

MANAGEMENT CHALLENGE	
Chapter 1: Ensuring Transparency and Accountability in the Department's Recovery Act Programs	
Issue 1A:	<p><u>Overseeing ARRA Projects and Expenditures</u> Since February 2009, the Department of Transportation and its Operating Administrations have obligated nearly \$40 billion American Recovery and Reinvestment Act (ARRA) funds for more than 14,600 projects. The Department must ensure adequate oversight and accountability to meet ARRA goals. Additionally, management attention is needed to protect ARRA funds from fraud, waste, and abuse.</p>
ACTION PLAN	
Cognizant Organization:	Office of Airports (ARP) Air Traffic Organization (ATO): ATO-Finance
Tools to be Used to Resolve the Issue:	<p><u>Organizational Team</u> In January 2010, ARP undertook further refinement of the 2009 staffing model, to more precisely define additional staffing requirements to the individual Airport District Office level. Our internal "Organization Team" is developing a field office staffing model and a plan for standardizing our field operations. Standardized operations, based on standard operating procedures, will incorporate national risk management models across all of our program areas – planning, environmental, engineering, financial, compliance, and airspace. Standardized field operations will enable us to better evaluate one office's staffing needs against another's, adopt a greater number of standard performance metrics, and offer a consistent airport customer experience from region to region. By meeting our staffing needs and ensuring consistency from one region to another, we can assure Recovery Act projects will receive the necessary oversight to meet the Act's goals for transparency and accountability.</p> <p><u>Corporate Work Plan (CWP)</u> ATO is utilizing the Corporate Work Plan (CWP) tool set for monitoring scheduled project activities and actual project accomplishments. The CWP maintains program schedule plans and actual accomplishments for each project location.</p> <p><u>Delphi</u> ATO is utilizing the departmental accounting system (DELPHI) to track expenditures against each individual project's schedule and obligations. In addition program personnel perform on site visits, monitoring activities, and project closeout coordination. Each project must undergo an acceptance inspection between FAA and the contractor before the project is accepted by FAA.</p>
Time Needed to Resolve the Issue:	ARP anticipates continued work through FY 2011 to meet exiting reporting requirements and mission priorities. As of April 1, 2011, ARP granted and obligated 100 percent of ARRA funds in 334 grants covering 372 projects. All projects have started and 364 (98 percent) of those projects were substantially complete.

	<p>ATO has completed 362 of 399 ARRA projects (90.7 percent). The majority of the projects that are ongoing are of large scale and scope. Only eight projects are expected to continue into FY 2012 because they consist of large scale facility construction projects. Only one of those projects, the Oakland Air Traffic Control Tower construction, will continue into the first quarter of FY13.</p>	
<p>Specific steps to be taken in FY 2011:</p>	<p><u>Evaluate Progress</u> The FAA continues to evaluate the progress of remaining ARRA projects through a variety of weekly and monthly meetings, intensive reporting requirements, and extensive use of existing program resources at both national and local levels.</p> <p><u>Adjust Section 1512</u> FAA will adjust its Section 1512 validation processes in accordance with any changes to existing OMB guidance, working in full cooperation with DOT</p> <p><u>Monitor Expenditure and Project Status</u> FAA will continue to monitor expenditure status weekly and project status bi-weekly, and perform comparative analyses against recipient reports. Weekly financial reports are prepared from information in the Department's Finance and Accounting System that reflect current grant obligation and outlay data.</p> <p><u>Work Directly w/ Recipients</u> FAA will continue to work directly in coordination with recipients to address and resolve data quality issues and support accurate recipient reporting.</p> <p><u>Grant Risk Model</u> ARP hired an outside contractor to expand the existing ARP Grant Risk Model specifically for ARRA grantees, as well as perform a sample audit of grantees for compliance with program requirements and improper payments.</p>	<p>Ongoing</p> <p>As required.</p> <p>Weekly & biweekly.</p> <p>Ongoing</p> <p>October 2010</p>

	<p><u>Review Single Audit Findings</u> ARP will continue to review all single audit findings forwarded by the OIG for information and action. These findings will be addressed with the airport sponsors.</p> <p><u>Review ARP Workload</u> Review ARP workload associated with the issuance and oversight of Federal funds from the three directions of 1) process standardization, 2) process re-engineering with increased automation, and 3) additional staff.</p> <p><u>Track Project Plans</u> ATO will continue to track project schedule plans and accomplishments through the CWP System.</p>	<p>As required.</p> <p>Pending availability of fiscal year 2011 funding, the Airports Staffing Model will be updated to include 2010 workload and staffing data.</p> <p>Ongoing</p>
<p>Expected Results, this year and in the future:</p>	<p>As anticipated changes are implemented and staffing increases realized, ARP will continue to more sharply focus on the highest value activities, including grant management and oversight.</p> <p>FAA Lines of Business will adjust proven Section 1512 validation processes in accordance with OMB guidance in full cooperation with DOT. The FAA adjusts 1512 validation processes as necessary to ensure effective tracking and oversight of ARRA implementation and execution. The FAA continues to work in coordination with recipients to address and resolve data quality issues and support accurate recipient reporting.</p> <p>ARP expects its recipients to complete 99 percent of their ARRA grants by September 30, 2011. One hundred percent of ARRA projects are expected to be completed in FY 2012</p> <p>ATO expects to complete 391 of the 399 ARRA projects (98 percent) by September 30, 2011. Three hundred ninety-nine (100 percent) of ARRA projects are expected to be completed by the end of calendar year 2012.</p>	

FY 2011 MANAGEMENT CHALLENGE – ACTION PLAN

Chapter 1: Ensuring Transparency and Accountability in the Department's Recovery Act Programs

Issue 1C:	<p><u>Collecting Quality Data From Award Recipients</u> The Department's oversight of ARRA recipient data was assessed. Inaccuracies were identified in recipient data in significant areas, including award type, date, and amount or the number of jobs created. Continued vigilance will be needed to meet the level of accountability called for in ARRA.</p>
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ADDRESSING THE ISSUE

Cognizant Organization:	<p align="center">FAA, Office of Airports (ARP) FAA, Air Traffic Organization (ATO): ATO-Finance</p>
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Tools to be Used to Resolve the Issue:	<p><u>Quarterly Reporting</u> Section 1512 of the Recovery Act requires grant and contract recipients to report accurate data. Their quarterly reporting requirement is published on FederalReporting.gov, which is a standardized centralized data collection point that was developed by OMB. FAA obtains daily data extracts from the OMB site to ensure full recipient reporting compliance, and to validate recipient data, program financial information, program schedule status and description, compensation information for corporate officers, and job numbers and descriptions.</p> <p><u>Established Validation Processes</u> The FAA continues to use established validation processes originally developed in FY 2009. These processes have been reviewed by GAO, OST and DOT OIG, and have been modified over time based on working experience and revised OMB guidance. These processes have served as a successful model for other DOT modes engaged in ARRA administration.</p> <p><u>Internal Personnel and Reporting Mechanisms</u> The FAA maintains a broad scope of internal personnel and reporting mechanisms to ensure reported job data correlates with all program indicators. ARP continues to leverage the existing SOAR grants tracking database coupled with their established Concept of Operations validation process. ATO carefully monitors program schedule, resource, and technical status of all acquisition programs through a variety of weekly and monthly reports, program reviews, and teleconferences. All ATO projects are tracked through their Corporate Work Plan (CWP) System. The CWP maintains program schedule plans and actual accomplishments for each project location. Resident Engineers (RE's) are personnel that make onsite visits to the actual work sites to monitor contractor activities.</p>
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Time Needed to Resolve the Issue:	<p><u>End of FY 2011</u> FAA ARRA fund recipients have completed over 80 percent of our ARRA projects. Overall our efforts and processes have been regarded as a positive success. Nevertheless, our monitoring of program status data in conjunction with reporting cycles for Sections 1201c and 1512 legislative requirements remains an ongoing and</p>
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	<p>intensive process. Required grant recipient reporting continues to be validated through ARP's Concept of Operations processes, and cross-referenced against SOAR data for accuracy. Data received from FAA contractors continues to be reviewed and correlated with individual program schedule and technical data for individual F&E projects. Almost all FAA funded projects will be completed before the end of FY 2011.</p>	
<p>Specific steps to be taken in FY 2011</p>	<p><u>Utilize FederalReporting.gov</u> Collect and analyze Section 1512 recipient reporting from OMB's FederalReporting.gov website to validate basic recipient data, financial information, schedule status and description, compensation information for corporate officers (where applicable), and job numbers and descriptions.</p> <p><u>Conduct Internal Reviews</u> Conduct internal reviews of the ARRA data submitted by recipients, through various validation procedures.</p> <p><u>Collect Monthly Reports</u> Collect monthly reports from both prime and sub recipients until work is complete. These submitted reports are certified by recipient officials, and reviewed by FAA personnel.</p> <p><u>Weekly Status Reports</u> ATO will collect weekly status reports from each ARRA program office that contain current technical and schedule information for each program.</p> <ul style="list-style-type: none"> i) Prepare weekly financial report from information in the financial system that reflects current contract obligation and outlay data. ii) Review and analyze earned value management (EVM) reports from contractors (where 	<p>Apply established data quality review validation processes to review the key award information fields in recipient data during each "Agency Review Period." October 2010, January 2011, April, 2011, and July, 2011. FAA will complete this process by the 29th day of each reporting month</p> <p>Ongoing</p> <p>Ongoing, Monthly</p> <p>Weekly, Ongoing</p>

