

**DEPARTMENT OF TRANSPORTATION
INSPECTOR GENERAL
TOP MANAGEMENT CHALLENGES
FOR FISCAL YEAR 2010**

FEDERAL AVIATION ADMINISTRATION
YEAR END PROGRESS REPORTS

NOVEMBER 8, 2010

Name of Challenge: Maximizing the Department's Economic Recovery Investments

Issue: Enhancing oversight of ARRA spending on existing and new programs

Why is this an issue? The FAA needs to follow through on comprehensive workforce plans, identifying mission-critical human capital needs for ARRA implementation and assessing ARRA impact to existing programs. Enhanced oversight mechanisms must be in place to support a sustained focus on ARRA administration.

Actions taken in 2010:

The Recovery Board has echoed the concerns voiced by the Department of Transportation's (DOT) Office of the Inspector General (OIG), that allocating resources to support high-priority Recovery Act programs could adversely impact non-Recovery Act activities across the federal government. The FAA acknowledges these justifiable concerns, given the responsibilities associated with administering the ARRA. We have taken aggressive actions to address and resolve potential staffing issues. Our staff has shown unwavering dedication in administering ARRA in support of America's economic recovery, as our efforts and continued success serve to demonstrate.

The FAA currently has a wide variety of programs, initiatives, and activities in place to address recruitment, development, and retention. Within FAA, direct administrative responsibilities for ARRA belong to the Office of Airports (ARP) and the Air Traffic Organization (ATO). Both organizations have fully complied with the Office of Management and Budget's (OMB) mandate to assess gaps in mission-critical human capital needs for ARRA implementation using competency-based workforce planning methodologies.

The Office of Airports completed a workforce staffing study and survey in FY 2009. This resulted in an ARP staffing model based on functional, competency-based workload drivers, established by expert outside consultants working with ARP field and headquarters subject matter experts. This empirical model continues to be used as a decision tool to address staffing requirements. In June 2010, ARP expanded the staffing model for use as a web-based tool to analyze current staffing and project future requirements. In July 2010, ARP established a corporate approach to model utilization as a decision tool in the context of mission priorities.

A National Acquisition Evaluation Group (NAEG) conducted formal assessments of ATO's acquisition workforce. ATO completed development of their Acquisition Workforce Plan in July 2010, to evaluate and address staffing requirements. This plan provides guidance for workforce hiring, retention and development decisions across all National Air Space (NAS) acquisition programs. ATO has continued to expand the scope and detail of the workforce plan throughout FY 2010. The current version focuses on the core acquisition community, primarily in ATO, that is engaged in NAS modernization programs. The portfolio of facilities and equipment ARRA programs are comprised exclusively of modernization programs. Future versions will address the larger acquisition community across the entire FAA.

FAA provides stringent oversight to ARRA program administration. Our data validation processes have been positively received by the Government Accounting Office, DOT, and the OIG. These processes have served as a model for other DOT modes engaged in ARRA administration. We collect monthly reports from both prime and sub recipients. The submitted reports are certified by recipient officials, and validated by responsible FAA personnel. Along with data obtained from internal financial tracking systems, all data is cross-referenced against 1512 quarterly recipient reporting as part of our proven data validation processes to ensure accurate reporting. Data validation and program oversight is further supported by regular ARRA project site visits and inspections.

Actions remaining and expected completion date:

We will continue strive through FY 2012 to achieve appropriate staffing levels that meet future demands and mission priorities.

Results or Expected Results:

We will continue to build on our successes in developing roadmaps that address acquisition workforce needs, adjusting as our evaluation and reporting of workforce metrics provides quantifiable indicators of our plan's success. We remain proud of our efforts in successfully administering ARRA, and of our achievements on behalf of the Administration and the American people.

Name of Challenge: Maximizing the Department's Economic Recovery Investments

Issue: Reporting Accurate and Consistent Job Creation Data

Why is this an issue? ARRA mandated extensive new reporting requirements to include estimating and reporting on job creation. The reporting provides transparency and accountability for federal recovery dollars. A methodology for reviewing the data must be established for FAA.

Actions taken in 2010:

Section 1512 of the American Recovery and Reinvestment Act of 2009 (ARRA) requires grant and contract recipients to provide accurate job reporting. ARRA recipients submit a quarterly report to www.federalreporting.gov, the Office of Management and Budget (OMB)'s centralized data collection point for the Recovery Act reporting. FAA obtains daily data extracts from the OMB website 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.

The FAA continues to use and refine statistical job validation processes originally developed in FY 2009. These processes have been reviewed by the Government Accounting Office (GAO), the Department of Transportation (DOT), and DOT's Office of the Inspector General (OIG). Our validation processes have also served as a successful model for other DOT modes engaged in ARRA administration. We have enhanced these processes based on our working experience and to comply with revised OMB guidance. The FAA developed and formally disseminated revised validation processes in March 2010, adapting to new OMB 1512 reporting guidance. The monitoring of program status data in conjunction with reporting cycles for Sections 1201c and 1512 legislative requirements remains an ongoing and intensive process at FAA. We apply established data quality review processes on data extracts obtained daily from OMB throughout the reporting and "Agency Review Period" following every calendar quarter to validate recipient reporting.

The FAA maintains a broad scope of internal personnel and reporting mechanisms to ensure reported job data correlates with established program indicators. The Office of Airports (ARP) leveraged the existing SOAR grants tracking database coupled with their established Concept of Operations validation process. Grant recipient reporting is being validated through ARP's Concept of Operations processes, and cross-referenced against SOAR data for accuracy.

The Air Traffic Organization (ATO) has carefully monitored 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. Job data received from FAA contractors and grant recipients continues to be reviewed and correlated with individual program schedule and technical data for individual Facilities and Equipment projects.

The FAA formally comments on 1512 records with potential inaccuracies and/or omissions by the 25th day of the *Agency Review Period*, to provide recipients time to respond and correct data errors or anomalies. All recipients are contacted with validation findings by the 25th day of the *Agency Review Period*. Through FY 2010, FAA conducted internal reviews of the ARRA data submitted by recipients, applying approved validation procedures, data reviews, and analysis of Regional personnel and on-site field staff.

FAA further collects monthly reports from both prime and sub recipients. This data includes the number of hours worked and charged to Recovery Act funds each month of the reporting period. Additionally, cumulative hours for the project charged to the Recovery Act are also reported. The submitted reports are certified by recipient officials, and reviewed by responsible FAA personnel.

The ATO collects weekly status reports that contain current technical and schedule information. Weekly financial reports are prepared from information in the financial system that reflects current contract obligation and outlay data. ATO reviews and analyzes earned value management reports from contractors

and conducts weekly and monthly teleconference meetings with contractors and FAA field staff regarding project activities and progress. Resident Engineers make onsite visits to the project locations, monitoring contractor activities and conducting first hand assessments of the work and resources. Each of these monitoring venues provide 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.

Actions remaining and expected completion date:

FAA will continue to evaluate validation processes and adjust as necessary to comply with future OMB and DOT guidance. The FAA will continue to perform rigorous oversight in the form of internal reviews of recipient data and coordinate with ARP Regional offices and ATO field staff to validate and address data quality. The FAA and DOT in accordance with OMB guidance and recipient reporting data access tools will facilitate improved clarification and reporting for all contractors and grant recipients

Results or expected results:

ARRA recipient reporting has proven reasonable and in line with all program indicators. We have received full cooperation from ARRA recipients, who have worked diligently to fulfill their reporting requirements.

