

## **Exhibit 300: Capital Asset Plan and Business Case Summary**

### **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: FAAXX224: Terminal Radar Digitizing, Replacement, and Establishment (TRDRE) [ASR-11]
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.) 021-12-01-20-01-1160-00
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
7. What was the first budget year this investment was submitted to OMB? FY2002
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:

Air traffic controllers use terminal surveillance radar systems to detect and track aircraft in the area surrounding airports. Airport Surveillance Radar, Model 11 (ASR-11) provides a single integrated digital primary and secondary radar system and will replace outdated primary radar systems (ASR-7/8) and secondary radar systems (Air Traffic Control Beacon Interrogators [ATCBI-4/5 or Mode-S]).

The ASR-11 investment also replaces the deteriorating infrastructure supporting current radar systems with new radar facilities, including advanced grounding and lightning protection systems, digital or fiber optic telecommunications, emergency backup power supplies and enhanced physical security. Together these new capabilities and infrastructure improvements result in increased ease of maintenance, increased system availability and reliability and improved operational performance.

The BY09 funding is for construction, program management, engineering and implementation of ASR-11 systems previously funded, including 12 demolitions/restorations of legacy sites.

The ASR-11 program has completed the planning phase and is currently a Mixed Life Cycle program with most efforts in the Full Acquisition Phase, equating to the Control Phase for the current cycle, and just beginning the In-Service Phase, equating to the Evaluate Phase in the CPIC review. The program received JRC approval on 9/9/2005 to rebaseline the program to 66 systems. All tests and evaluations have been completed and the program achieved an In-Service Decision for system deployment on September 22, 2003. As of July 23, 2007, there are 33 systems in full operational capability and commissioned into the National Airspace System (NAS).
9. Did the Agency's Executive/Investment Committee approve this request? Yes
  - a. If "yes," what was the date of this approval? 9/10/2007
10. Did the Project Manager review this Exhibit? Yes
11. Contact information of Project Manager?

Name Huffman, Michael

Phone Number Redacted

Email Michael.Huffman@faa.gov
- a. What is the current FAC-P/PM certification level of the project/program manager? Senior/Expert-level
12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project? Yes
  - 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) Yes
    1. If "yes," is an ESPC or UESC being used to help fund this investment? No
    2. If "yes," will this investment meet sustainable Yes

design principles?

3. If "yes," is it designed to be 30% more energy efficient than relevant code? No

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](http://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- Terminal and 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 16-23 below. If the answer is "No," do not answer questions 16-23.

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) Yes

19. Is this a financial management system? No

a. If "yes," does this investment address a FFMI compliance area?

1. If "yes," which compliance area:

2. If "no," what does it address?

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

20. What is the percentage breakout for the total FY2009 funding request for the following? (This should total 100%)

Hardware	0.000000
Software	0.000000
Services	22.480000
Other	77.520000

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
E-mail	carla.mauney@faa.gov

23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? No

Question 24 must be answered by all Investments:

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

### **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.

<b>Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES</b> <b>(REPORTED IN MILLIONS)</b> (Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)									
	<b>PY-1 and earlier</b>	<b>PY 2007</b>	<b>CY 2008</b>	<b>BY 2009</b>	<b>BY+1 2010</b>	<b>BY+2 2011</b>	<b>BY+3 2012</b>	<b>BY+4 and beyond</b>	<b>Total</b>
Planning:	21.3	0	0	0	Redacted	Redacted	Redacted	Redacted	Redacted
Acquisition:	592.4	43.6	19.6	11.4	Redacted	Redacted	Redacted	Redacted	Redacted
Subtotal Planning & Acquisition:	613.7	43.6	19.6	11.4	Redacted	Redacted	Redacted	Redacted	Redacted
Operations & Maintenance:	7.6	11.6	15	14.8	Redacted	Redacted	Redacted	Redacted	Redacted
TOTAL:	621.3	55.2	34.6	26.2	Redacted	Redacted	Redacted	Redacted	Redacted
<b>Government FTE Costs should not be included in the amounts provided above.</b>									
Government FTE Costs	8.975	1.5	1.528	1.274	Redacted	Redacted	Redacted	Redacted	Redacted
Number of FTE represented by Costs:	69	11	11	9	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 FTE's? No

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.



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:

The ASR-11 program award occurred in August 1996 via a joint contract, known as the DASR, led and managed by the United States Air Force. EVM was not a requirement on these DoD Firm Fixed Price (FFP) contracts because they were developed in the mid 1990s, using a Cost and Schedule Status Report (C/SSR) requirement to interpret and validate cost and schedule trends of contract performance, before EVM became an OMB standard requirement.

