

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: 8/11/2006
2. Agency: Department of Transportation
3. Bureau: Federal Aviation Administration
4. Name of this Capital Asset: FAAXX155: NEXT GENERATION VHF AIR/GROUND COMMUNICATIONS (NEXCOM)
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.) 021-12-01-15-01-1020-00

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

7. 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:

If many more planes fly during peak periods, or if Air Traffic Controllers become empowered to work more efficiently, then more Very High Frequency (VHF) radio spectrum will be needed for Air Traffic Control (ATC) communications; either for more voice, data, Next Generation Air Transportation System (NextGen) technologies or a combination of these. NEXCOM's new radio technologies support the FAA's goal of Greater Capacity by making more efficient use of existing spectrum. Furthermore, replacing very old radios and their higher failure rates with newer radios will reduce the future growth rate of O&M costs, a cost avoidance. The NEXCOM program first received approval in May, 1998, received a JRC Revalidation Decision in May, 2000, and was Rebaselined in December, 2005. NEXCOM will be implemented in three segments. Segment 1 addresses the high- and ultrahigh-sector air traffic voice channels for aircraft flying en route above 24,000 feet. Segment 1 is divided into two phases, Segments 1a and 1b. Only Segment 1a has been approved to date. Due to higher agency priorities, Segments 1b, 2 & 3 have been deferred. The new radios are Multimode Digital Radios (MDRs). This exhibit is for Segment 1a which will replace all en route radios with MDRs by 2013. The first installation was in 2004. MDRs installed in 2004 enter the "Evaluate" phase in 2006. MDRs installed in 2005 and later are in the "Control" phase. In FY09, MDRs will be installed at 150 sites. The program has been designed for growth and flexibility. The MDRs can emulate the existing analog protocol, thus facilitating transition, or they can operate in the more efficient 8.33 kHz voice mode currently in use in Europe, or with additional expenditures in a later phase they can operate in the VDL-3 mode especially designed for Air Traffic Control. The VDL mode provides integrated data and voice. The spectrally efficient 8.33 kHz voice-only mode recovers the spectrum needed for a stand-alone data communications system (i.e., Datacom program). As part of Vision 100, the NextGen Joint Planning and Development Office worked with six cabinet-level offices to develop the integrated plan for NextGen. The plan envisions an automated air/ground trajectory capability. The ATC paradigm shift from workload-intensive tactical control to automation-assisted strategic traffic management needs a data link, and the MDR will provide the spectrum for this link and has the option to provide the link itself directly.

9. Did the Agency's Executive/Investment Committee approve this request? Yes

a. If "yes," what was the date of this approval? 12/14/2005

10. Did the Project Manager review this Exhibit? Yes

11. Contact information of Project Manager?

Name Dieter Thigpen
Phone Number Redacted
Email dieter.thigpen@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? No

a. Will this investment include electronic assets Yes

(including computers)?

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 ID# 1001121

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 FFMIA compliance area? No

1. If "yes," which compliance area: Not applicable

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 47.660000

Software 0.000000

Services 52.340000

Other 0.000000

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
 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? Yes

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.

Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS)									
(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)									
	PY-1 and earlier	PY 2007	CY 2008	BY 2009	BY+1 2010	BY+2 2011	BY+3 2012	BY+4 and beyond	Total
Planning:	3.426	0	0	0	Redacted	Redacted	Redacted	Redacted	Redacted
Acquisition:	150.674	25	30.4	33.4	Redacted	Redacted	Redacted	Redacted	Redacted
Subtotal Planning & Acquisition:	154.100	25	30.4	33.4	Redacted	Redacted	Redacted	Redacted	Redacted
Operations & Maintenance:	0.054	0.46	0.548	0.663	Redacted	Redacted	Redacted	Redacted	Redacted
TOTAL:	154.154	25.46	30.948	34.063	Redacted	Redacted	Redacted	Redacted	Redacted
Government FTE Costs should not be included in the amounts provided above.									
Government FTE Costs	30.047	7.594	9.59	10.941	Redacted	Redacted	Redacted	Redacted	Redacted
Number of FTE represented by Costs:	267	66	79	87	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.

