Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview (All Capital Assets)

| 1. Date of Submission: | 9/10/2007 |
|--|---|
| 2. Agency: | Department of Transportation |
| 3. Bureau: | Federal Aviation Administration |
| 4. Name of this Capital Asset: | FAAXX294: ATC Beacon Interrogator Replacement (ATCBI- 6) |
| 5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.) | 021-12-01-20-01-1020-00 |
| 6. What kind of investment will this be in FY2009? (Please NOTE: Investments moving to O&M in FY2009, with Planning/Acquisition activities prior to FY2009 should not select O&M. These investments should indicate their current status.) | Mixed Life Cycle |
| What was the first budget year this investment was submitted to OMB? | FY2001 or earlier |

8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap:

ATCBI-6 is a secondary surveillance radar, a "beacon" radar, that provides aircraft location data to FAA air traffic controllers for separation assurance, traffic management, navigation and flight information in the en route airspace.

DoD and DHS personnel also use ATCBI-6 data. They use the secure Identify Friend or Foe (IFF) function, which allows them to identify friendly aircraft from enemy. The configuration identified as the ATCBI-6 Mode-4 variant or ATCBI-6M includes the IFF function. The Mode-4 variant is a DoD requirement.

ATCBI-6 addresses performance gap generated by the ATCBI-4/5 systems that have reached the end of their 20-year life cycles. ATCBI-6 supports the goal, Greater Capacity and aligns with Strategic Management Process (SMP) Objective, Optimize Service Availability, by reducing aircraft delays and radar service operating costs. The legacy, analog systems are not sustainable due to parts obsolescence; high failure rates and maintenance costs; and long repair times and are not compatible with the new automation systems. The ATCBI-6 will improve system performance with the use of selective interrogation and monopulse technology which enables direct interrogation of a single aircraft and increases the detection of aircraft, improves the accuracy of reported aircraft location and reduces occurrences of false detections (reports of aircraft when there are none). Implementation of the ATCBI-6 is consistent with the end-state architecture outlined in NAS-SS-1000 and will ensure service/data is available through the transition to FAA's use of GPS-based technology.

Original ATCBI-6 baseline included 127 ATCBI-6 systems to replace 124 ATCBI-4/5 and to provide 3 systems for prototype evaluation, testing, training, logistics and operational engineering support. The 2007 rebaseline (anticipate approval Sept. 2007) adjusts the program cost and schedule to account for increase of scope to 137 systems, which include additional sites from agency cost share agreements, congressional earmarks, and other government programs; prior year funding reductions; lack of funding for facility establishments in FY04 and FY05; and lower acquisition and implementation costs. The 2007 rebaseline covers the completion of all DME activities.

Completed 137 system deliveries from vendor 7/31/06; commissioned 89 sites as of 8/16/07. BY09 plan: last system delivery to site and 122 sites commissioned. BY10 plan: commission last system.

| 9. Did the Agency's Executive/Investment Committee approve this request? | Yes |
|---|------------------------|
| a. If "yes," what was the date of this approval? | 9/30/2007 |
| 10. Did the Project Manager review this Exhibit? | Yes |
| 11. Contact information of Project Manager? | |
| Name | Maxwell, Pamela |
| Phone Number | Redacted |
| Email | pamela.maxwell@faa.gov |
| a. What is the current FAC-P/PM certification level of the project/program manager? | TBD |
| 12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project? | No |
| a. Will this investment include electronic assets (including computers)? | Yes |

| b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only) | No |
|--|---|
| 1. If "yes," is an ESPC or UESC being used to help fund this investment? | |
| 2. If "yes," will this investment meet sustainable design principles? | |
| 3. If "yes," is it designed to be 30% more energy efficient than relevant code? | |
| 13. Does this investment directly support one of the PMA initiatives? | No |
| If "yes," check all that apply: | |
| a. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? (e.g. If E-Gov is selected, is it an approved shared service provider or the managing partner?) | |
| 14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit www.whitehouse.gov/omb/part.) | Yes |
| a. If "yes," does this investment address a weakness found during a PART review? | Yes |
| b. If "yes," what is the name of the PARTed program? | FAA Air Traffic Services |
| c. If "yes," what rating did the PART receive? | Adequate |
| 15. Is this investment for information technology? | Yes |
| If the answer to Question 15 is "Yes," complete questions 16 16-23. | -23 below. If the answer is "No," do not answer questions |
| For information technology investments only: | |
| 16. What is the level of the IT Project? (per CIO Council PM Guidance) | Level 3 |
| 17. What project management qualifications does the Project Manager have? (per CIO Council PM Guidance) | (1) Project manager has been validated as qualified for this investment |
| 18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4 - FY 2007 agency high risk report (per OMB Memorandum M-05-23) | No |
| 19. Is this a financial management system? | No |
| a. If "yes," does this investment address a FFMIA compliance area? | No |
| 1. If "yes," which compliance area: | |
| 2. If "no," what does it address? | |
| b. If "yes," please identify the system name(s) and syste systems inventory update required by Circular A-11 section 5 | em acronym(s) as reported in the most recent financial 52 |
| 20. What is the percentage breakout for the total FY2009 fur | nding request for the following? (This should total 100%) |
| Hardware | 28.000000 |
| Software | 0.00000 |
| Services | 69.000000 |
| Other | 3.000000 |
| 21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities? | N/A |
| 22. Contact information of individual responsible for privacy | related questions: |
| Name | Mauney, Carla |
| Phone Number | Redacted |
| Title | Privacy Officer |

carla.mauney@faa.gov

Yes

E-mail

23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval?

Question 24 must be answered by all Investments:

24. Does this investment directly support one of the GAO Yes High Risk Areas?

Section B: Summary of Spending (All Capital Assets)

1. Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated "Government FTE Cost," and should be excluded from the amounts shown for "Planning," "Full Acquisition," and "Operation/Maintenance." The "TOTAL" estimated annual cost of the investment is the sum of costs for "Planning," "Full Acquisition," and "Operation/Maintenance." For Federal buildings and facilities, life-cycle costs should include long term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

| Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS) (Estimates for BV : 1 and bound are represent and do not represent budget decisions) | | | | | | | | | | | | |
|---|----------|--------------|------------|-------------|------------|--------------|----------|----------|----------|--|--|--|
| PY-1 and PY 2007 CY 2008 BY 2009 BY+1 2010 BY+2 2011 BY+3 2012 BY+4 and beyond Total | | | | | | | | | | | | |
| Planning: | 0.97 | 0 | 0 | 0 | Redacted | Redacted | Redacted | Redacted | Redacted | | | |
| Acquisition: | 210.11 | 13.4 | 14.907 | 9.572 | Redacted | Redacted | Redacted | Redacted | Redacted | | | |
| Subtotal Planning & Acquisition: | 211.08 | 13.4 | 14.907 | 9.572 | Redacted | Redacted | Redacted | Redacted | Redacted | | | |
| Operations & Maintenance: | 3.275 | 2.727 | 3.296 | 3.864 | Redacted | Redacted | Redacted | Redacted | Redacted | | | |
| TOTAL: | 214.355 | 16.127 | 18.203 | 13.436 | Redacted | Redacted | Redacted | Redacted | Redacted | | | |
| | Governme | nt FTE Costs | should not | be included | in the amo | unts provide | d above. | 8 | | | | |
| Government FTE Costs | 8.652 | 4.43 | 4.299 | 4.048 | Redacted | Redacted | Redacted | Redacted | Redacted | | | |
| Number of FTE represented by Costs: | 65 | 39 | 34 | 31 | Redacted | Redacted | Redacted | Redacted | Redacted | | | |

Note: For the multi-agency investments, this table should include all funding (both managing partner and partner agencies). Government FTE Costs should not be included as part of the TOTAL represented.

2. Will this project require the agency to hire additional No FTE's?

a. If "yes," How many and in what year?

3. If the summary of spending has changed from the FY2008 President's budget request, briefly explain those changes: Redacted

Section C: Acquisition/Contract Strategy (All Capital Assets

1. Complete the table for all (including all non-Federal) contracts and/or task orders currently in place or planned for this investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

| Contracts/T | ontracts/Task Orders Table: * Costs in millions | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|--|---|---|--|-------------------------------------|--|--|---|------------|--|---|---|
| Contract or Task Order Number | Type of Contract/ Task Order | Has the contract been awarded (Y/N) | If so what is the date of the award? If not, what is the planned award date? | Start date of Contract/ Task Order | End date of Contract/ Task Order | Total Value of Contract/ Task Order (\$M) | Is this an Interagenc y Acquisition ? (Y/N) | Is it performanc e based? (Y/N) | Competitive ly awarded? (Y/N) | What, if any, alternative financing option is being used? (ESPC, UESC, EUL, N/A) | Is EVM in the contract? (Y/N) | Does the contract include the required security & privacy clauses? (Y/N) | Name of CO | CO Contact information (phone/em ail) | Contracting Officer Certificatio n Level (Level 1,2,3,N/A) | If N/A, has the agency determined the CO assigned has the competenci es and skills necessary to support this acquisition ? (Y/N) |
| Redacted | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

Prime Mission Equipment 1st Article & Production - Firm Fixed Price (FFP), Contract (DTFA01-98-C-00058): Competitively awarded the production of the prime mission equipment and firm fixed prices for the associated line items were incorporated into the contract with firm delivery requirements and were not subject to earned value reporting. However, the first article program systems were subject to EVM, approximately 10% of the FFP value.

Prime Mission Implementation - Cost Plus Fixed Fee Level of Effort (CPFFLOE), Contract (DTFA01-98-C-00058): Task orders for implementation services are contracted for on a level of effort basis and are subject to program management reviews and monthly reporting that include cost, schedule, and performance updates for inclusion in the ATCBI-6 program level EVM reporting. Large scope cost reimbursable system development task orders were subject to formal EVM reporting, approximately 11% of the CPFF value.

In August 2005, the FAA conducted an EVM assessment based on the FAA EVM compliance criteria aligned with the ANSI EIA-748 Standard for EVM and the NDIA ANSI EIA 748 Intent Guide, January 2005 edition. As a result, the ATCBI-6 program is implementing a Mid-Program EVM approach that does not require added EVM information from the contractors beyond what is currently available. The intent of this approach is to provide useful EVM performance data to the program and executive management in the near term without significant program cost investment. This approach was recommended for programs with remaining effort that is mostly deployment with a consistent site deployment schedule template. The ATCBI-6 EVM implementation includes costs for contractors and FAA FTEs. ATCBI-6 EVM reporting is structured around remaining work and will commence after the 2007 rebaseline approval. After reporting has begun, the ATCBI-6 EVM program will be reviewed for ANSI/EIA compliance using the FAA approved Red/Yellow/Green criteria.

3. Do the contracts ensure Section 508 compliance?

N/A

7/31/2007

The ATCBI-6 program is exempt from the FAA's Section 508

1194.3(f)). In addition, Section 508 didn't become enforceable until 06/21/01. The FAA is not required to retrofit its electronic information technology and the ATCBI-6 system procurement occurred in 1998, therefore is exempt from Section 508

requirements because the ATCBI-6 EIT is located in spaces frequented only by service personnel for maintenance, repair or

occasional monitoring of equipment (36 CFR Section

a. Explain why:

4. Is there an acquisition plan which has been approved in Yes accordance with agency requirements?

a. If "yes," what is the date?

b. If "no," will an acquisition plan be developed?

1. If "no," briefly explain why:

Section D: Performance Information (All Capital Assets)

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures (indicators) must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment, or general applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use the following table to report performance goals and measures for the major investment and use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for each of the four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov. The table can be extended to include performance measures for years beyond FY 2009.

| Performance Information Table | | | | | | | | | | |
|-------------------------------|-----------------------------------|---------------------------------|-------------------------|---------------------------------|--|---|---|---|--|--|
| Fiscal Year | Strategic Goal(s) Supported | Measurement Area | Measurement Category | Measurement Grouping | Measurement Indicator | Baseline | Target | Actual Results | | |
| 2005 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled en- route ATCBI-4/5 outages | 3.8 delayed aircraft per year due to unscheduled ATCBI-4/5/6 outages | Aircraft delays caused by unscheduled outages: ATCBI- 6 = 0, ATCBI-5 = 5 | | |
| 2005 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage | En route ATCBI- 4/5 average per site MTBO (unscheduled) = | En route ATCBI- 4/5/6 average per site MTBO (unscheduled) = | Average per site MTBO (unscheduled) = 8,655 hrs for en | | |

Friday, January 25, 2008 - 10:57 AM Page 5 of 18

| Fiscal Year | Strategic Goal(s) Supported | Measurement Area | Measurement Category | Measurement Grouping | Measurement Indicator | Baseline | Target | Actual Results |
|-------------|-----------------------------------|---------------------------------|--------------------------------|--|--|--|--|---|
| | | | | | (MTBO) | 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | 7,775 hrs | route ATCBI- 4/5/6. |
| 2005 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | Mean time to restore = 6.62 hours | 6.54 hours mean time to restore (15 minute prorated improvement) | ATCBI-6 MTTR in FY05 = 5.16 hours |
| 2005 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FY03 ATCBI-4/5 baseline data) | En route ATCBI- 4/5/6 average per site repair costs (total requisition costs) = \$5,510 | En route ATCBI- 4/5 average per site repair costs (total requisition costs) in FY05 = \$6,285. ATCBI- 6 average per site repair costs (total requisition costs) in FY05 = \$2,244. |
| 2005 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | CD-2 average per site repair costs (total requisition costs) = \$5,110 | CD-2 average per site repair costs (total requisition costs) in FY05 = \$4,360 |
| 2006 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled en- route ATCBI-4/5 outages | 3.5 delayed aircraft per year due to unscheduled outages | Reduced yearly aircraft delays caused by unscheduled outages to 0. ATCBI-6 = 0, ATCBI-5 = 0 |
| 2006 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | En route ATCBI- 4/5/6 average per site MTBO (unscheduled) = 8,095 hrs | Increased average per site MTBO (unscheduled) to 10,298 hrs for en route ATCBI- 4/5/6 |
| 2006 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | Mean time to restore = 6.62 hours | 6.49 hours mean time to restore (15 minute prorated improvement) | Reduced MTTR to 5.00 hrs at sites with ATCBI-6. MTTR at sites with legacy ATCBI- 4/5 increased to 20.70 hrs, increasing the en route ATCBI- 4/5/6 MTTR to 11.24 hrs. Planned improvement to the baseline assumed legacy MTTR of 6.62 hrs. |
| 2006 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FY03 ATCBI-4/5 baseline data) | En route ATCBI- 4/5/6 average per site repair costs (total requisition costs) = \$5,140 | Reduced per site repair costs to \$711 (\$652 in 2003) at sites w/ATCBI-6. Repair costs at sites w/legacy ATCBI-4/5 increased to \$21,202 (\$19,442 in 2003\$), increasing the en route ATCBI- 4/5/6 average per site repair costs to \$13,467 (\$12,349 in 2003] |
| 2006 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from | CD-2 average per site repair costs (total requisition costs) = \$4,825 | Reduced CD-2 average per site repair costs (total requisition costs) in FY06 to |

| erformance Information Table | | | | | | | | | |
|------------------------------|-----------------------------------|---------------------------------|--------------------------------|--|--|--|--|---|--|
| Fiscal Year | Strategic Goal(s) Supported | Measurement Area | Measurement Category | Measurement Grouping | Measurement Indicator | Baseline | Target | Actual Results | |
| | | | | | | FY03 CD-2 baseline data) | | \$4,166 | |
| 2007 | | Customer Results | Customer Benefit | Customer Complaints | | | | | |
| 2007 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled outages | Reduce aircraft delays due to unscheduled ATCBI outages to 2.8 delayed aircraft per year at sites with ATCBI-6 commissioned in FY07 and prior | Data for actual FY07 results will be available in 2nd qtr of FY08 and reported in the FY10 Exhibit | |
| 2007 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | Increase en route ATCBI average per site MTBO (unscheduled) to 8,745 hrs at sites with ATCBI-6 commissioned in FY07 and prior | Data for actual FY07 results will be available in 2nd qtr of FY08 and reported in the FY10 Exhibit | |
| 2007 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | En route ATCBI- 4/5 Mean time to restore = 6.62 hours (from FY03 en route ATCBI-4/5 baseline data) | Reduce en route ATCBI mean time to restore to 6.00 hrs at sites with ATCBI-6 commissioned in FY07 and prior | Data for actual FY07 results will be available in 2nd qtr of FY08 and reported in the FY10 Exhibit | |
| 2007 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FV03 ATCBI-4/5 baseline data) | Reduce average per site repair cost to \$4,947 (in BYO6 \$) at sites with ATCBI-6 commissioned in FYO7 and prior | Data for actual FY07 results will be available in 2nd qtr of FY08 and reported in the FY10 Exhibit | |
| 2007 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | Cummulative total of 20 CD-2s removed from the NAS for yearly cost savings of \$113,560 | Data for actual FY07 results will be available in 2nd qtr of FY08 and reported in the FY10 Exhibit | |
| 2008 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled outages | Maintain aircraft delays due to unscheduled ATCBI outages at 2.8 delayed aircraft per year at sites with ATCBI-6 commissioned in FY08 and prior | Data for actual FY08 results will be available in 2nd qtr of FY09 and reported in the FY11 Exhibit | |
| 2008 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI average per site MTBO (unscheduled) at 8,745 hrs at sites with ATCBI-6 commissioned in FY08 and prior | Data for actual FY08 results will be available in 2nd qtr of FY09 and reported in the FY11 Exhibit | |
| 2008 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | En route ATCBI- 4/5 Mean time to restore = 6.62 hours (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI mean time to restore at 6.00 hrs at sites with ATCBI-6 commissioned in FY08 and prior | Data for actual FY08 results will be available in 2nd qtr of FY09 and reported in the FY11 Exhibit | |
| 2008 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FY03 ATCBI-4/5 baseline data) | Maintain average per site repair cost at \$4,947 (in BYO6 \$) at sites with ATCBI-6 commissioned in FYO8 and prior | Data for actual FY08 results will be available in 2nd qtr of FY09 and reported in the FY11 Exhibit | |

