems trainer for the Common Missile Warning System (CMWS). MAST provides force-on-force training by stimulation of the onboard CMWS at the Maneuver Combat Training Centers (MCTC). The aircraft training against the MAST system include the Apache, Chinook, Kiowa Warrior, Blackhawk, and Fixed Wing platforms.

AZ3508 ASE Laser CM

APO = 1,332

The AN/AVR-2B Laser Detecting Set (LDS) installed on Army rotary-wing aircraft passively detects laser-aided weapons targeting the aircraft and alerts aircrews, allowing them to engage the threat or maneuver to break the targeting. The system detects aircraft illumination by laser rangefinders, laser target designators, and laser beam rider surface-to-air missiles. The system provides the aircrew visual and aural warnings prioritized by threat lethality using 360 degree azimuth and 90 degree elevation field of view coverage.

AZ3511 Radio Frequency CM

APO = 1,200

The objective of the Aircraft Survivability Equipment (ASE) Development project is to improve Radio Frequency (RF) ASE for Army aviation. The APR-39 Radar Warning Receiver (RWR) detects, categorizes, and prioritizes Radio Frequency (RF) emitters and provides a visual / aural alert to aircrew members warning them of targeting by RF-guided weapons. The Milestone Decision Authority (MDA) approved Phases 1 and 2 of a 3-phased path forward.
Phase 1 serves as an obsolescence / sustainment upgrade to the Processor Line Replaceable Unit (LRU) of the AN/APR-39A(V) Radar Warning Receiver (RWR) implemented to ensure that the currently fielded system remains viable until affordable improved RF ASE capability can be pursued in Phases 2 and 3.

Phase 2, RWR Modernization, adopts the ongoing United States Navy Class I RWR Engineering Change Proposal (ECP), commonly referred to as the APR-39D(V)2 system. APR-39D(V)2 will significantly improve the near-spherical RF threat coverage, automatic detection and identification of threat types, bearing, and lethality. Under Phase 2, the Army will develop enhancements to the APR-39D(V)2, including integrated suite control functionality, threat correlation, and hardware upgrades needed to keep the APR-39D(V)2 technically relevant and address emerging Low Probability Intercept (LPI) and frequency agile threats.

Phase 3 adds active Electronic Countermeasures (ECM) jamming capability for selected aircraft; Materiel Development Decision (MDD) for this ECM jamming capability phase is not expected until later in the Future Years Defense Program (FYDP).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>140</td>
<td>29</td>
<td>20</td>
<td>110</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>47.610</td>
<td>89.059</td>
<td>56.215</td>
<td>-</td>
<td>56.215</td>
<td>169.581</td>
<td>36.810</td>
<td>41.133</td>
<td>144.724</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>140</td>
<td>29</td>
<td>20</td>
<td>110</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>47.610</td>
<td>89.059</td>
<td>56.215</td>
<td>-</td>
<td>56.215</td>
<td>169.581</td>
<td>36.810</td>
<td>41.133</td>
<td>144.724</td>
</tr>
</tbody>
</table>
Exhibit P-40, Budget Line Item Justification: PB 2016 Army
Date: February 2015

**Justification:**

AZ3506 ASE Trainers: There is no Fiscal Year (FY) 2016 Base Procurement dollar funding requirement due to the transition of MAST to sustainment.

AZ3508 ASE Laser CM: Fiscal Year (FY) 2016 Base procurement dollars in the amount of $27.485 million procures AN/AVR-2B A-Kits for CH-47F aircraft, finishes A-Kit installation on UH-60L and begins A-Kit installation on CH-47F aircraft in support of required operational capabilities, and integration of AN/AVR-2B LDS with other ASE systems.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.


In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibits Schedule</td>
<td>Prior Years</td>
<td>FY 2014</td>
</tr>
<tr>
<td>Title*</td>
<td>Exhibits</td>
<td>ID CD</td>
</tr>
<tr>
<td>AZ3506 / ASE Trainers</td>
<td>P-40a</td>
<td>- / 365.975</td>
</tr>
<tr>
<td>AZ3508 / ASE Laser CM</td>
<td>P-5, P-5a, P-21</td>
<td>- / 320.223</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Army  

P-1 Line Item Number / Title:  
AZ3504 / Aircraft Survivability Equipment

Aggregated Items Title:  
Various

Date: February 2015

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Item Number / Title [DODIC]</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($)</td>
<td>Qty (Each)</td>
<td>Total Cost ($)</td>
<td>Unit Cost ($)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>ASE Trainers</td>
<td>365.975</td>
<td>2.666</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military Assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Distribution</td>
<td></td>
<td></td>
<td>2.666</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: ASE Trainers</td>
<td></td>
<td></td>
<td>365.975</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>2.666</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LI AZ3504 - Aircraft Survivability Equipment

UNCLASSIFIED

Page 4 of 16  
P-1 Line #31
### Resource Summary

<table>
<thead>
<tr>
<th>Procurement Quantity (Units in Each)</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
<td>320.223</td>
<td>44.944</td>
<td>32.896</td>
<td>27.485</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>11.565</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
<td>308.658</td>
<td>44.944</td>
<td>32.896</td>
<td>27.485</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>11.565</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
<td>320.223</td>
<td>44.944</td>
<td>32.896</td>
<td>27.485</td>
<td>-</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

### Cost Elements

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Non Recurring Engineering (A-Kit)</td>
<td>-</td>
<td>6.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A-Kit Procurement(1)</td>
<td>-</td>
<td>16.914</td>
<td>32.933</td>
<td>179</td>
<td>5.895</td>
<td>-</td>
</tr>
<tr>
<td>A-Kit Filters</td>
<td>-</td>
<td>-</td>
<td>0.511</td>
<td>350</td>
<td>0.179</td>
<td>6.500</td>
</tr>
<tr>
<td>B-Kit Procurement(1)</td>
<td>-</td>
<td>64.197</td>
<td>190.690</td>
<td>58</td>
<td>11.060</td>
<td>-</td>
</tr>
<tr>
<td>Other Production (Brackets)</td>
<td>-</td>
<td>0.085</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Prime Contractor Program Mgmt</td>
<td>-</td>
<td>2.229</td>
<td>-</td>
<td>-</td>
<td>0.960</td>
<td>-</td>
</tr>
<tr>
<td>Systems Engineering</td>
<td>-</td>
<td>7.990</td>
<td>-</td>
<td>-</td>
<td>2.023</td>
<td>-</td>
</tr>
<tr>
<td>Program Management</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.022</td>
<td>-</td>
</tr>
<tr>
<td>Systems Test and Evaluation</td>
<td>-</td>
<td>3.322</td>
<td>-</td>
<td>-</td>
<td>3.120</td>
<td>-</td>
</tr>
<tr>
<td>Training</td>
<td>-</td>
<td>0.225</td>
<td>-</td>
<td>-</td>
<td>8.150</td>
<td>-</td>
</tr>
<tr>
<td>Fielding</td>
<td>-</td>
<td>2.730</td>
<td>-</td>
<td>-</td>
<td>0.015</td>
<td>-</td>
</tr>
<tr>
<td>Other Procurement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>320.223</td>
<td>-</td>
<td>-</td>
<td>44.944</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>320.223</td>
<td>-</td>
<td>-</td>
<td>44.944</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
Exhibit P-5, Cost Analysis: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10

P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment

Item Number / Title [DODIC]: AZ3508 / ASE Laser CM

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost</td>
<td>Qty</td>
<td>Total Cost</td>
<td>Unit Cost</td>
<td>Qty</td>
<td>Total Cost</td>
</tr>
<tr>
<td></td>
<td>320.223</td>
<td>-</td>
<td>44.944</td>
<td>32.896</td>
<td>-</td>
<td>27.485</td>
</tr>
</tbody>
</table>

Secondary Distribution FY 2014 FY 2015 FY 2016 Base FY 2016 OCO FY 2016 Total

| Army                          | Quantity    |         |         |             |             |             |
| Total:                        |             | 44.944  | 32.896  | 27.485      |             | 27.485      |

(*) indicates the presence of a P-5a
**Exhibit P-5a, Procurement History and Planning:** PB 2016 Army  
**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A / 04 / 10

**P-1 Line Item Number / Title:**  
AZ3504 / Aircraft Survivability Equipment

**Item Number / Title [DODIC]:**  
AZ3508 / ASE Laser CM

| Cost Elements | FY | Contractor and Location | Method/Type or Funding Vehicle | Location of PCO | Award Date | Date of First Delivery | Qty (Each) | Unit Cost ($K) | Specs Avail Now? | Date Revision Available | RFP Issue Date |
|---------------|----|-------------------------|--------------------------------|------------------|------------|------------------------|------------|----------------|------------------|---------------------|-----------------
| A-Kit Procurement (†) | 2014 | SSAI / Huntsville, AL | C / FFP | LSFMA, Redstone Arsenal, AL | Mar 2014 | Dec 2014 | 179 | 32.933 | | | |
| A-Kit Procurement (†) | 2016 | Various / Various | C / FFP | LSFMA, Redstone Arsenal | Dec 2015 | Sep 2016 | 139 | 70.496 | | | |
| B-Kit Procurement (†) | 2014 | UTC Aerospace Systems / Danbury, CT | SS / FFP | AMCOM Contracting Command, RSA | May 2014 | Feb 2015 | 58 | 190.690 | | | |