Implementing EVM has become a top agency and program priority as FAA has made several commitments to OMB. Even though EVM is not required on the DASR contract, the ASR-11 program management team has implemented EVM reporting and tracking at the program level through collaboration with the prime contractor to mitigate risk and manage cost and schedule performance. The ASR-11 program EVM implementation uses FAA-approved compliance criteria aligned with the current ANSI/EIA 748 Standard.

The ASR-11 EVM Plan of Actions and Milestones (POAM), as monitored by the FAA VMO, was assessed green by the FAA Focal Point in January 2007 and validated the effectively and efficiently implemented EVM process and established EVM practices that improve the program management capabilities in compliance with the FAA AMS and ANSI/EIA 748A standard.

3. Do the contracts ensure Section 508 compliance?

N/A

a. Explain why:

IAW FAA Sec 508 Procurement SOP, ASR-11 determined that none of the Sec 508 standards apply. The primary contract is to purchase radars, and as a general exemption, access will only be by fully trained and authorized maintenance personnel, supporting national security/military command and control. ASR-11 includes its own secure building and equipment lay out, with all physical security provisions (security fence, locked access gate & doors, password protected entry) and authorized access only.

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

Yes

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

8/5/2005

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 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 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](http://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 Satisfaction	Operational Availability	Sustainment of OA above 99.5%, (and ASR-11 over legacy systems.)	OAadj to be greater than 99.5%	COMPLETED. FY 2005 ASR-11 OAadj = 99.56%.
2005	Mobility	Mission and Business Results	Transportation	Air Transportation	Unscheduled Outages	Unscheduled outage related delays for deployed ASR-7 12 month average of 1.21.	Reduce ASR-outage-related delays by 50%.	COMPLETED. As of December 2005 (4/06 Rpt), identified unscheduled outage related delays for deployed ASR-11 sites was a 12 month average of .67, compared to the ASR-7 12 month

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
								average of 1.21. This is a 45 % reduction, virtually meeting the planned
2005	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Efficiency- Hours of - Mean Time To Repair (MTTR)	Legacy ASR-7/8 systems MTTR.	Improve ASR-11 MTTR over legacy MTTR.	COMPLETED. Actual ASR-11 MTTR for 2005 = 3.07, ASR-7 = 3.97, & ASR-8 = 4.83.
2005	Organizational Excellence	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Improvement-Reduced/Avoided O&M costs.	Annual In-Service Management costs for Legacy systems.	Decrease in the annual O&M costs for the ASR-11 over the legacy systems.	OBSOLETE. Actual ASR-11 O&M costs for 2005 not available as many ASR-11 systems just went In- Service that year, report will be in 2006.
2006	Mobility	Customer Results	Customer Benefit	Customer Satisfaction	Operational Availability	Sustainment of OA above 99.5%, (and ASR-11 over legacy systems.)	OAadj to be greater than 99.5%	COMPLETED.As of December 06, FY06 OAadj for ASR-11 = 99.64%, ASR-7 = 99.83%, & ASR-8 = 99.73%
2006	Mobility	Mission and Business Results	Transportation	Air Transportation	Unscheduled Outages	Unscheduled outage related delays for deployed ASR-7 = 1.10 & ASR-8 = 1.39, as of 5/06.	Reduce ASR-outage-related delays by 50%	COMPLETED. Dec 2006 Unscheduled outage related delays for deployed ASR-11 sites is 0.54 (14/26), a 51% & 64% improvement respectively over the ASR-7 = 1.10 (22/20) &
2006	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Efficiency- Hours of - Mean Time To Repair (MTTR).	Legacy ASR-7/8 systems MTTR.	Improve ASR-11 MTTR over legacy MTTR	COMPLETED. Actual ASR-11 MTTR = 3.62, ASR-7 = 3.96 & ASR-8 = 4.04 as of Dec 2006.
2006	Organizational Excellence	Technology	Efficiency	Improvement	Improvement-Reduced/Avoided O&M costs.	Annual In-Service Management costs for Legacy systems and ASR-11.	Decrease in the annual O&M costs for the ASR-11 over the legacy systems.	COMPLETED. ASR-11 O&M costs for 2006 = \$7.6 M. A decrease of \$6.467 M over the legacy systems costs (\$14.1 M.)
2007	Mobility	Customer Results	Customer Benefit	Customer Satisfaction	Operational Availability	Sustainment of OA above 99.5%, (and ASR-11 over legacy systems.)	OAadj to be greater than 99.5%	INTERIM. As of 4/07, FY07 OAadj for ASR-11 = 99.63%, ASR-7 = 99.89%, & ASR-8 = 99.55%; which are all above 99.5%.
2007	Mobility	Mission and Business Results	Transportation	Air Transportation	Unscheduled Outages	Unscheduled outage related delays for deployed ASR-7 12 month average.	Reduce ASR-outage-related delays by 50%	INTERIM. Identified unscheduled outage related delays for deployed ASR-11 sites is 0.89 12-month avg as of 4/07, ASR-7 = .68 & ASR-8 = 1.54.
2007	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Efficiency- Hours of - Mean Time To Repair (MTTR).	Legacy ASR-7/8 systems MTTR.	Improve ASR-11 MTTR over legacy MTTR	INTERIM. Actual ASR-11 MTTR = 3.04 Hrs, ASR-7 = 4.06 & ASR-8 = 7.14 as of April 2007.
2007	Organizational Excellence	Technology	Efficiency	Improvement	Improvement-Reduced/Avoided	Annual In-Service	Decrease the annual O&M	INTERIM. ASR-11 O&M costs for

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					d O&M costs.	Management costs for Legacy systems and ASR-11.	costs.	2007 = \$7.3 M. Legacy systems = \$14.0 M, a decrease of \$6.7 M.
2008	Mobility	Customer Results	Customer Benefit	Customer Satisfaction	Operational Availability	Sustainment of OA above 99.5%, (and ASR-11 over legacy systems.)	OAadj to be greater than 99.5%	FY 08 OAadj = %
2008	Mobility	Mission and Business Results	Transportation	Air Transportation	Unscheduled outage.	Unscheduled outage related delays for deployed ASR-7 12 month average.	Reduce ASR-outage-related delays by 50%	Identified unscheduled outage related delays for deployed ASR-11 sites will be reported for 08.
2008	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Efficiency- Hours of - Mean Time To Repair (MTTR).	Legacy ASR-7/8 systems MTTR.	Improve ASR-11 MTTR over legacy MTTR	Actual ASR-11 MTTR will be reported for 08.
2008	Organizational Excellence	Technology	Efficiency	Improvement	Improvement-Reduced/Avoided O&M costs.	Annual In-Service Management costs for Legacy systems and ASR-11.	Decrease the annual O&M costs.	ASR-11 O&M costs for 2008.
2009	Mobility	Customer Results	Customer Benefit	Customer Satisfaction	Operational Availability	Sustainment of OA above 99%.5, (and ASR-11 over legacy systems.)	OAadj to be greater than 99.5%	FY 09 OAadj = %
2009	Mobility	Mission and Business Results	Transportation	Air Transportation	Unscheduled outages	Unscheduled outage related delays for deployed ASR-7 12 month average.	Reduce ASR-outage-related delays by 50%	Identified unscheduled outage related delays for deployed ASR-11 sites will be reported for 09.
2009	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Efficiency- Hours of - Mean Time To Repair (MTTR).	Legacy ASR-7/8 systems MTTR.	Improve ASR-11 MTTR over legacy MTTR.	Actual ASR-11 MTTR will be reported for 2009.
2009	Organizational Excellence	Technology	Efficiency	Improvement	Improvement-Reduced/Avoided O&M costs.	Annual In-Service Management costs for Legacy systems and ASR-11.	Decrease the annual O&M costs.	ASR-11 O&M costs for 2009.

**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 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.

Exhibit 300: FAAXX224: Terminal Radar Digitizing, Replacement, and Establishment (TRDRE) [ASR-11] Redacted 1-25-08  
 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 and integrated into the overall costs of the investment? Yes  
 a. If "yes," provide the "Percentage IT Security" for the budget year: 0.30
2. Is identifying and assessing security and privacy risks a part of the overall risk management effort for each system supporting or part of this investment? Yes

3. Systems in Planning and Undergoing Enhancement(s), Development, and/or Modernization - Security Table(s):			
Name of System	Agency/ or Contractor Operated System?	Planned Operational Date	Date of Planned C&A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)
Redacted			

4. Operational Systems - Security Table:							
Name of System	Agency/ or Contractor Operated System?	NIST FIPS 199 Risk Impact level (High, Moderate, Low)	Has C&A been Completed, using NIST 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 the systems part of or supporting this investment been identified by the agency or IG? Yes  
 a. If "yes," have those weaknesses been incorporated into the agency's plan of action and milestone process? Yes
6. Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses? Redacted  
 a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness.
7. How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above? Redacted

8. Planning & Operational Systems - Privacy Table:					
(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
ASR-11 Operational Systems	No	No	No, because a PIA is not required to be completed, because the system does not contain, process or transmit personal identifying information.	No	
ASR-11 Planning Systems	No	No	No, because a PIA is not required to be completed, because the system does not contain, process or transmit personal identifying information.	No	

**Details for Text Options:**  
 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.

**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



Exhibit 300: FAAXX224: Terminal Radar Digitizing, Replacement, and Establishment (TRDRE) [ASR-11] Redacted 1-25-08 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 enterprise architecture? Yes

a. If "no," please explain why?

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

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

b. If "no," please explain why?