Name of Challenge: Addressing Human Factors and Strengthening the Regulatory and Oversight Framework for Aviation Safety

Issue: Increasing efforts to address human factors

Why is this an issue?

Human factors in aviation can affect the safety of users of the National Airspace System (NAS). For example, the effects of fatigue negatively impact human performance through impaired reasoning, attention lapses, and reduced situational awareness.

Actions taken in 2010:

- In 2010, we established an Air Traffic Organization (ATO) Fatigue Risk Management (FRM) program office to address fatigue in air traffic safety by identifying fatigue causes and mitigating its risks. The primary focus of the FRM program office is to build the foundation of an adaptive, evolving Fatigue Risk Management System (FRMS) to promote safety in the National Airspace System (NAS) and enhance the safety and well-being of employees.
- In June FY 2010, we developed an initial communication, education, and training plan to increase fatigue awareness for operational employees and management. We also developed an initial report to implement programs to increase content of fatigue risk event information. In collaboration with the National Air Traffic Controllers Association (NATCA), we formed a workgroup to address air traffic controller workplace fatigue, and developed collection methodologies to capture and analyze fatigue data from reported air traffic events.
- In 2010, we collaborated with internal FAA stakeholders and NATCA to develop an initial draft of the Fatigue Risk Management System (FRMS) concept. The FRMS will include a broad range of fatigue risk mitigations, such as scheduling, training and education, methods for reporting fatigue, and strategic communications activities.
- In September 2010 we published a pilot flight and duty time, and rest requirements (FDR), notice of proposed rulemaking (NPRM). We are using science and information on fatigue, as well as existing international standards, to assist in developing new rule language.

Actions Remaining and Expected Completion Date:

In FY 2011, FAA and NATCA will deliver an initial recommendation for potential policy and procedural changes that address air traffic controller (ATC) fatigue, as well as the jointly-designed FRMS. We will also identify causes of ATC fatigue, associated hazards and risks, and appropriate mitigations to reduce fatigue risk in the NAS.

Results or Expected Results:

The FAA has made substantial progress towards addressing fatigue. We expect the FRMS to bring about a sustained focus on fatigue safety through a top-to-bottom approach that incorporates and rests upon fatigue science. The FRMS will also leverage all appropriate fatigue risk mitigation best practices to develop and implement effective improvements in fatigue safety. The results of the Final Rule on pilot flight and duty, and rest requirements will be consistency and standardization in guidance that addresses fatigue, a critical factor in aviation safety. This will mitigate the risks of fatigue and provide the traveling public with reliably-rested flight crews.

Name of Challenge: Addressing Human Factors and Strengthening the Regulatory and Oversight Framework for Aviation Safety

Issue: Providing an equivalent level of safety for passengers flying on-demand carriers by strengthening FAA regulations and oversight

Why is this an issue?

FAA has regulatory and statutory authority to provide oversight on air carriers' safety standards. Through our surveillance activities, we are responsible for assuring that air operators and air agencies provide service with the highest level of safety to the traveling public. On-demand carriers have had a worse safety record in recent years and have less restrictive regulations and oversight than commercial carriers. FAA is developing a risk-based oversight approach for on-demand operators but it will not be implemented for 3 years.

Actions taken in 2010:

In FY 2010, FAA revised internal guidance material to strengthen our oversight of on-demand operators. We updated and published the following FAA orders and notice that require principal inspectors to use the Safety Performance Analysis System (SPAS) Surveillance Priority Index (SPI) for work program planning and updating their work.

- August 12, 2010, published FAA Order 1800.56J (National Flight Standards Work Program Guidelines)
- August 12, 2010, published FAA Order 8900.1 (Volume 6, Chapter 2, Section 1 – General Policies and Procedures for Parts 121, 135, and 91 Subpart K Surveillance)
- August 12, 2010, published Notice 8900.132 (Work program Development for 14 CFR Part 135 Certificate Holders).

The FAA is currently considering Safety Management System (SMS) regulations for on-demand air carriers operating under 14 CFR part 135. In the meantime, Flight Standards is sponsoring a set of SMS Pilot Projects, through which operators can develop an ICAO-conforming SMS using the advisory guidance published in FAA Advisory Circular (AC) 120-92A. SMS enhances the operators' safety by applying risk management and safety assurance processes to their operational systems. On-demand operators of all types, from international jet operators to air tour helicopter operators are participating. One subset of the part 135 community that has become especially active is the Helicopter Emergency Medical Service (HEMS) industry. In another segment, an air tour CEO recently stated that "This [SMS] is the best investment that any aviation company can make." The pilot projects are also conducted in close coordination with each operator's FAA certificate management team. Currently, for on-demand operators, the SMS Pilot Project has 55 current participants, 20 of whom joined in FY 2010.

FAA also continued its longer-term strategy to develop and deploy over the next four years a new risk-based oversight approach for on-demand operations as defined by the multi-year Systems Approach to Safety Oversight (SASO) Project Management Plan. SPAS is a major tool for managing a risk-based work program and provides a foundation for a data-driven approach to safety oversight. Mandatory use of the SPAS SPI tool aids principal inspectors in using resources more effectively by focusing surveillance on higher priority risks. Inspectors can use information from the Surveillance and Evaluation Program Data Package of each certificate holder to identify areas of risk within the certificate holder's operations. These tools help inspectors prioritize surveillance and focus attention where it is most needed.

Information technology requirements and automation requirements were developed in FY 2010. The functionality of the Safety Assurance System (SAS) was demonstrated with a prototype. The change management and communications strategies for transition to SAS were established and implemented.

Actions Remaining and Expected Completion Date:

FAA will continue the implementation of change management and communications strategies for the transition to SAS. Wave 1 of the SAS software will be developed by September 30, 2011.

Results or Expected Results:

By the end of FY 2013, deployment of SAS will allow FAA inspectors to provide strengthened, risk-based, and standardized oversight to on-demand carriers.

Prior to the deployment of the SAS (2013) and final SMS rule, mandated use of the SPAS SPI, the SEP data packages, and the SMS guidance material and pilot project will provide strengthened, risk-based, and standardized oversight of on-demand air carriers. Additionally, prior to SAS deployment, the SMS pilot project will transition to a formal voluntary program to meet the requirements of the SMS rule for 14 CFR part 121 operators. This will raise the standard for participating on-demand air carriers to the same level as major airlines.

Name of Challenge: Addressing Human Factors and Strengthening the Regulatory and Oversight Framework for Aviation Safety

Issue: Maintaining momentum in joint FAA/industry efforts to improve runway safety

Why is this an issue?

FAA experiences almost 1000 runway incursions per year, and each one has the potential to result in a collision. The majority of runway incursions (approximately 65 percent) occur when a pilot violates a regulation or fails to adhere to an air traffic controller's instruction. FAA must find near-term solutions to reduce runway incursions and fully vet and set milestones for the Plan's mid- and long-term initiatives.

