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| Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force | | | | | | | | | | Date: February 2015 | | |
|---|-------------|---------|---------|--------------|--|---------------|---------|---------|---------|---------------------|------------------|------------|
| Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD) | | | | | R-1 Program Element (Number/Name) PE 0603260F I Intelligence Advanced Development | | | | | | | |
| COST (\$ in Millions) | Prior Years | FY 2014 | FY 2015 | FY 2016 Base | FY 2016 OCO | FY 2016 Total | FY 2017 | FY 2018 | FY 2019 | FY 2020 | Cost To Complete | Total Cost |
| Total Program Element | - | 0.977 | - | - | - | - | - | - | - | - | - | 0.977 |
| 652053: National Air Intel Center | - | 0.977 | - | - | - | - | - | - | - | - | - | 0.977 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

Note

In FY 2015, PE 0603260F (BA5), Intelligence Advanced Development (IAD), Project Number 652053, National Air Intelligence Center efforts were transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64537A, Intelligence Analysis Capabilities (IAC), in order to properly align efforts, increase management efficiency, and reduce administrative actions.

A. Mission Description and Budget Item Justification

Intelligence Advanced Development (IAD) develops and demonstrates technology required to support warfighter needs for timely all source intelligence information. IAD supports global awareness, consistent battlespace knowledge, precision information, and the execution of time critical missions. IAD projects provide better on-time information to the warfighter using new and existing data sources, streamlining data analysis, reducing footprint required, and extending life of sensors in place and enhancing performance. The Air Force Research Lab, Rome Research Site, Information and Intelligence Exploitation Division (AFRL/RIE), works directly with users, employing evolutionary approaches and integrating finished modules directly in the field. The programs are oriented toward specific shortfalls and deficiencies as documented by the Major Commands (MAJCOMS), unified commands, and intelligence organizations in their mission and functional area plans. This PE expedites technology transition from the laboratory to operational users via rapid prototyping, focusing on technology insertion correcting AF intelligence deficiencies at the tactical and operational levels. This PE bridges the technology transition from Advanced Technology Demonstrations (ATDs) and Integrated Technology Thrust Programs (ITTPs) to current/new systems, and also supports the associated Defense Technology Objectives (DTOs). IAD may also reallocate existing resources to support out-of-cycle new/updated warfighter requirements.

Requirements for this PE are gathered and prioritized by the 25th Air Force (25 AF). Development of new/improved capabilities to meet the requirements is managed by AFRL/RIE. Prototype products, usually in the form of software, once evaluated by the users, are transferred to the operational environment.

This Program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

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| B. Program Change Summary (\$ in Millions) | | FY 2014 | FY 2015 | FY 2016 Base | FY 2016 OCO | FY 2016 Total |
| Previous President's Budget | | 0.977 | - | - | - | - |
| Current President's Budget | | 0.977 | - | - | - | - |
| Total Adjustments | | - | - | - | - | - |
| • Congressional General Reductions | | - | - | | | |
| • Congressional Directed Reductions | | - | - | | | |
| • Congressional Rescissions | | - | - | | | |
| • Congressional Adds | | - | - | | | |
| • Congressional Directed Transfers | | - | - | | | |
| • Reprogrammings | | - | - | | | |
| • SBIR/STTR Transfer | | - | - | | | |
| • Other Adjustments | | - | - | - | - | - |
| C. Accomplishments/Planned Programs (\$ in Millions) | | | | FY 2014 | FY 2015 | FY 2016 |
| Title: Project Theo | | | | 0.350 | - | - |
| Description: Continues development of prototype to query and retrieve information across all available National Air & Space Intelligence Center (NASIC) Corporate Object Repositories (COR), metadata and their supported features; thereby assisting the Intel Analyst in identifying intelligence gaps and allowing the analyst to nominate intel collection in those areas. | | | | | | |
| FY 2014 Accomplishments: Released prototype 1.3 to operational community for evaluation and initiated final combination of Project Theo's components. Released Final prototype. | | | | | | |
| Title: High Performance Aero Vehicle Modeler (HP-AVM) | | | | 0.266 | - | - |
| Description: Continues development of the HP-AVM tool, with the focus on modeling previously unknown airframes, that provides detailed engineering assessments of threat aircraft performance and characteristics. | | | | | | |
| FY 2014 Accomplishments: Released prototype 1.2 and initiated and released final prototype of HP-AVM. | | | | | | |
| Title: Space, Air, and Terrestrial Modeling & Simulation Initiative | | | | 0.361 | - | - |
| Description: Initiates SATM&S to add a space communications modeling capability to the previously fielded terrestrial communications focused TEL-SCOPE tool. This effort will complete modeling of an adversary's total C4ISR system and assist nomination of terrestrial and space targets. | | | | | | |
| FY 2014 Accomplishments: | | | | | | |