(†) indicates the presence of a P-21

**Remarks:**
The increase in unit price for A-Kits (FY15) includes the change in procurement from all 4 sensor systems on UH-60 platforms to a mix of 4 and 6 sensor systems to support the CH-47 platforms. FY16 will be all 6 sensor A-Kits in support of CH-47 platforms.
Exhibit P-21, Production Schedule: PB 2016 Army

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A-Kit Procurement

<table>
<thead>
<tr>
<th>QTY</th>
<th>FY 2014</th>
<th>QTY</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B-Kit Procurement

<table>
<thead>
<tr>
<th>QTY</th>
<th>FY 2014</th>
<th>QTY</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Elements (Units in Each)</td>
<td>Fiscal Year 2016</td>
<td>Calendar Year 2016</td>
<td>Fiscal Year 2017</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------</td>
<td>--------------------</td>
<td>-----------------</td>
</tr>
</tbody>
</table>

LI AZ3504 - Aircraft Survivability Equipment

UNCLASSIFIED

Army

Page 9 of 16

P-1 Line #31
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** PB 2016 Army

**P-1 Line Item Number / Title:** AZ3504 / Aircraft Survivability Equipment

**Item Number / Title [DODIC]:** AZ3508 / ASE Laser CM

**Date:** February 2015

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Production Rates (Each / Year)</th>
<th>Procurement Leadtime (Months)</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Initial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
<td>Mfg PLT</td>
</tr>
<tr>
<td>1</td>
<td>SSAI - Huntsville, AL</td>
<td>30</td>
<td>125</td>
<td>300</td>
<td>-</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>Various - Various</td>
<td>30</td>
<td>125</td>
<td>300</td>
<td>-</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>UTC Aerospace Systems - Danbury, CT</td>
<td>30</td>
<td>120</td>
<td>240</td>
<td>-</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

*"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999, all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999, all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000, all quantities are shown in billions (rounded to the nearest million).
<table>
<thead>
<tr>
<th>Resource Summary</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>98.596</td>
<td>-</td>
<td>56.163</td>
<td>28.730</td>
<td>-</td>
<td>28.730</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>98.596</td>
<td>-</td>
<td>56.163</td>
<td>28.730</td>
<td>-</td>
<td>28.730</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10

P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment

Item Number / Title [DODIC]: AZ3511 / Radio Frequency CM
<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
<td>Unit Cost ($K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($M)</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
**Exhibit P-5a, Procurement History and Planning: PB 2016 Army**

**Item Number / Title [DODIC]:**
AZ3504 / Aircraft Survivability Equipment

**Item Number / Title [DODIC]:**
AZ3511 / Radio Frequency CM

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Spec Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Kit Procurements(†)</td>
<td>2016</td>
<td>Various / Various</td>
<td>C / FFP</td>
<td>TBD</td>
<td>May 2016</td>
<td>Mar 2017</td>
<td>5</td>
<td>1,266.600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-Kit Procurements(†)</td>
<td>2015</td>
<td>Northrop Grumman / Rolling Meadows, IL</td>
<td>SS / IDIQ</td>
<td>TBD</td>
<td>Jun 2015</td>
<td>Apr 2016</td>
<td>13</td>
<td>1,152.769</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-Kit Procurements(†)</td>
<td>2016</td>
<td>Northrop Grumman / Rolling Meadows, IL</td>
<td>SS / IDIQ</td>
<td>TBD</td>
<td>Jun 2016</td>
<td>Apr 2017</td>
<td>6</td>
<td>1,000.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21

**Remarks:**
FY15 / FY16 B-Kits are for integration purposes
<table>
<thead>
<tr>
<th></th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost Elements</strong> (Units in Each)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>O M F</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C R O #</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SERVICE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QTY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACCEPT PRIOR TO 1 OCT 2014</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BAL DUE AS OF 1 OCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A-Kit Procurements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2016 ARMY</td>
<td>5</td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>2 2015 ARMY</td>
<td>13</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2 2016 ARMY</td>
<td>6</td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td><strong>B-Kit Procurements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 2015 ARMY</td>
<td>13</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2 2016 ARMY</td>
<td>6</td>
<td></td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
Exhibit P-21, Production Schedule: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A / 04 / 10

P-1 Line #31

Item Number / Title [DODIC]:
AZ3504 / Aircraft Survivability Equipment

Item Number / Title:
AZ3511 / Radio Frequency CM

Date: February 2015

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>O   M   C   R   O   #   FY   SERVICE</td>
<td>PROC QTY</td>
<td>ACCEPT PRIOR TO 1 OCT 2016</td>
<td>BAL DUE AS OF 1 OCT</td>
<td>O   N   D   J   F   M   A   M   J   J   A   S   O   N   D   J   F   M   A   M   J   J   A   S   B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C   O   E   A   E   A   P   A   U   U   E   C   O   E   A   E   A   P   A   U   U   E   A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T   V   C   N   B   R   R   Y   N   L   G   P   T   V   C   N   B   R   R   Y   N   L   G   P   L</td>
</tr>
</tbody>
</table>

A-Kit Procurements

| 1   2016 | ARMY   | 5   | -  | 5   | -  | -  | -  | 5   |
| 2   | 2016 | ARMY   | 6   | -  | 6   | -  | -  | -  | 6   |

B-Kit Procurements

| 2   2015 | ARMY   | 13  | 13 | -   | -   | -  | -  | -   |
| 2   2016 | ARMY   | 6   | -  | 6   | -  | -  | -  | 6   |
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 04 / 10  
**P-1 Line Item Number / Title:** AZ3504 / Aircraft Survivability Equipment  
**Item Number / Title [DODIC]:** AZ3511 / Radio Frequency CM  
**Date:** February 2015

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>Production Rates (Each / Year)</th>
<th>Procurement Leadtime (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MSR For 2016</td>
<td>1-8-5 For 2016</td>
</tr>
<tr>
<td>1</td>
<td>Various - Various</td>
<td>30</td>
<td>125</td>
</tr>
<tr>
<td>2</td>
<td>Northrop Grumman - Rolling Meadows, IL</td>
<td>24</td>
<td>125</td>
</tr>
</tbody>
</table>

*"A" in the Delivery Schedule indicates the Contract Award Date.*

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
Description:
The Advanced Threat Infrared Countermeasure System (ATIRCM) is an infrared (IR) countermeasure system that interfaces with the Common Missile Warning System (CMWS) to provide near spherical protection of the host aircraft platform in order to defeat IR threat missiles. The US Army's concept of ATIRCM is part of the Suite of Integrated Infrared Countermeasures (SIIRCM). The core components of the SIIRCM concept are: a Missile Warning System (MWS), expendable countermeasures (flares) and a laser based IR countermeasure (IRCM). The CMWS detects, declares, and initiates IRCM against IR-guided Surface-to-Air Missiles (SAM) or Air-to-Air Missiles (AAM).

The A-Kit for ATIRCM includes mounting hardware, wiring harnesses, and other components necessary to install and interface the mission kit on host aircraft. The ATIRCM B-Kit is the mission kit (laser, optical coupler, infrared jam head, and jam head control unit) required to achieve near spherical coverage for an aircraft.

The ATIRCM program is a post-Milestone C, Acquisition Category (ACAT) 1C program of record fielded on CH-47F aircraft.

The Approved Acquisition Objective (AAO) for ATIRCM is 340 A-Kits and 120 B-Kits.
<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready) :</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ3507</td>
<td>Survivability CM</td>
<td>P-5</td>
</tr>
<tr>
<td>P-5</td>
<td>Exhibit Schedule</td>
<td>Prior Years</td>
</tr>
<tr>
<td>AZ3507 / Survivability CM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- / 50.712</td>
<td>- / 5.700</td>
<td>- / 7.800</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- / 50.712</td>
<td>- / 5.700</td>
<td>- / 7.800</td>
</tr>
</tbody>
</table>

*Title represents 1) the number / title for items; 2) the number / title [DODIC] for ammunition; and/or 3) the number / title (modification type) for modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:
Fiscal Year (FY) 2016 Base Procurement dollars in the amount of $8.917 million funds ATIRCM A-Kit installation, fielding, testing, Jam Code update to counter emerging Man-Portable Air Defense (MANPAD) threats, and support across the CH-47F aircraft fleet to include integration requiring recurring and non-recurring modification work order activities.