Actions taken in 2010:

- In December 2009, we convened the first-ever FAA International Runway Safety Summit. This event raised runway safety awareness globally, improving safety for the flying public, including U.S. citizens traveling abroad. We conducted nine trade shows and safety conferences that were held throughout the continental United States. At one event alone over 43,000 runway safety publications were distributed.
- In June 2010, our Runway Safety Call to Action Mid/Long Term Action Plan Working Group published the Runway Safety Call to Action Mid-Term and Long-Term Initiatives Action Plan. This plan addresses the status of FAA activities, schedules, and milestones required to implement mid-and long-term initiatives identified by the Runway Safety Call to Action.
- On June 30, 2010, the FAA implemented new phraseology that will reduce runway incursion risk. Under the new procedure, pilots are required to receive explicit instructions before crossing or taxiing onto a runway and, except for certain circumstances, multiple runway crossing instructions can not be issued. We also instituted an Explicit Taxi Instruction Campaign designed to educate pilots, mechanics, and vehicle drivers of this change.
- In September, 2010, FAA implemented another significant phraseology change. This phraseology change adopted the international terminology "Line Up and Wait" in place of the former U.S. phrase "Taxi Into Position and Hold". The terminology change will reduce runway incursion risks by establishing a common international standard for this critical air traffic control instruction. We also initiated a campaign to educate pilots on this change.
- In 2010, our Root Cause Analysis Team (RCAT), chartered by our Runway Safety Council (RSC), reviewed serious runway incursions at seven airports. Full root cause analyses were conducted at four of the seven airports. Formal prioritized recommendations were presented to the RSC for one airport and initial recommendations for three, as well as event review results for three airports.

Actions Remaining and Expected Completion Date:

- The Digital Notice to Airmen (NOTAM) project is scheduled for initial operational capability in 2014 as part of Segment 1 of the Airspace and Aeronautical Information Management Modernization program. NOTAM digitization and dissemination trials are currently running at six airports.
- FAA will expedite the development of "off the shelf" Low Cost Surveillance System (LCGS) for use at smaller airports in order to provide some of the surveillance capabilities of Airport Surface Detection Equipment – Model X (ASDE-X). LCGS will improve controller surface situational awareness. LCGS is in a two-year test period.

Results or Expected Results:

FAA continues its ongoing outreach, education, and awareness programs to affected groups through mass electronic mail communications, training animations, and a new webpage. Runway safety remains one of our top priorities and we remain committed to mitigating the risks of runway incursions.

As each mid-and long-term item in the action plan is implemented the both the number and severity of runway incursions is expected to be reduced.

The recommendations concerning root causes of runway incursions identified by the RCAT were accepted by the RSC. The RSC assigned a lead organization for each recommendation and is currently tracking the implementation progress for each as well as the effectiveness of the recommendation once implemented.

The International Runway Safety Summit was very successful attracting over 500 people from almost 20 countries. This has resulted in the FAA presenting a Runway Safety working paper at the International Civil Aviation Organization's (ICAO) High Level Safety Conference. The paper was accepted and ICAO and several states submitted Runway Safety working papers to ICAO's 37th Assembly. This has resulted in ICAO, with FAA support, planning a Global Runway Safety Symposium in May 2011. A second International Runway Safety Summit tentatively will be hosted by EuroControl in 2013.

In addition to the two major fly-in events, we participated in over 600 functions where we interacted with pilots and vehicle drivers and distributed safety information. The expectation is Runway Safety awareness and knowledge of best practices and procedures is increasing; thus, resulting in fewer runway incursions.

While it is too soon to evaluate the effect of explicit taxi instructions or the phraseology change to "Line Up and Wait", we expect these changes to also reduce the number of runway incursions.

Modernizing the Notice to Airmen (NOTAM) system will provide current and relevant safety information to pilots concerning airport information that will help pilots avoid runway incursion situations.

The LCGS systems are operational at two airports and are scheduled to be installed at three additional airports. These systems will provide the basis for a thorough evaluation of this technology. If adopted, these systems will improve the situational awareness of controllers and provide a tool which can be used to prevent runway incursions.

Name of Challenge: Moving Toward the Next Generation Air Transportation System and Improving Performance of the National Airspace System

Issue: Taking actions to deliver NextGen benefits in the near- and mid-term

Why is this an issue?

A key challenge for the Department and FAA involves setting realistic expectations for what NextGen can deliver in the near and mid-term. The FAA's Next Generation Air Transportation System (NextGen) is a complex, multi-program undertaking encompassing a portfolio of investments designed to deliver new capabilities to the National Airspace System (NAS) over the next five to ten years. It is a high-risk effort involving billion-dollar investments from both the government and the airline industry. NextGen's challenges are multi-dimensional, involving research and development, complex software development and integration for existing and new systems, workforce changes, and policy changes. The integration of new systems, technologies, and capabilities impact the workforce and how FAA conducts the air traffic control operation.

Actions taken in 2010:

The NextGen Implementation Plan (published annually) summarizes NextGen goals and objectives and provides details on the planned activities required to achieve the desired near and mid-term operational improvements and associated benefits. NextGen implementation projects have been managed and tracked against the planned annual activities and milestones contained in the NextGen Implementation Plan. Moving forward, FAA has continued to integrate RTCA Task Force recommendations into the agency's NextGen planning and implementation activities. Diverse and competing interests of the stakeholders have further reinforced the need for continued government/industry collaboration. As a result, FAA directed RTCA to create a new advisory committee for NextGen. The newly-created *NextGen Advisory Committee* includes senior industry participants who speak for safety, airport, environmental, global harmonization, and air traffic interests.

The FAA published an updated Enterprise Architecture (EA) in early 2010 that reflects updates to the infrastructure roadmaps such as: Aircraft, Air-Ground, Automation, Weather, Communication, Navigation, Surveillance, Airspace & Procedures, Enterprise Services, Facilities, Human Systems Integration, and Information Systems Security. The NAS EA provides the technical roadmaps for NextGen, and FAA has worked to ensure there are links within the EA from the mid-term through the long-term.

In FY 2010, in conjunction with the National Academy of Public Administration (NAPA) findings and recommendations, FAA developed and implemented an acquisition workforce plan to ensure the hiring, development, certification, and retention of a workforce with enhanced competencies and skills to successfully implement NextGen. The plan contains descriptions of the acquisition workforce, challenges, workforce planning process, current views of the workforce and future demand, staffing/hiring plans, and strategies to address workforce gaps/needs.

Actions Remaining and Expected Completion Date:

- ▶ Test the Aeronautical Information Management portion of the Special Use Airspace Automated Data Exchange capability for System Wide Information Management. (December 2010)
- ▶ Terminal separation services prior to first production sites (ADS-B to ADS-B and ADS-B to Radar) for Common Automated Radar Terminal System. (Initial Operating Capability (IOC) April 30, 2011)
- ▶ En Route separation services with ADS-B integrated into En Route Automation Modernization (ERAM) (IOC April 30, 2011)
- ▶ Terminal separation services prior to first production sites (ADS-B to ADS-B and ADS-B to Radar) for STARS (IOC June 30, 2011)
- ▶ En Route separation services with ADS-B integrated into Advanced Technologies and Oceanic Procedures (ATOP) (IOC August 30, 2011)
- ▶ Calculate impacts of NAS system performance on passenger exposure in all phases of flight, including delays, using a national flow model for major airports. (September 2011)
- ▶ Execute acquisition workforce plan. (September 2011)

Results or Expected Results:

The FAA will continue to focus on the integration across agency processes, systems and personnel. Under the construct of FAA's portfolio management framework, FAA will conduct detailed integrated program planning to effectively manage NextGen.