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| Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)</i> | | | | | R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i> | | | | | | | |
| C. Accomplishments/Planned Programs (\$ in Millions) | | | | | | | | | | FY 2014 | FY 2015 | FY 2016 |
| Initiated development of prototype. | | | | | | | | | | | | |
| Accomplishments/Planned Programs Subtotals | | | | | | | | | | 0.977 | - | - |
| D. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | | |
| Line Item | FY 2014 | FY 2015 | FY 2016 Base | FY 2016 OCO | FY 2016 Total | FY 2017 | FY 2018 | FY 2019 | FY 2020 | Cost To Complete | Total Cost | |
| • RDTE: BA04: 0603260F: <i>Intelligence Advanced Development</i> | - | 5.408 | 5.032 | - | 5.032 | 5.654 | 5.691 | 5.663 | 5.764 | Continuing | Continuing | |
| Remarks | | | | | | | | | | | | |
| E. Acquisition Strategy | | | | | | | | | | | | |
| Requirements of new/upgraded intelligence analysis tools are identified and prioritized by the 25th Air Force (25 AF). Development of capabilities to meet these requirements is managed by the AF Research Laboratory (Rome Research Site). Prototype products (usually software), once evaluated by the users, are fielded in incremental capability spirals. All major contracts within this project are awarded after full and open competition. | | | | | | | | | | | | |
| F. Performance Metrics | | | | | | | | | | | | |
| Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission. | | | | | | | | | | | | |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force | | | | | | | | | | | | Date: February 2015 | | | |
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| Appropriation/Budget Activity 3600 / 5 | | | | | | R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i> | | | | Project (Number/Name) 652053 / <i>National Air Intel Center</i> | | | | | |
| Product Development (\$ in Millions) | | | | FY 2014 | | FY 2015 | | FY 2016 Base | | FY 2016 OCO | | FY 2016 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Project Theo | C/CPFF | Northrop Grumman Mission Systems, General Dynamics, and Janya : Beavercreek, OH | - | 0.316 | Nov 2013 | - | | - | | - | | - | - | 0.316 | 1.372 |
| High Performance Aero Vehicle Modeler (HP-AVM) | C/CPFF | Northrop Grumman Mission Systems : Beavercreek, OH | - | 0.231 | Nov 2013 | - | | - | | - | | - | - | 0.231 | 1.112 |
| Space Air & Terrestrial Modeling &Simulation Initiative | C/CPFF | Northrop Grumman Mission Systems : Beavercreek, OH | - | 0.325 | Jun 2014 | - | | - | | - | | - | - | 0.325 | - |
| Subtotal | | | - | 0.872 | | - | | - | | - | | - | - | 0.872 | - |
| Support (\$ in Millions) | | | | FY 2014 | | FY 2015 | | FY 2016 Base | | FY 2016 OCO | | FY 2016 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Subtotal | | | - | - | | - | | - | | - | | - | - | - | - |
| Test and Evaluation (\$ in Millions) | | | | FY 2014 | | FY 2015 | | FY 2016 Base | | FY 2016 OCO | | FY 2016 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Subtotal | | | - | - | | - | | - | | - | | - | - | - | - |
| Management Services (\$ in Millions) | | | | FY 2014 | | FY 2015 | | FY 2016 Base | | FY 2016 OCO | | FY 2016 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| PMA | Various | AFRL - Information Directorate : Rome, NY | - | 0.105 | Oct 2013 | - | | - | | - | | - | - | 0.105 | - |

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| Appropriation/Budget Activity 3600 / 5 | | | | | | R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i> | | | | Project (Number/Name) 652053 / <i>National Air Intel Center</i> | | | | |

| Management Services (\$ in Millions) | | | | FY 2014 | | FY 2015 | | FY 2016 Base | | FY 2016 OCO | | FY 2016 Total | | | |
|--------------------------------------|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Subtotal | | | - | 0.105 | | - | | - | | - | | - | - | 0.105 | - |

| | Prior Years | FY 2014 | FY 2015 | FY 2016 Base | FY 2016 OCO | FY 2016 Total | Cost To Complete | Total Cost | Target Value of Contract |
|----------------------------|-------------|---------|---------|--------------|-------------|---------------|------------------|------------|--------------------------|
| Project Cost Totals | - | 0.977 | - | - | - | - | - | 0.977 | - |

Remarks

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| | | | | | |
|---|--|--|----------------------------|--|---|
| Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force | | | Date: February 2015 | | |
| Appropriation/Budget Activity 3600 / 5 | | R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i> | | | Project (Number/Name) 652053 / <i>National Air Intel Center</i> |

| | FY 2014 | | | | FY 2015 | | | | FY 2016 | | | | FY 2017 | | | | FY 2018 | | | | FY 2019 | | | | FY 2020 | | | |
|--|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Electronic Warfare (EW) Flagging Development/Prototype | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Theo Development/Prototype | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HP-AVM Development/Prototype | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Space, Air, and Terrestrial M&S Development/Prototype | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force | | | Date: February 2015 |
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Schedule Details

| Events | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Electronic Warfare (EW) Flagging Development/Prototype | 1 | 2014 | 2 | 2014 |
| Project Theo Development/Prototype | 1 | 2014 | 4 | 2014 |
| HP-AVM Development/Prototype | 1 | 2014 | 4 | 2014 |
| Space, Air, and Terrestrial M&S Development/Prototype | 3 | 2014 | 4 | 2014 |