	<p>applicable), conduct weekly and monthly teleconference meetings with contractors and FAA field staff regarding project activities and progress.</p> <p>iii) Make daily onsite visits to the project locations to complete a first-hand assessment of the work and resources. Each of these monitoring venues provides a basis for determining the reasonableness of the job information provided by the ARRA contractors. Contractors are prepared to provide documentation that substantiates their numbers, in the form of payroll reports and supporting documents.</p>	
<p>Expected Results, this year and in the future:</p>	<p>FAA continues to evaluate validation processes and will adjust as necessary based on future OMB and DOT guidance. ARRA recipient reporting should be reasonable and in line with program indicators. FAA will continue to perform internal reviews of recipient data and coordinate with ARP Regional offices and ATO field staff to validate and address data quality. The rigorous oversight by FAA and DOT along with improved OMB guidance and recipient reporting data access tools will facilitate improved clarification and reporting for all contractors and grant recipients.</p>	

MANAGEMENT CHALLENGE

Chapter 3: Maintaining Momentum in Addressing Human Factors and Improving Safety of the Aviation Industry

Issue 3A:	<p><u>Advancing Industry and Government Efforts to Address Pilot Training and Fatigue Issues</u></p> <p>According to the National Transportation Safety Board (NTSB), pilot fatigue has been associated with air carrier accidents resulting in 250 fatalities over the last 16 years. Although FAA created the Call to Action plan to refocus and accelerate air carriers' safety efforts and issued two Notices of Proposed Rule to address pilot fatigue and training, FAA has not addressed NTSB's recommendation to require air carriers to address fatigue risks associated with pilot commuting.</p>
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ACTION PLAN

Cognizant Organization:	Flight Standards Service (AFS)	
Tools to be Used to Resolve the Issue:	<p><u>NPRM (75 FR 55852)</u></p> <p>On September 14, 2010, the FAA published an NPRM (75 FR 55852) entitled "Flightcrew Member Duty and Rest Requirements." This NPRM addressed pilot commuting in its provisions for "Fitness for Duty". Additionally, FAA contracted with the National Academy of Sciences to conduct a study on the effects of pilot commuting on fatigue and report back to the Administrator. The FAA will update, as appropriate, its rulemaking on duty and rest based on the results of this study. Finally, FAA has required all part 121 air carriers to submit a fatigue risk management program (FRMP), which must include training on the effects of fatigue as a result of commuting.</p>	
Time Needed to Resolve the Issue:	<p>The FAA is currently drafting the final rule for "Flightcrew Member Duty and Rest Requirements". We anticipate publishing the final rule by August 1, 2011. The National Academy of Sciences will be providing its report to the FAA by June 30, 2011. The FAA is in the process of reviewing and accepting all FRMP. We will complete that take by August 1, 2011.</p>	
Specific steps to be taken in FY 2011	<ul style="list-style-type: none"> • Issue guidance on fatigue risk management programs • Issue NPRM on Flightcrew Member Duty and Rest Requirements • Contract with National Academy of Sciences • All part 121 air carriers submit FRMP • Review and accept FRMP 	<p>October 1, 2010</p> <p>October 1, 2010</p> <p>October 1, 2010</p> <p>October 31, 2010</p> <p>August 1, 2011</p>

	<ul style="list-style-type: none"> • NAS provides FAA with interim report • NAS submits final report • Issue final rule on Flightcrew Member Duty and Rest Requirements 	<p>January 31, 2011</p> <p>June 30, 2011</p> <p>August 1, 2011</p>
<p>Expected Results, this year and in the future:</p>	<p>Improve education on the effects of commuting on fatigue. Establish regulatory requirements on "fitness for duty", which includes reporting rested for flight duty.</p>	

MANAGEMENT CHALLENGE	
Chapter 3: Maintaining Momentum in Addressing Human Factors and Improving Safety of the Aviation Industry	
Issue 3B:	<p><u>Enhancing Risk-Based Oversight of Part 121 Air Carriers and Foreign and Domestic Repair Stations</u></p> <p>Weaknesses continue to be found in FAA's Air Transportation Oversight System (ATOS). Specifically, oversight of ATOS inspections has been ineffective at the national level. Additionally, FAA has not addressed longstanding recommendations to identify facilities performing safety-critical repairs and target its surveillance accordingly.</p>
ACTION PLAN	
Cognizant Organization:	Flight Standards Service (AFS)
Tools to be Used to Resolve the Issue:	<p><u>Quarterly Accomplishment Reports</u></p> <p>We will enhance our ability to monitor the Air Transportation Oversight System (ATOS) by amending our quarterly accomplishment reports to track and trend uncompleted inspections (backlog). We will demonstrate to the OIG the existing capability of ATOS software to reschedule unaccomplished inspections.</p> <p><u>Safety Assurance System (SAS)</u></p> <p>We will continue to develop the Safety Assurance System (SAS) for 2013 deployment. SAS will provide a more rigorous, systems safety-based oversight capability for repair stations. In the short term, in FY 2010, we enhanced guidance for inspectors to identify and oversee repair facilities that perform safety-critical maintenance.</p> <p><u>Oversight Prioritization Tool (OPT)</u></p> <p>Earlier this fiscal year, we clarified the guidance for using the Oversight Prioritization Tool (OPT) to target resources for repair station oversight; and we published advisory information for air carriers on contract maintenance best practices.</p>
Time Needed to Resolve the Issue:	<p><u>2013</u></p> <p>Comprehensive change will occur when we deploy the SAS in December 2013. The SAS is the Flight Standards safety assurance component of the Office of Aviation Safety's safety management system. The SAS will apply system safety concepts to the oversight of all air carriers and repair stations. It will employ data-driven resource targeting and will enable FAA inspectors to monitor emergent hazards in the air transportation system. The development of the SAS is a complex task and is dependent on Facilities and Equipment (F&E) funding. SAS business processes, data collection tools, training, and software are currently under development and will be deployed by December 31, 2013, if F&E funding remains available.</p>

<p>Specific steps to be taken in FY 2011</p>	<p><u>Continue Inspections of Essential Maintenance Providers</u> Require an initial inspection of essential maintenance providers followed by triennial recurring inspections.</p> <p><u>Publish an Advisory Circular</u> Publish an advisory circular on contract maintenance best practices.</p> <p><u>Publish Clarified Guidance Material</u> Publish clarified inspector guidance material on using the Oversight Prioritization Tool to target resources for repair station inspections.</p> <p><u>Amend Quarterly Accomplishment Reports</u> Amend quarterly ATOS accomplishment reports to track and trend unaccomplished inspections.</p> <p><u>Demonstrate Software Capability</u> Demonstrate ATOS software capability to reschedule uncompleted inspections to OIG.</p> <p><u>Continue SAS Development</u> Continue development of SAS business processes, data collection tools, software, and training.</p>	<p>Ongoing throughout FY 2011</p> <p>December 31, 2011</p> <p>January 31, 2011</p> <p>March 31, 2011</p> <p>March 31, 2011</p> <p>September 30, 2011</p>
<p>Expected Results, this year and in the future:</p>	<p>Beginning in April 2011, field division managers will have the benefit of trending information regarding ATOS inspections that have not been accomplished in their regions. This information will be useful in identifying staffing disparities between field offices.</p> <p>Regarding repair station oversight, significant change began in FY 2010 when we updated inspector guidance to clearly identify maintenance facilities that perform safety-critical (defined as "essential") maintenance and required an initial inspection of these facilities followed by triennial recurring inspections. These activities are on-going in FY 2011 and will result in more rigorous oversight of foreign and domestic repair stations.</p>	