Name of Challenge: Moving Toward the Next Generation Air Transportation System and Improving Performance of the National Airspace System

Issue: Maximizing the benefits of performance-based navigation in the national airspace system and keeping airspace redesign projects on track

Why is this an issue?

As air travel continues to be a way of life, increasing demands are made on airspace capacity. Although FAA is maximizing the efficiency and safety of our national airspace system (NAS) through performance-based navigation (PBN) and airspace redesign, there is a need to streamline and expedite the implementation processes. Increased awareness and better project management are two key areas that will help achieve the goals of developing integrated, benefit-focused projects.

Actions taken in 2010:

FAA has continued to refine the Integrated Airspace and Procedures concept. We promoted awareness by reaching out to our stakeholders to ensure that they understand the full benefits of implementing RNAV and RNP initiatives. The goal is to ensure that the system works for everyone, including air traffic controllers (ATCs), pilots, airports, and the community. To increase awareness amongst the aviation community, in June 2010, FAA initiated a plan to develop material for briefing industry and ATC. This will consist of two digital video disks (DVDs) that will allow the controllers and other stakeholders to gain a greater understanding of RNAV/RNP benefits. The final review of the task order was completed in September, 2010. It is expected that the development of the DVDs will take approximately nine months and subsequently will be delivered to FAA's Technical Training Organization.

Industry, through RTCA Task Force 5, recommended RNAV operations that focus on benefits should be increased and optimized; that a structured and systematic approach to PBN implementation is essential; that environmental concerns and fuel-savings considerations must be a focus; that teams to study the Metroplex issues should be implemented immediately; and that industry should continue to be involved. The primary goal is to produce measurable benefits in reduced flight time & fuel burn by utilizing airspace redesign and PBN. The team also hopes to de-conflict airports in the same Metroplex such as Washington Dulles, Washington National, and Baltimore-Washington International as well as the smaller airports. Anticipated reduction in controller workload will lead to reduced congestion and improved airport and airspace capacity.

Concepts of Metroplex Optimization of Airspace and Procedures were developed:

Metroplex Optimization is an expedited approach for Integrated Airspace and Procedures efforts. This requires a systems approach to PBN initiatives and the design of airspace providing a geographic focus to problem solving.

Integration of Airspace and Procedures creates additional transition access/egress points that are not based on ground-based navigation aids. The expedited approach considers concurrent development and implementation of arrival and departure procedures, decouples operations between primary and secondary/satellite airports and develops high-altitude routes and procedures.

To pursue integrated airspace and procedures concept, FAA held prototype activities, including kick-off meetings, and planning discussions with facilities in Denver in February 2010. On April 19-23, 2010, a design meeting was held with all parties and the initial integrated procedures design was completed in August 2010. Environmental review and human-in-the-loop simulations will further determine refinements to the initial designs.

To improve project management and project tracking mechanisms, FAA initiated development of two databases to track PBN procedures. The first database, the PBN Project Tracking Tool, is a web-based tool that provides a tracking mechanism to expedite the development, review, and implementation of PBN procedures and routes throughout the lifecycle of the PBN project. Additionally, it was developed to align with the new FAA Order – *Process for Development and Implementation of PBN Procedures and Routes*.

It provides project management functionality for PBN working group members, along with transparency for those interested in the progress of PBN projects. The PBN Project Tracking Tool is designed to be used by all parties involved with developing PBN procedures and routes. It includes features that are important for compliance with the Safety Management System (SMS). The PBN Project Tracking Tool is currently in the initial testing phase and is scheduled for release in conjunction with approval of the new FAA Order – *Process for Development and Implementation of PBN Procedures and Routes*. The second database that was developed in May 2010 is an interim solution to project tracking. It helps track individual procedures and report on procedure counts for our *Flight Plan* goals.

Actions Remaining and Expected Completion Date:

FAA will approve the new PBN Order and release the online procedures tracking database - scheduled for completion by December 2011. It will also complete the final deliverable DVD briefing material to FAA's Technical Training Organization by July 2011 and update guidance material as needed.

Results or Expected Results:

The expected result is to have an expedited and integrated process for PBN design and implementation. ATCs and other stakeholders will have a greater understanding of RNAV and RNP, enhancing wider acceptance and technical knowledge.

Beginning in FY 2011, FAA will continue to produce PBN routes and procedures at a similar rate as in FY 2010. These procedures and routes will be benefits focused and mainly implemented in Metroplex areas. The FAA's efforts to deconflict arrival and departure traffic around multiple airports in congested metropolitan areas will move RNAV/RNP airspace and procedure design away from individual overlays into an Integrated Airspace and Procedures approach. The agency is also focusing on city pair networks, deconflicting and optimization of procedures serving airports in close proximity.

In September 2010, FAA initiated work to develop media and materials for RNAV and RNP briefings to both industry and ATC. This briefing information will assist in expanding the knowledge and increasing overall acceptance and use of RNAV/RNP procedures by all parties. Additionally, the DVD's will be used in part to create national controller training.

FAA initiated two databases to increase efficiency in tracking progress and status of all PBN procedures. This web-based tool will help expedite PBN procedures, aids in Safety Management Systems (SMS) compliance and expedites coordination with our new more efficient 5 Phase Development and Implementation of PBN Procedures and Routes.

Name of Challenge: Moving Toward the Next Generation Air Transportation System and Improving Performance of the National Airspace System

Issue: Improving programs for developing the next generation of air traffic controllers

Why is this an issue?

Over the next decade, FAA plans to hire and train nearly 15,000 new air traffic controllers (ATCs) to replace those who are close to retirement. Ensuring that these controllers are properly trained and certified at FAA's more than 300 air traffic control facilities requires effective national oversight and accurate metrics for measuring progress of new controllers in training.

Actions taken in 2010:

FAA published a report that outlines training failure information by year, type of hire, what stage of training did the student fail in and, completion time. A comparison study was also generated that provides information on transfers, as well as whether or not the transferred controllers were successful or unsuccessful in their new facility. This comparison study made multiple comparisons between en route and terminal air traffic control facilities as well as a comparison of the results of transfers from en route-to-en route facilities, en route-to-terminal facilities, terminal-to-terminal facilities, and terminal-to-en route facilities. The FAA has been analyzing and reporting the time it takes to become a Certified Professional Controller, the number of training failures, and the number of training delays. Enhancements of the methods used for analyzing and reporting on relevant training data continue. A periodic review of these specific indicators has continued through the end of the fiscal year and will continue into subsequent fiscal years.