The FY16 funding request was reduced by $2.823 million to account for the availability of prior year execution balances.
Exhibit P-5, Cost Analysis: PB 2016 Army

Date: February 2015

<table>
<thead>
<tr>
<th>Appropriation / Budget Activity / Budget Sub Activity:</th>
<th>P-1 Line Item Number / Title:</th>
<th>Item Number / Title [DODIC]:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2031A / 04 / 10</td>
<td>AZ3507 / Survivability CM</td>
<td>AZ3507 / Survivability CM</td>
</tr>
</tbody>
</table>

**ID Code (A=Service Ready, B=Not Service Ready):**

**MDAP/MAIS Code:**

<table>
<thead>
<tr>
<th>Resource Summary</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>50.712</td>
<td>5.700</td>
<td>7.800</td>
<td>8.917</td>
<td>-</td>
<td>8.917</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>50.712</td>
<td>5.700</td>
<td>7.800</td>
<td>8.917</td>
<td>-</td>
<td>8.917</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>50.712</td>
<td>5.700</td>
<td>7.800</td>
<td>8.917</td>
<td>-</td>
<td>8.917</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

**Note:** Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>5.700</td>
<td>7.800</td>
<td>8.917</td>
<td>-</td>
<td>-</td>
<td>8.917</td>
</tr>
</tbody>
</table>

Secondary Distribution

<table>
<thead>
<tr>
<th>Army:</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Obligation Authority</td>
<td>5.700</td>
<td>7.800</td>
<td>8.917</td>
<td>-</td>
<td>8.917</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA

ID Code (A=Service Ready, B=Not Service Ready): AZ3517 / CMWS

Program Elements for Code B Items:

Other Related Program Elements: 0604274A

|------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|-------------|-------|
| Gross/Weapon System Cost ($ in Millions) | 229.451 | 103.021 | 60.401 | 78.348 | - | 78.348 | 42.000 | 38.331 | 33.358 | 19.110 | Continuing
| Less PY Advance Procurement ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
| Net Procurement (P1) ($ in Millions) | 229.451 | 103.021 | 60.401 | 78.348 | - | 78.348 | 42.000 | 38.331 | 33.358 | 19.110 | Continuing
| Plus CY Advance Procurement ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
| Total Obligation Authority ($ in Millions) | 229.451 | 103.021 | 60.401 | 78.348 | - | 78.348 | 42.000 | 38.331 | 33.358 | 19.110 | Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
Flyway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |
Gross/Weapon System Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |

Description:

APO = 1,351

The US Army operational requirements concept for Aviation Infrared (IR) countermeasure systems is known as the Suite of Integrated Infrared Countermeasures (SIIRCM). SIIRCM is an integrated warning and countermeasure system to enhance aircraft survivability against IR-guided threat missile systems. The Common Missile Warning System (CMWS) is a core element of the SIIRCM concept. CMWS is an integrated ultraviolet (UV) missile warning system, with an Improved Countermeasure Dispenser (ICMD) serving as a subsystem to a host aircraft.

The CMWS program is a UV missile warning system that both flare and laser-based countermeasures to defeat incoming IR-seeking missiles and will alert aircrews to the presence of certain incoming unguided munitions. The B-Kit consists of the components which perform the missile detection and aircrew notification, unguided munitions detection and aircrew notification, false alarm rejection, and countermeasure employment/cueing functions of the system. The CMWS Electronic Control Unit (ECU) receives UV missile detection data from Electro-Optic Missile Sensors (EOMS) and sends a missile alert signal to warn aircrews via on-board avionics. Tier 1 threat missiles detected and tracked by the CMWS are subsequently defeated by a combination of missile seeker countermeasures, including decoy flares and IR Laser Jamming (currently ATIRCM equipped CH-47 platform only). In addition, the CMWS ECU receives from the EOMS unguided munitions detection data which is also passed to the aircrew through aural and visual cues. The aircrew then applies the appropriate Tactics, Techniques and Procedures (TTPs) to break contact or engage the enemy with on-ship ordnance. The CMWS Generation 3 (Gen 3) ECU in conjunction with ongoing software development efforts will address outstanding material release conditions to achieve a Full Material Release (FMR) for CMWS and ensure protection against emerging IR-guided missile threats.

The A-Kit for CMWS includes mounting hardware, wiring harnesses, cables, and other components necessary to install and interface the mission kit on host aircraft. The A-Kit ensures the mission kit is functionally and physically operational with a specific host aircraft type.
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA  
10: Ground Support Avionics

**Date:** February 2015

**P-1 Line Item Number / Title:**
AZ3517 / CMWS

**ID Code (A=Service Ready, B=Not Service Ready):**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Base</td>
<td>OCO</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Army</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
<td>42.000</td>
<td>38.331</td>
<td>33.358</td>
<td>19.110</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
<td>42.000</td>
<td>38.331</td>
<td>33.358</td>
<td>19.110</td>
</tr>
</tbody>
</table>

Secondary Distribution

- **Army**
- Total Obligation Authority

**Program Elements for Code B Items:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Base</td>
<td>OCO</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Army</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
<td>42.000</td>
<td>38.331</td>
<td>33.358</td>
<td>19.110</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
<td>42.000</td>
<td>38.331</td>
<td>33.358</td>
<td>19.110</td>
</tr>
</tbody>
</table>

**Other Related Program Elements:** 0604274A

**Secondary Distribution**

- Total Obligation Authority
- Total

**Quantity**

- **Army**
- Total

**Total Obligation Authority**

- **Army**
- Total

**FY 2014**

- 103.021

**FY 2015**

- 60.401

**FY 2016**

- 78.348

**FY 2017**

- 42.000

**FY 2018**

- 38.331

**FY 2019**

- 33.358

**FY 2020**

- 19.110
Justiceification:
Fiscal Year (FY) 2016 Base procurement dollars in the amount of $78.348 million supports CMWS A-Kit installations on rotary wing and fixed wing aircraft such as the UH-60 and C-12, software modifications efforts required to achieve full material release, associated system test and evaluation efforts, and integration with other ASE systems.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.
<table>
<thead>
<tr>
<th>ID Code</th>
<th>MDAP/MAIS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ3517 / CMWS</td>
<td>UNCLASSIFIED</td>
</tr>
</tbody>
</table>

### Resource Summary

<table>
<thead>
<tr>
<th>Procurement Quantity (Units in Each)</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>229.451</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>229.451</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>229.451</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Note

Initial Spares ($ in Millions)

<table>
<thead>
<tr>
<th>Gross/Weapon System Unit Cost ($ in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.

### Prior Years

<table>
<thead>
<tr>
<th>Unit Cost</th>
<th>Qty</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ K)</td>
<td>(Each)</td>
<td>($ M)</td>
</tr>
<tr>
<td>CMWS A-Kit Fixed Wing Installation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMWS A-Kit Rotary Wing Installation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Recurring Prod (Software/Engineer)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Systems Engineering</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Program Management</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Recurring Prod (Software/Engineer)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Systems Test and Evaluation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Support Cost

<table>
<thead>
<tr>
<th>Unit Cost</th>
<th>Qty</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ K)</td>
<td>(Each)</td>
<td>($ M)</td>
</tr>
<tr>
<td>Training</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fielding</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Modifications</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMWS Gen 3 ECU Hardware(1)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Procurement</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Support Cost</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**UNCLASSIFIED**

**Exhibit P-5, Cost Analysis:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 04 / 10

**P-1 Line Item Number / Title:** AZ3517 / CMWS

**Item Number / Title [DODIC]:**

**ID Code (A=Service Ready, B=Not Service Ready):**

**UNCLASSIFIED**

**Date:** February 2015

---

**Page 4 of 9**

---

**LI AZ3517 - CMWS**

---
## Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 04 / 10  
**P-1 Line Item Number / Title:** AZ3517 / CMWS

### ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code:

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Army</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>103.021</td>
<td>60.401</td>
<td>78.348</td>
<td>-</td>
<td>78.348</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
### Exhibit P-5a, Procurement History and Planning: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A/04/10

**P-1 Line Item Number / Title:**
AZ3517 / CMWS

**Item Number / Title [DODIC]:**
AZ3517 / CMWS

**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>O C O</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMWS Gen 3 ECU Hardware(†)</td>
<td>2014</td>
<td></td>
<td>BAE Systems / Nashua, NH</td>
<td>SS / FFP</td>
<td>AMCOM Contracting Command, RSA</td>
<td>May 2014</td>
<td>Feb 2015</td>
<td>216</td>
<td>158.796</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 04 / 10  
**P-1 Line Item Number / Title:** AZ3517 / CMWS  
**Item Number / Title [DODIC]:** AZ3517 / CMWS

**Date:** February 2015

---

#### Cost Elements  
(Units in Each)

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMWS Gen 3 ECU Hardware</td>
<td>1</td>
<td>2014</td>
<td>ARMY</td>
<td>XVIII</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>O</td>
<td>E</td>
<td>A</td>
</tr>
</tbody>
</table>

---

**UNCLASSIFIED**
### Exhibit P-21, Production Schedule: PB 2016 Army

#### Date: February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 04 / 10

**P-1 Line Item Number / Title:**
AZ3517 / CMWS

**Item Number / Title [DODIC]:**
AZ3517 / CMWS

---

#### Cost Elements (Units in Each)

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O</td>
<td>N</td>
<td>D</td>
<td>J</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>O</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td>ME</td>
<td>T</td>
<td>V</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td>M#</td>
<td>FY</td>
<td>SERVICE</td>
<td>PROC QTY</td>
<td>ACCEPT PRIOR TO 1 OCT 2015</td>
</tr>
<tr>
<td>1</td>
<td>2014</td>
<td>ARMY (XVIII)</td>
<td>210</td>
<td>120</td>
</tr>
</tbody>
</table>

---

**CMWS Gen 3 ECU Hardware**

### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 04 / 10

**P-1 Line Item Number / Title:**
AZ3517 / CMWS

**Item Number / Title [DODIC]:**
AZ3517 / CMWS

**Date:** February 2015

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Initial</th>
<th>Procurement Leadtime (Months)</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BAE Systems - Nashua, NH</td>
<td>24</td>
<td>600</td>
<td>1,000</td>
<td>-</td>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

*“A” in the Delivery Schedule indicates the Contract Award Date.*

*Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).*

**Service/Agency Suffixes:**

(XVIII) BASE
### Description:
The AN/AVS-6, Aviator's Night Vision Imaging System (ANVIS), supports the Army's objectives by permitting superior tactical mobility of rotary wing aircraft during darkness and low light conditions. The AN/AVS-6 also supports Fixed Wing Lift permitting loading/unloading and flight during darkness and low light conditions. The AN/AVS-6 is a binocular, helmet-mounted system for Aviation crew members. The AN/AVS-6(V)3 is a night vision goggle that significantly expands the input dynamic range to support operations in conditions that vary from below starlight illumination levels through strong urban lighting situations.