MANAGEMENT CHALLENGE

Chapter 3: Maintaining Momentum in Addressing Human Factors and Improving Safety of the Aviation Industry

Issue 3C:	<p><u>Ensuring FAA Provides Effective Oversight of Mainline and Regional Air Carriers Operating Under Domestic Code Share Agreements</u></p> <p>Domestic code share agreements are an integral part of the aviation system. While they can help mainline and regional carriers expand their markets, they also present challenges. Differences have been identified between the hiring, training, professionalism, and safety programs of most regional and mainline carriers. FAA must make oversight of mainline and regional air carriers operating under domestic code share agreements a top priority in order to ensure the safety of passengers who depend on those flights.</p> <p>FAA Response: The OIG has not identified these differences as the audit is still ongoing. The FAA continues to meet with the OIG as they conduct this audit and are looking forward to reviewing its recommendations. A discussion draft is expected this summer.</p>
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ACTION PLAN

Cognizant Organization:	Flight Standards Service (AFS)	
Tools to be Used to Resolve the Issue:	<p><u>Regulatory Standards</u></p> <p>The FAA holds all part 121 air carriers to the same regulatory standards and provides the same oversight, regardless of business arrangement. An air carrier may sell tickets under another's code; however that has no bearing on the obligation of an air carrier to individually meet regulatory requirements.</p>	
Time Needed to Resolve the Issue:	An OIG audit was started on Sep 1, 2010 on this subject. This audit is on-going and the FAA is presently working with the OIG on this audit. We cannot identify specific actions to resolve issues until this audit is concluded.	
Specific steps to be taken in FY 2011	<p><u>Mar-May 2011</u></p> <p>Meet with OIG on topics ranging on:</p> <ul style="list-style-type: none"> • Certificate Management Office (CMO) "safety sharing across certificates" efforts • FAA airline safety sharing meetings/initiatives • DOD request/approval process and process for resolving audit discrepancies • Regulation of aircraft livery used by the airlines; 	<p>May 31, 2011</p> <p>May 31, 2011</p> <p>May 31, 2011</p>

	<p>regulations/FARs covering aircraft marking or where operating airline name must be posted</p> <ul style="list-style-type: none"> • ASIAs' projected benefit to sharing of safety data/issues across similar airlines 	<p>May 31, 2011</p> <p>May 31, 2011</p>
<p>Expected Results, this year and in the future:</p>	<p>Review OIG recommendation and Work with the OIG completes this audit and provides the FAA with their final report which will include their recommendations, if any.</p>	

	<p>LPV and ILS for simultaneous independent and dependent approaches to Closely Spaced Parallel Runways.</p> <p><u>Metroplex Optimization of Airspace and Procedures</u></p> <p>Complete the two Study Teams that were initiated in FY2010, i.e., North Texas and Washington, DC.</p> <p>Conduct 3-5 additional Study Teams in FY2011.</p> <p>Initiate Design and Implementation Teams for 2-3 Metroplexes that have completed Study Teams.</p> <p><u>Continuous Low Energy, Emissions and Noise (CLEEN)</u></p> <p>Conduct demonstration of at least one technology to reduce fuel burn.</p>	<p>Sept. 30, 2011</p> <p>Sept. 30, 2011</p> <p>Sept. 30, 2011</p> <p>Sept. 30, 2011</p>
	<p><u>Recommendations from the ADS-B In Aviation Rulemaking Committee</u></p> <p>The ADS-B-In ARC provides a forum for the U.S. aviation community to recommend a strategy or strategies for incorporating NextGen ADS-B-In capabilities into the National Airspace System. The ARC is considering ADS-B-In applications that require both aircraft and ground capabilities -- evaluating cost-benefits, areas of applicability, and timelines. The ARC is expected to deliver specific recommendations for FAA action by September 30, 2011.</p> <p><u>System Wide Information Management</u></p> <p>Introduce Reroute Data Exchange Capability and Flight Data Publication Initial Flight Information Services.</p>	<p>Sept. 30, 2011</p> <p>Sept. 30, 2011</p>
	<p><u>Managing NextGen Costs</u></p> <p>NextGen is being implemented through a series of solution set portfolios. Activities receiving NextGen funding are managed through a portfolio of project level agreements (PLAs) between accountable individuals within the NextGen Integration & Implementation Office and the program or other performing organization receiving NextGen funding. The PLAs outline details such as the work to be performed, the timeline and milestones, and the resources that are being allocated to the tasks. The formulation and execution tracking of the respective</p>	<p>Ongoing</p>

	<p>Solution Set portfolios are managed by the Solution Set Coordinators in the NextGen Integration & Implementation Office.</p>	
	<p><u>Developing NextGen Metrics</u> Per recommendations and guidance from RTCA Task Force 5, the Government Accountability Office and others, FAA recognizes that it is imperative for both government and industry to participate in defining what NextGen success looks like and how we'll know that we've achieved it. To that end, the FAA tasked RTCA to create a new work group under the NextGen Advisory Committee to collaborate with FAA on establishing high-level performance measures. A formal tasking has been issued, and recommendations are due to FAA by August 2011.</p>	<p>August 30, 2011</p>
<p><u>Expected Results, this year and in the future:</u></p>	<p>Four of these activities will immediately improve efficiency and the operational availability of NAS resources. They are:</p> <ul style="list-style-type: none"> • Approve RNAV and RNP for Closely Space Parallel Runway approaches • Metroplex Optimization of Airspace and Procedures • Automated Terminal Proximity Alerts • System Wide Information Management <p>Overall, successful completion of these activities represents a major stride toward FAA's ability to implement NextGen mid-term operational improvements in a timely and efficient manner.</p> <p>Work activities beyond calendar year 2011 are identified in the FAA's NextGen Implementation Plan, which was released in March 2011 (www.faa.gov/nextgen). Appendix B of this plan provides a timeline and a summary of FAA's key work plans in support of delivering the operational improvements necessary to achieve our vision of operations for the NextGen mid-term, which covers the period through 2018. Examples include:</p> <ul style="list-style-type: none"> • Complete NAS-wide deployment of ADS-B Traffic Information Services-Broadcast and Flight Information Services-Broadcast • Enable revised departure clearance capability in the tower environment • Deploy CATMT Work Package 2 capabilities to include arrival uncertainty management, weather integration, collaborative airspace constraint resolution, and airborne reroute execution <p>Supporting detailed plans are contained in internal management documents called NextGen Segment Implementation Plans, which identify the steps necessary to develop, integrate, and implement discrete segments of the NextGen mid-term.</p> <p>NextGen program plans and performance output goals for fiscal years 2012 through 2016 are also contained in FAA's National Airspace System Capital Investment Plan, which was released in May 2011.</p>	

According to our latest estimates, NextGen will reduce total flight delays about 35 percent by 2018, compared with the level delays would reach in the absence of NextGen, while providing \$23 billion in cumulative benefits to the traveling public, aircraft operators, and the FAA. Aircraft owners will save about 1.4 billion gallons of fuel during this period, reducing carbon dioxide emissions by 14 million tons.

New Capabilities for Controllers

NextGen will provide new capabilities for air traffic controllers, and decisions need to be made on how to allocate these new capabilities among various automation systems. The FAA needs to decide how much responsibility will be delegated to pilots in the cockpit and what duties will remain with controllers and FAA ground systems for tracking aircraft. The decision on the degree of human involvement in air traffic management and separating aircraft is linked to this division of responsibility between the air and controllers.