FAA initiatives to analyze training hours and costs are based on contractor provided invoice data. This ongoing review of training hours and costs has allowed FAA to better monitor training/recruit trends. Also, FAA developed tools to predict contract costing trends for the Air Traffic Control Optimum Training Solution (ATCOTS) contract by May 1, 2010. These tools analyze training hours and weekly invoice data provided by the contractor. In addition, FAA has developed contractor utilization surveillance tools to monitor hours billed for supplemental field training. A program-wide online tool will be deployed in November 2010. As a result of prior recommendations, FAA has aggressively filled multiple ATCOTS program management positions to include Executive Lead, Communications Lead, Management Analyst, and Business Manager. Additionally, contract support vehicles have been utilized to provide contractor support for the Contracting Officer, Program Manager, and Quality Lead. New award fee metrics and goals were established to include individual competency, organizational competency, cost awareness, and customer satisfaction.

Actions Remaining and Expected Completion Date:

Because of the boost in hiring activities since 2006, new air traffic controllers are increasingly brought on with no prior experience. The En Route facilities have established training programs which are able to handle and have been effective handling any type of controller new hire. However some of the larger terminal facilities have been challenged in meeting the training demand. But since 2007 – and especially in the past year – the FAA launched several initiatives to update its training methodologies and lesson plans to fit the profile of those who are being hired. The FAA continues to modify its training curriculum to improve its effectiveness for training today's workforce. In addition, periodic review of the stated key performance indicators, measures, and metrics, will continue to assist in determining where additional effort can be targeted, continuously improving the training system, including areas applicable to new hires from the general public.

An ATCOTS program-wide online tool to analyze contractor training hours and weekly costs will be deployed in November 2010.

Results or Expected Results:

The Technical Training office is positioned to analyze training related data more efficiently with the data sets newly available on a regular basis, allowing for more substantial efforts towards root-cause analysis going into FY 2011. As the metrics and measures mature over the course of the next year,

the office will be able to use them to strategically target training support and oversight efforts through weekly tasks, quarterly initiatives, and an annual workplan.

The ATCOTS program office successfully executed the second contract year and remained within the initial and supplemental funding allocation

By revamping the award fee structure, the FAA now motivates the contractor to perform with added focus in specific program areas. This has resulted in the contractor aligning its initiatives to the FAA's vision for the Technical Training organization and provides a better structure to inform stakeholders on contractor contributions.

By increasing staffing at the FAA ATCOTS Program Office, the government has improved its capability to support a performance-based, cost-plus contract of this magnitude, scope and complexity. It has built tools to improve day-to-day monitoring of the contract, processes for two-way communications to the field, and an organization structure to improve Program Office efficiency. The program stood up a Quality Assurance team that now analyzes contractor activities, and established a joint Risk and Opportunity Management board to guide excellence and efficiency. The FAA participates in the contractor's quality assurance sit visits and audits and manages its own instructor evaluation and voucher review programs. To augment existing voucher review process, the FAA secured third-party audit assistance providing dedicated analyses to ensure direct and indirect costs paid under the ATCOTS contract are allowable and appropriate. The ATCOTS Program Office believes increased scrutiny of quality, cost and price performance could net additional savings that could be redirected to funding training development and delivery.

Once the FAA deploys the first phase of the contractor utilization surveillance tool, expected in November 2010, training managers in the field will be able to forecast and reallocate resources while remaining under established budget. This provides added flexibility for frontline training managers to move resources where they need them without having to go through a lengthy approval process that previously required action from both the FAA and contractor program managers.

Name of Challenge: Improving Contract Management and Oversight

Issue: Strengthening DOT's suspension and debarment program to effectively safeguard against awards to improper parties

Why is this an issue?

FAA policy and guidance governing the Suspension and Debarment (S&D) program is critical in ensuring stakeholders realize their roles and responsibilities. It is an appropriate means to implement FAA policy and should be undertaken only to protect the interest of FAA. Oversight is critical in the implementation of the S&D program. FAA ensures compliance by incorporating a review of the S&D program into its National Acquisition Evaluation Program (NAEP).

Actions taken in 2010:

The FAA has effectively met and exceeded the Inspector General's recommendations by strengthening its suspension and debarment program to effectively safeguard against awards and improper parties by ensuring S&D related content was appropriate and effective

FAA ensures compliance by incorporating review of the S&D program into its National Acquisition Evaluation Program (NAEP). The NAEP compliance checks were conducted onsite by the end of February 2010, and included Excludes Parties List System entries.

Additionally, FAA revised its Acquisition Management System (AMS) in April 2010 to ensure S&D-related content was appropriate and effective. This included assigning an office of responsibility for the S&D program, verifying procedures and roles identified in AMS are appropriate, and including a 45 day goal, within notification of a referral, for the issuance of a suspension or debarment notice or a written justification why a suspension or debarment is not issued.

Actions Remaining and Expected Completion Date:

None

Results or Expected Results:

The S&D program is properly and effectively implemented and managed.

Name of Challenge: Improving Contract Management and Oversight

Issue: Maintaining High Ethical Standards among DOT Employees and Fund Recipients

Why is this an issue?

FAA must provide training to employees, contractors, and their grantees that focuses on preventing, detecting, and reporting potential fraud in order to ensure transparency and accountability.

Actions taken in 2010:

The Federal Aviation Administration (FAA) takes our responsibility to the American taxpayer with the utmost gravity. Our workforce strives to be worthy of taxpayer confidence by maintaining exemplary ethical standards in all of our business. This is clearly reflected in our workforce's ongoing commitment to federal acquisition/procurement ethics. These standards are reinforced annually through a comprehensive training program designed and tailored for acquisition personnel of all levels (e.g. Contracting Officers, Contract Specialists, Program Office personnel/Contracting Officer's Technical Representative, etc.) who have responsibility for stewardship of taxpayer dollars and business liaison responsibilities between the United States Government and private contractors.

The FAA's annual procurement ethics training continues to provide a personal and interactive approach to our course curriculum. Ethics training modules, materials and presentations are revised and rewritten annually to ensure our material remains both fresh and engaging. The FAA's FY 2010 revised procurement drafts and modules were completed on schedule. The intensive training schedule was initiated on July 8, 2010, incorporating the new modules, almost a full month ahead of schedule.

Course instruction is provided by members of FAA's Office of Chief Counsel. Material is carefully tailored to suit target audiences at Headquarters and Regional levels. To ensure the applicability of procurement ethics training to operational procurement, the content in FY 2010 focused on procurement planning and solicitation. Topics included proper contract type, effective use of Independent Government Cost Estimates, and how to avoid waste throughout source selection including specific discussion of *The Procurement Integrity Act*, Advanced Solicitation Drafting, Evaluation Methodology and the Debrief process. Beyond reinforcing a strong ethics message, these topics help FAA realize increased efficiencies and reduced costs by ensuring less cost growth and surprise, more effective communication, and reduced protests that cost taxpayers significant dollars. FAA procurement standards continue to support our Administration's policy of transparency, building from the Recovery Act example. Our interactive approach includes a battery of hypothetical, real life case studies.

Training survey results have been consistently positive. A recurring theme in survey feedback demonstrates that interaction between the trainers and the attendees makes the training very effective. We are seeing that the topic areas, all relating to creating and administering a more effective and efficient (cost and schedule) contract, are informative and highly relevant to the tasks our acquisition personnel face daily in their jobs.