Exhibit 300: FAAXX013: Automated Surface Observing System / Automated Weather Observing System (ASOS/AWOS) (Revision 12)

Contracts/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 Interagency Acquisition ? (Y/N)	Is it performance based? (Y/N)	Competitively 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/email)	Contracting Officer Certification Level (Level 1,2,3,N/A)	If N/A, has the agency determined the CO assigned has the competencies 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:

NEXCOM employs a performance based management system (PBMS) compliant with Earned Value Management System ANSI/EIA 748A Standard to proactively manage the performance of all program level government and contractor efforts. Support contractors' performance is proactively monitored and managed on a monthly basis. EVM was implemented in FY2003 for the full investment and covers the design, development, production, deployment and support of the MDR. The PBMS covers 100% of the activities and participating organizations contributing to the investment objectives, including the production contractor and related subcontractors; FAA organizations and supporting contractors responsible for the planning, management, testing and support of the MDR; FAA organizations and supporting contractors responsible for the deployment and fielding of the radio; and additional contractors contributing support equipment and services. The EVM-based PBMS used to manage 100% of the investment proactively monitors scope, schedule and cost on a monthly basis to mitigate the risk of not having EVM on the contracts. In April 2005, NEXCOM initiated an independent review of its program management practices and EVM capabilities. The review rigorously assessed the program's EVM implementation, using FAA approved compliance criteria aligned with the ANSI/EIA 748A Standard. The assessment reviewed the PBMS implementation and documentation and interviewed the program manager, control account managers, schedulers and business managers. The assessment determined that NEXCOM has established compliant EVM practices at the program level consistent with the ANSI/EIA 748A Standard. A program-specific EVM transition plan resulted from this review. The plan has been implemented. The recommendations were not contract related issues, but rather focused on revising current planning processes to reduce the amount of LOE reporting and improving the actual cost and variance reporting processes. Also in 2005, a successful Integrated Baseline Review was performed by the FAA Capital Investment Team.

The AUATAC contract is a T&M contract and is performance based. Therefore, the statement "T&M is by definition is not performance based" is incorrect. The contractor is awarded a performance fee based on quarterly assessments rating by the customer. The government evaluates quality, efficiency, schedule, and overall performance and products. The award fee is split between the company and the employees

3. Do the contracts ensure Section 508 compliance? No
- a. Explain why: In accordance with FAA's Section 508 Procurement Standard Operating Procedures, NEXCOM Segment 1a has determined that none of the Section 508 standards apply to the program.
- Specifically, NEXCOM Multimode Digital Radios will be located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment.
4. Is there an acquisition plan which has been approved in accordance with agency requirements? Yes
- a. If "yes," what is the date? 7/31/2007
- 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. 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	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent	Radio system rated excellent by 82% of pilots surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 84% of pilots surveyed.	New radio rated excellent by 85% of pilots surveyed.
2005	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High	32 Air Traffic Delays (Average 2001-2002) due	Reduce air traffic delays due to reported Very	Zero air traffic delays in 2005 due to radio

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					Frequency (VHF) radio outages.	to reported Very High Frequency (VHF) radio outages.	High Frequency (VHF) radio outages by 10% of the 2001-2002 average	outages.
2005	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent	Radio system rated excellent by 60% of controllers surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 65% of air traffic controllers surveyed.	New radio rated excellent by 67.5% of controllers surveyed.
2005	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 VHF radio sparing requests in 2003 at a cost of \$1.8M	Reduce sparing requests and cost by 5%	Sparing Requests reduced by 16.9% and sparing costs reduced by 47.6% in 2005.
2006	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent	Radio system rated excellent by 82% of pilots surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 87% of pilots surveyed.	Radio system rated excellent by 88% of pilots surveyed
2006	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High Frequency (VHF) radio outages	32 Air Traffic Delays (Average 2001-2002) due to reported Very High Frequency (VHF) radio outages.	Reduce air traffic delays due to reported Very High Frequency (VHF) radio outages by 10% of the 2004-2005 average.	Zero air traffic delays in 2006 due to radio outages.
2006	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent	Radio system rated excellent by 60% of controllers surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 70% of air traffic controllers surveyed	Radio system rated excellent by 87% of air traffic controllers surveyed
2006	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 Very High Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M	Reduce sparing requests and costs by 8%.	Sparing requests were reduced by 51.6% and costs were reduced by 63.6%
2007	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent	Radio system rated excellent by 82% of pilots surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 91% of pilots surveyed.	3/31/2008
2007	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High Frequency (VHF) radio outages.	32 Air Traffic Delays (Average 2001-2002) due to reported Very High Frequency (VHF) radio outages.	Reduce air traffic delays due to reported Very High Frequency (VHF) radio outages by 10% of the 2005-2006 average.	3/31/2008
2007	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Average training time for radio maintenance repair	Average legacy analog radio training time is 160 hours.	Digital radio training time will be 20% less than analog radio.	3/31/08
2007	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent	Radio system rated excellent by 60% of controllers surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 80% of air traffic controllers surveyed.	3/31/2008
2007	Reduced	Technology	Reliability and	Reliability	Equipment	5,531 Very High	Reduce sparing	3/31/2008