While there are no foreseen changes in the roles and responsibilities of controllers and pilots (such as self-separation airspace or fully automated air traffic control) now through the mid-term, there are major changes to the methods and support mechanisms by which pilots and controllers will operate. These changes include:

- The use of data communications for trajectory operations;
- The increased use of the flight management system (FMS) and flight deck systems in executing merging and spacing;
- The delivery of conflict resolution advisories to the controller by the automation; and
- The use of 3-Dimensional RNAV/RNP.

As part of the NextGen portfolio, there are ongoing activities in the NextGen R&D and the NextGen Pre-Implementation Solution Set Activities to address for example the human factors, display, certification, and training issues related to these new methods and tools.

The NAS Enterprise Architecture “green lanes” - the support and mission activity portions of the roadmaps - are used to link these activities to NAS investment decisions and the integration tables of the architecture are used to identify key linkages and requirements.

Facilities Consolidation

A major determination of both capital and operating costs for NextGen is the degree to which the FAA can realign, co-locate, consolidate, or eliminate air traffic facilities. Critical decisions must be made on facility requirements that will significantly impact the type and number of systems needed to support NextGen.

The FAA developed a multi-year, data driven facilities transformation effort that will be rolled out across the nation incrementally in segments. The approach not only focuses on physical infrastructure, but also the systems, airspace and procedures, and technologies necessary to optimize services within each segment.

An initial investment decision for Segment 1 (the Northeast Corridor) is scheduled for the first quarter of FY 2012. Based on available funding, the FAA will pursue final investment decisions for individual facility projects to satisfy service needs within the segment. This approach allows the FAA to best align the state of the art NextGen technologies and procedures to capitalize on service realignment opportunities and maximize new facility investments.

MANAGEMENT CHALLENGE

Chapter 7: Advancing the Next Generation Air transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System

Issue 7B:

Addressing Problems with Ongoing Modernization Projects That Are Essential to NextGen's Success

Central to achieving NextGen's goals is the successful implementation of ongoing modernization projects that will provide platforms for new NextGen capabilities. Of particular concern are problems with the En Route Automation Modernization (ERAM) program. Because software problems have been encountered, FAA stopped testing in March 2010 to reexamine and deploy corrective actions. Delays could be two years or longer to address the more than 200 problems identified. As a result, FAA will have to maintain aging systems longer and provide training for controllers and technicians who must be certified on two different systems.

ACTION PLAN

Cognizant Organization:

En Route and Oceanic Services
Program Operations/Surveillance and Broadcast Services
ERAM Program Office

Tools to be Used to Resolve the Issue:

Program Management / Acquisition Tools

The program team will use program management / acquisition tools to execute the revised plan for the deployment of ERAM throughout the nation's 20 CONUS ARTCCs. These tools include integrated program schedules, earned value management, risk management and mitigation, software development and test metrics, contract incentives, repeatable processes to bring each ARTCC in a gradual, measured approach to achieving continuous operations on ERAM, and increased vigilance by agency executives including participation in monthly ERAM stakeholder forums.

Memorandum of Understanding

Additionally, the agency established a memorandum of understanding with the National Air Traffic Controllers Association early in fiscal year 2010 which will involve controllers more significantly in the rollout of ERAM, helping to minimize risks in the deployment.

Time Needed to Resolve the Issue:

End of FY 2014

The ERAM program missed baseline milestones for In-Service Decision (ISD) and first and last site Operational Readiness Determination (ORD) in FY 2009 and FY 2010. The agency conducted a top-to-bottom review of ERAM and also considered recommendations from an outside independent assessment of the program, in developing a revised approach to ensure the successful deployment of ERAM. The waterfall deployment will be executed over fiscal years 2011 – 2013 with all sites achieving Initial Operating Capability (IOC) by the end of FY 2013 and the last site ORD occurring in FY 2014. By the end of FY 2014 the legacy HOST system will be decommissioned at all facilities.

<p>Specific steps to be taken in FY 2011</p>	<p><u>In Service Decision (ISD)</u> During FY 2011 the ERAM Team's focus is first on achieving a successful In Service Decision (ISD), which will open the gate for implementation of ERAM at the remaining 18 ARTCCs over the next three fiscal years. The team has been working with the prime contractor, Lockheed Martin, to develop software Problem Report (PR) fixes and change requests (CRs) that mitigate hazards identified by the Independent Operational Assessment (IOA) team at the Salt Lake City (ZLC) and Seattle (ZSE) key sites. The IOA team will conduct a re-assessment prior to the ISD.</p> <p>Once ISD is achieved, the team's focus will be on continuing activities already initiated at the next 5 sites in the waterfall. These activities include air traffic and technical operations system checkout, conducting air traffic and technical operations refresher training, setting up site specific adaptation parameters, and delivering software releases with site specific content. These activities are necessary to enable the 5 sites to achieve initial operations on ERAM (defined as IOC) and begin the transition from initial through extended and on to continuous operations following a site benchmarking process. The benchmarking process has been developed in collaboration with site and service center personnel and bargaining unit employees to provide a standard, repeatable process in achieving continuous operations at each ARTCC.</p> <p><u>HOST</u> FAA has been developing, testing, and integrating software to replace the HOST computer system (HCS) since 2008. Due to delays in ERAM, we have had to maintain this aging system longer</p>	<p>In-Service Decision (ISD) March 2011</p> <p>Achieve IOC at 7 ARTCC sites by September 2011: Albuquerque April 2011 Minneapolis April 2011 Houston April 2011 Chicago June 2011 Denver June 2011 (2 sites had been completed in FY 2009)</p> <p>Key Site IOC of Release 3 September 2011</p> <p>Air Traffic and Technical Operations Refresher Training: Minneapolis, January 2011 For remaining five sites, training scheduled to complete by 30 days prior to IOC.</p> <p>Software Release 2: Throughout FY 2011</p>
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	<p>than expected. FAA has committed to OMB in the ERAM Improvement Plan that software Release 2 would be the waterfall deployment release used through FY 2011 and till the 3rd quarter of FY 2012, when Release 3 will become the deployment baseline Sites which have previously achieved operations on Release 2 will be transitioned to Release 3. Release 2 contains all of the baseline ERAM functionality that replaces the HCS as well as some additional improvements needed to support continuous operations at the ERAM key sites. The Release 3 system adds system interfaces with the ADS-B and SWIM systems.</p>	
<p>Expected Results, this year and in the future:</p>	<p><u>Achieve IOC at ARTCC sites</u> The expected results are to achieve IOC at seven ARTCC sites by the end of fiscal year 2011. The future expected results are to achieve IOC at six ARTCC sites by the end of FY 2012, and achieve IOC at the remaining seven ARTCC sites by the end of FY 2013.</p> <p><u>Decommission HOST</u> Sites which have previously achieved operations on software Release 2 will be transitioned to Release 3 after the third quarter of FY 2012. By the end of FY 2014 the legacy HOST system will be decommissioned at all facilities.</p>	

MANAGEMENT CHALLENGE		
Chapter 7: Advancing the Next Generation Air transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System		
Issue 7C:	<p><u>Maximizing the Delivery and Implementation of New Performance-Based Navigation Initiatives That Can Enhance Capacity and Reduce Delays</u></p> <p>A fundamental building block of FAA's NextGen efforts is establishing new performance-based procedures using Area Navigation (RNAV) and Required Navigation Performance (RNP) specifications. The FAA has not widely implemented efficient RNP procedures, clarified the role of non-government third parties in developing RNAV/RNP procedures, or developed metrics to measure expected benefits.</p>	
ACTION PLAN		
Cognizant Organization:	ATO Mission Support Services, AJV-0	
Tools to be Used to Resolve the Issue:	<p><u>Implementation Plan</u> Develop implementation plan for streamlining the development and integration of instrument flight procedure process.</p> <p><u>Beneficial Procedures</u> Adjust goals to focus on implementing beneficial procedures rather than producing a targeted number of procedures.</p>	
Time Needed to Resolve the Issue:	<p><u>January 2012</u> The new U.S. Standard for Performance-Based Navigation (PBN) Procedures and Routes Integration Order is expected to be complete in January 2012. This order provides a standardized process for the development and implementation of PBN applications, including Area Navigation (RNAV) and Required Navigation Performance (RNP) instrument approaches, departure procedures, arrival procedures, and routes in the en route and terminal domains.</p> <p><u>FY 2011</u> The <i>Flight Plan</i> goal change is expected this fiscal year. In FY 2011, FAA will build on the successful introduction of PBN operations in the NAS through a continuous improvement process to optimize PBN procedures. Close collaboration between FAA and industry, through forums such as RTCA and the Performance-Based Operations Aviation Rulemaking Committee (PARC), as well as close coordination between the FAA's air traffic and flight standards organizations will ensure success.</p>	
Specific steps to be taken in FY 2011	<p><u>Align Flight Plan Goal</u> Align <i>Flight Plan</i> goal and amended wording to reflect need for beneficial procedures.</p>	