The FAA launched a rigorous agency-wide FY 2010 training curriculum with the Annual Procurement Training Conference, conducted from November 17-19, 2009. Over 362 FAA professional attended. On-site procurement ethics training was delivered to 1026 acquisition personnel.

Actions remaining and expected completion date:

FY 2011 will see FAA continue the ambitious program and pace successfully established in FY 2009. In early FY 2011, the Office of General Counsel will provide procurement ethics training for acquisition personnel at the FAA Annual Procurement Conference. Our FY 2011 training will be expanded to address real estate and purchase card issues.

Results or Expected Results:

Periodic training will ensure effective communication is continued throughout the agency.

Name of Challenge: Enhancing the Ability to Combat Cyber Attacks and Improving the Governance of Information Technology Resources

Issue: Establishing a robust information security program to support the department's missions

Why is this an issue? FAA must identify and plan improvement for security deficiencies in key control areas. FAA must complete issuance of Personal Identity Verification (PIV) cards to employees and contractors.

Actions taken in 2010:

The Federal Information Security Management Act (FISMA) provides key security standards and guidelines for federal agencies protecting our nation's critical information infrastructure. The FAA's Information Systems Security (ISS) Program Plan describes the approach for conducting ISS compliance reviews for all FAA systems. Our Compliance Program meets federal, Departmental, and agency policies that require the regular testing and evaluation of information security policies, procedures and practices. The FAA's aggressive triennial Certification and Accreditation (C&A) process demands that every system be reviewed to ensure consistent compliance with the highest standards of security controls and practices. During FY 2010, FAA completed a comprehensive assessment of 72 (100 percent) systems to ensure that policies are correctly implemented and provide full protection to FAA systems. The FAA successfully completed 221 (100 percent) system assessments in FY 2010 and FAA developed ten (125 percent) Plan of Actions and Milestones (POAMs) to shore up potential weaknesses and to provide for iron clad defenses.

The FAA actively supports the DOT CIO's leadership in the Departmental Cyber Security and Privacy council. We have engaged in the development of cyber security and privacy plans, balancing strategic, operational, tactical, and innovative solutions that align with federal and agency mission goals, to incorporating our own successes with those of other agencies and the private sector. The FAA further supports DOT's initiative to upgrade cyber security management systems, to improve data quality and accuracy in reporting of weaknesses, as well as evaluate and implement a dashboard with sustainable metrics in order to accurately monitor and report on DOT performance.

The FAA has earned considerable success in supporting our Administration's ambitious PIV card program goals, achieving unprecedented efficiencies and cost savings. The FAA Office of Security and Hazardous Materials (ASH) won agency-wide cooperation and support for the PIV card program, partnering across Staff Offices and Lines of Business through an aggressive marketing and awareness campaign.

This effort culminated in an agency-wide training conference and the launching of 159 PIV card issuing stations. These stations are strategically distributed across the country to conveniently service 65,000 of the 84,000 workers that need the PIV card. FAA's training program and agency-wide support has provided for 400 trained FAA employees who actively support the PIV card effort as a collateral duty.

FAA attended a July 12 meeting at OMB to update Administration officials on agency and Departmental PIV card issuance. Federal CIO Vivek Kundra specifically commended FAA, requesting that our successes serve as the government-wide "best practices" model. The OMB further lauded FAA PIV program cost savings. The FAA PIV cards cost less than half the cost per card that most agencies pay through GSA. The Departments of Agriculture and Treasury have already sought FAA's leadership in HSPD-12 compliance.

Actions remaining and expected completion date:

FAA will achieve agency-wide PIV card issuance and HSPD-12 compliance by April 15, 2011.

Results or Expected Results:

The standard PIV card plays an integral role in protecting government facilities and sensitive data by restricting physical and logical access.

Name of Challenge: Enhancing the Ability to Combat Cyber Attacks and Improving the Governance of Information Technology Resources

Issue: Increasing Security Protection and Resilience of the Air Traffic Control System to Reduce the Risks of Cyber Attacks.

Why is this an issue?

We continue to modernize air traffic control systems, with increasing reliance on the use of Internet Protocol (IP)-based commercial software rather than proprietary software. While this strategy enables us to efficiently collect and disseminate information to facilitate air traffic control services, it poses a higher security risk due to the vulnerabilities inherent in using commercial IP products. Our air traffic control systems represent a critical part of our nation's infrastructure, fostering and sustaining the national economy while ensuring the safety and mobility of the flying public. Increased vigilance is necessary to safeguard and protect these vital systems.

Actions taken in 2010:

We have resolved eighty percent of the FAA-related web application security issues identified in the FY 2010 DOT Top Management Challenges. Compliance checks for all items were completed ahead of schedule. Meticulous tracking has been performed to document the successful resolution of identified issues. Completion has been slightly delayed due to Traffic Flow Management web asset consolidation at the William J. Hughes Technical Center, which will yield increased security benefits.

Our more technologically advanced future demands a more nimble security solution, with safeguards and contingency plans. Our Business Continuity Plan (BCP) called for the capability to duplicate an air route traffic control center (ARTCC) at a secondary location, and to move functionality to that location without any break in service. FAA is proud to report success in the form of a SPare Air Route Traffic Control Center (SPARTCC) facility, which was declared "Activation Ready" on October 1, 2009. The "Activation Readiness" declaration indicates the completion of the design and implementation phases, including the systems and procedures, required for activation of the SPARTCC. In addition, we successfully conducted a table-top exercise of the BCP activation plans in March of 2010. We since developed a comprehensive training module with an overview of the SPARTCC facility and its activation process, so that all of our field personnel can react capably and effectively in an emergency.

In December 2009 the FAA Joint Resources Council approved the annual update to the FAA National Airspace System (NAS) Enterprise Architecture (EA) which included a detailed Information Systems Security (ISS) Architecture. The NAS EA ISS Architecture is based on the following principals: External Boundary Protection (Gateways), Certified Software Management, Intrusion Detection and Response, and Internal Policy Enforcement. The FAA's Acquisition Management System will ensure that programs in development will be built to comply with this new ISS Architecture. A program has been established to help legacy (existing) NAS programs understand and transition to the NAS cyber security architecture. This program is known as the NAS Enterprise Information System Security (NEISS). Funding has been requested in the FAA's FY 2012 budget request that is currently being considered by the OMB.

Many of our NextGen transformational aviation initiatives have their own robust security architecture and cybersecurity programs are built into future requests. Robust security designs ensure that contractor-owned systems can safely interface with our air traffic control infrastructure. During FY 2010, we completed all Security Certification and Authorization Package (SCAP) Supplemental Risk Assessments to support the ADS-B In Service Decision (ISD). The SCAP ensures compliance with all federal mandates and security guidance, certifies and authorizes a system for operation within the National Airspace System (NAS), documents the system security posture, and assures risks have been mitigated to an acceptable level commensurate with potential magnitude of harm. We have now entered the Continuous Monitoring Phase consisting of: configuration management and control; security control monitoring; and status reporting and documentation. The purpose of this phase is to provide oversight and monitoring of the security controls in the information system on an ongoing basis and to inform the authorizing official when changes occur that

may impact the security of the system. The activities in this phase are performed continuously throughout the life cycle of ADS-B.