Friday, January 25, 2008 - 10:57 AM Page 7 of 18

| Performance In | formation Table | 9 | | | | | | |
|----------------|-----------------------------------|---------------------------------|--------------------------------|--|--|--|--|---|
| Fiscal Year | Strategic Goal(s) Supported | Measurement Area | Measurement Category | Measurement Grouping | Measurement Indicator | Baseline | Target | Actual Results |
| 2008 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | Cummulative total of 20 CD-2s removed from the NAS for yearly cost savings of \$113,560 | Data for actual FY08 results will be available in 2nd qtr of FY09 and reported in the FY11 Exhibit |
| 2009 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled outages | Maintain aircraft delays due to unscheduled ATCBI outages at 2.8 delayed aircraft per year at sites with ATCBI-6 commissioned in FY09 and prior | Data for actual FY09 results will be available in 2nd qtr of FY10 and reported in the FY12 Exhibit |
| 2009 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI average per site MTBO (unscheduled) at 8,745 hrs at sites with ATCBI-6 commissioned in FY09 and prior | Data for actual FY09 results will be available in 2nd qtr of FY10 and reported in the FY12 Exhibit |
| 2009 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | En route ATCBI- 4/5 Mean time to restore = 6.62 hours (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI mean time to restore at 6.00 hrs at sites with ATCBI-6 commissioned in FY09 and prior | Data for actual FY09 results will be available in 2nd qtr of FY10 and reported in the FY12 Exhibit |
| 2009 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FY03 ATCBI-4/5 baseline data) | Maintain average per site repair cost at \$4,947 (in BYO6 \$) at sites with ATCBI-6 commissioned in FYO9 and prior | Data for actual FY09 results will be available in 2nd qtr of FY10 and reported in the FY12 Exhibit |
| 2009 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | Cummulative total of 20 CD-2s removed from the NAS for yearly cost savings of \$113,560 | Data for actual FY09 results will be available in 2nd qtr of FY10 and reported in the FY12 Exhibit |
| 2010 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled outages | Maintain aircraft delays due to unscheduled ATCBI outages at 2.8 delayed aircraft per year at sites with ATCBI-6 commissioned in FY10 and prior | Data for actual FY10 results will be available in 2nd qtr of FY11 |
| 2010 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI average per site MTBO (unscheduled) at 8,745 hrs at sites with ATCBI-6 commissioned in FY10 and prior | Data for actual FY10 results will be available in 2nd qtr of FY11 |
| 2010 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | En route ATCBI- 4/5 Mean time to restore = 6.62 hours (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI mean time to restore at 6.00 hrs at sites with ATCBI-6 commissioned in FY10 and prior | Data for actual FY10 results will be available in 2nd qtr of FY11 |
| 2010 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FY03 | Maintain average per site repair cost at \$4,947 (in BY06 \$) at sites with ATCBI-6 | Data for actual FY10 results will be available in 2nd qtr of FY11 |

| Performance Ir | Stratogia | : | | 1 | i | | [| |
|----------------|----------------------|---------------------------------|--------------------------------|--|--|--|--|--|
| Fiscal Year | Goal(s) Supported | Measurement Area | Measurement Category | Measurement Grouping | Measurement Indicator | Baseline | Target | Actual Results |
| | | | | | | ATCBI-4/5 baseline data) | commissioned in FY10 and prior | |
| 2010 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | Cummulative total of 22 CD-2s removed from the NAS for yearly cost savings of \$124,916 | Data for actual FY10 results will be available in 2nd qtr of FY11 |
| 2011 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled outages | Maintain aircraft delays due to unscheduled ATCBI outages at 2.8 delayed aircraft per year at sites with ATCBI-6 commissioned in FY11 and prior | Data for actual FY11 results will be available in 2nd qtr of FY12 |
| 2011 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI average per site MTBO (unscheduled) at 8,745 hrs at sites with ATCBI-6 commissioned in FY11 and prior | Data for actual FY11 results will be available in 2nd qtr of FY12 |
| 2011 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | En route ATCBI- 4/5 Mean time to restore = 6.62 hours (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI mean time to restore at 6.00 hrs at sites with ATCBI-6 commissioned in FY11 and prior | Data for actual FY11 results will be available in 2nd qtr of FY12 |
| 2011 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FV03 ATCBI-4/5 baseline data) | Maintain average per site repair cost at \$4,947 (in BYO6 \$) at sites with ATCBI-6 commissioned in FY11 and prior | Data for actual FY11 results will be available in 2nd qtr of FY12 |
| 2011 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | Cummulative total of 22 CD-2s removed from the NAS for yearly cost savings of \$124,916 | Data for actual FY11 results will be available in 2nd qtr of FY12 |
| 2012 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled outages | Maintain aircraft delays due to unscheduled ATCBI outages at 2.8 delayed aircraft per year at sites with ATCBI-6 commissioned in FY12 and prior | Data for actual FY12 results will be available in 2nd qtr of FY13 |
| 2012 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI average per site MTBO (unscheduled) at 8,745 hrs at sites with ATCBI-6 commissioned in FY12 and prior | Data for actual FY12 results will be available in 2nd qtr of FY13 |
| 2012 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | En route ATCBI- 4/5 Mean time to restore = 6.62 hours (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI mean time to restore at 6.00 hrs at sites with ATCBI-6 commissioned in FY12 and prior | Data for actual FY12 results will be available in 2nd qtr of FY13 |
| 2012 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition | Maintain average per site repair cost at \$4,947 (in BY06 \$) at | Data for actual FY12 results will be available in 2nd qtr of FY13 |