	<p>Provide briefing material to administrator</p> <p><u>Implement Procedures</u> The FAA will implement planned procedures using a new phased process designed to ensure all coordination, environmental, SMS, automation and training is complete prior to the published date of the procedure.</p> <p>Draft U.S. Standard For PBN Performance Based Navigation and Route Integration</p> <p>AJV-14 review and approval.</p> <p>Document Change Review and comment</p>	<p>October 2010</p> <p>February 2011</p> <p>March 2011</p> <p>July 2011</p>
<p>Expected Results, this year and in the future:</p>	<ul style="list-style-type: none"> • The new Order will be an all-encompassing strategy to effectively implement and streamline PBN procedures and routes. • The new FAA <i>Flight Plan</i> Goals recognize the need to quickly evolve procedural design and deployment to produce greater benefits. 	

MANAGEMENT CHALLENGE	
Chapter 7: Advancing the Next Generation Air transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System	
Issue 7D:	<p><u>Ensuring a Sufficient Number of Certified Professional Controllers at Critical Facilities</u></p> <p>The FAA estimates that it will need to hire and train nearly 11,000 new air traffic controllers by fiscal year 2019. Because of the surge in attrition, FAA must assign newly hired controllers to complex air traffic control facilities. FAA will need to minimize the risk that less experienced controllers impose on the most critical facilities to the NAS. Key challenges will be ensuring adequate staffing, training resources, and other support to maintain continuity of facility operations.</p>
ACTION PLAN	
Cognizant Organization:	<p style="text-align: center;">Air Traffic Organization Office of Technical Training (AJL)</p> <p style="text-align: center;">Air Traffic Organization En Route and Oceanic Services (AJE)</p> <p style="text-align: center;">Air Traffic Organization Terminal Services (AJT)</p> <p style="text-align: center;">Air Traffic Organization Strategy and Performance (AJG)</p>
Tools to be Used to Resolve the Issue:	<p>To minimize the risk that less experienced controllers impose on the most critical facilities in the NAS, and to ensure adequate staffing, training resources and other support to maintain continuity of facility operations, the FAA plans to:</p> <p><u>Payroll Data</u> Use payroll data from ATO Finance to monitor current facility staffing</p> <p><u>Snapshot</u> Use information from the Snapshot tool to project transfers and retirements</p> <p><u>National Training Database</u> Use details from the National Training Database to assess training progress in the field</p> <p><u>Actual-On-Board Information</u> Report Actual-On-Board information to the monthly Flight Plan Review group as management review</p> <p><u>Curriculum Development</u> Manage curriculum development through a national process that involves instructional system designers, technical input from subject matter experts, defined responsibilities and prioritization of resources</p>

	<p><u>Quarterly Training</u> Conduct quarterly training metrics reviews to identify trends, gauge progress and strategically target support to improve field training delivery</p> <p><u>Air Traffic Control Optimum Training Solution (ATCOTS)</u> Adjust resources in the Air Traffic Control Optimum Training Solution (ATCOTS) contract to maximize training resources at facilities with the most crucial need.</p>	
<p>Time Needed to Resolve the Issue:</p>	<p>Most of the controllers who will be certified in fiscal 2011 at complex air traffic facilities such as Southern California Terminal Radar Approach Control, Chicago O'Hare Tower and the New York terminal facilities are benefiting from recent training initiatives, and they are completing their final position certifications. The facilities have been staffed according to the Controller Workforce Plan, and the FAA will continue to provide oversight of its staffing situation at critical facilities. Ongoing challenges include managing controller attrition and making a sound national training program more efficient. The specifications to address these are listed below. Plans to manage controller attrition include:</p> <ul style="list-style-type: none"> • Improve how we screen and assign controller candidates • Validate the Terminal Operational Assessment Program and see if it's feasible to expand program to other complex TRACON facilities • Authorize contractor resources using a new resource allocation tool so facilities with most need get appropriate resources available within program budget • Increase deployment and use of simulation equipment to augment training • Update curriculum under the learning transformation initiative to incorporate competency-based approach to training <p>While this Management Challenge – ensuring a sufficient number of certified controllers are assigned at critical facilities – is an issue that the FAA must monitor indefinitely, we anticipate we will make significant progress in addressing it by September 30, 2011.</p>	
<p>Specific steps to be taken in FY 2011</p>	<p><u>Publish Annual Update</u> Publish annual update to the Air Traffic Controller Workforce Plan.</p> <p><u>Analyze Controller Proficiency</u> Analyze how controller proficiency is being addressed in the current curriculum.</p> <p><u>Terminal Operational Assessment</u> The FAA is piloting an initiative at these three key sites to validate</p>	<p>Finalize in March 2011</p> <p>Complete analysis by March 2011. Next steps: Develop an implementation plan for restructuring the curriculum and updating courses</p>

	<p>an Operational Assessment Program to screen applicants who want to transfer to ATC-10 and above TRACON facilities. The program includes a knowledge exam and skills assessment as part of the pre-selection criteria, which would provide the hiring manager with additional data to consider in making the hiring decisions. This process could screen out applicants who lack skills to succeed at more complex and NAS-critical facilities.</p> <p>Enhance pre-hire operational evaluation of Certified Professional Controller transfers at Southern California, Chicago and Atlanta Terminal Radar Approach Control facilities.</p> <p><u>Expand SimFast</u> Expand SimFast terminal radar simulator capability to 50 locations that did not previously have access to a terminal radar simulator. By increasing the use of simulators for refresher training, controllers have the opportunity to hone air traffic skills and increase technical proficiency.</p> <p><u>Deploy Additional Training Computers</u> Deploy 360 additional training computers to expand or upgrade obsolete training workstations. This allows increased use of e-learning content delivery instead of non-interactive resources such as a memorandum, and will allow more training to be centrally developed and pushed to the field.</p> <p><u>Expand use of the high-fidelity Tower Simulation System</u> Expand use of the high-fidelity Tower Simulation System to optimize training at the FAA Academy and at field facilities. Each simulator has the database capacity to service neighboring facilities, maximizing the return</p>	<p>Pilot project begins April 2011; potential to expand program to similar facilities nationwide.</p> <p>Install 25 systems by March 2011, and another 25 systems by June 2011.</p> <p>Install all workstations by June 2011.</p> <p>Install an additional two simulators at the FAA Academy and an additional four simulators in the Field by September 2011 under a previously funded initiative.</p>
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	<p>on investment.</p> <p><u>Develop enhanced course for On-the-Job Training Instructors</u> Develop enhanced course for On-the-Job Training Instructors to improve their teaching competency and performance as instructors.</p> <p><u>Terminal Skill Enhancement Workshop</u> Require all students destined to Level 10 and higher terminal radar facilities to attend the FAA Academy's Terminal Skills Enhancement Workshop, which provides additional practice in simulators to prepare students for a more complex air traffic environment.</p> <p>TSEW will be part of the required training program for students bound for complex TRACON facilities until an updated curriculum is implemented at the FAA Academy that has this course enhancement built into the lessons. This update is part of the learning transformation initiative and is projected to be implemented in fiscal 2012.</p> <p><u>Develop and implement skill enhancement workshop</u> Develop and implement skill enhancement workshop at the FAA Academy for students assigned to Level 10 and higher control towers so students arrive at their assigned facilities better prepared for a more complex air traffic environment.</p> <p><u>Maximize hiring controllers or controller transfers</u> Maximize hiring controllers or controller transfers with previous air traffic experience at NAS-critical facilities. This is an ongoing initiative that is part of the ATO's staffing/placement</p>	<p>Complete front-end curriculum analysis by September 2011.</p> <p>Ongoing. Achieve goal by September 2011.</p> <p>Achieve goal by September 2011.</p> <p>Ongoing. Achieve goal by September 2011.</p>
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	<p>strategy.</p> <p><u>Certify 1,000 controllers</u> Certify 1,000 controllers across the NAS.</p> <p><u>Manage training content using a Learning Content Management System</u> Manage training content using a Learning Content Management System. An LCMS allows content developers to search, find and reuse learning objects and allows other stakeholders (such as subject matter experts or task managers) to remotely contribute to the development of a course. This approach can reduce learning content development time between 25 percent and 60 percent.</p>	<p>Achieve goal by September 2011.</p> <p>Complete Investment Analysis Readiness Decision Checklist will be complete by April 2011</p>
<p>Expected Results, this year and in the future:</p>	<p>The FAA expects that controllers-in-training at NAS-critical facilities will benefit from recent enhancements to FAA training and will progress to earn facility ratings in line with FAA goals. As the agency executes the comprehensive Controller Workforce Plan, it continues to modify curriculum and upgrade technology to improve how it teaches today's workforce. As the Technical Training organization matures, it is positioned to more effectively provide training-related data on a regular basis. This allows stakeholders to identify trends and strategically target support to improve field training delivery.</p>	