The increased capability of the AN/AVS-6(V)3 yields enhanced mission performance and improved safety of flight, compared to what is now possible using previous AN/AVS-6 systems. The AN/AVS-6(V)3 enhances the survivability, lethality, and tactical mobility for aviators.

The Army Acquisition Objective (AAO) is 16,686.

### Exhibit P-40, Budget Line Item Justification:

- **Appropriation / Budget Activity / Budget Sub Activity:** 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA  30: Other Support
- **P-1 Line Item Number / Title:** AZ3000 / Avionics Support Equipment
- **Date:** February 2015

### Program Elements for Code B Items:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>12,637</td>
<td>845</td>
<td>820</td>
<td>721</td>
<td>-</td>
<td>721</td>
<td>725</td>
<td>712</td>
<td>120</td>
<td>106</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Less FY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

(Initial Spares ($ in Millions), Flyaway Unit Cost ($ in Thousands), Gross/Weapon System Unit Cost ($ in Thousands))

| Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - |
| Flyaway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - |

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>845</td>
<td>820</td>
<td>721</td>
<td>-</td>
<td>721</td>
<td>725</td>
<td>712</td>
<td>120</td>
<td>106</td>
</tr>
</tbody>
</table>
### Justification:

FY 2016 Base procurement dollars, in the amount of $6.937 million, procures 721 AN/AVS-6(V)3 systems for fielding to Active Units.
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:** 2031A / 04 / 30  
**P-1 Line Item Number / Title:** AZ3000 / Avionics Support Equipment

<table>
<thead>
<tr>
<th>Item Number / Title [DODIC]:</th>
<th>K35601 / ANVIS</th>
</tr>
</thead>
</table>

**ID Code (A=Service Ready, B=Not Service Ready): A**

**MDAP/MAIS Code:**

### Prior Years

<table>
<thead>
<tr>
<th>Resource Summary</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>12,637</td>
<td>845</td>
<td>820</td>
<td>721</td>
<td>721</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>93.902</td>
<td>6.809</td>
<td>6.847</td>
<td>6.937</td>
<td>6.937</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | - | - | - | - | - |

**Note:** Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyway Cost</td>
<td></td>
<td>6.800</td>
<td>12,056</td>
<td>81.980</td>
<td>6.809</td>
<td>6.847</td>
</tr>
<tr>
<td>ANVIS(†)</td>
<td></td>
<td>6.511</td>
<td>845</td>
<td>5.502</td>
<td>6.232</td>
<td>5.798</td>
</tr>
<tr>
<td>Engineering Support</td>
<td>-</td>
<td>-</td>
<td>4.122</td>
<td>-</td>
<td>0.514</td>
<td>-</td>
</tr>
<tr>
<td>Project Management Admin</td>
<td>-</td>
<td>-</td>
<td>0.740</td>
<td>-</td>
<td>0.745</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Change Orders</td>
<td>-</td>
<td>-</td>
<td>0.385</td>
<td>-</td>
<td>0.053</td>
<td>-</td>
</tr>
<tr>
<td>Fielding</td>
<td>-</td>
<td>-</td>
<td>1.335</td>
<td>-</td>
<td>0.053</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>93.902</td>
<td>-</td>
<td>6.809</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyway Cost</td>
<td>-</td>
<td>-</td>
<td>93.902</td>
<td>-</td>
<td>6.809</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recurring Cost</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANVIS(†)</td>
<td>6.800</td>
<td>12,056</td>
<td>81.980</td>
<td>6.809</td>
<td>6.847</td>
<td>6.937</td>
</tr>
<tr>
<td>Engineering Support</td>
<td>-</td>
<td>-</td>
<td>4.122</td>
<td>-</td>
<td>0.514</td>
<td>-</td>
</tr>
<tr>
<td>Project Management Admin</td>
<td>-</td>
<td>-</td>
<td>0.740</td>
<td>-</td>
<td>0.745</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Change Orders</td>
<td>-</td>
<td>-</td>
<td>0.385</td>
<td>-</td>
<td>0.053</td>
<td>-</td>
</tr>
<tr>
<td>Fielding</td>
<td>-</td>
<td>-</td>
<td>1.335</td>
<td>-</td>
<td>0.053</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>93.902</td>
<td>-</td>
<td>6.809</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyway Cost</td>
<td>-</td>
<td>-</td>
<td>93.902</td>
<td>-</td>
<td>6.809</td>
<td>-</td>
</tr>
</tbody>
</table>

### Secondary Distribution

<table>
<thead>
<tr>
<th>Secondary Distribution</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>845</td>
<td>820</td>
<td>721</td>
<td>-</td>
<td>721</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>845</td>
<td>820</td>
<td>721</td>
<td>-</td>
<td>721</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a
**Exhibit P-5a, Procurement History and Planning:** PB 2016 Army  
**Date:** February 2015

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>O C O</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANVIS(†)</td>
<td>2015</td>
<td>L-3 / Tempe, AZ</td>
<td>C / IDIQ</td>
<td>ACC APG</td>
<td>Nov 2014</td>
<td>Feb 2015</td>
<td>820</td>
<td>6.723</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANVIS(†)</td>
<td>2016</td>
<td>TBS / TBD</td>
<td>C / IDIQ</td>
<td>ACC/PG</td>
<td>Nov 2015</td>
<td>Feb 2016</td>
<td>721</td>
<td>7.798</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-21

**Remarks:**
Each delivery order made under these contracts is competed among the 2 manufacturers on the basis of best cost, available schedule, and performance. Therefore, a determination of the quantity per manufacturer to be awarded to each is made after reviewing this information at the time of each delivery order.
Exhibit P-21, Production Schedule: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A / 04 / 30

P-1 Line Item Number / Title:
AZ3000 / Avionics Support Equipment

Item Number / Title [DODIC]:
K35601 / ANVIS

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2014</th>
<th>Calendar Year 2014</th>
<th>Fiscal Year 2015</th>
<th>Calendar Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C   O   E   A   E   A   P   A   U   U   E   C   O   E</td>
<td>A   E   A   P   A   U   U   E   A   E   A   P   A   U   U   E</td>
<td>C   O   E   A   E   A   P   A   U   U   E   C   O   E</td>
<td>A   E   A   P   A   U   U   E   A   E   A   P   A   U   U   E</td>
</tr>
</tbody>
</table>

ANVIS

Prior Years Deliveries: 12056

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>PROC QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2013</th>
<th>BAL DUE AS OF 1 OCT 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMY (XX)</td>
<td>845</td>
<td>-</td>
<td>845</td>
</tr>
<tr>
<td>ARMY (XX)</td>
<td>820</td>
<td>-</td>
<td>820</td>
</tr>
<tr>
<td>ARMY (XX)</td>
<td>721</td>
<td>-</td>
<td>721</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MFRD</th>
<th>FY</th>
<th>SERVICE</th>
<th>PROC QTY</th>
<th>ACCEPT PRIOR TO 1 OCT 2013</th>
<th>BAL DUE AS OF 1 OCT 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2014</td>
<td>ARMY (XX)</td>
<td>845</td>
<td>-</td>
<td>845</td>
</tr>
<tr>
<td>1</td>
<td>2015</td>
<td>ARMY (XX)</td>
<td>820</td>
<td>-</td>
<td>820</td>
</tr>
<tr>
<td>2</td>
<td>2016</td>
<td>ARMY (XX)</td>
<td>721</td>
<td>-</td>
<td>721</td>
</tr>
</tbody>
</table>
### Exhibit P-21, Production Schedule: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 04 / 30

**P-1 Line Item Number / Title:**
AZ3000 / Avionics Support Equipment

**Item Number / Title [DODIC]:**
K35601 / ANVIS

**Date:** February 2015

#### Exhibit P-21, Production Schedule

**ANVIS**

**Prior Years Deliveries:** 12056

<table>
<thead>
<tr>
<th>FY</th>
<th>Service</th>
<th>Proc QTY</th>
<th>Accept Prior To 1 Oct 2015</th>
<th>Bal Due As Of 1 Oct</th>
<th>Fiscal Year 2016</th>
<th>Calendar Year 2016</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>ARMY</td>
<td>845</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>ARMY</td>
<td>820</td>
<td>550</td>
<td>270</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>ARMY</td>
<td>721</td>
<td>721</td>
<td>61</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
**Exhibit P-21, Production Schedule:** PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 04 / 30

