

Exhibit 300 FY2010

FAAXX456: ASR-9 Transmitter Modifications

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

Description: In Part I, complete Sections A, B, C, and D for all capital assets (IT and non-IT). Complete Sections E and F for IT capital assets.

I.A. Overview (All Capital Assets)

Description: The following series of questions are to be completed for all investments.

I.A.1. Date of Submission:	2008-12-03
I.A.2. Agency:	021
I.A.3. Bureau:	12
I.A.4. Name of this Capital Asset: Description: (Up to 250 characters)	FAAXX456: ASR-9 Transmitter Modifications
I.A.5. Unique Project (Investment) Identifier: Description: For IT investment only, see section 53. For all other, use agency ID system.	021-12-01-20-01-1010-00
I.A.6. What kind of investment will this be in FY2010? Description: Please NOTE: Investments moving to O&M in FY2010, with Planning/Acquisition activities prior to FY2010 should not select O&M. These investments should indicate their current status.	Mixed Life Cycle
I.A.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: Description: (Up to 2500 characters)	<p>ASR-9 systems provide aircraft detection and weather information to air traffic controllers at the highest activity airports. The ASR-9 tracks all aircraft within its range and provides those tracks, as well as six-level weather intensity information, to terminal automation systems and utilized by air traffic controllers to safely and efficiently separate aircraft in the terminal environment. The ASR-9 provides data to AMASS and ASDE-X, which are used for surface surveillance to reduce the likelihood of runway incursions. The purpose of the investment is to address the most troublesome components within the ASR-9 transmitter - the modulator pulse assembly, trigger amplifier, and post charge regulator - in order to ensure that the current level of system availability and reliability is maintained. The Modulator Pulse Assembly (MPA) and related components are responsible for up to 50% of the failures associated with the transmitter, and thus this subassembly is considered the greatest single risk to system reliability and availability. Without these modifications to the ASR-9 transmitter, the ASR-9 will continue to experience decreasing reliability and availability over time. The cost of technology refresh has been determined to be more cost-effective than acquiring full replacement systems, because the current system performance is sufficient in meeting both the safety and capacity needs of the nation's air traffic system at major airports. The proposed investment assumes the solution has an economic service life of 20 years. This investment encompasses a mixed life cycle in both the solution development and operations and maintenance phases of the FAA's Acquisition Management System (equivalent to the Control and Evaluate Phases of CPIC). The baseline, based on the June 2005 JRC decision approving the investment, reflects the activities necessary to perform the design, development, production and installation of the MPA modification to the ASR-9 transmitter. Based on a successful Critical Design Review a production decision was obtained in December 2005. Currently, the system has successfully completed testing and production authorization has been granted. Implementation began in December 2007 and is scheduled to be completed in 2010.</p>
I.A.9. Did the Agency's Executive/Investment Committee approve this request?	yes
I.A.9.a. If "yes," what was the date of this approval?	2005-06-30
I.A.10. Did the Project Manager review this Exhibit?	yes
I.A.12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project?	yes
I.A.12.a. Will this investment include electronic assets (including computers)?	yes
I.A.12.b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)	no
I.A.12.b.1. If "yes," is an ESPC or UESC being used to help fund this investment?	
I.A.12.b.2. If "yes," will this investment meet sustainable design principles?	
I.A.12.b.3. If "yes," is it designed to be 30% more energy efficient than relevant code?	
I.A.13. Does this investment directly support any of the PMA initiatives?	no
I.A.13.a. If "yes," select all that apply:	
I.A.13.b. 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? Description: (Up to 500 characters)	
I.A.14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? Description: (For more information about the PART, visit www.whitehouse.gov/omb/part .)	yes
I.A.14.a. If "yes," does this investment address a weakness found during a PART review?	no
I.A.14.b. If "yes," what is the name of the PARTed program?	10001121 - FAA Air Traffic Services
I.A.14.c. If "yes," what rating did the PART receive?	Adequate
I.A.15. Is this investment for information technology?	yes
I.A.16 What is the level of the IT Project? (per CIO Council PM Guidance) Description: Level 1 - Projects with low-to-moderate complexity and risk. Example: Bureau-level project such as a stand-alone information system that has low- to-moderate complexity and risk. Level 2 - Projects with high complexity and/or risk which are critical to the mission of the organization. Examples: Projects that are part of a portfolio of projects/systems that impact each other and/or impact mission activities. Department-wide projects that impact cross-organizational missions, such as an agency-wide system integration that includes large scale Enterprise Resource Planning (e.g., the DoD Business Mgmt Modernization Program). Level 3 - Projects that have high complexity, and/or risk, and have government-wide impact. Examples: Government-wide initiative (E-GOV, President's Management Agenda). High interest projects with Congress, GAO, OMB, or the general public. Cross-cutting initiative (Homeland Security).	Level 3
I.A.17. In addition to the answer in 1.A.11.d, 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
I.A.18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4-FY 2008 agency high risk report? (per OMB Memorandum M-05-23)	no
I.A.19. Is this a financial management system?	no
I.A.19.a. If "yes," does this investment address a FFIA compliance area?	
I.A.19.a.1. If "yes," which compliance area: Description: (Up to 250 characters)	
I.A.19.a.2. If "no," what does it address? Description: (Up to 500 characters)	
I.A.19.b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52 Description: (Up to 2500 characters)	
I.A.20. What is the percentage breakout for the total FY2010 funding request for the following? Description: (This should total 100%)	
I.A.20.a. Hardware	0
I.A.20.b. Software	0
I.A.20.c. Services	100
I.A.20.d. Other	0
I.A.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
I.A.23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval?	no
I.A.24. Does this investment directly support one of the GAO High Risk Areas?	no
I.B. Summary of Spending (All Capital Assets)	
I.B.1 Summary of Spending Table Description: 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.