Friday, January 25, 2008 - 10:57 AM Page 9 of 18

| errormance Information Table | | | | | | | | | | | |
|------------------------------|-----------------------------------|---------------------------------|--------------------------------|--|--|--|--|--|--|--|--|
| Fiscal Year | Strategic Goal(s) Supported | Measurement Area | Measurement Category | Measurement Grouping | Measurement Indicator | Baseline | Target | Actual Results | | | |
| | | | | | | costs) = \$7,345 (from FY03 ATCBI-4/5 baseline data) | sites with ATCBI-6 commissioned in FY12 and prior | | | | |
| 2012 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | Cummulative total of 22 CD-2s removed from the NAS for yearly cost savings of \$124,916 | Data for actual FY12 results will be available in 2nd qtr of FY13 | | | |
| 2013 | Mobility | Customer Results | Customer Benefit | Customer Impact or Burden | Reduce aircraft delays due to unscheduled equipment outage | 4.7 delayed aircraft per year due to unscheduled outages | Maintain aircraft delays due to unscheduled ATCBI outages at 2.8 delayed aircraft per year at sites with ATCBI-6 commissioned in FY13 and prior | Data for actual FY13 results will be available in 2nd qtr of FY14 | | | |
| 2013 | Mobility | Mission and Business Results | Transportation | Air Transportation | Increase en route beacon Mean Time Between Outage (MTBO) | En route ATCBI- 4/5 average per site MTBO (unscheduled) = 6,479 hrs (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI average per site MTBO (unscheduled) at 8,745 hrs at sites with ATCBI-6 commissioned in FY13 and prior | Data for actual FY13 results will be available in 2nd qtr of FY14 | | | |
| 2013 | Mobility | Processes and Activities | Productivity and Efficiency | Efficiency | Reduce en route beacon Mean Time to Restore (MTTR) | En route ATCBI- 4/5 Mean time to restore = 6.62 hours (from FY03 en route ATCBI-4/5 baseline data) | Maintain en route ATCBI mean time to restore at 6.00 hrs at sites with ATCBI-6 commissioned in FY13 and prior | Data for actual FY13 results will be available in 2nd qtr of FY14 | | | |
| 2013 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduce en route beacon repair costs | En route ATCBI- 4/5 average per site repair costs (total requisition costs) = \$7,345 (from FY03 ATCBI-4/5 baseline data) | Maintain average per site repair cost at \$4,947 (in BYO6 \$) at sites with ATCBI-6 commissioned in FY13 and prior | Data for actual FY13 results will be available in 2nd qtr of FY14 | | | |
| 2013 | Mobility | Technology | Financial (Technology) | Operations and Maintenance Costs | Reduced CD-2 repair costs | CD-2 average per site repair costs (total requisition costs) = \$5,678 (from FY03 CD-2 baseline data) | Cummulative total of 22 CD-2s removed from the NAS for yearly cost savings of \$124,916 | Data for actual FY13 results will be available in 2nd qtr of FY14 | | | |

Section E: Security and Privacy (IT Capital Assets only)

In order to successfully address this area of the business case, each question below must be answered at the system/application level, not at a program or agency level. Systems supporting this investment on the planning and operational systems security tables should match the systems on the privacy table below. Systems on the Operational Security Table must be included on your agency FISMA system inventory and should be easily referenced in the inventory (i.e., should use the same name or identifier).

For existing Mixed-Life Cycle investments where enhancement, development, and/or modernization is planned, include the investment in both the "Systems in Planning" table (Table 3) and the "Operational Systems" table (Table 4). Systems which are already operational, but have enhancement, development, and/or modernization activity, should be included in both Table 3 and Table 4. Table 3 should reflect the planned date for the system changes to be complete and operational, and the planned date for the associated C&A update. Table 4 should reflect the current status of the requirements listed. In this context, information contained within Table 3 should characterize what updates to testing and documentation will occur before implementing the enhancements; and Table 4 should characterize the current state of the materials associated with the existing system.

All systems listed in the two security tables should be identified in the privacy table. The list of systems in the "Name of System" column of the privacy table (Table 8) should match the systems listed in columns titled "Name of System" in the security tables (Tables 3 and 4). For the Privacy table, it is possible that there may not be a one-to-one ratio between the list of systems and the related privacy documents. For example, one PIA could cover multiple systems. If this is the case, a working link to the PIA may be listed in column (d) of the privacy table more than once (for each system covered by the PIA).

The questions asking whether there is a PIA which covers the system and whether a SORN is required for the system are discrete from the narrative fields. The narrative column provides an opportunity for free text explanation why a working link is

Friday, January 25, 2008 - 10:57 AM Page 10 of 18

not provided. For example, a SORN may be required for the system, but the system is not yet operational. In this circumstance, answer "yes" for column (e) and in the narrative in column (f), explain that because the system is not operational the SORN is not yet required to be published.