ATO's Security Information Group (SIG) is working in partnership with Federal Telecommunications Infrastructure (FTI) and the Cyber Security Management Center (CSMC) to improve our ability to efficiently process incident reports. This is the first intra-agency group addressing all aspects of cyber security. By December 2010, we will produce a draft standard operating procedure at an agency level, ensuring a better defense for all aspects of the NAS. Our efforts will result in better coordination, increased situational awareness and agility that will allow FAA to do more than just react, but to defend against emerging threats. Our new standards will allow us to stay ahead of cyber threats across Lines of Business, collaborating in an agency-wide manner that solidly reflects our Administration's guidance and Cyber Czar Lt. General Alexander's espoused vision for cyber detection and response.

Actions Remaining and Expected Completion Date:

- ▶ All ATO Web applications will be configured according to the National Checklist Program. (December 2010)
- ▶ Conduct additional NAS Web Audit site scans. (March 2011)
- ▶ Complete draft Standard Operating Procedure for all aspects of NAS and non-NAS systems cyber security (December 2010)
- ▶ Submit Security Certification and Authorization Package annual assessment (October 31, 2010)

Results or Expected Results:

The FAA will continue to conduct comprehensive analyses to ensure NextGen has a robust security design that includes oversight of contractor-owned systems that interface with air traffic control infrastructure.

Name of Challenge: Enhancing the Ability to Combat Cyber Attacks and Improving the Governance of Information Technology Resources

Issue: Strengthening the privacy protection program to secure personally identifiable information (PII)

Why is this an issue? To minimize the risks associated with the unauthorized disclosure of personally identifiable information, the Office of Management and Budget (OMB) required agencies to eliminate the unneeded use of SSNs. FAA must secure personally identifiable information, finalizing the inventory of PII systems and properly securing them.

Actions taken in 2010:

The Office of Management and Budget (OMB) Memorandum 07-16, Safeguarding Against and Responding to the Breach of Personally Identifiable Information, requires federal government agencies to establish appropriate safeguards to ensure the security and confidentiality of PII.

As FAA strives to reach the next level of safety, efficiency, environmental responsibility, and global leadership with a continual mission to provide the safest, most efficient aerospace system in the world, FAA seeks to earn our place as a recognized leader in managing the privacy of PII, including Social Security Numbers (SSN).

To support this goal, FAA is actively establishing appropriate administrative, technical, and physical safeguards that ensure the security and confidentiality of PII to protect against any anticipated threats or hazards to FAA information assets. This is reflected in our phased SSN reduction/elimination implementation plan to reduce the unnecessary collection and use of SSNs and eliminate such use throughout the agency, where possible and practicable.

To help prevent future unnecessary usage of SSNs across the FAA, the Privacy Office developed and began implementing strategic roadmap prevention activities. The FAA has successfully laid the groundwork in previous years, since implementing our phased approach in FY 2008. In FY 2010, FAA built on previous successes by completing our Phase One efforts to identify, reduce, protect, and prevent the use of SSNs across the agency, while preparing for Phase Two in FY 2011.

Our technical SSN reduction team worked with SSN system points of contact via interviews and/or data calls to understand how SSNs are stored, processed or transmitted, and to identify interfaces to and from confirmed SSN systems, assessing systemic privacy risks. Diagrams of SSN system interrelationships were developed along with an SSN reduction priority list based on the identified risk factors in preparation of future phases that will ensure full compliance with OMB's mandate in FY 2013.

The FAA completed Project QuickSPIIn in FY 2010, our interim capability for data discovery and PII security remediation. We were able to detect SSNs in unstructured data sources through the utilization of scanning tools capable of identifying PII data, including SSNs, on file servers and employee's desktops. Project QuickSPIIn has resulted in FAA Lines of Business and Staff Office reviewing their listing on files and records containing SSNs and taking remedial actions to remove and redact (as well as protect) records as required. It has further resulted in the elimination of SSNs in seventeen application databases and the termination of two applications that contained SSNs.

Actions Remaining and Expected Completion Date:

Efforts to identify unstructured data containing SSNs will conclude with the transition from Project QuickSPIIn to Operation aSPIIrin. The aSPIIrin effort is our longer term data loss prevention solution targeted for initial implementation by January 2011. In Operation aSPIIrin, scanning efforts will expand to address the identification, reduction and/or elimination and protection of stored, transmitted, and viewed data to support FAA-wide data loss prevention efforts.

Results or Expected Results:

The FAA's efforts have resulted in an accurate report of PII systems for FISMA and for internal and OIG audits. The results of our system discovery process and the enterprise view of SSN systems have directly

supported system analysis and design of a more comprehensive SSN reduction service solution. Procurement of a security tool will enhance protection of our PII systems, significantly reducing the potential for and severity of privacy incidents. Our FY 2011 launch will ensure that digital Sensitive Personally Identifiable Information on the FAA network is identified and protected from misuse or violation of the provisions of the Department of Transportation's (DOT) policies.

Name of Challenge: Enhancing the Ability to Combat Cyber Attacks and Improving the Governance of Information Technology Resources

Issue: Enhancing control of IT investments through oversight and accountability

Why is this an issue? The FAA must use Earned Value Management (EVM) to compile the cost and schedule variances. FAA must evaluate the EVM system to ensure compliance with DOT's guidance while ensuring accountability for monitoring and overseeing the performance of major IT investment projects.

Actions taken in 2010:

The Office of Management and Budget (OMB) and the Department of Transportation (DOT) require use of EVM to establish effective management structures to govern and improve IT investments. EVM compares the value of work accomplished in a given period against the planned value of work scheduled for that period, compiling cost and schedule variances. FAA has implemented the EVM system in compliance with Department guidance. Both the Government Accounting Office (GAO) and OMB have recognized that the FAA is a leader in implementing EVM among civilian agencies.

The FAA provides an assessment of each major program's EVM System as part of the Investment Decision Process and conducts annual surveillance after the initial assessment. The FAA has documented the process for assessment/validation of both programs and contractors in AMS. The FAA also accepts contractor validations issued by the Defense Contract Management Agency (EVM Executive Agent for DoD).

The development of FAA's EVM System Description (SD) provides a single reference for programs' implementation of EVM, providing standard templates and resource documentation that programs will be able to tailor to meet their specific requirements. The result will be a consistent presentation of program information across all FAA programs. FAA developed a plan to establish EVM SD by March 2010. Our plan was briefed to the Acquisition Executive Board on March 5, 2010 and was subsequently approved.

The FAA's EVM Performance Measurement Baseline (PMB) management process and procedure was presented to the EVM Council on June 23, 2010. Council members' comments were received and included in the PMB document. This resulting EVM PMB process will be incorporated into the FAA EVM SD which is being drafted.

The initial draft of the FAA EVM SD was presented and discussed at the August 18, 2010, EVM Council Meeting. The FAA provided monthly written reports and quarterly briefings to the Joint Resources Council (JRC) on major program's EVM data. This information has also been included in the monthly internal review of programs of the OMB IT Dashboard for the recommended CIO ratings.

The FAA conducted Service Level Reviews (SLRs) in spring and fall of 2010 to obtain the status of the agency's entire portfolio of investments and operational assets.