To effectively balance the development and management of the DOT Transition Strategy, the first version was scoped to include those investments with development activities (non O&M). Additionally, as the NAS Architecture was publicly available, it was also not fully integrated with the materials forwarded to OMB in February 2006. However, the NAS is considered part of the DOT Transition Strategy and will be more fully integrated within the next revision. Future revisions are set to expand upon that scope and include both steady state (O&M) investments and expanded linkages to the NAS Architecture. NAS websites document the plan for the FAA's target architecture where the investment can be found and a sequencing plan showing the dependencies (See this URL and search on "ASR-11", [http://www.nas-architecture.faa.gov/nas5/downloads/full\\_oi\\_long\\_report.pdf](http://www.nas-architecture.faa.gov/nas5/downloads/full_oi_long_report.pdf)).

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

a. If "yes," provide the name of the segment architecture as provided in the agency's most recent annual EA Assessment. Airport Surveillance Radars (ASR)

**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>.

Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
Airborne (ATS, TM-Synchronization)	Airborne synchronization, or spacing and 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.(TM Synchronization)	Digital Asset Services	Content Management	Tagging and Aggregation			No Reuse	6
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	Digital Asset Services	Knowledge Management	Knowledge Distribution and Delivery			No Reuse	44

**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>.

Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
	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. (ATC Separation Assurance)							
Airborne (ATS, TM-Synchronization)	Airborne synchronization, or spacing and 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. (TM Synchronization)	Process Automation Services	Tracking and Workflow	Conflict Resolution			No Reuse	44
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. (ATC Separation Assurance)	Support Services	Security Management	Access Control			No Reuse	6

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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%.

<b>5. Technical Reference Model (TRM) Table:</b>				
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)
Knowledge Distribution and Delivery	Component Framework	Data Interchange	Data Exchange	Redacted
Knowledge Distribution and Delivery	Component Framework	Data Management	Reporting and Analysis	Redacted
Tagging and Aggregation	Component Framework	Presentation / Interface	Content Rendering	Redacted
Conflict Resolution	Service Access and Delivery	Access Channels	Other Electronic Channels	Redacted
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Database / Storage	Storage	Redacted
Conflict Resolution	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	Redacted
Access Control	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Redacted
Conflict Resolution	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 applications across the Government (i.e., FirstGov, Pay.Gov, etc)?  No

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?      8/15/2005
  - 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 millions
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 or in-whole?      Yes

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?      This 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
ASR-7		9/30/2009
ASR-8		9/30/2009
ATCBI-4		9/30/2009
ATCBI-5		9/30/2009

**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.

1. 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 changed since last year's submission to OMB?      No
- c. If "yes," describe any significant changes:

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 ASR-11 investment baseline cost and schedule estimates were risk adjusted, resulting in a comprehensive risk adjusted JRC-approved baseline. The total risk-adjusted F&E cost = \$696.5M and the risk-adjusted O&M cost = \$466.97M, ending in FY 2010. Management reserve for cost is shown in II.C Table 9, and schedule reserve is identified in the Integrated Program Schedule (IPS).

The program continuously monitors cost/schedule baselines through use of software tools, risk management programs, and established baseline and variance analysis methods. The program uses the IPS to track the contract elements with DoD, monitors cost/schedule/performance status against targets in the Exhibit 300 Program Baseline on a continuing basis, and takes corrective action when variances from planning objectives arise. The program office reports status at Service-Level Reviews, where the focus is to identify high-risk issues requiring resolution and to ensure all actions necessary to achieve projected value and benefits are being executed satisfactorily, particularly those outside the control of the service organization. The service organization applies the principles of earned value management to the entire investment program, and when applicable, uses audits to ensure contract costs are proper and allowable.

There has not been a significant change in risks at this time but the risk database/register and mitigation action plan are being constantly monitored and updated. The program uses the team's issue and risk management process to manage program elements. The program office's risk management strategy is based on FAA's Systems Engineering Manual [Section 4.10- Risk Management Guidance.] All ASR-11 program members and stakeholders meet periodically, and the ASR-11 Risk Management Board meets monthly, to report on and discuss the mitigation plan status of risks identified in the risk database/register, to identify/validate any potential new risks to the team; and to identify risks to be reported to upper management. New risks are assigned to a responsible team member, a mitigation plan is established, and monitoring is performed at the lowest team level. The program manager acts as the team representative to internal and external organizations.

### ***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 criteria in ANSI/EIA Standard-748? Yes
2. Is the CV% or SV% greater than +/- 10%? (CV%= CV/EV x 100; SV%= SV/PV x 100) No
  - a. If "yes," was it the CV or SV or both?
  - b. If "yes," explain the causes of the variance:
  - c. If "yes," describe the corrective actions:
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 'O' for any milestone no longer active.

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