**P-1 Line Item Number / Title:**
AZ3000 / Avionics Support Equipment

**Item Number / Title [DODIC]:**
K35601 / ANVIS

**Date:** February 2015

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>Production Rates (Each / Month)</th>
<th>Initial</th>
<th>Procurement Leadtime (Months)</th>
<th>Reorder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MSR For 2016</td>
<td>1-8-5 For 2016</td>
<td>MAX For 2016</td>
<td>ALT Prior to Oct 1</td>
</tr>
<tr>
<td>1</td>
<td>L-3 - Tempe, AZ</td>
<td>25</td>
<td>125</td>
<td>250</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>TBS - TBD</td>
<td>25</td>
<td>125</td>
<td>250</td>
<td>4</td>
</tr>
</tbody>
</table>

*"A" in the Delivery Schedule indicates the Contract Award Date.*

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

**Service/Agency Suffixes:**

(XXX) BASE

(XX) BASE

(XXI) BASE
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA

P-1 Line Item Number / Title: AZ3100 / Common Ground Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items:

Other Related Program Elements: 0603801A, 0605830A

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>13,650</td>
<td>5,531</td>
<td>1,012</td>
<td>-</td>
<td>1,012</td>
<td>1,145</td>
<td>1,049</td>
<td>736</td>
<td>514</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,068.890</td>
<td>45.999</td>
<td>29.231</td>
<td>64.867</td>
<td>-</td>
<td>64.867</td>
<td>64.447</td>
<td>71.285</td>
<td>63.008</td>
<td>62.471</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,068.890</td>
<td>45.999</td>
<td>29.231</td>
<td>64.867</td>
<td>-</td>
<td>64.867</td>
<td>64.447</td>
<td>71.285</td>
<td>63.008</td>
<td>62.471</td>
<td>Continuing</td>
<td></td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,068.890</td>
<td>45.999</td>
<td>29.231</td>
<td>64.867</td>
<td>-</td>
<td>64.867</td>
<td>64.447</td>
<td>71.285</td>
<td>63.008</td>
<td>62.471</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

| Initial Spares ($ in Millions) | -           | -       | -       | -            | -           | -             | -       | -       | -       | -       | -           |       |
| Flyaway Unit Cost ($ in Thousands) | -           | -       | -       | -            | -           | -             | -       | -       | -       | -       | -           |       |
| Gross/Weapon System Unit Cost ($ in Thousands) | -           | 3.370   | 5.285   | 64.098       | -           | 64.098        | 56.286  | 67.955  | 85.609  | 121.539 | Continuing  |       |

Description:

Aviation Ground Support Equipment (AGSE) acquires, fields, and sustains aviation equipment within cost, schedule, and performance parameters, allowing the Joint War fighter to carry out peacetime and wartime missions. Systems managed by AGSE through its Life Cycle include Aircraft Cleaning and De-icing System, Aviation Ground Power Unit, Aviation Light Utility Mobile Maintenance Cart, Aviation Intermediate Maintenance (AVIM) Shop Sets, Aviation Unit Maintenance (AVUM) (A92), Modernized Aviation Platforms, Common Aviation Tool System, Digital Flexible Engine Diagnostic System, Digital Aircraft Weighting Scale, Self-propelled Crane Aircraft Maintenance and Positioning (SCAMP II), Unit Maintenance Aerial Recovery Kit, and Non-Destructive Test Equipment. AGSE is critical to the operational readiness of Army Aviation Units. AGSE products provide the finest material and support solutions to Army Aviation.
**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army  
**P-1 Line Item Number / Title:** AZ3100 / Common Ground Equipment  
**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA  
30: Other Support

<table>
<thead>
<tr>
<th>ID Code (A=Service Ready, B=Not Service Ready)</th>
<th>Program Elements for Code B Items</th>
<th>Other Related Program Elements: 0603801A, 0605830A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
<td><strong>Exhibits</strong></td>
<td><strong>ID CD</strong></td>
</tr>
<tr>
<td><strong>Title Schedule</strong></td>
<td><strong>Exhibits</strong></td>
<td><strong>Quantity / Total Cost (Each) / ($ M)</strong></td>
</tr>
<tr>
<td><strong>Prior Years</strong></td>
<td><strong>FY 2014</strong></td>
<td><strong>FY 2015</strong></td>
</tr>
<tr>
<td><strong>FY 2016 Base</strong></td>
<td><strong>FY 2016 OCO</strong></td>
<td><strong>FY 2016 Total</strong></td>
</tr>
<tr>
<td>AZ3520 / AVIATION GROUND SUPPORT EQUIPMENT</td>
<td>P-5</td>
<td>- / 1,068.890</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13,650 / 45.999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,531 / 29.231</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,012 / 64.867</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- / -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,012 / 64.867</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td></td>
<td>- / -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,012 / 64.867</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**

FY 2016 Base procurement dollars in the amount of $64.867 million supports and procures ground support equipment which supports the operational readiness of all Army aviation field units operating AH-64, UH-60, CH-47, OH-58D and other Army aircraft. AGSE provides a means to correct safety-of-flight discrepancies which endanger both life and property utilizing currently fielded test equipment. The Aircraft Cleaning and De-icing System provides aviation maintenance personnel with the capability to clean external and internal aircraft surfaces, aircraft engine flushing, and to conduct aircraft de-icing. The Self-propelled Crane Aircraft Maintenance and Positioning II provides lifting capabilities ranging from simple scheduled maintenance lifting on the flight line and other improved Aviation maintenance areas, to maintenance lifting required during contact maintenance and Downed Aircraft Recovery Team operations in unimproved environments. Digital Flexible Engine Diagnostic Systems provide Army Aviation maintainers with the capability to test rotary-wing engines off-wing after major repairs eliminating the risk of damaging airframes in the case of engine failures during test. Non-Destructive Test Equipment provides Army Aviation Maintainers with the capability to inspect aircraft components and structures for defects, corrosion, or foreign objects without complete disassembly or removal from the aircraft. The Aviation Light Utility Mobile Maintenance Cart will enhance mission performance of current forces by enhancing flexibility and maintainability of maintenance operations on the airfield and forward operating base. The Unit Maintenance Aerial Recover Kit provides capabilities to quickly rig disabled or crash damaged aircraft for aerial evacuation using standardized recovery procedures. The Modernized Maintenance Platforms provides a stable working platform for Army rotorcraft maintenance activities and enhances the occupational safety environment for maintainers. The Aviation Intermediate Maintenance Shop Set complex provides Class 7 shop sets in new or refurbished expandable International Standardization Organization shelters.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.
## Exhibit P-5, Cost Analysis: PB 2016 Army

### Resource Summary

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>13,650</td>
<td>5,531</td>
<td>1,012</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,068.890</td>
<td>45.999</td>
<td>29.231</td>
<td>64.867</td>
<td>-</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,068.890</td>
<td>45.999</td>
<td>29.231</td>
<td>64.867</td>
<td>-</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,068.890</td>
<td>45.999</td>
<td>29.231</td>
<td>64.867</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

<table>
<thead>
<tr>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aviation Cleaning</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deicing System</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Avn Intermediate Maint Shop Sets</td>
<td>-</td>
<td>-</td>
<td>727.200</td>
<td>5</td>
<td>3.638</td>
</tr>
<tr>
<td>Modernized Maintenance Platforms</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Common Aviation Tool System</td>
<td>-</td>
<td>-</td>
<td>1.385</td>
<td>13,493</td>
<td>18.869</td>
</tr>
<tr>
<td>Digital Flexible Engine Diagnostics Sys</td>
<td>-</td>
<td>-</td>
<td>5,451,000</td>
<td>2</td>
<td>10,902</td>
</tr>
<tr>
<td>Digital Aircraft Weighing Scale</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SCAMP II Flight Line Type 1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SCAMP II Expeditionary Type 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unit Maint Aerial Recovery Kit</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.
## Exhibit P-5, Cost Analysis: PB 2016 Army

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 04 / 30

### P-1 Line Item Number / Title:
AZ3100 / Common Ground Equipment

### Item Number / Title [DODIC]:
AZ3520 / AVIATION GROUND SUPPORT EQUIPMENT

### MDAP/MAIS Code:

ID Code (A=Service Ready, B=Not Service Ready):

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Prior Years

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
<td>Unit Cost ($ M)</td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
</tr>
<tr>
<td>Non-Destructive Test Equipment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Program Management Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>1,068,890</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>1,068,890</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>-</td>
<td>-</td>
<td>1,068,890</td>
<td>3,370</td>
<td>13,650</td>
</tr>
</tbody>
</table>

### Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td>13,650</td>
<td>2,433</td>
<td>445</td>
<td>-</td>
<td>445</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>45,999</td>
<td>11,737</td>
<td>31,268</td>
<td>-</td>
<td>31,268</td>
</tr>
<tr>
<td>ANG</td>
<td>-</td>
<td>2,876</td>
<td>526</td>
<td>-</td>
<td>526</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>16,225</td>
<td>30,331</td>
<td>-</td>
<td>30,331</td>
</tr>
<tr>
<td>AR</td>
<td>-</td>
<td>222</td>
<td>41</td>
<td>-</td>
<td>41</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>1,269</td>
<td>3,288</td>
<td>-</td>
<td>3,288</td>
</tr>
<tr>
<td>Total: Secondary Distribution</td>
<td>13,650</td>
<td>5,531</td>
<td>1,012</td>
<td>-</td>
<td>1,012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>45,999</td>
<td>29,231</td>
<td>64,867</td>
<td>-</td>
<td>64,867</td>
</tr>
</tbody>
</table>
**Description:**
Air Warrior survival and mission equipment improves the combat effectiveness of Army aircrew members. Components include Clothing and Individual Equipment; a Microclimate Cooling System; an Aircrew Integrated Helmet System; laser eye protection and chemical-biological protection; tailored body armor; overwater survival gear; survival, escape, and evasion tools; the Electronic Data Manager (EDM) which provides a digital moving map w/tactical overlays and an interface to Blue Force Tracking (BFT) in the form of a digital kneeboard; the Encrypted Aircraft Wireless Intercom System (EAWIS); a Portable Helicopter Oxygen Delivery System (PHODS) worn by the crewmember to safely conduct high altitude missions; a grab-and-go Survival Kit, Ready Access, Modular (SKRAM); and a Communication Enhancement/ Protection System (CEPS) that provides an external audio capability without the need to remove the flight helmet. The phased Air Warrior replacement is the Air Soldier System (Air SS), a systems-level approach to significantly reduce weight and bulk and enhance safety, survivability, mission duration, and situational awareness. The Air SS enhances situational awareness and safety through an improved helmet mounted display with three dimensional symbology for flight in Degraded Visual Environments (DVE). Select components of the Air Warrior program will be modified through Engineering Change Proposals (ECP) and integrated into the Air Soldier baseline. The Personnel Recovery Support System (PRSS) program includes the platform modification, integration, procurement, and fielding of interoperability systems to provide a significantly enhanced ability to respond to occurrences of isolated, missing, detained, or captured Soldiers.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.
**Justification:**

FY2016 Base procurement dollars in the amount of $44.085 million supports production and fielding of Air SS capability consisting of improved flight helmets; a Mission Display Module for UH-60L aviators; improved lightweight body armor; improved environmental protective clothing and personal survival equipment; and a day/night helmet-mounted display with head tracking and three dimensional DVE flight symbology for UH-60 and CH-47 aviators. These funds also procure Air Soldier platform-mounted components necessary for airframe interface with the Air Soldier; the integration of Air Warrior ECPs; and installation of airframe integration kits. FY2015 and beyond does not contain any Personnel Recovery Support System funding in this budget line.

Funding procures equipment and materiel to support a balanced investment strategy in support of the Army Acquisition Objective.

The FY16 funding request was reduced by $3.010 million to account for the availability of prior year execution balances.
### Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Prior Years

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flyaway Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRSS Platform Modifications</td>
<td>854.000</td>
<td>2</td>
<td>1.708</td>
<td>2.481</td>
<td></td>
</tr>
<tr>
<td>Air Warrior ECAPs Supporting Air SS Rqmts</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Air SS Soldier Kits(^{1})</td>
<td>-</td>
<td>-</td>
<td>10.542</td>
<td>3.774</td>
<td>1.329</td>
</tr>
<tr>
<td>Air SS Airframe Kits(^{1})</td>
<td>-</td>
<td>-</td>
<td>0.741</td>
<td>1.677</td>
<td>1.347</td>
</tr>
<tr>
<td>Airframe Kit Install</td>
<td>-</td>
<td>-</td>
<td>3.925</td>
<td>1.500</td>
<td>1.699</td>
</tr>
<tr>
<td>Manual</td>
<td>-</td>
<td>-</td>
<td>13.593</td>
<td>0.279</td>
<td>-</td>
</tr>
<tr>
<td>New Equipment Training</td>
<td>-</td>
<td>-</td>
<td>1.416</td>
<td>0.302</td>
<td>-</td>
</tr>
<tr>
<td>Initial Spares</td>
<td>-</td>
<td>-</td>
<td>5.311</td>
<td>0.318</td>
<td>-</td>
</tr>
<tr>
<td>Support Equipment</td>
<td>-</td>
<td>-</td>
<td>8.072</td>
<td>0.236</td>
<td>-</td>
</tr>
<tr>
<td>Systems Test and Evaluation</td>
<td>-</td>
<td>-</td>
<td>13.460</td>
<td>0.956</td>
<td>-</td>
</tr>
<tr>
<td>Nonrecurring Engineering (NRE)</td>
<td>-</td>
<td>-</td>
<td>26.166</td>
<td>2.603</td>
<td>0.485</td>
</tr>
<tr>
<td>PRSS Interoperability Engineering</td>
<td>-</td>
<td>-</td>
<td>57.970</td>
<td>1.400</td>
<td>-</td>
</tr>
<tr>
<td>Engineering Charges</td>
<td>-</td>
<td>-</td>
<td>6.301</td>
<td>0.415</td>
<td>-</td>
</tr>
<tr>
<td>Systems Integration Engineering</td>
<td>-</td>
<td>-</td>
<td>5.214</td>
<td>0.318</td>
<td>-</td>
</tr>
</tbody>
</table>

### Total Cost

- Total: $44.085
- FY 2016 OCO: $11.207
- FY 2016 Total: $217

**Resource Summary**

<table>
<thead>
<tr>
<th>Procurement Quantity (Units in Each)</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross/Weapon System Cost ($ in Millions)</strong></td>
<td>156.755</td>
<td>45.841</td>
<td>48.081</td>
<td>44.085</td>
<td>-</td>
<td>44.085</td>
</tr>
<tr>
<td><strong>Less PY Advance Procurement ($ in Millions)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Net Procurement (P1) ($ in Millions)</strong></td>
<td>156.755</td>
<td>45.841</td>
<td>48.081</td>
<td>44.085</td>
<td>-</td>
<td>44.085</td>
</tr>
<tr>
<td><strong>Total Obligation Authority ($ in Millions)</strong></td>
<td>156.755</td>
<td>45.841</td>
<td>48.081</td>
<td>44.085</td>
<td>-</td>
<td>44.085</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)
### Exhibit P-5, Cost Analysis: PB 2016 Army

**Appropriation / Budget Activity / Budget Sub Activity:**
2031A / 04 / 30

**P-1 Line Item Number / Title:**
AZ3110 / Aircrew Integrated Systems

**Item Number / Title [DODIC]:**
AZ3110 / Aircrew Integrated Systems

**ID Code** (A=Service Ready, B=Not Service Ready):

**MDAP/MAIS Code:**

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost</td>
<td>Qty (Each)</td>
<td>Total Cost ($)</td>
<td>Unit Cost</td>
<td>Qty (Each)</td>
<td>Total Cost ($)</td>
</tr>
<tr>
<td>Program Management &amp; Matrix Support</td>
<td>-</td>
<td>-</td>
<td>10,395</td>
<td>-</td>
<td>-</td>
<td>5,438</td>
</tr>
<tr>
<td>Total Package Fielding</td>
<td>0.437</td>
<td>2,740</td>
<td>1,197</td>
<td>-</td>
<td>-</td>
<td>0.058</td>
</tr>
<tr>
<td>Contract Logistics Support</td>
<td>0.469</td>
<td>2,742</td>
<td>1,287</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal: Recurring Cost</td>
<td>-</td>
<td>-</td>
<td>156,755</td>
<td>-</td>
<td>-</td>
<td>45,841</td>
</tr>
<tr>
<td>Subtotal: Flyaway Cost</td>
<td>-</td>
<td>-</td>
<td>156,755</td>
<td>-</td>
<td>-</td>
<td>45,841</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>-</td>
<td>-</td>
<td>156,755</td>
<td>-</td>
<td>-</td>
<td>45,841</td>
</tr>
</tbody>
</table>

(†) indicates the presence of a P-5a

LI AZ3110 - Aircrew Integrated Systems

UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED

Army

Page 4 of 8

P-1 Line #36

345
<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>FY</th>
<th>Contractor and Location</th>
<th>Method/Type or Funding Vehicle</th>
<th>Location of PCO</th>
<th>Award Date</th>
<th>Date of First Delivery</th>
<th>Qty (Each)</th>
<th>Unit Cost ($ K)</th>
<th>Specs Avail Now?</th>
<th>Date Revision Available</th>
<th>RFP Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air SS Soldier Kits(1)</td>
<td>2014</td>
<td>Various / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Aug 2015</td>
<td>Dec 2015</td>
<td>448</td>
<td>10.542</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air SS Soldier Kits(1)</td>
<td>2015</td>
<td>Various / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Aug 2015</td>
<td>Dec 2015</td>
<td>1,677</td>
<td>11.077</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air SS Soldier Kits(1)</td>
<td>2016</td>
<td>Various / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Jan 2016</td>
<td>May 2016</td>
<td>1,347</td>
<td>11.207</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air SS Airframe Kits(1)</td>
<td>2014</td>
<td>Various / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Aug 2015</td>
<td>Mar 2016</td>
<td>185</td>
<td>62.027</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air SS Airframe Kits(1)</td>
<td>2015</td>
<td>Various / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Aug 2015</td>
<td>Mar 2016</td>
<td>168</td>
<td>62.667</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air SS Airframe Kits(1)</td>
<td>2016</td>
<td>Various / TBD</td>
<td>C / FFP</td>
<td>Redstone Arsenal, AL</td>
<td>Jan 2016</td>
<td>Jul 2016</td>
<td>217</td>
<td>62.728</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) indicates the presence of a P-21