The JRC approved the Facilities and Equipment and Research, Engineering & Development 2012 budget submissions on June 12, 2010. The FAA's JRC and ATO Executive Council (EC) have held quarterly reviews on the status of the milestones and decision points outlined in the CY 2010 FAA Enterprise Architecture (EA). On June 2, 2010 the JRC also approved changes to the NAS EA that were developed in response to the RTCA Task Force 5 recommendations.

On May 24, 2010, FAA approved the final investment decision on the Aerospace Medical Equipment Needs program (ACAT 5) and the NAS Interference Detection Mitigation program (ACAT 5). The FAA approved an operational capability demonstration and the conduct on a pilot on the LAACS investment; the initial investment decision on the Unified Contracting System; and a pilot program for the ATO Scheduler investment.

Actions Remaining and Expected Completion Date:

In December 2010, the FAA EVM SD will be presented to the Acquisition Executive Board (AEB) for consideration for incorporation into AMS by December 2010. The positive impacts of our investment decision-making process will continue to be evaluated by FAA through 2011.

Results or Expected Results:

FAA will continue to earn our place as a recognized leader in the implementation of EVM within the Department of Transportation.

Name of Challenge: Strengthening the Department's Acquisition Workforce

Issue: Addressing acquisition workforce retention and recruitment concerns

Why is this an issue? DOT's acquisition workforce faces a potential retirement wave in the next several years. The FAA is ensuring its staffing and professional development needs for the acquisition workforce are met in the coming years.

Actions taken in 2010:

The FAA is continually moving forward in implementing initiatives to strategically assess its acquisition workforce to ensure it retains and recruits individuals who will be able to fill the positions in research and engineering /system engineering, program/project management, contracting, and other key acquisition disciplines. FAA's plan for addressing acquisition workforce retention and recruitment concerns is further explained in the annual Acquisition Workforce Plan. The 2010 update to this plan was completed and published online in June, 2010.

The main strategies implemented by addressing workforce retention and recruitment concerns build on existing activities that use metrics to track and assess progress in closing workforce gaps. FAA has created and implemented four high-level strategies to address workforce retention:

- Strategy 1: Fill gaps based on workforce analyses
- Strategy 2: Develop and execute a consolidated acquisition recruitment and hiring plan
- Strategy 3: Create an integrated acquisition career development program
- Strategy 4: Institutionalize an acquisition workforce planning process

Filling the most critical hiring gaps is a high priority for the agency to support the successful design, development, deployment, and sustainment of current and future NAS technologies and infrastructure. The FAA is using the acquisition workforce data and analysis to identify priority and relative needs and make staffing and position allocation decisions accordingly.

The FAA has developed and continues to execute its consolidated acquisition recruitment and hiring plan that is essential in addressing the problem of having a diminished source of experienced acquisition professionals while the need for their skill sets in the FAA and throughout the federal government is increasing. This strategy focuses on targeted outreach and recruitment for senior-, mid-, and entry-level acquisition professionals by discipline, as well as broad-based outreach to attract a diverse applicant pool.

The agency is developing a career-long training and development roadmap for acquisition professionals that contain a comprehensive career development framework, competency models, career paths, communities of practice, and a well-defined training plan to remain competitive and be an employer of choice. Each career path in the program will clearly define typical job responsibilities and developmental requirements and opportunities (education and experience) for each experience level. The delivery of timely, relevant and targeted training and development will enhance technical proficiency, support career development, and promote career-long learning.

Acquisition workforce planning has been extended beyond the Air Traffic Organization (ATO) to include the Service Areas, Regions and Center Operations (ARC), and the Aviation Safety (AVS) organizations. Enhancements to FAA's acquisition workforce planning model have been made to provide a stronger, integrated framework. Workforce analyses have been improved to examine more closely specific workforce needs of NextGen and other critical acquisition programs. Acquisition workforce planning tools have been improved to better project future needs and identify workforce gaps. Expansion and enhancement of acquisition workforce planning and analysis supported the update to the workforce plan published in June 2009. The FAA continues to refine and enhance the workforce staffing model ensuring cross-organization collaboration.

Additionally, the FAA has an active National Acquisition Evaluation Program. Through reviews and site sessions that include contract file reviews, interviews and workgroup sessions, the program identifies areas for increased training and skill development as well as best practices to share across the FAA. Interviews

included management and non-management personnel who are considered stakeholders to the acquisition process. Interviews were conducted at Headquarters, the Mike Monroney Aeronautical Center, the William J. Hughes Technical Center, and the Service Centers and Regional Offices. All of these site visits were completed by July 31, 2010.

Actions remaining and expected completion date:

None

Results or Expected Results:

Overall, the FAA continues to move in the right direction with its acquisition workforce staffing for present and future needs. In addition to hiring successes, attrition was modest and efforts at retention have been successful.

Name of Challenge: Strengthening the Department's Acquisition Workforce

Issue: Ensuring a Sufficient and Competent Acquisition Workforce to Meet Mission Needs

Why is this an issue?

FAA faces the same challenges confronting many federal agencies and acquisition organizations. The number and complexity of acquisitions across the federal government have increased significantly at the time when retirement eligibility is on the rise. These combined factors are resulting in an ever-increasing competition for acquisition talent. Currently, about 15 percent of FAA's core acquisition workforce is eligible to retire with a cumulative eligibility of 32 percent by FY 2014. As increasing numbers of acquisition employees retire, FAA's pipeline could shrink. To combat this, FAA has a concerted focus on bringing in and developing new talent.

Actions taken in 2010:

In FY 2010, FAA created the centralized Acquisition Career Management Group under the FAA Acquisition Executive. This group had its primary staffing in place by December 2009. The Group's focus is workforce planning, workforce development, and the implementation of certification programs specifically designed for the acquisition workforce. The change in organizational infrastructure emphasizes the critical importance of the agency's acquisition workforce to mission accomplishment and transition to the NextGen air traffic control system.

On March 31, 2010 FAA published the Acquisition Career Program Guide under the Acquisition Management System (AMS) policy to further recognize the need for workforce competency. This Guide establishes core requirements related to competencies, training, experience, and certification for multiple acquisition workforce disciplines.

FAA's 2010 Acquisition Workforce Plan provides a profile section for each acquisition-related discipline to provide information about the community, critical competency requirements, training and certification programs, and other workforce-related initiatives. Additionally, FAA carried out reviews of the National Acquisition Evaluation Program (NAEP) in July, 2010. The findings are being used to identify performance gaps within the acquisition workforce. Current training programs and policies are being modified as needed. Areas of review included:

- Defining and estimating FAA requirements.
- Use of performance-based acquisition.
- Evaluation of proposals and negotiations.
- Contracting Officer Technical Representative (COTR) communications and management.
- Administration life-cycle logistics and contracts by program offices.

Actions Remaining and Expected Completion Date:

- ▶ None.

Results or Expected Results:

FAA expects to have the staffing and skill mix to successfully manage NextGen and other major acquisition programs now and into the future. Through the introduction of the Acquisition Career Management Group, documented plans and standards, and proper oversight, FAA will be able to estimate and implement training and support where most needed to effectively achieve its mission.