Please respond to the questions below and verify the system owner took the following actions:

1. Have the IT security costs for the system(s) been identified Yes and integrated into the overall costs of the investment:

a. If "yes," provide the "Percentage IT Security" for the 2.13 budget year:

2. Is identifying and assessing security and privacy risks a part Yes of the overall risk management effort for each system supporting or part of this investment.

| 3. Systems in Planning and Undergoing Enhancement(s), Development, and/or Modernization - Security Table(s): | | | | | | | | | | | |
|--|--|--|--|------------------------|--|--|--|--|--|--|--|
| Name of System | | Agency/ or Con Sys | tractor Operated tem? | Planned Ope | erational Date | Date of Planned C&A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems) | | | | | |
| Redacted | | | | | | | | | | | |
| I. Operational Systems - Security Table: | | | | | | | | | | | |
| Agency/ or Contractor Operated System? | | NIST FIPS 199 Risk Impact level (High, Moderate, Low) | Has C&A been Completed, using NI ST 800-37? (Y/N) | Date Completed: C&A | What standards were used for the Security Controls tests? (FIPS 200/NIST 800-53, Other, N/A) | Date Complete(d): Security Control Testing | Date the contingency plan tested | | | | |
| Redacted | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

5. Have any weaknesses, not yet remediated, related to any of Yes the systems part of or supporting this investment been identified by the agency or IG?

a. If "yes," have those weaknesses been incorporated into Yes the agency's plan of action and milestone process?

6. Indicate whether an increase in IT security funding is Redacted requested to remediate IT security weaknesses?

a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness.

Redacted

7. How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above? Redacted

| (a) Name of System (b) Is this a new system? (Y/N) | | (c) Is there at least one Privacy Impact Assessment (PIA) which covers this system? (Y/N) | (d) Internet Link or Explanation | (e) Is a System of Records Notice (SORN) required for this system? (Y/N) | (f) Internet Link or Explanation | |
|--|----|---|--|---|--|--|
| Air Traffic Control Beacon Interrogator -6 (operational systems) | No | No | A PIA is not required, because the system does not contain, process, or transmit personal identifying information. | No | No, because the system is not a Privacy Act system of records. | |
| Air Traffic Control Beacon Interrogator -6 (planned systems) | No | No | A PIA is not required, because the system does not contain, process, or transmit personal identifying information. | No | No ,because the system is not a Privacy Act system of records. | |

Column (d): If yes to (c), provide the link(s) to the publicly posted PIA(s) with which this system is associated. If no to (c), provide an explanation why the PIA has not been publicly posted or why the PIA has not been conducted.

Column (f): If yes to (e), provide the link(s) to where the current and up to date SORN(s) is published in the federal register. If no to (e), provide an explanation why the SORN has not been published or why there isn't a current and up to date SORN.

Note: Working links must be provided to specific documents not general privacy websites. Non-working links will be considered as a blank field

Exhibit 300: FAAXX294: ATC Beacon Interrogator Replacement (ATCBI-6) Redacted 1-25-2008 Section F: Enterprise Architecture (EA) (IT Capital Assets only)

In order to successfully address this area of the capital asset plan and business case, the investment must be included in the agency's EA and Capital Planning and Investment Control (CPIC) process and mapped to and supporting the FEA. The business case must demonstrate the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.

 1. Is this investment included in your agency's target
 Yes

 enterprise architecture?
 Yes

a. If "no," please explain why?

2. Is this investment included in the agency's EA Transition Strategy?

a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment.

b. If "no," please explain why?

distance or

х

3. Is this investment identified in a completed (contains a Yes target architecture) and approved segment architecture?

a. If "yes," provide the name of the segment architecture as Air Traffic provided in the agency's most recent annual EA Assessment.

4. Service Component Reference Model (SRM) Table: Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to http://www.egov.gov Service Service FFA SRM Internal or Agency Agency FEA SRM FEA SRM **BY Funding** Component Component Component Component Service External Service Type Component (a) Reused Name Reused UPI ercentage (d) Name Description Domain Reuse? (c) (b) (b) Airborne Digital Asset No Reuse Airborne Content Fagging and synchronization, Services Management Aggregation or spacing and sequencing of ai traffic, safely maximizes National Airspace System efficiency and capacity throughout the cruise, arrival, and departure phases of flight. . Traffic synchronization is provided to aircraft during cruise, through metering at fixes/waypoints and modifying traffic flow patterns to meet , operational objectives and accommodate user preferences. . (NAS Traffic Management Synchronization) Aircraft to Aircraft are <nowledge Digital Asset Knowledge No Reuse 45 separated from Distribution and Aircraft Management Services Separation other known Delivery Capability aircraft in the terminal, en route, and oceanic environments Separation assurance involves the application of separation standards to ensure aircraft emain an appropriate minimum

ATC Beacon Interrogator Replacement (ATCBI-6)

V - -

Yes

| Exhibit 300 | : FAAXX294: | ATC Beacon | Interrogator | Replacement | (ATCBI-6 |) Redacted | 1-25-2008 |
|-------------|-------------|------------|--------------|-------------|----------|------------|-----------|
|-------------|-------------|------------|--------------|-------------|----------|------------|-----------|

4. Service Component Reference Model (SRM) Table: Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management tc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to http://www gov.gov Service Service FEA SRM Agency Agency Internal or FEA SRM FEA SRM BY Funding Component Component Component Name Service Domain Component External Service Type Component (a) Reused Name Reused UPI Percentage (d) Reuse? (c) Description (b) (b) altitude from other known aircraft. Standards are defined for aircraft based or aircraft type, size, equipment, and for operating in different environments. (NAS ATC-Separation . Assurance) Airborne Airborne Process Tracking and Process Tracking No Reuse 45 synchronization, Automation Workflow or spacing and Services sequencing of air traffic, safely maximizes National Airspace System efficiency and capacity throughout the cruise, arrival, and departure phases of flight. Traffic synchronization is provided to aircraft during cruise, through metering at fixes/waypoints and modifying traffic flow patterns to meet operational objectives and accommodate user preferences. (NAS Traffic Management Synchronization Aircraft to Aircraft are Support Services Security Access Control No Reuse Aircraft separated from Management Separation other known Capability (ATCaircraft in the Separation terminal, en . Assurance) route, and oceanic environments. Separation assurance involves the application of separation standards to ensure aircraft remain an appropriate minimum distance or altitude from other known aircraft. Standards are defined for aircraft based or aircraft type, size, equipment and for operating in different environments

a. Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.

b. A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.

c. 'Internal' reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. 'External' reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.

d. Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the percentage of the BY requested funding amount transferred to another agency to pay for the service. The percentages in the column can, but are not required to, add up to 100%.

5. Technical Reference Model (TRM) Table:

To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

| FEA SRM Component (a) | FEA TRM Service Area | FEA TRM Service Category | FEA TRM Service Standard | Service Specification (b) (i.e., vendor and product name) |
|--|--|---------------------------|-----------------------------|---|
| Process Tracking | Component Framework | Data Interchange | Data Exchange | Redacted |
| Tagging and Aggregation | Component Framework | Presentation / Interface | Content Rendering | Redacted |
| Knowledge Distribution and Delivery | Service Access and Delivery | Access Channels | Other Electronic Channels | Redacted |
| Knowledge Distribution and Delivery | Service Platform and Infrastructure | Database / Storage | Storage | Redacted |
| Knowledge Distribution and Delivery | Service Platform and Infrastructure | Hardware / Infrastructure | Embedded Technology Devices | Redacted |
| Access Control | Service Platform and Infrastructure | Hardware / Infrastructure | Network Devices / Standards | Redacted |
| Knowledge Distribution and Delivery | Service Platform and Infrastructure | Hardware / Infrastructure | Peripherals | Redacted |
| Knowledge Distribution and Delivery | Service Platform and Infrastructure | Hardware / Infrastructure | Peripherals | Redacted |
| Knowledge Distribution and Delivery | Service Platform and Infrastructure | Hardware / Infrastructure | Servers / Computers | Redacted |

a. Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications

b. In the Service Specification field, agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

6. Will the application leverage existing components and/or No applications across the Government (i.e., FirstGov, Pay.Gov, etc)?

a. If "yes," please describe.

Exhibit 300: Part II: Planning, Acquisition and Performance Information

Section A: Alternatives Analysis (All Capital Assets)

Part II should be completed only for investments identified as "Planning" or "Full Acquisition," or "Mixed Life-Cycle" investments in response to Question 6 in Part I, Section A above.

In selecting the best capital asset, you should identify and consider at least three viable alternatives, in addition to the current baseline, i.e., the status quo. Use OMB Circular A-94 for all investments and the Clinger Cohen Act of 1996 for IT investments to determine the criteria you should use in your Benefit/Cost Analysis.

1. Did you conduct an alternatives analysis for this project? Yes

a. If "yes," provide the date the analysis was completed? 7/11/2007

b. If "no," what is the anticipated date this analysis will be completed?

c. If no analysis is planned, please briefly explain why:

| 2. Alternative Analysis Results: * Costs in m Use the results of your alternatives analysis to complete the following table: | | | | | | | | |
|---|----------------------------|---|--|--|--|--|--|--|
| Alternative Analyzed | Description of Alternative | Risk Adjusted Lifecycle Costs estimate | Risk Adjusted Lifecycle Benefits estimate | | | | | |
| Redacted | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

3. Which alternative was selected by the Agency's Executive/Investment Committee and why was it chosen?

Redacted

4. What specific qualitative benefits will be realized?

Redacted

5. Will the selected alternative replace a legacy system in-part Yes or in-whole?

a. If "yes," are the migration costs associated with the migration to the selected alternative included in this investment, the legacy investment, or in a separate migration investment.

b. If "yes," please provide the following information:

| List of Legacy Investment or Systems | | | | | | |
|--|------------------|-------------------------------|--|--|--|--|
| Name of the Legacy Investment of Systems | UPI if available | Date of the System Retirement | | | | |
| En Route ATCBI-4 | | 7/31/2006 | | | | |
| En Route ATCBI-5 | | 5/31/2010 | | | | |

Section B: Risk Management (All Capital Assets)

You should have performed a risk assessment during the early planning and initial concept phase of this investment's life-cycle, developed a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

| Does the investment have a Risk Management Plan? | Yes |
|--|-----------|
| a. If "yes," what is the date of the plan? | 5/31/2005 |
| b. Has the Risk Management Plan been significantly | No |
| changed since last year's submission to OMB? | |

c. If "yes," describe any significant changes:

The team has made no signification changes to the risk process to identify and mitigate risks as described in the Risk Management Plan. The team updates the plan for administrative items, such as changes in organizational codes, titles, and personnel as a result of the change from ATB to ATO. The ATCBI-6 team meets on a monthly basis to identify critical areas, analyze, mitigate and track risks affecting the cost, schedule and technical aspects of the procurement in accordance with the ATO-T, Program Operations Risk Management Plan dated 05/31/05. The team uses the Sector's automated tracking system to insert and update data, schedules, mitigation and estimates pertaining to identified risks. The tracking system database is updated by the third Tuesday of every month. Last update completed 08/21/07. The ATCBI-6's tracking system contains

Friday, January 25, 2008 - 10:57 AM Page 15 of 18

information on OMB's current risk guidance that our team considers each time we address individual risks to facilitate focus on specific areas of risk. There are no program specific mitigation items from the PART assessment. The team assigns to each risk a Point of Contact (POC) to lead the mitigation process and discussion for consideration. The team agrees on acceptance and level of each risk before it is approved, reduced, increased and or retired. The team conducts meetings by telecom to encourage full participation across the service areas. The program conducts monthly Program Management Reviews with the contractor and monthly Internal Program Reviews with FAA management team. Risk discussions and mitigations are an integral part of both reviews. The team has a fully functional risk management program that is user friendly, active and effective in meeting the ATCBI-6 cost, schedule and technical goals before they become serious, expensive problems to the program. The identification of any and all risks are openly encouraged & considered from all team members.

2. If there currently is no plan, will a plan be developed?

- a. If "yes," what is the planned completion date?
- b. If "no," what is the strategy for managing the risks?