Remarks:
Unit Cost changes across the years reflect the different mix of subsystem components procured each year.
$2.481 million for PRSS Platform Modifications shown in FY14 was used for subject matter expert (SME) support in lieu of platform modifications.
**Exhibit P-21, Production Schedule: PB 2016 Army**

### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 04 / 30

### P-1 Line Item Number / Title:
AZ3110 / Aircrew Integrated Systems

### Item Number / Title [DODIC]:
AZ3110 / Aircrew Integrated Systems

#### Cost Elements (Units in Each)

### Exhibit P-21, Production Schedule: PB 2016 Army

#### Appropriation / Budget Activity / Budget Sub Activity:
2031A / 04 / 30

#### P-1 Line Item Number / Title:
AZ3110 / Aircrew Integrated Systems

#### Item Number / Title [DODIC]:
AZ3110 / Aircrew Integrated Systems

#### Date:
February 2015

![Cost Elements (Units in Each)](image)

<table>
<thead>
<tr>
<th>Cost Elements (Units in Each)</th>
<th>Fiscal Year 2017</th>
<th>Calendar Year 2017</th>
<th>Fiscal Year 2018</th>
<th>Calendar Year 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>M</td>
<td>C</td>
<td>R</td>
<td>FY</td>
</tr>
<tr>
<td>O</td>
<td>M</td>
<td>C</td>
<td>R</td>
<td>FY</td>
</tr>
<tr>
<td>Air SS Soldier Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2014 ARMY &amp; 446 &amp; 376 &amp; 72 &amp; 38 &amp; 34 &amp; -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2015 ARMY &amp; 1,677 &amp; 1,405 &amp; 272 &amp; 142 &amp; 130 &amp; -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2016 ARMY &amp; 1,347 &amp; 670 &amp; 677 &amp; 134 &amp; 134 &amp; 137 &amp; 138 &amp; -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air SS Airframe Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 2014 ARMY &amp; 185 &amp; 124 &amp; 61 &amp; 20 &amp; 20 &amp; 21 &amp; -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 2015 ARMY &amp; 168 &amp; 112 &amp; 56 &amp; 18 &amp; 18 &amp; 20 &amp; -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 2016 ARMY &amp; 217 &amp; 60 &amp; 157 &amp; 20 &amp; 20 &amp; 30 &amp; 40 &amp; 47 &amp; -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Exhibit P-21, Production Schedule:** PB 2016 Army  
**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A / 04 / 30

**P-1 Line Item Number / Title:**  
AZ3110 / Aircrew Integrated Systems

**Item Number / Title [DODIC]:**  
AZ3110 / Aircrew Integrated Systems

<table>
<thead>
<tr>
<th>MFR Ref #</th>
<th>MFR Name - Location</th>
<th>MSR For 2016</th>
<th>1-8-5 For 2016</th>
<th>MAX For 2016</th>
<th>Production Rates (Each / Month)</th>
<th>Procurement Leadtime (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Various - TBD</td>
<td>50</td>
<td>400</td>
<td>1,000</td>
<td>Initial</td>
<td>Reorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Various - TBD</td>
<td>50</td>
<td>400</td>
<td>1,000</td>
<td>Initial</td>
<td>Reorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ALT Prior to Oct 1</td>
<td>ALT After Oct 1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>19</td>
</tr>
</tbody>
</table>

*A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).
Funds described herein support the acquisition of modernized tactical and fixed base Air Traffic Control (ATC) systems that will enable safety of aircraft operations. ATC systems are required to achieve or maintain compliance with civil, military, domestic and international air traffic control mandates and combat identification requirements. Efforts funded include the Tactical Airspace Integration System (TAIS), Air Traffic Navigation Integration and Coordination System (ATNAVICS), the Mobile Tower System (MOTS), the Tactical Terminal Control System (TTCS), the ATC Common Simulator (ACS), and Fixed Base systems, such as the DoD Advanced Automation System (DAAS), the Digital Airport Surveillance Radar (DASR), and other navigational control aids to include the Army Airfield Automation System (AAAS), National Air Space (NAS) voice switch and the radio replacement program.

TAIS, the Airspace Management System of the Army Mission Command System, performs Air Traffic Services (ATS) and Airspace Control (AC) at brigade and theater commands. TAIS Airspace Workstation (AWS) provides for AC planning and execution at the Brigade Combat Team and above. It is the Army's link to the Theater Battle Management Core System for Joint Airspace Management. TAIS and TAIS AWS provide an automated AC and ATS capability for current requirements and Battle Command interfaces. ATNAVICS provides all-weather instrument flight capabilities to include terminal, and radar precision approach and landing services to all Army, Joint, and Allied aircraft. The TTCS is a mobile ATC communications system that provides initial ATS at remote landing sites and drop zones. It enables secure ground-to-air and ground-to-ground communications between Army aircraft, other services and Allied aircraft, and ground stations. TTCS also provides aircraft separation and ground control capabilities, a meteorological measuring system for basic weather information, and precision location capability. MOTS provides ATC and aircraft separation for both air and ground operations at tactical or remote landing sites. It replaces the 1970's era 7A mobile tower system. MOTS capabilities include weather information, secure and anti-jam communications across all required frequency bands and ranges, and precision location. ATNAVICS, TAIS, TTCS, and MOTS serve as effective air traffic risk management tools for aviation safety during night, inclement weather, and combat operations. The ACS facilitates training and continued operator proficiency by incorporating the functionality of ATNAVICS, MOTS, and TAIS into a single simulator system. The ACS provides the ability to simulate start to finish ATC scenarios or any specific phase of ATC operations. Simulated ATC scenarios can include tower, radar and air traffic services operations with precise simulation of take-off/landing under both Visual Flight Rules (VFR) and Instrument Flight Rules (IFR), radar simulation for surveillance and precision approach, flight-following, airspace control and airspace deconfliction. Fixed Base ATC requirements (DAAS, DASR, AAAS, radio replacement program) will be met through a vast array of new technology solutions and pre-planned product improvement (P3I) of these systems, resulting in highly reliable and safe ATC systems in accordance with the Joint DoD/Federal Aviation Administration (FAA) program to modernize the NAS and the FAA Next Gen program.
### Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

**Appropriation / Budget Activity / Budget Sub Activity:**
- 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
- 30: Other Support

**P-1 Line Item Number / Title:**
- AA0050 / Air Traffic Control

#### Program Elements for Code B Items:

<table>
<thead>
<tr>
<th>ID Code</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements: 0604633A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Army</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>6</td>
<td>10</td>
<td>14</td>
<td>-</td>
<td>14</td>
<td>35</td>
<td>36</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>94.192</td>
<td>98.314</td>
<td>72.277</td>
<td>-</td>
<td>72.277</td>
<td>96.825</td>
<td>114.541</td>
<td>99.819</td>
<td>64.178</td>
</tr>
<tr>
<td><strong>ANG</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>27.836</td>
<td>22.268</td>
<td>-</td>
<td>22.268</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>AR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>-</td>
<td>1.082</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total: Secondary Distribution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>6</td>
<td>14</td>
<td>21</td>
<td>-</td>
<td>21</td>
<td>35</td>
<td>36</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Total Obligation Authority</td>
<td>94.192</td>
<td>127.232</td>
<td>94.545</td>
<td>-</td>
<td>94.545</td>
<td>96.825</td>
<td>114.541</td>
<td>99.819</td>
<td>64.178</td>
</tr>
</tbody>
</table>
**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army  
**Appropriation / Budget Activity / Budget Sub Activity:**  
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA  
AA0050 / Air Traffic Control  
30: Other Support  

**ID Code** (A=Service Ready, B=Not Service Ready) : 

<table>
<thead>
<tr>
<th>Exhibits Schedule</th>
<th>ID Code</th>
<th>Program Elements for Code B Items:</th>
<th>Other Related Program Elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title*</td>
<td>Exhibits</td>
<td>Prior Years</td>
<td>FY 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
<td>Quantity / Total Cost (Each) / ($ M)</td>
</tr>
<tr>
<td>AA0050 / Air Traffic Control</td>
<td>P-5</td>
<td>- / 1,154.588</td>
<td>14 / 127.232</td>
</tr>
<tr>
<td>Total Gross/Weapon System Cost</td>
<td>- / 1,154.588</td>
<td>14 / 127.232</td>
<td>21 / 94.545</td>
</tr>
</tbody>
</table>

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.*

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**
FY 2016 Base procurement dollars in the amount of $94.545 million provides for the acquisition of MOTS units and supports tactical and fixed base ATC systems including pre-planned product improvements (P3I). Funds for tactical ATC systems provide for upgrades and modifications to TAIS, ATNAVICS, TTCS, and MOTS. ATNAVICS upgrades will address interoperability and networking capabilities with the integration of the Tactical Operations Center Intercommunications System (TOCNET) and the ATC Network. ATNAVICS will also improve radio communications with the acquisition and installation of PRC-117G radios, and will upgrade Advanced Signal Data Processors and state of the art computers. These modifications will also allow the ATNAVICS to transmit critical air picture information to TAIS. TAIS funding provides for the implementation of interfaces to ATNAVICS and the Expanded Airtrack Sensor Integrator, TAIS AWS hardware/software refresh, and upgrade of the Mobile Server Unit. TTCS funding provides for the production and retrofit of a Universal Rack that accommodates vehicle uparmor requirements, provides initial issue spares, the integration of Blue Force Tracker 2 capabilities, and the initiation of efforts to integrate TOCNET. These modifications to tactical ATC systems ensure Army ATC and Army airspace command and control systems are capable of supporting the path ahead to the Future Force. Funding also procures MOTS units, along with engineering services and P3I for the procured units. ACS funding provides for the acquisition and installation of simulator hardware and software, as well as non-recurring engineering services required to integrate the ACS, and initial training. Fixed Base system funding replaces obsolete legacy transmitters and receivers with the Global Air-Traffic Management compatible CM-300 and AN/PRC-117G radios. Fixed Base funded efforts also include P3I for DAAS and DASR, upgrade to the NAS voice switch, AAAS hardware and software upgrades to accommodate changes to the Digital Automatic Terminal Information Service and the USAF Weather System Joint Environmental Toolkit. Fixed Base equipment quantities and configurations are tailored to meet specific site requirements, resulting in varying unit costs. Funding ensures compliance and interoperability between the Army, Joint, and FAA systems operating in the National Airspace System (NAS).