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Congestion		Availability		sparing requests	Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M	requests and cost by 10%	
2008	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent	Radio system rated excellent by 82% of pilots surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 95% of pilots surveyed.	3/31/2009
2008	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High Frequency (VHF) radio outages.	32 Air Traffic Delays (Average 2001-2002) due to reported Very High Frequency (VHF) radio outages.	Reduce air traffic delays due to reported Very High Frequency (VHF) radio outages by 10% of the 2006-2007 average.	3/31/2009
2008	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Average training time for radio maintenance repair	Average legacy analog radio training time is 160 hours.	Digital radio training time will be 30% less than analog radio.	3/31/2009
2008	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent	Radio system rated excellent by 60% of controllers surveyed. (NOTE: Initial survey conducted in July 2004)	Radio system rated excellent by 82% of air traffic controllers surveyed.	3/31/2009
2008	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 Very High Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M	Reduce sparing requests and cost by 12%	3/31/2009
2009	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent.	Radio system rated excellent by 82% of pilots surveyed.	Radio system rated excellent by 97% of pilots surveyed.	3/31/2010
2009	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Average training time for radio maintenance repair.	Average legacy analog radio training time is 160 hours.	Digital radio training time will be 40% less than analog radio.	3/31/2010
2009	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent.	Radio system rated excellent by 60% of controllers surveyed.	Radio system rated excellent by 85% of air traffic controllers surveyed.	3/31/2010
2009	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 Very High Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M.	Reduce sparing requests and cost by 14%.	3/31/2010
2010	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent.	Radio system rated excellent by 97% of pilots surveyed.	Radio system rated excellent by 97.5% of pilots surveyed.	3/31/2011
2010	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High Frequency (VHF) radio outages	32 Air Traffic Delays (Average 2001-2002) due to reported VHF radio outages.	Reduce air traffic delays due to reported Very High Frequency (VHF) radio outages by 10% of the 2008-2009 average.	3/31/2011
2010	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Average training time for radio maintenance repair.	Average legacy analog radio training time is 160 hours.	Digital radio training time will be 45% less than analog radio.	3/31/2011
2010	Reduced	Processes and	Productivity and	Productivity	Percent of	Radio system	Radio system	3/31/2011

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Congestion	Activities	Efficiency		controllers who rate the air traffic control radio system as excellent.	rated excellent by 85% of controllers surveyed.	rated excellent by 87% of air traffic controllers surveyed.	
2010	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 Very High Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M.	Reduce sparing requests and cost by 15%.	3/31/2011
2011	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent.	Radio system rated excellent by 97.5% of pilots surveyed.	Radio system rated excellent by 98% of pilots surveyed.	3/31/2012
2011	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High Frequency (VHF) radio outages	32 Air Traffic Delays (Average 2001-2002) due to reported VHF radio outages.	Reduce air traffic delays due to reported Very High Frequency (VHF) radio outages by 10% of the 2009-2010 average.	3/31/2012
2011	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Average training time for radio maintenance repair.	Average legacy analog radio training time is 160 hours.	Digital radio training time will be 47% less than analog radio.	3/31/2012
2011	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent.	Radio system rated excellent by 87% of controllers surveyed.	Radio system rated excellent by 87.5% of air traffic controllers surveyed.	3/31/2012
2011	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 Very High Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M.	Reduce sparing requests and cost by 16%.	3/31/2012
2012	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent.	Radio system rated excellent by 98% of pilots surveyed.	Radio system rated excellent by 98.5% of pilots surveyed.	3/31/2013
2012	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High Frequency (VHF) radio outages	32 Air Traffic Delays (Average 2001-2002) due to reported VHF radio outages.	Reduce air traffic delays due to reported Very High Frequency (VHF) radio outages by 10% of the 2010-2011 average.	3/31/2013
2012	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Average training time for radio maintenance repair.	Average legacy analog radio training time is 160 hours.	Digital radio training time will be 48% less than analog radio.	3/31/2013
2012	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent.	Radio system rated excellent by 87.5% of controllers surveyed.	Radio system rated excellent by 88% of air traffic controllers surveyed.	3/31/2013
2012	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 Very High Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M.	Reduce sparing requests and cost by 17%.	3/31/2013
2013	Reduced Congestion	Customer Results	Service Quality	Accuracy of Service or Product Delivered	Percent of pilots who rate the air traffic control radio system as excellent.	Radio system rated excellent by 98.5% of pilots surveyed.	Radio system rated excellent by 99% of pilots surveyed.	3/31/2014
2013	Reduced Congestion	Mission and Business Results	Transportation	Air Transportation	Reduce delays due to reported Very High Frequency (VHF) radio outages	32 Air Traffic Delays (Average 2001-2002) due to reported VHF radio outages.	Reduce air traffic delays due to reported Very High Frequency (VHF) radio outages by 10%	3/31/2014

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
							of the 2011-2012 average.	
2013	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Efficiency	Average training time for radio maintenance repair.	Average legacy analog radio training time is 160 hours.	Digital radio training time will be 49% less than analog radio.	3/31/2014
2013	Reduced Congestion	Processes and Activities	Productivity and Efficiency	Productivity	Percent of controllers who rate the air traffic control radio system as excellent.	Radio system rated excellent by 88% of controllers surveyed.	Radio system rated excellent by 88.5% of air traffic controllers surveyed.	3/31/2014
2013	Reduced Congestion	Technology	Reliability and Availability	Reliability	Equipment sparing requests	5,531 Very High Frequency (VHF) radio sparing requests in 2003 at a cost of \$1.8M.	Reduce sparing requests and cost by 18%.	3/31/2014

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.