MANAGEMENT CHALLENGE

Chapter 8: Implementing Processes To Improve the Department's Acquisitions and Contract Management

Issue 8A:

Strengthening Processes To Govern the Appropriate Use of Non-Competitive or Risky Contracts and Maximize Use of Competition

The Department of Transportation annually awards over \$1.8 billion using sole-sourced, cost-reimbursable, time-and-materials, and labor hours contracts. A review of sole-sourced contracts awarded by FAA revealed that acquisition planning was inadequate and responsible officials were not sufficiently trained to perform price analyses. Improved planning, training, and documentation are essential to ensure that prices are fair and reasonable for these contracts. As a result, program and contracting officials took shortcuts when completing price analyses to meet compressed timeframes.

Note: The IG Report misidentifies the true number and value of noncompetitive awards made by FAA in 2009. The IG report states FAA awarded 16,500 noncompetitive contract actions at a value of \$541 million. In fact, of that amount, 1,819 (over \$173 million) were not available for competition (8a, sdvosb, etc).

ACTION PLAN

Cognizant Organization:

Acquisition and Contracting

Tools to be Used to Resolve the Issue:

Training, additional management reviews, and audits will be used to address this challenge area. These will include:

Training

Training for contracting officers/specialists and program personnel will address how to determine which type of contract is most appropriate given requirements and cost, schedule and technical risks.

Reviews

Senior contracting officers will provide additional reviews when CPAF and noncompetitive awards are proposed.

Compliance Reviews

FAA's National Acquisition Evaluation Program (NAEP) will continue to review CPAF contracts and noncompetitive awards for compliance with applicable policy and guidance (based on a sampling protocol).

Award Statistics Reviews

FAA's Acquisition Executive will review award statistics monthly, to identify any negative trends in noncompetitive awards and address accordingly.

<p>Time Needed to Resolve the Issue:</p>	<p>As the experience levels of staffs in both areas increases, the quality of our contractual efforts will improve. It would be prudent to monitor this progress every six months and to expect progress within the next six to twelve months. With the additional Senior Contracting Officer oversight, progress should be experienced over the next twelve month period. The continuous monitoring through NAEP will also assist in making progress on this issue.</p>	
<p>Specific steps to be taken in FY 2011</p>	<p><u>Training & Education</u> Continued training and education of contracting officers, COTRs and program managers.</p> <p><u>Senior Contracting Officer Review</u> Implementation of Senior Contracting Officer Review (independent of the Contracting Officer on the effort) for all contemplated CPAF contracts over \$50 million, for appropriateness of award fee criteria.</p> <p><u>Review CPAF & Noncompetitive Awards</u> FAA's National Acquisition Evaluation Program will include reviews of CPAF and noncompetitive awards for compliance with AMS</p> <p>Based upon the overall findings from NAEP, recommendations will be made for needed training or opportunities for workforce development</p> <p><u>F&E Review of Noncompetitive Award Statistics</u> FAA's Acquisition Executive will review award statistics on a monthly basis to identify any negative trends in noncompetitive awards.</p>	<p>Ongoing</p> <p>Begins March 15</p> <p>Ongoing</p> <p>Ongoing</p>
<p>Expected Results, this year and in the future:</p>	<p>Through the actions identified above, FAA will ensure it awards and administers CPAF contracts effectively and efficiently and makes noncompetitive awards appropriately.</p>	

FY 2011 MANAGEMENT CHALLENGE – ACTION PLAN

Chapter 8: Implementing Processes To Improve the Department's Acquisitions and Contract Management

Issue 8B:	<p><u>Strengthening the Acquisition Function and Workforce to Provide Leadership for the Department's Acquisitions</u></p> <p>The Department of Transportation is challenged to maintain an acquisition workforce that can effectively oversee its expanding and complex contracts for goods and services. There are concerns about retention, recruitment and the need to ensure a competent workforce which poses risks to the Department's ability to meet its acquisition workload demands. The FAA's acquisition workforce is currently 6 percent understaffed, this shortage could grow to 26 percent by 2014. Despite these concerns, the Department has yet to develop adequate plans to address this challenge.</p>
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ADDRESSING THE ISSUE

Cognizant Organization:	Acquisition and Business Services
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Tools to be Used to Resolve the Issue:	<p><u>Acquisition Workforce Plan</u> FAA's executive-level Acquisition Workforce Council oversees workforce planning and development for FAA's acquisition workforce, including annual updates and implementation of FAA's Acquisition Workforce Plan. Through a rigorous data collection and analysis process, FAA continuously assesses its staffing requirements and gaps and develops and implements strategies to meet the unique requirements of each acquisition profession.</p> <p><u>Career Development & Certification Programs</u> In 2009 the agency created a new function, the Acquisition Career Management organization, to drive acquisition workforce development forward to meet the challenges of the future FAA. The ACM, in conjunction with the Acquisition Workforce Council, defines and implements acquisition workforce development strategies. The ACM also manages FAA's acquisition career certification programs. FY11 work includes development of a new certification program for Test and Evaluation specialists and development of an online Community of Practice Portal.</p>
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Time Needed to Resolve the Issue:	Workforce planning and development are ongoing processes. FAA has institutionalized a structured framework and approach to continuously assess and address staffing and skill requirements. Action items in this plan strengthen the program and will be achieved in FY11.
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Specific steps to be taken in FY 2011	<p><u>Publish FY11 Update to FAA Acquisition Workforce Plan</u></p> <ul style="list-style-type: none"> - Draft plan developed 	June 30, 2011
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	- Final Plan completed	September 30, 2011
	<u>Complete development of certification program for Test & Evaluation specialists</u>	
	- Competencies developed	December 31, 2010
	- Behavioral indicators developed	January 31, 2011
	- Certification levels and requirements defined	September 30, 2011
	<u>Certify acquisition professionals in accordance with agency policy</u>	
	- Assess certification status of program managers and contracting officers/specialists quarterly	Quarterly
	- Achieve FY11 targets for PM and CO certification <ul style="list-style-type: none"> o 95% of Acquisition Category (ACAT) 1 & 2 programs managed by a level 3 certified program manager o Entry level contracting specialists achieve level 1 certification within 15 months of hire 	September 30, 2011
	<u>Develop and prototype Community of Practice Portal</u>	April 30, 2011
Expected Results, this year and in the future:	FAA will have sustained high performance in managing acquisitions through sufficient staffing and skilled/certified acquisition workforce.	