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.
<table>
<thead>
<tr>
<th>Resource Summary</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>6</td>
<td>14</td>
<td>21</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>1,154.588</td>
<td>94.192</td>
<td>127.232</td>
<td>94.545</td>
<td>-</td>
<td>94.545</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>1,154.588</td>
<td>94.192</td>
<td>127.232</td>
<td>94.545</td>
<td>-</td>
<td>94.545</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>1,154.588</td>
<td>94.192</td>
<td>127.232</td>
<td>94.545</td>
<td>-</td>
<td>94.545</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares ($ in Millions) | - | - | - | - | - | - |
Gross/Weapon System Unit Cost ($ in Thousands) | - | 15,698.667 | 9,088.000 | 4,502.143 | - | 4,502.143 |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

### Cost Elements

#### Unit Cost

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Flyaway Cost**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Recurring Cost**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Fixed Base Precision Approach Radar**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**DoD Advanced Automation System (DAAS)**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Digital Airport Surveillance Radar (DASR)**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Tactical Airspace Integration Sys (TAIS)**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Air Traffic Navigation and Integration**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Navigational Control Aids**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Tactical Terminal Control System (TTCS)**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Mobile Tower System (MOTS)**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**ATC Common Simulator (ACS)**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Subtotal: Recurring Cost**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>

**Subtotal: Flyaway Cost**

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Unit Cost ($K)</th>
<th>Qty (Each)</th>
<th>Total Cost ($M)</th>
</tr>
</thead>
</table>
Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30
P-1 Line Item Number / Title: AA0050 / Air Traffic Control
Item Number / Title [DODIC]: AA0050 / Air Traffic Control

ID Code (A=Service Ready, B=Not Service Ready):
MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost</td>
<td>Qty</td>
<td>Unit Cost</td>
<td>Qty</td>
<td>Total Cost</td>
<td>Unit Cost</td>
</tr>
<tr>
<td>Gross/Weapon System Cost</td>
<td>1,154.588</td>
<td>6</td>
<td>94.192</td>
<td>14</td>
<td>9,088.000</td>
<td>127.232</td>
</tr>
</tbody>
</table>

Secondary Distribution

<table>
<thead>
<tr>
<th></th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>6</td>
<td>10</td>
<td>14</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>ANG</td>
<td>-</td>
<td>3</td>
<td>7</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>AR</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total:</td>
<td>6</td>
<td>14</td>
<td>21</td>
<td>-</td>
<td>21</td>
</tr>
</tbody>
</table>

Total Obligation Authority

|        | 94.192  | 127.232 | 94.545  | -    | 94.545  |

Date: February 2015
Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
30: Other Support

P-1 Line Item Number / Title: AZ3300 / Industrial Facilities

ID Code (A=Service Ready, B=Not Service Ready):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Quantity (Units in Each)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross/Weapon System Cost ($ in Millions)</td>
<td>182.084</td>
<td>1.615</td>
<td>1.203</td>
<td>1.207</td>
<td>-</td>
<td>1.207</td>
<td>1.228</td>
<td>1.408</td>
<td>1.441</td>
<td>1.468</td>
<td>-</td>
<td>191.654</td>
</tr>
<tr>
<td>Less PY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Procurement (P1) ($ in Millions)</td>
<td>182.084</td>
<td>1.615</td>
<td>1.203</td>
<td>1.207</td>
<td>-</td>
<td>1.207</td>
<td>1.228</td>
<td>1.408</td>
<td>1.441</td>
<td>1.468</td>
<td>-</td>
<td>191.654</td>
</tr>
<tr>
<td>Plus CY Advance Procurement ($ in Millions)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Obligation Authority ($ in Millions)</td>
<td>182.084</td>
<td>1.615</td>
<td>1.203</td>
<td>1.207</td>
<td>-</td>
<td>1.207</td>
<td>1.228</td>
<td>1.408</td>
<td>1.441</td>
<td>1.468</td>
<td>-</td>
<td>191.654</td>
</tr>
</tbody>
</table>

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

- Initial Spares ($ in Millions) | - | - | - | - | - | - | - | - | - | - | - | - |
- Flyaway Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - | - |
- Gross/Weapon System Unit Cost ($ in Thousands) | - | - | - | - | - | - | - | - | - | - | - | - |

Description:
This program provides funding to the Army Test and Evaluation Command (ATEC) to establish, modernize, expand or replace test facilities used in production testing of Aircraft and Aircraft components. It sustains Army production test capabilities through upgrade and replacement of instrumentation and equipment that is technologically and/or economically obsolete. Modernization of test instrumentation and equipment provides increased automation and efficiencies, improved data quality and quantity and cost avoidances to Army Program Managers. Programmed funding will be used to upgrade or replace production test instrumentation and equipment at the Redstone Test Center (RTC), Huntsville, AL and Yuma Test Center (YTC), Yuma Proving Ground, AZ.
### FY 2016 Base procurement dollars in the amount of $1.207 million support the following:

At RTC, procures new data acquisition equipment used to collect aircraft structural integrity data during extreme flight maneuvers to help predict catastrophic structure failures and provide life cycle fatigue estimates of aircraft components. At YTC, procures replacement aircraft instrumentation for the time-stamping, on-board recording and telemetering of data from standard data buses and sensors; and on-board recorders and telemetry equipment that can meet the environment and data speeds needed for production base aviation programs.

Funding also procures high speed, high definition video cameras mounted on ground based Kineto Tracking Mounts used for video tracking of air armament systems and guided munitions, required for detailed engineering analysis of weapon system deployment and malfunction analysis.

The majority of the instrumentation being upgraded or replaced is obsolete and has met or exceeded its economic life. This instrumentation is required to ensure complete and accurate test data is collected and safety and environmental hazards are minimized. Benefits of this project include increased test efficiencies and decreased costs and risks to Army Program Managers.

All COMPO 1 Active
<table>
<thead>
<tr>
<th>Item Number / Title [DODIC]</th>
<th>Prior Years</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016 Base</th>
<th>FY 2016 OCO</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ID CD</td>
<td>MDA/MAIS Code</td>
<td>Unit Cost ($ K)</td>
<td>Qty (Each)</td>
<td>Total Cost ($ M)</td>
<td>Unit Cost ($ K)</td>
</tr>
<tr>
<td>AA7700 / PROVISION OF INDUSTRIAL FACILITIES</td>
<td>- -</td>
<td>182,084</td>
<td>- -</td>
<td>1.615</td>
<td>- -</td>
<td>1.203</td>
</tr>
<tr>
<td>Subtotal: PROVISION OF INDUSTRIAL FACILITIES</td>
<td>- -</td>
<td>182,084</td>
<td>- -</td>
<td>1.615</td>
<td>- -</td>
<td>1.203</td>
</tr>
<tr>
<td>Total</td>
<td>- -</td>
<td>182,084</td>
<td>- -</td>
<td>1.615</td>
<td>- -</td>
<td>1.203</td>
</tr>
</tbody>
</table>
**Description:**
The M261 19-tube analog launcher and the M260 7-tube analog launcher are used to fire 2.75 Inch Hydra 70 Rockets from the following platforms: AH-64 Apache, Kiowa Warrior, MH-60L Blackhawk and AH-6J Helicopters. The analog launchers are non-repairable, yet durable enough to withstand at least 16 rocket firings per tube before being discarded. The empty weight of the M260 analog launcher is approximately 35 pounds and the empty weight of the M261 analog launcher is approximately 82 pounds. The analog launcher permits fuze-timing selections from the cockpit and will launch rockets using either the MK40 or the MK66 motors.

**Justification:**
FY2016 procurement dollars in the amount of $3.102 million supports the procurement of 219 M261 19-tube analog launcher for the AH-64 Apache, MH-60L Blackhawk, and AH-6J helicopters. Procurement replaces disposable launchers as a result of annual rocket firings for training and replenishes the limited issuable stockage that has been depleted below levels acceptable to support training and war reserve requirements of Active Army, Special Operations Forces and Reserve Components usage.

The procurement quantity decreases shown in FY15-20 are due to M260 analog launchers no longer being procured for the OH-58D Kiowa Warrior due to the Aviation Restructure Initiative.
"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."