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 budget year: 5.03
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 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
NEXCOM Multimode Digital Radio (deployed)	No	No	The system does not contain, process, or transmit personal identifying information	No	The system is not a Privacy Act system of records.
NEXCOM Multimode Digital Radio (to be deployed)	No	No	The system will not contain, process, or transmit personal identifying information	No	The system is not a Privacy Act system of records.

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 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. Next Generation Air/Ground Communication System (NEXCOM)

b. If "no," please explain why?

NEXCOM is addressed indirectly in the agency's transition strategy. 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. Since this FAA investment does not appear to be specifically mentioned within the DOT Transition Strategy or the FAA Modernization Blueprint, please refer to the following public NAS websites which document the plan for the FAA's target architecture where the investment can be found as well as a sequencing plan showing the dependencies:

- http://www.nas-architecture.faa.gov/nas5/downloads/full_oi_long_report.pdf (page 571)
- <http://www.nas-architecture.faa.gov/nas5/faq/tsd/Systems/ShowSys.cfm?Domain=Surface>

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 for NAS investments 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>.

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)
Weather Advisory Capability (446)	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, or from personnel at 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. (ATC Advisories)	Support Services	Communication	Voice Communications			No Reuse	48
Aircraft to Aircraft Separation Capability (389)	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	Communication	Voice Communications			No Reuse	48
Weather Advisory Capability (446)	Weather information is available either automatically or manually through communication	Support Services	Security Management	Digital Signature Management			No Reuse	2

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)
	with ATC and other facilities. For example, pilots receive weather advisories from automated surface observing systems and other systems, or from personnel at 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. (ATC Advisories)							
Aircraft to Aircraft Separation Capability (389)	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	Digital Signature Management			No Reuse	2

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)
Voice Communications	Service Access and Delivery	Access Channels	Wireless / PDA	Redacted
Digital Signature Management	Service Access and Delivery	Service Requirements	Legislative / Compliance	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? 12/13/2005
 - 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
En Route Facilities VHF Radios (Procured via multiple programs going back over 40 years)		9/30/2013

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? 1/3/2007
 - b. Has the Risk Management Plan been significantly changed since last year's submission to OMB? Yes
- c. If "yes," describe any significant changes:

The program office includes a risk manager and risk team that meets monthly. A risk log is maintained as a separate document that is a requirement of, but not imbedded in, the risk management plan. The risk log is continually updated to reflect the current list of active risks being managed and their status. The team develops and manages mitigation plans for each identified risk. For example, as a risk mitigation strategy to keep the program within budget, the program office has set two average per site implementation cost targets for each site, one for site implementations where 60% or more of the effort is performed by FAA government employees and a second higher average per site cost target for site implementations where 60% or more of the effort is performed by contractor personnel. The first target provides a reserve of a 34% cost reserve per site. The second provides an incentive for the agency to utilize contractor personnel to complete installation within the schedule should FAA

Exhibit 300: FAAXX155: NEXT GENERATION VHF AIR/GROUND COMMUNICATIONS (NEXCOM) Redacted 1-25-2008
government employee shortfalls occur while preserving a cost reserve of 16% per site. As a result of this mitigation strategy as of July 30, 2006, the program has exceeded its FY2006 goal of 80 sites with operational MDRs.

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:

Risk mitigations have been included in the program baseline. Initial cost estimates were risk adjusted using the Crystal Ball tool. FAA government employee resource shortfalls prior to FY06 caused a significant schedule variance to the program. The program office developed risk adjusted implementation plans that assume similar reductions in the out years. Risk adjusted procurement forecasts and implementation costs were revised to reflect the new plan. The FAA's Joint Resource Committee approved a new risk adjusted program baseline in December 2005. For the new program baseline, investment risks have been accounted for in both the program schedule and the life cycle cost estimate (5.71% or \$42.6M of the total life cycle cost). Specifically, (a) the schedule to complete the 1200 implementation sites has been extended by 3 years and (b) the per site implementation cost estimate includes estimated costs to cover 120% of the estimated average total work effort (both contractor and FAA government employees required). The costs and schedule risk mitigations have been incorporated in the milestones identified in Section II.C. Additionally, management reserve has been included in FY08 useful segments in the program baseline captured in Section II. C.

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 '0' 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										