MANAGEMENT CHALLENGE		
Chapter 8: Implementing Processes To Improve the Department's Acquisitions and Contract Management		
Issue 8C:	<p><u>Maintaining Programs to Help Ensure High Ethical Standards Among the Department's Contractors and Employees</u></p> <p>The Department of Transportation's oversight of over \$40 billion in Recovery Act funds heightens the importance of safeguarding against awarding funds to those with a record of wrongdoing and abuse. Audits and investigations have identified the need for more vigilant oversight to detect and prevent procurement fraud, waste, and abuse among fund recipients. FAA has not fully implemented the reporting system and corresponding internal controls used across the Department to collect and manage suspension and debarment information.</p>	
ACTION PLAN		
Cognizant Organization:	FAA Office of the Chief Counsel Acquisition and Commercial Law Division	
Tools to be Used to Resolve the Issue:	<p><u>Training</u> The FAA plans to develop new training modules that will address ethics rules and regulations including the Procurement Integrity Act. In addition, elements of appropriation and fiscal law, debarment and suspension rules and methods of identifying fraud will be discussed. This training initiative will be focused on providing acquisition personnel with a clear understanding of their legal and ethical responsibilities. Training will be offered both live and computer based.</p> <p><u>eLMS</u> FAA's eLMS system is able to track who receives the training modules and who completes the training for monitoring grant/funding recipients. In FY 2011, FAA should have an exact count of employees to whom the training was delivered. The system is also able to provide the training to categorized groups of employees (i.e. all contracting officers).</p>	
Time Needed to Resolve the Issue:	Fiscal Year 2011	
Specific steps to be taken in FY 2011	<p><u>Propose Training Schedule</u> Proposed training schedule completed.</p> <p><u>Develop Training Curriculum</u> Training curriculum developed.</p> <p><u>Computer Based Training</u> Computer based training available.</p>	<p>December 30, 2010</p> <p>June 1, 2011</p> <p>June 15, 2011</p>

	<p><u>Suspension and Debarment Training</u> Module on FAA policy and practices</p> <p><u>Live Training</u> Complete live training.</p>	<p>August 31, 2011</p> <p>September 30, 2011</p>
<p><u>Expected Results, this year and in the future:</u></p>	<p>Heightened awareness of ethical responsibility to ensure timely action and reaction to acquisition issues.</p>	

MANAGEMENT CHALLENGE

Chapter 9: Improving the Department's Cyber Security

<p>Issue 9A:</p>	<p><u>Establishing a Robust Information Security Program</u> The Federal Information Security Management Act (FISMA) of 2002 requires agencies to establish an information security program to protect agency information and systems. Security deficiencies exist in key control areas, including management of information, system authorization, configuration management, and contingency planning. Additionally, the Department's Office of the Chief Information Officer could do more to guide and oversee the Operating Administrations in building and sustaining strong information security practices. Finally, the Department has yet to meet OMB's requirement for issuing Personal Identity Verification cards to employees and contractors.</p>
<p>ACTION PLAN</p>	
<p>Cognizant Organization:</p>	<p>AIO – Office of Information Services ASH – Office of Security and Hazardous Materials AIN – Office of Security</p>
<p>Tools to be Used to Resolve the Issue:</p>	<p><u>ISS and Compliance Programs</u> The Information Systems Security (ISS) Program Plan describes the approach for conducting ISS compliance reviews for all FAA systems. The Compliance Program has been developed to meet federal, Departmental, and agency policies that require the regular testing and evaluation of information security policies, procedures and practices.</p> <p><u>C & A Process</u> Each system is required to undergo a triennial Certification and Accreditation (C&A) process to ensure consistent compliance with the highest standards of security controls and practices. As part of the Certification and Accreditation (C&A) process, Risk Assessment and Security Testing is conducted to evaluate technical, operational, and management security control requirements mandated by Federal Information Processing Standard (FIPS) – 200. From these initial findings, Plan of Actions and Milestones (POAMs) are developed to shore up any potential weaknesses and to provide for an iron clad defense.</p> <p><u>CMS</u> AIN will continue to use its on-line Card Management System (CMS) for application, enrollment, and issuance of PIV Cards. AIN will continue to set up PIV card issuing stations in FAA facilities across the US. AIN will then move to remote issuing tactics for very small and remote FAA offices.</p>
<p>Time Needed to Resolve the Issue:</p>	<p>Information technology security deficiencies are being successfully addressed at all levels by the end of FY11. This is an ongoing and aggressive program of certification and accreditation in accordance with FISMA standards throughout the agency, in full cooperation with Department's Chief Information Officer (CIO). Each system is required to undergo a triennial C&A process to ensure consistent compliance with the highest standards of security controls and practices. A comprehensive assessment of security controls is performed regularly to ensure that policies are correctly implemented</p>

	and providing full protection to FAA systems.	
<p>Specific steps to be taken in FY 2011</p>	<p><u>Monthly Reviews</u> Conduct monthly reviews to ensure the highest levels of situational awareness through the use of scorecards, visibility charts and project updates.</p> <p><u>Reporting, Results and Assessments</u> Provide security incident reporting, scanning results, and regular vulnerability assessments to FAA Staff Offices and Lines of Business.</p> <p><u>Complete C&A</u> Completed C&A on 1 (100 percent) systems so far this year and on track to complete 72 remaining within triennial review anniversary date.</p> <p><u>System Assessments</u> Perform 218 systems assessments</p> <p>We have already completed 4 annual assessments of 218 scheduled in FY 2011.</p> <p><u>POA&M</u> Agreed upon and funded high risk POA&M vulnerabilities due for remediation in FY 2011.</p> <p><u>PIV Card Issuance</u> Continue PIV card issuance across the US in an effort to issue PIV cards to all 73,000 employees and contractors that require them.</p>	<p>Monthly</p> <p>Daily, weekly, and monthly</p> <p>December 21, 2010</p> <p>September 30, 2011</p> <p>December 31, 2010</p> <p>When an enacted FY 11 budget is finalized by the FAA (TBD)</p> <p>April 30, 2011</p>
<p>Expected Results, this year and in the future:</p>	<p>It is crucial that FAA systems protection remains an increasing, shared, and visible priority. The FAA seeks not only to protect systems that protect travelers, but to instill a full and justified confidence in both stakeholders and employees, and to set a recognized standard for systems security.</p>	

MANAGEMENT CHALLENGE		
Chapter 9: Improving the Department's Cyber Security		
Issue 9B:	<p><u>Strengthening Air Traffic Control System Protections</u> FAA's NextGen system relies on a number of new technologies to achieve its goal. As FAA develops NextGen, it must continue to protect its current Air Traffic Control (ATC) systems. FAA has not established adequate Intrusion Detection System (IDS) capabilities to monitor and detect potential cyber security incidents at key ATC facilities. Additionally, FAA has not developed or identified a timetable for deploying IDS beyond specified TRACON facilities.</p>	
ACTION PLAN		
Cognizant Organization:	ATO ISS Program	
Tools to be Used to Resolve the Issue:	<p><u>Centralized NAS Cyber Event Monitoring</u> Centralized NAS cyber event detection tools that provide for NAS system level security event monitoring and analysis and NAS data flow modeling, anomaly detection, and analysis</p> <p><u>Cyber Event Situational Awareness and Response</u> Agency-level cyber event situational awareness and response coordination tools</p>	
Time Needed to Resolve the Issue:	September 15, 2012	
Specific steps to be taken in FY 2011	<p><u>The ATO is implementing a suite of cyber protection mechanisms for the NAS that do not solely rely on static IDS signature-based detection mechanisms. The following is a summary of the protection mechanisms being implemented.</u></p> <p><u>Modify ATO Notice 1370.44 to include policy for all Contractor provided NAS Operational Services to comply with ATO NAS Security Requirements.</u></p> <p>Establish formal ATO security requirements derived from NIST 800-53</p> <p>Include policy statement for NAS Operational Contract Services to comply with defined ATO security requirements</p>	<p>August 15, 2011</p> <p>September 30, 2011</p>

	<p><u>Implement NAS Cyber Operations (NCO) to provide a centralized NAS cyber event monitoring, detection, and response capability.</u></p> <p>Begin the Project Initiation Phase for a centralized NAS monitoring capability</p> <p><u>Develop a coordinated agency-level NAS cyber event response capability using formal Standard Operating Procedures (SOP)</u></p> <p>Coordinated Agency NAS Cyber Event Response steps: Complete draft of NAS Incident Response SOP</p>	<p>August 31, 2011</p> <p>September 30, 2011</p>
<p>Expected Results, this year and in the future:</p>	<p>2011 Impact: Formal ATO NAS security requirements will be levied on contractor provided NAS services. Centralized NAS cyber event monitoring and agency-level response will be initiated.</p> <p>Future Impact: NAS contract services will be secured at the same level as NAS owned systems. NCO will provide for fully centralized NAS cyber detection and response capability.</p>	