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.

I.B.1.a. Summary of Spending for Project Phases

	PY-1 and earlier	PY 2008	CY 2009	BY 2010
Planning	\$7.200	\$0.000	\$0.000	\$0.000
Acquisition	\$48.600	\$4.600	\$3.300	\$1.400
Subtotal Planning and Acquisition	\$55.800	\$4.600	\$3.300	\$1.400
Operations and Maintenance	\$0.008	\$0.141	\$0.284	\$0.442
TOTAL	\$55.808	\$4.741	\$3.584	\$1.842
Government FTE Costs	\$5.050	\$1.025	\$1.092	\$1.161

I.B.1.b. Summary of Spending for Project Phases (Government FTE Costs Only)

	PY-1 and earlier	PY 2008	CY 2009	BY 2010
Number of FTE represented by cost	30	7	7	7

I.B.2. Will this project require the agency to hire additional FTE's? no

I.B.2.a. If "yes," How many and in what year?

Description: (Up to 500 characters)

I.B.3. If the summary of spending has changed from the FY2009 President's budget request, briefly explain those changes:

Description: (Up to 2500 characters)

FY 09 submission omitted planning dollars of \$7.2M, which are included in this submission. Also in the FY 09 submission, Maintenance government FTE costs were inadvertently included in both O&M and FTE rows. Maintenance government FTE costs have been changed to reflect original baseline.

I.D. Performance Information (All Capital Assets)

I.D.1. Performance Information Table

Description: 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 outcomes, and if 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 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 the next President's Budget.

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Grouping	Measurement Indicator
2005	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2005	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2005	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2005	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2005	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2006	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2006	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2006	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2006	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2006	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2007	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages

2007	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2007	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2007	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2007	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2008	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2008	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2008	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2008	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2008	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2009	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2009	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2009	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2009	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2009	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2010	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2010	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2010	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2010	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2010	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2011	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2011	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2011	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2011	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2011	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2012	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2012	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2012	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2012	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2012	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages
2013	Mobility	Customer Results	Customer Impact or Burden	Reduce Flight Delays Due to ASR-9 MPA-related Outages
2013	Mobility	Mission and Business Results	Air Transportation	Reduce aircraft delays due to ASR-9 MPA-related outages
2013	Mobility	Processes and Activities	Efficiency	Reduced SMO/site logistics and maintenance costs
2013	Mobility	Technology	Reliability	Reduce Mean Time To Repair
2013	Mobility	Technology	Availability	Reduce hours of unscheduled ASR-9 equipment outages

I.F. Enterprise Architecture (EA) (IT Capital Assets only)

Description: 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.