3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule:

The 2007 JRC investment baseline is risk-adjusted. The program estimates the total risk-adjusted F&E cost at \$251.9M excluding government FTE costs, \$262.2M including FTE costs. Estimated O&M costs at \$97.5M excluding FTEs, \$171.7M including FTE costs. Out of the \$251.9M, \$211.1M is sunk, leaving \$40.8M as the estimate-to-complete beginning in FY07. The F&E funding ends in FY10 and is sufficient to complete the DME portion of the program in 2012. The O&M funding baseline ends in FY24. The program F&E cost reserve is \$1.7M. The schedule reserve for the final level 1 milestone (Last Site ORD) is 6 months.

Established the 2007 approved baseline costs using the latest official FAA Work Breakdown Structure (WBS) and the ACE-IT cost estimating model. Calculated a point estimate for the remaining costs (FY07 and beyond) using historical data, engineering assessments, level of effort and other standard FAA estimating methodologies. For life cycle cost risks, a planned, pessimistic and optimistic cost range was assessed and associated with the appropriate WBS elements. Probability distributions were defined for individual inputs into the cost model to capture the range of possible results. The Monte Carlo simulation in the Crystal Ball risk software was used to determine the overall effect of the cost risk on the overall cost of the program. In the context of costs, the risk-adjusted estimate is defined by an 80% probability that actual costs would be less than or equal to the given value. The dollar increase required to provide an 80% confidence level in the program estimate was apportioned to the individual WBS elements based on their relative risk level. With the life cycle cost estimate adjusted to an 80% confidence level, the overall exposure to cost risk is reduced. The delta between the high-confidence and point estimates, \$1.7M, is the cost reserve. In addition to the cost reserve, incorporated several risk mitigation efforts into the ATCBI-6 Program Plan to reduce specific Program risks during implementation of the system including WBS 4.2 Field Engineering, WBS 4.5 Construction and WBS 5.10 Second Level Engineering. These efforts totaled \$2.6M and reflect in the initial point estimate. The total of the cost reserve and risk mitigation efforts is \$4.3M, approximately 10% of the estimated remaining budget.

Section C: Cost and Schedule Performance (All Capital Assets)

EVM is required only on DME portions of investments. For mixed lifecycle investments, O&M milestones should still be included in the table (Comparison of Initial Baseline and Current Approved Baseline). This table should accurately reflect the milestones in the initial baseline, as well as milestones in the current baseline.

1. Does the earned value management system meet the No criteria in ANSI/EIA Standard-748?

2. Is the CV% or SV% greater than +/- 10%? (CV%= CV/EV x No 100; SV%= SV/PV x 100)

- a. If "yes," was it the CV or SV or both? SV
- b. If "yes," explain the causes of the variance:

The Program Office submitted in 2006 a Baseline Management Notification (BMN) for the schedule variance from the JRC January 2002 approved schedule baseline. The JRC approved the original ATCBI-6 baseline in 8/97. This baseline had the last site commissioning in 12/04, a duration of 77 months from CA in 8/98. The program experienced delays in contractor developmental testing, production and system deliveries, due to Congressional and internal FAA funding reductions of (\$22.6M in FY99 and \$31.4M in FY00). As a result, the JRC approved to extend the last site ORD to 1/06, adding 13 months to the program for a 90 month duration. Since this JRC approval, the following have occurred to slip the last ORD further: 1) FAA funding cut in FY03 of \$20M. The original plan called for Raytheon to install 4 systems per month, but based on this budget cut and longer-than-expected Remote Monitoring Capabilities (RMC) development, the program office scaled back to 2 system installs per month. This resulted in a 28 month slip in the schedule from the latest JRC approved baseline, causing the last site ORD to slip to 5/08; 2) In FY04, the Program office expected funding for the three Beacon Only Site (BOS) new establishments (Georgetown, BH; Freeport, BH; and Yakutat, AK) on the ATCBI-6 waterfall schedule but funding was not appropriated until FY06; 3) In November 2004, the FAA signed a cost sharing agreement with Eagle County, CO and Gallatin Field, MT to establish two "beacon only" facilities; 4) In the FYO6 appropriation, Congress added two additional "beacon only" sites (Redmond, OR and Jackson Hole, WY); 5) In FY05, funding was received from the HAATS program to implement ATCBI-6 at Lufkin to meet their congressional mandate; and 6) In December 2006 finalized the Interagency Agreement to install at Fremont Valley, CA the system DoD procured in 2001. The equipment delivery, installation and checkout activities for these six additional sites were inserted into the ATCBI-6 waterfall schedule to meet the commitments associated with these agreements. These program changes result in a last ORD milestone of 5/10, including six month schedule reserve.

c. If "yes," describe the corrective actions:

Friday, January 25, 2008 - 10:57 AM Page 16 of 18 The program office completed AMS documentation in July 2007 for the rebaseline and expects JRC approval in September 2007. Information presented in this Exhbit reflects the proposed 2007 baseline. Program office is in process of implementing EVM in accordance with the standard and the 2007 baseline. The Current Baseline data in the II.C table below reflects the new EVM baseline. In accordance with the POA&M ATCBI-6 EVM reporting is structured around remaining work and will commence after the 2007 rebaseline approval.

3. Has the investment re-baselined during the past fiscal year? No

a. If "yes," when was it approved by the agency head?

4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in \$ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate '0' for any milestone no longer active.

| Milestone Number | Description of Milestone | Initial Baseline | | Current Baseline | | | | Current Baseline Variance | | |
|---------------------|--------------------------|--|---------------------------------|------------------|------------------|---------|----------|---------------------------|------------|----------|
| | | Planned Completion Total Cost (\$M) | Completion Date (mm/dd/yyyy) | | Total Cost (\$M) | | Schedule | | Percent | |
| | | Date (mm/dd/yyy y) | Estimated | Planned | Actual | Planned | Actual | (# days) | Cost (\$M) | complete |
| Redacted | | | | | | | | | | |

Friday, January 25, 2008 - 10:57 AM Page 18 of 18