FY 2011 MANAGEMENT CHALLENGE – ACTION PLAN

Chapter 9: Improving the Department's Cyber Security

Issue 9C:	<p><u>Increasing Protection of Personally Identifiable Information</u> Increasing protection of personally identifiable information (PII) is essential to protect the public's privacy and comply with OMB requirements. The FAA has not fully implemented security controls required by OMB and the Department to protect PII. In addition, FAA has not ensured secured configuration of MSS computers in accordance with the Department's baseline standards to reduce the risk of unauthorized access and corruption.</p>
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ADDRESSING THE ISSUE

Cognizant Organization:	<p align="center">Privacy Division (AES-300)</p> <p align="center">Office of Quality, Integration, and Executive Services Information Technology Division (AQS-200)</p> <p align="center">Office of Aerospace Medicine (AAM)</p>
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Tools to be Used to Resolve the Issue:	<p><u>Comprehensive Plan</u> The FAA has a comprehensive and streamlined plan to increase the protection of personally identifiable information (PII) that focuses on establishing the appropriate administrative, technical, and physical <u>safeguards</u> to ensure the <u>security</u> and <u>confidentiality</u> of PII. In accordance with the Departmental requirements and the OIG MSS findings, the FAA has developed a strategic plan for implementing Privacy Program requirements across the enterprise. In addition, if approved by Congress, the FAA Administrator has announced a reorganization which will include a merger of the FAA Privacy Program with the Office of Information Systems Security under an IT Shared Services Organization.</p> <p>Key components of the plan include:</p> <ul style="list-style-type: none"> • Establishment of additional policies and procedures to address privacy compliance • Development and implementation of role based training and awareness specific to the FAA medical staff within the Aviation Safety organization • Implementation of vulnerability scanning tools • Implementation of rules of behavior for handling PII • Maturation of the Privacy Compliance Program <p><u>System Security Plan (ISSP) and E-Authentication Analysis</u> The FAA updated the Information System Security Plan (ISSP) and E-Authentication Analysis in 2009 to provide a clear rationale for the differing access levels for the different Medical Support System (MSS) component applications. The FAA implemented user ID and password authentication controls for the limited web-based MSS application access afforded to Aviation Medical Examiners (AMEs), AME staff and airmen. Remote FAA users who can fully access all MSS data and applications must use multifactor authentication. AMEs, their staffs and airmen have significantly restricted access to MSS data and applications. Airmen only have access to MedXpress which allows them to submit their personal identifying and medical information for their next examination.</p>
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	<p><u>Baseline Security Configuration Standards (BSCS)</u> AVS developed several Baseline Security Configuration Standards (BSCS) for commercial products, including common databases. An AVS BSCS was used as a foundation for the security configuration during the database upgrade. Recent DOT policy changes require configuration and assessment using a NIST or DOT approved checklist. AVS will review available database checklists and implement an appropriate checklist for compatibility with enterprise infrastructure and business requirements. To ensure the MSS servers maintain their approved security configuration, AVS will continue its vulnerability scanning program which regularly scans the server infrastructure that hosts the Medical Support Systems (MSS) applications and addresses vulnerabilities. The MSS web-enabled applications were modified on August 14, 2008 to lock user accounts after three unsuccessful attempts. The FAA will specify a specific time out value for AME desktops in their AMCS access agreements. While NIST recommends a 15 minute value, the FAA will discuss this specific value with the AME community and establish a value that complies with OMB, DOT and HHS requirements for information systems security.</p>	
<p>Time Needed to Resolve the Issue:</p>	<p>The Privacy Program Strategic Plan and Roadmap identifies specific activities which must be performed to bring the program into compliance with current applicable polices, laws and regulations. At the end of each fiscal year, a legislative and compliance review will be performed to determine any required updates to the program plan. The current plan if fully funded, brings the Privacy Program into compliance by the end of 2013 however protecting PII has operational components that are continuous and required on an ongoing basis to reduce risk of the PII exposure.</p> <p>Secure configuration of Medical Support System (MSS) computers in accordance with the Department's baseline standards to reduce the risk of unauthorized access and corruption will be ensured in FY2011.</p>	
<p>Specific steps to be taken in FY 2011</p>	<p><u>Perform a Privacy Program review to determine gaps in existing policies, processes and procedures.</u></p> <ul style="list-style-type: none"> o Privacy Compliance Program Developed. o Privacy Program Review Starts o Privacy Program Review Complete <p><u>Complete development of four role based training courses and conduct training at key sites.</u></p> <ul style="list-style-type: none"> o Training Course Development and Pilot Complete o Conduct Training at IT/ISS Conference o Conduct Training at key sites 	<p>December 2010</p> <p>April 1, 2011</p> <p>September 30, 2011</p> <p>February 28, 2011</p> <p>March 17, 2011</p> <p>September 30, 2011</p>

	<p><u>Continue progress on SSN and PII Reduction/Elimination and Protection</u></p> <ul style="list-style-type: none"> ○ Eliminate SSN in 3 application databases identified as containing SSN ○ Complete Directive process for Information and Data Management policy ○ Review business processes to identify and address unnecessary SSN usage and inadequate protection. <p><u>Implement components of Data Loss Prevention (DLP) solution for data at rest, data in use and data in motion.</u></p> <ul style="list-style-type: none"> ○ Develop and deliver implementation strategy document ○ Implement initial phase DLP solution in key FAA organizations as identified in the strategy document <ul style="list-style-type: none"> ▪ Establish Routine Scanning (signed SLAs) ▪ Install Endpoints on high-risk assets ▪ Install Network Monitors ○ Conduct Scheduled DLP scans and distribute reports of scan results in accordance with LOB/SO Service Level Agreements <p><u>Complete the rollout of encryption tools.</u></p> <ul style="list-style-type: none"> ○ Track LOB/SO rollout of encryption tools ensure individuals who handle PII are provided the software NLT <p><u>Continue vulnerability scans for software code and websites across all LOB/SOs.</u></p> <ul style="list-style-type: none"> ○ Monitor and track the progress of software code and website scanning for all LOB/SOs through September 30, 2011 to ensure 100% of identified completes the activity. 	<p>August 31, 2011</p> <p>September 30, 2011</p> <p>September 30, 2011</p> <p>December 31, 2011</p> <p>February 1, 2011</p> <p>September 30, 2011</p> <p>June 30, 2011</p> <p>September 30, 2011</p>
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	<p><u>Ensure individuals who handle PII sign a rules of behavior.</u></p> <ul style="list-style-type: none"> ○ Implement the Rules of Behavior application ○ Confirm individuals who handle PII sign the rules of behavior <p><u>Perform a Pilot Compliance activity.</u></p> <ul style="list-style-type: none"> ○ Pilot Finance Office Compliance Review <p><u>Manage and track Privacy Policy Implementation Plans and establishment of Privacy Managers within the Lines of Business/Staff Offices</u></p> <ul style="list-style-type: none"> ○ Privacy Managers in place for all LOB/SOs ○ Privacy Policy Implementation Plans finalized for all LOB/SOs <p>The FAA will specify a specific time out value for AME desktops in their AMCS access agreements. While National Institute of Standards and Technology recommends a 15 minute value, the FAA will discuss this specific value with the AME community and establish a value that complies with OMB, DOT and HHS requirements for information systems security. The target date for establishment and implementation of all time out standards is September 30, 2011.</p>	<p>May 1, 2011</p> <p>September 30, 2011</p> <p>September 30, 2011</p> <p>April 30, 2011</p> <p>June 30, 2011</p> <p>September 30, 2011</p>
<p>Expected Results, this year and in the future:</p>	<p>As the components of the Privacy Program are implemented, the FAA will reduce the risk of possible PII exposure. The Privacy Program will be re-evaluated against 17 strategic privacy control categories, 9 strategic directions and 26 high level capabilities on an annual basis to determine a program risk rating. If the current activities in the strategic roadmap are fully funded and executed, the privacy program can expect to achieve a moderate risk rating by 2012 and an acceptable risk rating by 2013.</p> <p>Actions will establish baseline standards to reduce the risk of unauthorized access and corruption and implement all time out standards.</p>	