I.F.1. Is this investment included in your agency's target enterprise architecture?	yes
I.F.1.a. If "no," please explain why? Description: (Up to 2500 characters)	
I.F.2. Is this investment included in the agency's EA Transition Strategy?	yes

I.F.2.a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment. Description: (Up to 500 characters)	Airport Surveillance Radars
I.F.2.b. If "no," please explain why? Description: (Up to 2500 characters)	
I.F.3. Is this investment identified in a completed and approved segment architecture?	yes
I.F.3.a. If "yes," provide the six digit code corresponding to the agency segment architecture. The segment architecture codes are maintained by the agency Chief Architect. For detailed guidance regarding segment architecture codes, please refer to http://www.egov.gov . Description: (In the format "XXX-000")	102-000

I.F.4. Service Component Reference Model (SRM) Table

Description: 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>.

- 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 this column can, but are not required to, add up to 100%.

Agency Component Name	Agency Component Description	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused - Component Name (b)
Aircraft to Aircraft Separation Capability (ATS, ATC-Separation Assurance)	Aircraft are separated from other known aircraft in the terminal, en 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 on aircraft type, size, equipment, and for operating in different environments. (NAS/ATS/ATC-SA)	Knowledge Management	Knowledge Distribution and Delivery	
Weather Advisories Capability (ATS, ATC Advisory)	ATC Advisories - Weather information is available either automatically or manually through communication with ATC and other facilities. For example, pilots receive weather advisories from automated surface observing systems and other systems, ATC facilities, and aircraft operations centers (AOCs). Advisories provide both routine and hazardous weather information and/or flight conditions at airports or along a flight path.	Content Management	Tagging and Aggregation	
Airborne (ATS, TN Synchronization)	Airborne synchronization or spacing and sequencing of air traffic safely maximize NAS 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/ATS/TM-S)	Tracking and Workflow	Conflict Resolution	

I.F.5. Technical Reference Model (TRM) Table

Description: 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.

- 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.

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)
Knowledge Distribution and Delivery	Component Framework	Data Interchange	Data Exchange	Northrop-Grumman/ASR-9 System
Conflict Resolution	Service Access and Delivery	Access Channels	Other Electronic Channels	Northrop-Grumman/ASR-9 System
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Database / Storage	Storage	Northrop-Grumman/ASR-9 System
Knowledge Distribution and Delivery	Component Framework	Data Management	Reporting and Analysis	Northrop-Grumman/ASR-9 System
Tagging and Aggregation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Northrop-Grumman/ASR-9 System
Conflict Resolution	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Northrop-Grumman/ASR-9 System

I.F.6. Will the application leverage existing components and/or applications across the Government (e.g. USA.gov, Pay.gov, etc.)? no

I.F.6.a. If "yes," please describe.
 Description: (Up to 2500 characters)

Part IV: Planning for "Multi-Agency Collaboration" ONLY

Description: Part IV should be completed only for investments identified as an E-Gov initiative, a Line of Business (LOB) Initiative, or a Multi-Agency Collaboration effort. The "Multi-Agency Collaboration" choice should be selected in response to Question 6 in Part I, Section A above. Investments identified as "Multi-Agency Collaboration" will complete only Parts I and IV of the exhibit 300.

IV.A. Multi-Agency Collaboration Oversight (All Capital Assets)

Description: Multi-agency Collaborations, such as E-Gov and LOB initiatives, should develop a joint exhibit 300.

IV.A.1. Stakeholder Table

Description: As a joint exhibit 300, please identify all the agency stakeholders (all participating agencies, this should not be limited to agencies with financial commitment). All agency stakeholders should be listed regardless of approval. If the partner agency has approved this joint exhibit 300 please provide the date of approval.

IV.A.9. Will the selected alternative replace a legacy system in-part or in-whole?

IV.A.9.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?

IV.A.9.b. If "yes," please provide the following information: