Make Aviation Safer and Smarter

The FAA oversees the safety of the world’s largest, most complex aviation system -- an aviation system that affects millions who fly for business and pleasure, to those that ship, receive, sell, and buy goods transported by air, to those that work in the industry who depend on travel and tourism for their livelihood.

ANG supports this by working with partners across the agency to promote continued operational safety (surveillance, oversight, education, inspections), establish safety rules and regulations (rulemaking), and certify the aviation competency of people (pilots) and organizations (individual airlines) and the airworthiness of aircraft and equipment.

We will continue to build on safety management principles to proactively address emerging safety risk by using consistent, data-informed approaches to make smarter, system-level, risk-based decisions.

Strategic Objective: Risk-Based Decision Making

Build on safety management principles to proactively address emerging safety risk by using consistent, data-informed approaches to make smarter, system-level, risk-based decisions.

Strategic Initiative: Standardization, Access, and Integration

Improve standardization, data access, & modeling integration.

Strategic Activity: FAA Safety Data Access and Management

Establish a permanent safety data and analysis team to standardize and integrate safety data at the agency level.

Activity Target 1:
Create a permanent safety data and analysis team. Due September 15, 2017

Strategic Activity: Hazard Tracking Tool

Evolve the agency-wide tool to track hazards and mitigation outcomes.

Activity Target 1:
Implement system enhancements to support interconnectivity with relevant data systems. Due September 15, 2017

Strategic Initiative: Decision Making Process

Enhance decision making processes.

Strategic Activity: Enhance decision making processes

Revise FAA Safety Risk Management policy to align with risk-based decision making principles.

Activity Target 1:
Publish revision to FAA Order 8040.4A, Safety Risk Management Policy. Due August 15, 2017

Strategic Initiative: Safety Performance Management

Evolve the Safety Oversight Model.

Strategic Activity: FAA Significant Safety Issues

Lead the agency effort to improve and manage Significant Safety Issues (SSIs) across the FAA by including safety risk when making decisions.

Activity Target 1:
Present quarterly status briefing of all identified FY17 FAA Significant Safety Issues (SSIs) to the FAA SMS Committee and FAA SMS Executive Council. Due September 15, 2017

Internal Work Objective: General Aviation Fatal Accident Rate

Reduce the general aviation fatal accident rate to no more than one (1) fatal accident per 100,000 flight hours by 2018. FY17 Target: 1.01.

Internal Work Initiative: Alaskan Satellite Telecommunication Infrastructure (ASTI) - (FY17) (CIP#:C17.02-01)

The ASTI project will replace and/or upgrade system components to raise system availability to required levels (0.9999), reduce the frequency of system alarms and outages, and reduce the level of FAA maintenance.

Relationship to Objective: CIP supports the objective
Internal Work Activity: Alaskan Satellite Telecom Infrastructure (ASTI)
Alaskan Satellite Telecom Infrastructure (ASTI)

Activity Target 1:
Support for an In-Service-Decision for the ASTI Program. Due June 30, 2017

Internal Work Objective: Runway Incursions (Category A and B)
Reduce Category A & B (most serious) runway incursions to a rate of no more than 0.395 per million.

Internal Work Initiative: Validate the Benefits Case for Utilizing Speech Recognition in the Prevention of Runway Incursions
Use of Speech Recognition to Reduce Runway Incursions

Internal Work Activity: ANG Support of CROPD
ANG will provide Program and Subject Matter Expert (SME) support to AJI to expand the geographic scope of CROPD to reduce runway incursions.

Activity Target 1:
Deliver contract support and programmatic support to AJI as required. Due September 30, 2017

Internal Work Objective: Secure the Enterprise
Continuously enhance the FAA's Cyber Security posture through provision of FAA-wide Information Security and Privacy Services that properly secure agency information and reduce risk to breach of Agency Information systems. In addition, AFN will collaborate with Department of Transportation (DOT) to advance capabilities that protect against cyber threats. Successful accomplishment of this objective will be based upon assessment of risks to the system and effective response to those risks.

Internal Work Initiative: Reduce Risk to Agency Internet Protocol (IP) Based Systems
Progressively improve the agency risk posture by implementing vulnerability management processes.

Internal Work Activity: Information Security Continuous Monitoring (ISCM), Including Continuous Diagnostics and Mitigation (CDM)
Provide near real-time information about the agency's hardware, software, and vulnerabilities. Update policy, plans and concept of operations to support ISCM.

Activity Target 1:
Coordinate with NAS and R&D to continue enhancements to the cybersecurity data visualization dashboard to include information about the Missions Support, R&D and NAS Domains. Due August 31, 2017

Internal Work Initiative: Information Security and Privacy Services
Continuously enhance the FAA’s Cyber Security posture through provision of FAA-wide Information Security and Privacy Services that properly secure agency information and information systems.

Internal Work Activity: Security and Privacy Liaison Service
The Security and Privacy Liaison Service provides relationship management between consumers and the Information Security and Privacy group. In addition, coordinates policies, awareness training, as well as situational awareness communications.

Activity Target 1:
Collaborate with ATO, ANG, AVS and ASH to develop an FAA Action Plan to adopt the 2210 job series for enhancing the cyber workforce. Due September 30, 2017

Activity Target 2:
In partnership with ATO, ANG, AVS and ASH, examine external cybersecurity collaboration and R&D activities to present recommendations to the Cybersecurity Steering Committee for engagement with these working groups and forums in FY18. Due September 30, 2017

Activity Target 3:
Gather input from ATO, ANG, ASH and AVS for the FAA Reauthorization, Section 2111, Aviation Cybersecurity, and provide content to AFN to submit reports to Congress. Interim due dates of reports to Congress: October 15, 2016, January 15, 2017, March 15, 2017; July 15, 2017. Due July 15, 2017
Internal Work Activity: Security Architecture and Engineering Service
The Security Architecture and Engineering Service supports security aspects of technology based initiatives for the FAA. This includes technology review and insertion, change review, security engineering, and advisory services.

Activity Target 1:
Establish an agency working group (AIT, ATO, ASH, ANG, AVS, ESC, DOT) to plan and conduct a technical summit to facilitate knowledge transfer about FAA network architecture/topology and security architecture/tooling in all three operating domains. Deliver report to the CSC with recommendations for improved security posture and visibility. Due June 30, 2017

Activity Target 2:
In partnership with ATO, ANG, AVS and ASH, develop an agency-wide plan for integrating Threat Modeling into cybersecurity risk management activities. The plan will include activities throughout the program life-cycle. Due September 30, 2017

Activity Target 3:
In partnership with ATO, ANG, AVS and ASH, perform an integrated Threat Profile analysis to assess security risks within the FAA architecture. Deliver a summary of network and system protection and defense capabilities for all three operating domains to the Cybersecurity Steering Committee. Due September 30, 2017

Internal Work Activity: Enterprise Safety
Develop NAS enterprise level safety concepts and products to enhance Risk-Based Decision Making (RBDM) by FAA safety stakeholders.

Activity Target 1:
Update three additional Service Level Preliminary Hazard Analyses (S/L PHAs) using the latest available NAS Enterprise Architecture (EA). Due March 31, 2017

Activity Target 2:
Analyze impacts to the Integrated Systems Engineering Framework (ISEF) safety metamodel based on latest Hazard Traceability View (HTV) and Risk Framework developments and provide recommended updates, if needed. Due April 30, 2017

Activity Target 3:
Develop traceability of safety data from three additional updated S/L PHA to NAS EA elements in order to mature the Hazard Traceability View (HTV). Due September 30, 2017

Activity Target 4:
Develop a draft process for building a Risk Framework to support Risk-Based Decision Making (RBDM). Due September 30, 2017

Activity Target 5:
Conduct Enterprise Level RBDM outreach to a minimum of two external organizations (e.g., AJI and AJM) in order to promote latest developments in HTV and Risk Framework concepts. Due September 30, 2017

Internal Work Objective: Safety Management
Build safety management practices to current and future air transportation safety challenges.

Internal Work Initiative: Safety & Information Security Services
The ANG Safety Management System program mandated by FAA Order 8000.369 focuses on the assurance and maintenance of implemented and compliant Safety Management System (SMS) processes.

Internal Work Activity: Support Services for Safety Management Systems (SMS)
Continue the assurance and maintenance of implemented and compliant Safety Management Systems (SMS) processes.

Internal Work Activity: Support FAA SIG Risk Based Decision Making (RBDM) for Planned Changes
Risk Based Decision Making is the Administrator's Strategic Initiative for improving Safety. ANG is a co-chair of the Safety Collaboration Team (SCT) that is identifying the FAA planned changes and facilitating the completion of integrated safety analysis.
Internal Work Activity: Cross Organizational Safety Assessment
Support the Risk Based Decision Making (RBDM) Sub-initiative for planned changes focusing on applying Integrated Safety Management (ISM).

Activity Target 1:
Complete and facilitate at least one NextGen based Integrated System Safety Assessment (ISSA) for FAA planned changes. Due September 30, 2017

Activity Target 2:
Support development of FAA level guidance documentation on a cross-organizational safety assessment process that is consistent with FAA Order 8040.4A for planned NAS changes. Due September 30, 2017

Deliver Benefits Through Technology/Infrastructure

NextGen is a significant undertaking for the United States. We are completely transforming the National Airspace System (NAS) and the way we manage aircraft in the system. This transition involves many varying components. We are transitioning to evolving digital and satellite technologies, we are acquiring and installing new infrastructure to enable that technology, and we are collaborating with industry and creating incentives for users to install equipment that will enable NextGen capabilities.

Our primary focus is on delivering benefits through technology and infrastructure. That is the heart of the Next Generation Air Transportation System. The work we do today will ensure that future generations continue to inherit the most efficient airspace possible due to the foundation we have laid with NextGen systems and improvements. NextGen was once primarily about the future, but we have progressed to the point that our focus is on delivering near-term benefits today.

Internal Work Objective: Deliver Benefits through Technology and Infrastructure - Deliver Capabilities
Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services.

Internal Work Initiative: Demonstrations & Infrastructure Development
The program objective is to prove concept feasibility, support validation and fast-time modeling, and provide data to support business case and investment decisions tied to the decision points in the National Airspace System (NAS) architecture and promote industry involvement. Demonstrations are also used to integrate current technology with transformational technology to achieve NextGen operational objectives as early as possible.

Internal Work Activity: Aircraft Access to System Wide Information Management (SWIM)
In FY17, the Aircraft Access to SWIM (AAtS) project will complete the SWIM Phase II demonstration final report necessary for this project's completion.

Activity Target 1:
Complete Aircraft Access to Swim (AAtS) Phase II demonstration final report. Due December 30, 2016

Internal Work Activity: Mini-Global Demonstration
Phase II will culminate with a demonstration of the applicability of the global exchange models for Flight, Aeronautical and Weather information using the Flight Information Exchange Model (FIXM), aeronautical Exchange Model (AIXM), and Weather Exchange Model (WXXM) standards.

Activity Target 1:
Complete International Interoperability Harmonization and Validation Operational Use Case/Scenarios Document. Due January 31, 2017

Activity Target 2:
Complete Tabletop Validation 1a and 1b Results Report for Flight and Flow Information for a Collaborative Environment (FF-ICE) Step One Provisions. Due August 31, 2017

Internal Work Activity: Demonstration & Infrastructure Development
Conduct two demonstrations in collaboration between industry and the FAA to expedite emerging technology in order to validate NextGen concepts, aircraft technology, and ground system requirements.

Activity Target 1:
Attend Aircraft Access to SWIM (AAtS) Phase II
demonstration and assist in final report evaluation. 
Due September 30, 2017

**Activity Target 2:**
Complete one Human-In-The-Loop/Subject Matter Expert (HITL/SME) evaluation of emerging technology. Due June 30, 2017

**Activity Target 3:**
Complete Vertical Conformance Verification (VCV) Analysis. Due March 30, 2017

**Internal Work Activity: 4D Trajectory Demonstration**
Demo project will be executed. Activities will include execution of a demonstration plan and demonstration slated for 2017 in Florida.

**Activity Target 1:**
Complete 4 Dimensional Trajectory (4DT) Demonstration Final Report. Due April 30, 2017

**Internal Work Activity: Remote Towers Demonstration Project**
Team will conduct demonstration reviews and surveys in Leesburg to determine benefits of capability at a non-towered airport. In addition, a second site will be developed in Colorado using new technology with same capabilities.

**Activity Target 1:**
Colorado Department of Transportation (CDOT) Remote Towers: Initiate Fort Collins CO Remote Tower site preparation activities. Due August 31, 2017

**Activity Target 2:**
Complete Safety Risk Assessment Panel (SRMP) to enter active test phase. Due June 30, 2017

**Activity Target 3:**
Issue an Agency decision to conduct active testing of the Leesburg Remote Tower System. Due September 30, 2017

**Internal Work Initiative: Closely Spaced Parallel Runways**
Research to find safe ways to recover lost capacity induced by the current aircraft-to-aircraft separation procedures required for simultaneous Instrument Metrological Conditions (IMC) operations to closely spaced parallel runways.

**Internal Work Activity: Separation Management - Closely Spaced Parallel Operations (CSPO)**
Partner with AFS-400 to develop concepts and perform analyses that will improve capacity by reducing separation standards and enabling new operations in lower visibility conditions. This initiative will develop and refine procedures and perform the requisite analyses that enable operations for closely spaced parallel runways (runway centerlines spaced less than 4300 feet laterally) in reduced visibility weather conditions. Reduced separation procedures will include both dependent and simultaneous independent parallel instrument approaches to runways between 2,500 and 4,300 feet, paired approaches for runways spaced less than 2500 feet, and closely spaced parallel departures from runways between 2,500 and 4,300 feet.

**Activity Target 1:**
Complete interim report on the effectiveness of blunder detection capability in Paired Approach application to inform interoperability requirements. Due August 31, 2017

**Activity Target 2:**
Complete initial white paper outlining a safety framework for creating new CSPO departure standards in the FAA Order 7110.65. Due September 30, 2017

**Internal Work Initiative: Separation Management - OTTM**
The Oceanic Tactical Trajectory Management (OTTM) project focuses on methods to promote strategic coordination between airspace users and ATCs in the Oceanic environment. The key objective is to use trajectory-based operations to improve fuel efficiency, system predictability, and performance by enabling airline operators to fly optimal flight paths while in the oceanic airspace.

**Activity Target 1:**
Complete the OTTM-4D (Oceanic Trajectory Management in 4D) Coordination Benefits Analysis. Due December 30, 2016
Internal Work Initiative: Improve Requirements Traceability to the Enterprise Level
Deliver a current and credible baseline and target state description of the NAS that improves traceability between the Enterprise and programs, informing analysis and decision making.

Internal Work Activity: Enhance Requirements Traceability using the Dynamic Object Oriented Requirements System (DOORS)
Update and maintain the enterprise requirements and establish traceability to ATO NAS programs.

Activity Target 1:
Create a guide to map the alignment between the Target NAS Requirements Document (TNRD) and the Program Requirement Documents (PRDs) for use by the programs. Due June 30, 2017

Activity Target 2:
Establish a requirements repository in DOORS by importing signed PRDs generated in FY17 and apply any linkages to the NRD identified by ANG-B13 through program interaction. Due September 30, 2017

Activity Target 3:
Generate traceable enterprise-level requirements based on the NAS Target Enterprise Architecture (EA) Systems/Services Functionality Description (SV-4) update. Due September 30, 2017

Internal Work Activity: Implement Better Traceability in the Enterprise Architecture
Collaborate with ATO NAS Program Offices to assure sound development of Acquisition Management System (AMS) required products that are consistent with the NAS Enterprise Architecture (EA) Model. Cooperate with the NAS Enterprise Planning & Analysis Division (ANG-B2) to ensure that functional capabilities and interfaces associated with NextGen Operational Improvements (OIs), NAS enterprise solutions and integration initiatives are capture in the NAS EA Model.

Activity Target 1:
Establish modeling structures and processes necessary to translate the operational concepts inherent in NextGen Operational Improvements (OIs) into a technical architecture necessary and sufficient for realizing NextGen improvements and captured in the NAS EA Model. Due November 30, 2016

Internal Work Activity: Align Program Functions to Enterprise Level Functions
Interact with ATO NAS Program Offices and other stakeholders organizations to ensure integration and maintain traceability of NAS programs products.

Activity Target 1:
Update required AMS policy and guidelines for products and documents to provide ATO NAS Programs guidance to improve traceability throughout the AMS lifecycle. Due June 30, 2017

Internal Work Activity: Collect Information Management Data from Programs Throughout the AMS to Achieve Data Exchange Traceability
Interact with ANG-B Branches and NAS Program Offices to ensure integration of Enterprise Information Management (EIM) practices and Information/Data Management FAA Order 13751.F.

Activity Target 1:
Develop NAS guidance and update all program requirements templates with appropriate references to EIM requirements, e.g., preliminary Program Requirements Document (pPRD), initial Program Requirements Document (iPRD), final Program Requirements Document (fPRD), and System Specifications, as well as other documentation including performance, security, privacy, etc. Due September 30, 2017

Internal Work Activity: Enable Service-Level Thread Analysis through Exchange Interaction of NAS Components
Collaborate with ANG-B Branches and Divisions to ensure templates for Acquisition Management System (AMS) required documentation are clear, concise, and accurately portray required quality and completeness necessary for approval, as well as demonstrate a potential framework for documenting diverse and crucial, information related to NAS-level functions.

Activity Target 1:
Update the Functional Analysis template to include the operational analysis process and to clearly define traceability between the operational and technical analysis processes, such that it is ready for review outside of ANG-B. Due July 31, 2017

Activity Target 2:
Mature the Operations Analysis Requirements Document (OARD) to demonstrate its utility as a framework for the collection of diverse information (e.g., actors, phase of flight, systems, and data)
associated with NAS-level functions as a precursor to enhancing the accessibility of this information on the Systems Engineering Portal (SEP) as well as an instrument that can be used for service-level thread analysis. Due September 30, 2017

**Activity Target 3:**
Update the Requirements Development template to define the level of requirements required for Preliminary Program Requirements document (pPRD) vs. Initial Program Requirements document (iPRD), such that it is ready for review outside of ANG-B. Due July 31, 2017

**Internal Work Initiative: Improve Interaction Between Enterprise Level and Program Level Activity**
Become a valued, collaborative partner in delivering timely, high-quality systems engineering expertise and services.

**Internal Work Activity: Collaborate Agency-Wide to Establish Enterprise Information Management (EIM) Governance and Mechanisms**
Interact with ANG-B Branches and NAS Program Offices to ensure integration of EIM practices and Information/Data Management FAA order 13751.F.

**Activity Target 1:**
Work with the FAA governance boards to update FAA Order 13751.1F with requirements for establishing and implementing EIM. Due September 30, 2017

**Activity Target 2:**
Provide guidance paper and recommended integration toolset for capturing and incorporating required EIM artifacts within the Enterprise Architecture. Due June 30, 2017

**Activity Target 3:**
Work with Communities of Interest (COIs) and Stewardship Community of Practice (SCoPs) to mature the contents of the Logical Data Model (OV-7) and at a minimum, show the relationship between subject areas/data classes and NAS systems/services. Due September 30, 2017

**Activity Target 4:**
Collaborate with ANG-B2 & Information Security Branch (ANG-B31) stakeholders to develop a white paper to describe how the EA functional decomposition can be used to build role-based security access to data. Due September 30, 2017

**Internal Work Activity: Use Collaboration to Improve Data and Information Architecture**
Interact with different FAA Lines of Business to integrate and apply Enterprise Information Management (EIM) best practices for Information and Data Management.

**Activity Target 1:**
Deliver ICAO IRM Alpha release. Due November 30, 2016

**Activity Target 2:**
The Integrated Systems Engineering Framework (ISEF) Stewardship Community of Practice (SCoP) will work with the ISEF COI to develop and publish ISEF MM v3.0 (logical data model) in accordance to the priorities agreed to by the ANG-B IPC. Due July 31, 2017

**Activity Target 3:**
Collaborate with ANG-B2 stakeholders to develop and publish the NAS Enterprise Information Management Roadmap. Due September 30, 2017

**Activity Target 4:**
Collaborate with ANG-B2 stakeholders to produce International Civil Aviation Organization (ICAO) Air Traffic Management (ATM) Information Reference Model (ICAO AIRM) releases in support of the ICAO Information Management Panel. Due September 30, 2017

**Internal Work Activity: Collaborate with Stakeholders to Develop Consistency between Enterprise and Program Requirements**
Interact with stakeholders to develop and better understand enterprise requirements that should be used for programs, ensuring consistency and convergence across the NAS.

**Activity Target 1:**
Develop preliminary Program Requirement Document (PRD) "canned" requirements to assist ATO NAS Programs by providing a basis for selected section of the preliminary PRD as allocated from the enterprise. Provide these requirements to ANG-B-11 for inclusion in a "canned" Dynamic Object Oriented Requirements System (DOORS) module which will be provided to respective program offices with new acquisitions. Due July 31, 2017
Internal Work Initiative: Ensure that the Acquisition Management System (AMS) Process is Streamlined for each Program

Improve our processes to increase agility and reduce workload by providing effective guidance to programs and the FAA systems engineering community.

Internal Work Activity: Modify AMS Policy to Increase Efficiency in the Process for Specific Recurring Circumstances

Interact with ATO NAS Program Offices and other stakeholder organizations to ensure integration and maintain traceability of NAS programs products.

Activity Target 1:
Complete modifications to the AMS policy and guidelines to reduce the need for tailoring by clarifying that certain artifacts for programs going through Technical Refresh are NOT required under specific conditions. Due July 31, 2017

Internal Work Objective: Deliver Benefits through Technology and Infrastructure - Execute Programs

Through these programs, we achieve our goal of delivering capabilities that translate into near-term benefits for the users of our airspace. We are focused on improving safety and providing more efficiency with better throughput, saving money, time and fuel, and reducing emissions too. We are focusing our efforts where our customers have placed value.

Internal Work Initiative: Aeronautical Information Dissemination

Provide pilots with safe access to the NAS by analyzing and disseminating aeronautical and meteorological information to pilots and controllers through innovative systems.

Internal Work Activity: Weather Product Standards

Establish Standards for weather products to be data linked to the cockpit.

Activity Target 1:
Analyze a selected oceanic-region operational shortfall to quantify the potential efficiency benefits of resolving it. Due July 31, 2017

Activity Target 2:
Demonstrate a capability to use crowd sourcing as a processor to produce accurate, low latency, visibility information from weather camera images/video. Due May 31, 2017

Internal Work Initiative: Unmanned Aircraft Systems

Support establishment of regulatory standards on UAS design and performance characteristics while operating in the NAS.

Internal Work Activity: Conduct Unmanned Aircraft System (UAS) Research

Conduct ongoing research and development efforts to support the safe and efficient integration of Unmanned Aircraft System (UAS) into the National Airspace System (NAS).

Activity Target 1:
Complete UAS Collision Severity (Ground and Airborne) Reports based on analysis and simulation. Due January 31, 2017

Activity Target 2:
Complete initial UAS Center of Excellence (COE) Science Technology Engineering and Mathematics (STEM) and Outreach Program Plan. Due September 30, 2017

Activity Target 3:
Complete initial report documenting the technical approach supporting the submission of a Part 107.39 waiver for UAS Operations Over People. Due June 30, 2017

Activity Target 4:
Complete a research project plan which defines FY17 Unmanned Aircraft System (UAS) Center of Excellence (COE) research projects and corresponding FY17 funding to support the FAA’s research objectives. Due March 31, 2017

Internal Work Initiative: Weather Program

Demonstrate the scientific advances required for advanced weather forecast products required for NextGen.

Internal Work Activity: Scientific Advances In WeatherForecast
Demonstrate the scientific improvements of advanced weather diagnoses and forecast capabilities required for the transition to NextGen.

**Activity Target 1:**
Complete development of transfer package for Rapid Refresh Version 4 (RAPv4) and High Resolution Rapid Refresh Version 3 (HRRRv3) weather prediction models to National Weather Service for operational implementation. Due July 31, 2017

**Activity Target 2:**
Complete a plan for integration of GOES-R satellite data into the Offshore Precipitation Capability (OPC) prototype. Due June 30, 2017

**Activity Target 3:**
Complete initial implementation of the NCAR Turbulence Detection Algorithm (NTDA) into the National Weather Service Multi-Radar, Multi-Sensor (MRMS) System. Due April 30, 2017

**Internal Work Initiative: Wake Turbulence Enhancement of Arrival And Departure Rates**
Conduct Research to improve safety and increase throughput using wake turbulence monitoring, operational procedures, and controller tools.

**Internal Work Activity: Wake Turbulence Enhancement Of Arrivals And Departures Support**
Partner with ATO and AVS in domestic and international work groups looking at enhanced methods of providing wake turbulence mitigation utilizing available technology. Lead the development of wake turbulence mitigation separation standards, procedures, processes and enabling technology for near-term, mid-term and far-term NextGen era operations. Assess the performance of the current wake turbulence separation processes and utilize the assessments in the design of the NextGen era operations. Perform analysis, modeling, concept development, and data collection activities necessary to accomplish the NextGen - Wake Turbulence research agenda. Coordinate the wake turbulence mitigation development work with AJT, AFS-400, and AIR-100 as the research progresses. Provide technical leadership in discussions with ICAO, airports, air carriers, unions, and other stakeholders regarding wake mitigation separation standards, procedures, processes and enabling technology.

**Activity Target 1:**
Complete and document safety analysis for Paired Departures operational demonstration at SFO. Due July 31, 2017

**Activity Target 2:**
Submit Safety Risk Management Document (SRMD) to AJI for an analysis methodology to assess new aircraft wake turbulence separation standards. Due August 31, 2017

**Internal Work Initiative: Reduced Weather Impact (RWI) - Weather Forecast Improvements**
The Weather Forecast Improvements (WFI) program addresses both the need to improve weather predictions and how to make best use of that information. Sophisticated National Weather Service (NWS) forecast models will be portrayed on areas of constrained airspace that can then be interpreted for NAS impact and problem resolution. In today's NAS, traffic managers and users must mentally interpret weather conditions and the potential impact of weather on ATC decisions. This program will improve this process, and the accuracy of aviation weather information, to include an automated indication of the constraints placed on the NAS.

**Internal Work Activity: Weather Forecast Improvements (WFI) program**
Weather Forecast Improvements: The Weather Forecast Improvements (WFI) program addresses the need to improve weather prediction and the use of weather information in the future NAS. National Weather Service (NWS) forecast models will be integrated into models that forecast weather impacts for aviation purposes. In today's NAS, traffic managers and users must mentally interpret weather conditions and the potential impact of weather on ATC decisions. WFI will improve the accuracy of aviation weather information, to include the automated objective indication of the constraints placed on the NAS, and incorporate this data into collaborative and dynamic decision-making.

**Activity Target 1:**
Complete Draft Standards and Recommended Practices for the provision of Space Weather Information (including performance requirements) for endorsement by International Civil Aviation Organization (ICAO) Meteorology (MET) Panel Due March 31, 2017

**Activity Target 2:**
Internal Work Initiative: Trajectory Based Operations SD - New Air Traffic Management (ATM) Requirements

The New ATM Requirements Program funds studies, analysis, prototype, and assessment work associated with the Research for Service Analysis (RSA) AMS Phase, and is aligned to the FAA Strategic Initiative to deliver benefits through technology and infrastructure. This initiative also performs concept maturity and technology development that will inform the baseline for a cost-effective replacement for the legacy terminal aircraft and weather surveillance radars required to support the FAA transformation of the nation’s aviation systems.

Internal Work Activity: Multi-function Phased Array Radar (MPAR)

Efforts pertaining to Phased Array Radar research and Advanced Technology Demonstrator development, will inform investment analysis for NextGen Surveillance and Weather Radar Capability.

Activity Target 1:
Develop initial Calibration Concept of Operations. Due January 31, 2017

Internal Work Activity: Weather Transition

The analysis and demonstration projects support the development of operational improvements (Requirements for weather information, Service Analysis to determine the feasibility of conceptual solutions) that will increase the number of arrivals and departures at major airports.

Activity Target 1:

Activity Target 2:
Deliver Automated Wind Compression Tool Accuracy Report to ANG Chief Scientist and National Weather Service/Center Weather Service Unit Program Lead. Due August 31, 2017

Internal Work Initiative: Integrated NAS

The Integrated National Airspace Design and Procedure Planning (INDP) program is currently conducting Performance Based Navigation (PBN) Initiatives safety analyses to allow for the future NAS-wide implementation of Established-on-RNP (Required Navigational Performance) Instrument Approach Procedures (IAPs). Established-on-RNP (EoR) will allow air traffic controllers to clear aircraft on an RNP final approach without providing standard radar separation between aircraft currently established on approaches to parallel runways. Facilitating the EoR concept of operation from a key developmental site to a NAS wide Document Changes Proposal (DCP) DCP is a major undertaking that involves modeling and simulating comprehensive scenarios of various simultaneous parallel runway operations and configurations.

Internal Work Activity: Collaborative Air Traffic Management (CATM) Flight & State Data Mgmt.- Integrated NAS

Modeling, simulation and analysis activities for the Established on RNP (EoR) operations will continue to progress and begin to output analysis results. In addition, the program will begin activities leading up to operational demonstration of the EoR.

Activity Target 1:
Complete Established on RNP(EoR) Radius-to-Fix (RF) Duals and Triples Safety Analysis. Due July 30, 2017

Activity Target 2:
Complete update to EoR Concept of Operations to include Track-to-Fix and Radius to-Fix information. Due September 30, 2017

Internal Work Initiative: Ground Based Augmentation System

Ground Based Augmentation System: GBAS standards for GAST-D, a service type equivalent to ILS CAT-III, were baselined within an ICAO Navigation Systems Panel proposed amendment to the Annex 10 Standards and Recommended Practices (SARPs). Final work to complete validation of these requirements is underway within various ICAO ad-hoc groups. These requirements will have to be met by the vendor applicant for System Design Approval (SDA) of a GAST-D GBAS system.

Internal Work Activity: Complete prototype Ground Based Augmentation System (GBAS) approach services Type D Separation Management

Continue work towards completion of System Design Approval (SDA) of a GAST-D/CAT III capable Ground Based Augmentation System.

Activity Target 1:
Complete review of interim vendor-supplied System Design Approval (SDA) artifacts and provide report. Due September 30, 2017
Internal Work Objective: Deliver benefits through technology and infrastructure - Advance Collaboration
We can only succeed with continued collaboration. We do that internally with cross-agency coordination and integration. We do that internationally with global partners. And we do that with other partners in the aviation community who are investing in the future along with the FAA.

Internal Work Initiative: Test and Evaluation
Test, analyze and evaluate NAS/NextGen systems/services to verify and validate that products meet specifications, satisfy requirements, and are operationally suitable and effective.

Internal Work Activity: Verification and Validation (V&V) of Strategies & Practices
Conduct independent assessments of test work products and acquisition work products requiring Verification and Validation (V&V), based on established standards, in support of organizational and acquisition program objectives.

Activity Target 1:
Conduct ninety percent (90%) independent review of the William J. Hughes Technical Center’s (WJHTC’s) test work products for projects following the Test & Evaluation (T&E) Handbook. Due September 30, 2017

Activity Target 2:
Host the annual Verification & Validation (V&V) Summit. Due September 30, 2017

Internal Work Activity: Test Protocol and Documentation
Provide quality Test & Evaluation (T&E) and analysis products and services to ensure that current National Airspace System (NAS) and future air transportation systems are verified and validated using best practices and quality standards.

Activity Target 1:
Deliver test documentation as specified in FY17 Project Scope Agreements (PSAs) with Program Management Organization (PMO) Sponsors (AJM-2/3) for acquisition programs (Surveillance, Air Traffic Management, Decision Support, Agency Support, Communications, Navigation, Flight Services, and Weather). Due September 30, 2017

Activity Target 2:
Prepare for Portfolio Review with Program Management Organization (PMO) Executive Leadership (AJM-2/3). Due August 31, 2017

Activity Target 3:
Maintain International Organization for Standardization (ISO) Certification by conducting biannual management reviews. Due September 30, 2017

Internal Work Initiative: Separation Standards and Analysis
Provide analytical studies and related safety monitoring services in support of separation reductions in U.S. Sovereign Airspace and international airspace where FAA has delegated authority to provide air traffic services. Provide the Reduced Vertical Separation Minimum (RVSM) Regional Monitoring Agency (RMA) functions for two of the thirteen world-wide RMAs.

Internal Work Activity: Separation Standards and Air Transportation Analytical Studies
Conduct and participate in Separation Standards and Transportation System Analytical studies, reviews and meetings.

Activity Target 1:
Prepare annual review for International Civil Aviation Organization (ICAO) regional safety meeting. Due August 30, 2017

Activity Target 2:
Implement a Performance Based Communication and Surveillance (PBCS) monitoring process that includes semi-annual reporting of operator performance. Due March 30, 2017

Internal Work Initiative: Aviation Research Initiative
Provide scientific solutions to current and future air transportation challenges by conducting applied research and development in collaboration with industry, academia, and government. These solutions guide the development of aviation safety improvements and are implemented through specifications, procedures, regulations, or certifications.

Internal Work Activity: Continued Airworthiness Research
Conduct research to reduce the risk of failure of aircraft structure, engines and systems as a function of their continued operation and usage.
Activity Target 1:
Develop criteria to describe stall departure trigger and characteristics for transport airplanes. Due June 30, 2017

Activity Target 2:
Prepare draft version of the annual update to the Metallic Materials Properties Development and Standardization (MMPDS) Handbook and derivative products. Due September 30, 2017

Internal Work Activity: NextGen - Alternative Fuels for General Aviation
Conduct research to identify alternative and renewable fuels for GA to lessen aviation environmental impacts to air and water quality.

Activity Target 1:
Perform piston aviation fuels Initiative engine detonation testing. Due September 30, 2017

Internal Work Activity: Fire Safety and Research
Conduct research to reduce risks associated with on-board aircraft fires and mitigate the effects of post-crash ground fire.

Activity Target 1:
Refine new test apparatus for more accurately measuring the heat release rate of honeycomb, thermoplastic, and other large surface-area cabin interior materials. Due September 30, 2017

Activity Target 2:
Develop and evaluate methods to safely ship lithium batteries, including packaging, cargo loading devices (containers and pallets), and on-board cargo compartment fire suppression systems for freighters. Due September 30, 2017

Internal Work Activity: System Safety Management
Support promotion and expansion of safety information sharing, safety risk management initiatives efforts, and prevent, reduce, or mitigate the number of accidents in the terminal area.

Activity Target 1:
Develop prognostic safety metrics for helicopter loss of control occurrences, i.e., autorotation, vortex ring state, tip-over taxi; for use by participating operators. Due June 30, 2017

Activity Target 2:
Implement two new capabilities within the CASSIE Environment. Due September 30, 2017

Internal Work Activity: Structural Safety/Advanced Materials
Conduct Research to reduce the risks due to structural failure by assessing the safety implications of new and present day composites, alloys and other materials, and associated structures and fabrication techniques.

Activity Target 1:
Conduct a full-scale drop test and computer simulation of a regional/commuter single aisle airplane (Fokker F-28) fuselage section to characterize the fuselage response. Due March 31, 2017

Internal Work Activity: Propulsion and Fuel System Safety
Conduct research to reduce the risks associated with the failure of aircraft engines, components, and fuel systems.

Activity Target 1:
Develop and implement an improved fleet risk analysis capability into the DARWIN software code to address inspection-related corrective actions to assess continued airworthiness associated with Advisory Circular 39-8. Due September 30, 2017

Internal Work Activity: Aircraft Icing/Digital System Safety Research
Conduct research to reduce the risks associated with aircraft icing and failures to software based digital flight controls and avionics systems.

Activity Target 1:
Conduct research and collaborate with Lincoln Labs to produce a process/methodology for Safety Risk Assessment (SRA) for the Aircraft Systems Information Security Protection (ASISP) program. Due May 30, 2017

Activity Target 2:
Conduct testing of artificial ice shapes in ONERA F1 pressurized aerodynamic tunnel during at simulated flight conditions (Reynolds Numbers). Due July 30, 2017

Internal Work Activity: Aircraft Catastrophic Failure Prevention Research
Conduct Research to reduce the risk of uncontained engine failures and propulsion system malfunction.
Activity Target 1:
Update and revise the new impact and failure models for metal and composite materials available in LS-DYNA through the LS-DYNA Aerospace Users Group. Due April 30, 2017

Internal Work Initiative: William J Hughes Technical Center Operations
Provide facility maintenance, environmental management, support services and engineering support for all properties located at the WJHTC.

Internal Work Activity: Facility Operations and Maintenance
Provide twenty-four hour facility, emergency management preparation/response operations, and maintenance services for the WJH Technical Center Campus.

Activity Target 1:
Identify changes required within the WJHTC Facility Security Plan based upon the release of FAA Order 1600.69C, FAA Facility Security Management Program. Due September 30, 2017

Activity Target 2:
Update Emergency Operations Management Program. Due September 30, 2017

Activity Target 3:
Implement Facility Master Plan (FMP) and produce annual report. Due September 30, 2017

Activity Target 4:
Update ISO procedures to include Facility Master Plan. Due September 30, 2017

Activity Target 5:
Maintain ISO and EMS certification for the WJH Technical Center EMS and Quality Management systems in the Laboratory Services, Test and Evaluation and Center Operations Divisions. Due September 30, 2017

Internal Work Initiative: NAS & NextGen Laboratory Facilities and Services
Provide a set of world class laboratory facilities and services to support research, engineering, development, test, evaluation and maintenance of air navigation, air traffic management, and future air transportation system capabilities.

Internal Work Activity: NextGen Laboratory Facilities
Sustain the NextGen Integration and Evaluation Capability (NIEC) and the Florida Test Bed (FTB) to support NextGen programs.

Activity Target 1:
Integrate DataComm functionality into the NIEC's reconfigurable cockpit simulator. Due June 30, 2017

Activity Target 2:
Upgrade existing capabilities at the FTB to encompass FF-ICE Block 1 functionalities. Due July 31, 2017

Internal Work Activity: NAS Air Traffic Control Laboratories
Sustain and improve the William J. Hughes Technical Center NAS Laboratory Facilities.

Activity Target 1:
Assess performance of laboratory management support including engineering, configuration management, system design and installation, data management, and technical support services for NAS and NextGen programs through program reviews. Due September 30, 2017

Activity Target 2:
Maintain ISO certification by meeting or exceeding customer requirements by maintaining a customer feedback response rating of 3.5 or higher. Due September 30, 2017

Activity Target 3:
Initiate 70% of planned Space and Infrastructure Master Plan projects scheduled for FY2017. Due September 30, 2017

Internal Work Activity: Research Laboratory Facilities at WJHTC
Support research and development laboratories at the WJHTC.

Activity Target 1:
Develop DataComm Segment 1 Phase 2 capabilities into the DESIREE air traffic control simulation system at the RDHFL. Due June 30, 2017

Activity Target 2:
Integrate Required Navigation Performance (RNP) capability into the Center's B-737 Aircraft
Simulation at the Cockpit Simulation Facility. Due August 30, 2017

Activity Target 3:
Implement Intelligent Agent Capability in Target Generation Facility. Due July 31, 2017

Internal Work Initiative: R&D Management
Lead the development, review and alignment of FAA's annual research and development (R&D) program to provide science and technology basis for continued evolution of a safe, efficient and environmentally sustainable aviation infrastructure.

Internal Work Activity: R&D Planning and Portfolio Management
Manage the planning and coordination of the FAA’s research and development portfolio through strategic planning, budget formulation, program execution, and program evaluation.

Activity Target 1:
Prepare final 2017 NARP for LOB Concurrence. Due February 28, 2017

Activity Target 2:
Coordinate the Research Engineering & Development Executive Board (REB) 2019 Portfolio Reviews. Due March 31, 2017

Activity Target 3:
DRAFT responses to REDAC FY2019 portfolio recommendations. Due June 30, 2017

Activity Target 4:
Submit final Tech Transfer Report for executive review and approval. Due February 28, 2017

Activity Target 5:
Submit final COE congressional report executive review and approval. Due September 30, 2017

Internal Work Initiative: WJHTC Operations & Infrastructure
Modernization of Technical Center infrastructure to ensure facilities operate efficiently and effectively.

Internal Work Activity: Facility Infrastructure Upgrades
Design and engineer facility improvements to ensure the ongoing operations of the WJH Technical Center.

Activity Target 1:
Complete 80% of construction of Airport Operations Area water main extension. Due September 30, 2017

Activity Target 2:
Complete Main Electrical Substation Upgrades (Switchgear Enclosure). Due September 30, 2017

Activity Target 3:
Complete Design for Building 300 Mechanical Upgrades (Replace AC-6, 7 and 8). Due September 30, 2017

Activity Target 4:
Complete Design and Submit Procurement Package for Bldg 316 Chiller Replacements by 3/31/17. Due March 31, 2017

Internal Work Initiative: ATC/Tech Ops Human Factors
Delivery of research and development (R&D) products that incorporate the human-centric perspective, roles, responsibilities and capabilities as they relate to air traffic control.

Internal Work Activity: Common Information Requirements
The overall objective of this project is to provide human factors guidance on the design and potential implementation of a common set of functions, information elements, user interfaces, and interactions across Air Route Traffic Control Center (ARTCC) and Terminal Radar Approach Control (TRACON) controller workstations. This guidance will take the form of a set of requirements and implementation recommendations that will make the workstations in both domains more similar in functionality and design.

Activity Target 1:
Complete report on Alarm, Alerts and Notification Management. Due January 31, 2017

Activity Target 2:
Complete TRACON on-the-job training standards. Due August 30, 2017

Activity Target 3:
Complete analysis of trainee survey data that identify perceived factors which contributed to their failure, and provide a report recommending interventions to ATO management services (AJG). Due September 30, 2017
Internal Work Initiative: Operations Concept Validation and Modeling
Develop and validate operational concepts that will increase capacity and improve efficiency and throughput.

Internal Work Activity: Improve Efficiency, Ops Concept Validation Modeling
Develop and validate operational concepts/methods that will expand capacity, improve efficiency and throughput by satisfying future growth in demand and reducing transit times.

Activity Target 1:
Complete Traffic Management Initiative Attribute Standardization (TAS). Due September 30, 2017

Activity Target 2:

Internal Work Initiative: NextGen Interagency Initiatives
Lead the early collaboration and coordination of key NextGen interagency initiatives.

Internal Work Activity: Interagency Coordination
Lead the early collaboration and coordination of key NextGen interagency initiatives that require collaboration and consensus among federal partners from the Departments of Defense, Commerce, and Homeland Security, the Federal Aviation Administration, the National Aeronautics and Space Administration, the White House Office of Science and Technology Policy, and the Office of the Director of National Intelligence. Initiatives include Research Transition Teams (RTTs), cyber security and weather research that requires interagency coordination.

Activity Target 1:
Identify gaps and inconsistencies in cyber policy/guidance among government agencies and develop a report articulating the findings. Due April 30, 2017

Activity Target 2:
Through the Interagency Cyber Core Team (ICCT), develop a multi-agency Aviation Cyber Security Research and Development Roadmap. Due September 30, 2017

Activity Target 3:
Through the ICCT, engage with partner agencies and other FAA organizations to identify gaps and vulnerabilities from the Aviation Cyber Exercises and evaluations. Develop recommendations for senior stakeholders of NextGen Partner Agencies and present to the Cyber Steering Committee. Due September 30, 2017

Activity Target 4:
Provide annual update on IPO accomplishments to the NextGen Executive Board for endorsement and provide updates to the Senior Policy Committee. Due September 30, 2017

Activity Target 5:
Identify potential weather multiagency R&D opportunities to close operational gaps and brief updates to the NextGen Executive Weather Panel (R2O/O2R RTT process). Due September 30, 2017

Internal Work Activity: ANG International Programs
Provide leadership, share best practices, and support air traffic modernization on behalf of the FAA at major international events and with key international partners and emerging modernization programs. Brief foreign delegations on NextGen programs.

Activity Target 1:
Chair the United States-Japan Future Air Transportation Systems (FATS) Working Group meetings. Facilitate appropriate NextGen subject matter expertise at work group meetings. Due July 31, 2017

Activity Target 2:
Foster NextGen - SESAR harmonization as part of the United States/European Union Memorandum of Cooperation (MOC). Submit NextGen Coordination Plan updates for work areas 1, 2, 3 and 4 of the MOC. Due September 30, 2017

Activity Target 3:
Develop a cross-agency initiative, in collaboration with the U.S. Department of Commerce (DOC), to leverage the new International Civil Aviation Organization (ICAO) Global Air Navigation Plan (GANP) core services into roadmap support for foreign states. Coordinate with DOC Commercial Services to provide at least one workshop on the GANP core services and NextGen programs. Due September 30, 2017
Internal Work Initiative: NextGen Status Report
Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services. Focus to achieve the benefits of NextGen Focus to achieve the benefits of NextGen.

Internal Work Activity: Portfolio Management
Collaborate with stakeholders to continually improve NextGen planning and benefits delivery.

Activity Target 1:
Conduct Portfolio Management Reviews with stakeholders (2 total in FY17). Due September 30, 2017

Activity Target 2:
Validate the FY17 NSIP changes and adjudicate all stakeholder comments Due January 31, 2017

Internal Work Activity: Budget Execution
Track and report the status execution of NextGen-funded activities.

Activity Target 1:

Activity Target 2:
Report status of PLA deliverable execution quarterly for all active PLAs. Ensure 100% tracking of all deliverables. 12/30/16, 3/31/17, 6/30/17. Due September 30, 2017

Internal Work Initiative: Stakeholder Confidence
Increase stakeholder confidence in NextGen through engagement and strategic messaging.

Internal Work Activity: NextGen Metrics
Provide context about the performance of NextGen capabilities at specific locations.

Activity Target 1:

Activity Target 2:

Activity Target 3:
NextGen Performance Snapshots (NPS) Release 14. Due March 31, 2017

Activity Target 4:
NextGen Performance Snapshots (NPS) Release 15. Due June 30, 2017

Activity Target 5:
NextGen Performance Snapshots (NPS) Release 16. Due September 30, 2017

Internal Work Activity: Communication and Outreach
Inform and promote enthusiasm for NextGen advances and benefits among stakeholders and the traveling public through electronic, print and social media.

Activity Target 1:
Provide the final 2017 NextGen Implementation Plan (NGIP) for Office of Management and Budget (OMB) review thirty days after the President's budget submission. Due March 31, 2017

Activity Target 2:
publish a minimum of three NextGen-related articles per quarter. Due 12/31/16, 3/31/17, 6/30/17 and 9/30/17. Due September 30, 2017

Activity Target 3:
Hold at least two events at airports where DataComm Tower Clearance is being implemented to educate residents of nearby communities about benefits and impacts. This target is co-owned with AOC-1. Due September 30, 2017

Activity Target 4:
Conduct three annual information sessions to educate members of the media on NextGen progress, implementation and benefits to encourage accurate reporting and coverage. Due December 31, 2017; June 30, 2017; September 30, 2017. This target is co-owned with AOC-1. Due September 30, 2017

Internal Work Initiative: Industry and Internal Collaboration
Facilitate cross-agency engagement to remove policy and tactical barriers to implementing NextGen.

Internal Work Activity: Cross-Agency Engagement
Facilitate cross-agency engagement to remove policy and tactical barriers to implementing NextGen.

**Activity Target 1:**
Working with the NextGen and ATO subject matter experts, provide monthly NextGen Integration Working Group progress to agency leadership to ensure NextGen commitments are on track for completion. Due September 30, 2017

**Activity Target 2:**
Execute NextGen Management Board governance to ensure an enterprise approach to developing and executing the FAA's NextGen plan. Due September 30, 2017

**Internal Work Activity: Industry Collaboration**
Lead collaboration efforts with industry to identify risks, remove roadblocks and assist FAA and industry leadership decision-making to implement Priorities commitments.

**Activity Target 1:**
Publish the 2017-2019 NextGen Priorities Joint Implementation Plan for implementing priority capabilities at specific locations by specific dates. (Alternatively, "Deliver 2017-2019 NextGen Priorities Joint Implementation Plan response to the NextGen Advisory Committee for implementing NextGen Priorities at specific locations by specific dates" if signed plan happens prior to business plan input being finalized.) Due November 30, 2016

**Activity Target 2:**
Deliver NextGen Priorities Quarterly Oversight and Monitoring Reports to the NAC SC on the four NextGen Priority focus areas to ensure NextGen commitments are tracked to completion. Due September 30, 2017

**Activity Target 3:**
Through collaboration with ANG-B and the NextGen Integration Working Groups, determine the projects for Joint Analysis Team evaluation in 2017 to report on the post-implementation performance improvements in NextGen Priorities focus areas. Due November 30, 2016

**Activity Target 4:**
Collaborate with the NAC and support the development of recommendations on the cost benefits of enhanced surveillance to ensure the tasking is clear and primed to produce a valuable outcome. Due June 30, 2017

**Activity Target 5:**
Through monthly reporting to the NAC Subcommittee, provide oversight and monitoring of DataComm, ADS-B, and RNP equipage reporting to the NAC to keep high-level focus on the pace and extent of operator equipage in line with NextGen Priorities implementation. Due September 30, 2017

**Internal Work Activity: Aviation Community Engagement**
Engage with the aviation community to ensure a climate conducive to effective NAS-wide use of NextGen capabilities.

**Activity Target 1:**
Provide Automatic Dependent Surveillance (ADS-B) equipage information to stakeholders at the National Business Aviation Association (NBAA) Conference to encourage business jet operators to equip their aircraft ahead of the January 1, 2020 ADS-B Out mandate. Due November 30, 2016

**Activity Target 2:**
Provide Automatic Dependent Surveillance (ADS-B) equipage information to stakeholders at Sun N Fun Fly-in to encourage general aviation operators to equip their aircraft ahead of the January 1, 2020 ADS-B Out mandate. Due April 30, 2017

**Activity Target 3:**
Provide Automatic Dependent Surveillance (ADS-B) equipage information to stakeholders at EAA Air Venture Fly-in to encourage general aviation operators to equip their aircraft ahead of the January 1, 2020 ADS-B Out mandate. Due July 31, 2017

**Activity Target 4:**
Publish quarterly articles or videos on Automatic Dependent Surveillance (ADS-B) equipage in FAA or external publications to encourage general aviation operators to equip their aircraft ahead of the January 1, 2020 ADS-B Out mandate. DU: December 31, 2016; March 31, 2017; June 30, 2017 and September 30, 2017 Due September 30, 2017

**Internal Work Activity: NextGen Advisory Committee (NAC) Recommendations**
The four areas of NextGen capabilities identified by the NAC as priority: Increasing use of Performance Based navigation (PBN), making multiple runway operations more efficient, improving surface operations, and implementing Data Communications.
Activity Target 1:
Achieve 80% of the FAA's commitments to Congress in response to the NAC recommendations within a calendar quarter of their scheduled dates. Due September 30, 2017

Activity Target 2:
Achieve 90% of the FAA's commitments to Congress in response to the NAC recommendations within a calendar quarter of their scheduled dates. Due September 30, 2017

Internal Work Initiative: Key Accomplishments for the FAA
WJHTC
Provide key Research and Development, Test and Evaluation and Facility Operations to support the mission of the FAA and ANG.

Internal Work Activity: Key activities in support of the FAA and ANG's mission.
Provide key research and Development, Test and Evaluation and Laboratory and Facility Services.

Activity Target 1:
Complete 80% of the T&E and Separation Standards targets in ANG-E's FY17 Business Plan. Due September 30, 2017

Activity Target 2:
Complete 80% of Laboratory and Facility Operations targets in ANG-E's FY17 Business Plan. Due September 30, 2017

Activity Target 3:
Complete 80% of the Research and Development targets in ANG-E's FY17 Business Plan. Due September 30, 2017

Internal Work Initiative: Flight Deck Human Factors
Delivery of research and development products that incorporate the human-centric perspective, roles, responsibilities and capabilities as they relate to flight deck management.

Support development of system requirements for the pilot interface for UAS control stations to provide the necessary information for the pilot to respond to impending loss of well-clear separation with other aircraft.

Activity Target 1:
Complete report on UAS human factors control station minimum requirements for detecting and avoiding other aircraft. Due August 31, 2017

Conduct research to examine methods of training a pilot for a specific professional flying position and evaluating training program components and the effectiveness of those training methods to determine if there is an additional path that could be developed for obtaining an ATP certificate with restricted privileges that is performance based.

Activity Target 1:
Complete research report on evaluation for a Performance-based Airline Transport Pilot certificate. Due May 30, 2017

Internal Work Activity: Common Information Requirements - Flight Deck
This project provides human factors guidance for a common set of functions for design, potential implementation, information elements, user interfaces, and interaction in the flight deck. Guidance will provide a set of recommendations for similar functionality and design.

Activity Target 1:

Activity Target 2:
Complete guidance document for the design, evaluation, and approval of visual, auditory, and tactile displays and controls to prevent clutter and confusion in the flight deck. Due May 30, 2017

Internal Work Objective: Business Services
Improve analytical capabilities, visibility, access and discovery of information and data that support NextGen decision making.

Internal Work Initiative: ANG Financial Reporting In Accordance With Federal Budget Process
Lead the formulation of the ANG Congressional Budget justification and provide updates throughout the development process as required. Ensure all funds are executed in accordance with federal guidelines and FAA procedures.

**Internal Work Activity: Budget Formulation**
Provide guidance and lead development of the FY18 President's budget.

**Activity Target 1:**
Conduct annual Mini-Capital Investment Team (CIT) Reviews. Assess the "lessons learned" from Mini-CIT Reviews to identify potential areas for improvement. Due June 30, 2017

**Activity Target 2:**
Facilitate annual submission of the FY 2017 Major IT Business case (formerly OMB Exhibit 300 & 55) to FAA's CIO and provide monthly status reports throughout the year of execution. Due September 30, 2017

**Activity Target 3:**
Facilitate timely submission of the following FY19 Formulation documents: White Sheets. Resource Planning Documents (RPD) and Congressional responses, and other requirements. Due September 30, 2017

**Internal Work Initiative: Operational Efficiency and Effectiveness**
Implement process improvements and best practices to enhance ANG financial management and service delivery.

**Internal Work Activity: Process Improvement**
Provide Operating Procedures for ANG Financial Management.

**Activity Target 1:**
Continue to enhance and deploy automated financial reporting capability via the web, as well as accompanying user manuals to the ANG directorates. Due June 30, 2017

**Internal Work Activity: Forecasting and Planning Branch**
Develop, manage and implement acquisition strategy for ANG-A.

**Internal Work Activity: Forecasting; Acquisition Planning; Acquisition Support**
Develop, manage and implement acquisition strategy for ANG-A.

**Activity Target 1:**
Provide ANG-A1 Contract Status Report to ANG Senior Management, electronically, by the 30th of each month. (Due: Monthly). Due September 30, 2017
Activity Target 2:
Provide Procurement Forecasting, Planning and Status Artifacts/Reports to each ANG Directorate. (Due: 12/31/2016, 3/31/2017, 6/30/2017, 9/30/2017). Due September 30, 2017

Activity Target 3:

Activity Target 4:
Execute Memorandum of Understanding (MOU) and work plan with all Lines of Business (LOBs) supported from SE2020 and MITRE CAASD Budget Line Items (BLI). Due March 31, 2017

Internal Work Initiative: Contract Administration and Management
Perform Contract Oversight and Administration, Task Order (TO) Development, and TO management for all contracts within ANG-A1 Division

Internal Work Activity: Manage existing Contracts within ANG-A1
Uniformly manage existing contracts.

Activity Target 1:
Track and manage key administration and management processes of FY17 award of new task orders, modifications, resumes and invoices - report progress quarterly in the Contract Status Report (Due: 12/31/2016, 3/31/2017, 6/30/2017, 9/30/2017). Due September 30, 2017

Activity Target 2:
Identify and execute contract options in a timely manner to ensure no gaps in service - report progress quarterly in the Contract Status Report (Due: 12/31/2016, 3/31/2017, 6/30/2017, 9/30/2017). Due September 30, 2017

Activity Target 3:
Conduct quarterly Program Management Reviews (PMRs) to manage and oversee contracts - report progress quarterly in the Contract Status Report (Due: 12/31/2016, 3/31/2017, 6/30/2017, 9/30/2017). Due September 30, 2017

Activity Target 4:
Ensure on time delivery of at least 90% of contract deliverables - report progress quarterly in the Contract Status Report (Due: 12/31/2016, 3/31/2017, 6/30/2017, 9/30/2017). Due September 30, 2017

Internal Work Initiative: ANG Strategic and Core Business Plan
In partnership with the directorates within ANG, develop and maintain the ANG Strategic and Core Business Plan.

Internal Work Activity: ANG FY17 Business Plan
Lead coordination and development efforts for the ANG FY18 Business Plan across the NextGen ANG Directorates.

Activity Target 1:
Submit proposal for ANG Strategic Priority-driven FY18 Business Plan framework for ANG-1 approval. Due March 30, 2017

Activity Target 2:
Lead ANG Senior Leadership in the development of ANG's FY18 Priority Framework to establish line-of-sight between ANG Strategic Priorities and Activities. Due April 30, 2017

Activity Target 3:
Prepare and distribute the implementation plan, guidance and milestone requirements for FY18 business planning framework to ANG Directorate Planners. Due May 30, 2017

Activity Target 4:
Submit the Final ANG-1 approved FY18 ANG Business Plan to APO. Due September 30, 2017

Internal Work Activity: FY 2017 Business Plan Governance
Facilitate ANG Business Plan performance reporting and execute modifications to the Plan to accurately reflect desired outcomes.

Activity Target 1:
Prepare and distribute comprehensive monthly Business Plan Performance Report to highlight at-risk Targets and Activities and develop mitigation strategies. Due September 30, 2017

Activity Target 2:
Integrate automated FY17 Business Plan Change Request process to be executed via ANG Dashboard portal. Due September 30, 2017

Activity Target 3:
Execute change Requests to APO for processing
Internal Work Initiative: Contracts Reporting Tool
Develop, manage and implement acquisition strategy for ANG-A.

Internal Work Activity: Contracts Records Management
Develop, manage and implement Phase II of reporting tool for ANG-A1.

Activity Target 1:
Initial rollout of the electronic Enterprise Management Reporting Tool (eEMRT) to CORs. Due December 31, 2016

Activity Target 2:
Complete Invoice Module for all contracts. Due March 31, 2017

Activity Target 3:
Initial Development of dashboards. Due June 30, 2017

Internal Work Objective:
Optimizing the Use of Agency Resources
As public stewards, AFN will optimize the use and management of FAA resources to improve accountability and enhance operational efficiency through improved management of FAA acquisitions and real property assets, effective management of financial resources, and support of non-AFN workforce planning. Successful accomplishment of this objective is measured through effective management of Agency acquisition policies and practices, reducing space requirements and pursuing alternative workplace strategies to increase space utilization, achieving cost reduction and avoidance targets, favorable financial system audit results, continuous efforts to promote the development of small businesses as well as good corporate citizenship, and establishing an AIT UAS PMO office to provide an one-stop-shop portal for all UAS applications.

Internal Work Initiative: Small Business Development
Provide direct procurement opportunities to small business, thereby promoting small business development and good corporate citizenship.

Internal Work Objective:
Performance Based Navigation (PBN) - Metroplex
Optimize airspace and PBN procedures to improve efficiency an average of 10% across core airports by 2018.

Internal Work Initiative: Performance Based Navigation (PBN) - Metroplex
As a direct response to NAC’s NextGen Integration Workgroup (NIWG) commitments, NextGen will provide contractual oversight and guidance of awards supporting the study phase. A benefits analysis of the airspace modifications and implemented procedures will be conducted.

Internal Work Activity: Performance Based Navigation (PBN) - Metroplex
Ensure contract awards are completed and deliverables are received on time for the Design and Implementation Phase and Post-Implementation phases of this project. Coordinate with AJV on completion reports and documents.

Activity Target 1:
Start Las Vegas Metroplex Design Phase. Due March 31, 2017

Activity Target 2:
Complete Charlotte Metroplex Post-Implementation Procedure Implementation. Due September 30, 2017
Internal Work Initiative: Improved Surface/TFDM - Surface Tactical Flow
Collaborate with NASA to accomplish the NextGen Integrated Working Group (NIWG) departure management recommendation and to document the Integrated Arrival/Departure (IADS) Research Transition Plan.

Internal Work Activity: NextGen Integrated Working Group (NIWG) demonstration
Coordinate the NextGen Integrated Working Group (NIWG) demonstration planning activities.

Activity Target 1:
Complete a report that will identify and describe the less-equipped airports within a Metroplex that impact operations at the primary airport. Due June 30, 2017

Activity Target 2:
Complete a Departure Metering Demonstration Readiness Report documenting readiness for Surface-Collaborative Decision Making (S-CDM) Metering Concept at Charlotte. Due September 30, 2017

Internal Work Objective: Deliver Benefits Through Technology and Infrastructure - Focus to Achieve the Benefits of NextGen
Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient streamlined services.

Internal Work Initiative: Improve NAS Software Assurance
Partner with stakeholders across the FAA to develop plans and practices to improve NAS software assurance.

Internal Work Activity: Improve NAS Software Assurance
Implement methods and practices to improve NAS software assurance.

Activity Target 1:
Improve the software quality of NAS software by developing a static code analysis capability and analyzing code from at least one NAS acquisition program. Due September 30, 2017

Internal Work Initiative: Strategic Technologies
Research and implement, where practical, new technologies and concepts as best practices to improve the implementation of Systems Engineering activities throughout the system development life cycle.

Internal Work Initiative: Model Based Systems Engineering
Partner with stakeholders to determine which systems engineering activities (e.g. requirements analysis, validation & verification, functional analysis and allocation, performance analysis and trade studies, system architecture specification, etc.) can benefit from the application of rigorous visual modelling principles and best practices and implement a proof of concept.

Internal Work Activity: Further the use of Model Based Systems Engineering
Extend the FY16 Proof of Concept Work

Activity Target 1:
Perform Trade studies on MBSE tools (CORE, SA, EA, etc.) to recommend which provides the optimum value. Due June 30, 2017

Activity Target 2:
Extend the FY16 proof of concept by modeling a systems concept in order to derive functional diagrams. The result of this activity and the FY16 activity will result in a model that connects the system concept to the requirements document. Due September 30, 2017

Internal Work Objective: Systems Engineering Information Management
Progressively improve visibility, access, and discovery of products, information, and data to further enable a workforce dedicated to architecting the evolution of the NAS and providing Systems Engineering leadership in delivering the future Aviation System.

Internal Work Initiative: Manage and Evolve Information Management Tools, Systems, and other Information Assets
Progressively improve visibility, access and discovery of information and data supporting systems engineering, enterprise architecture and planning knowledge and
decisions associated with evolving the NAS and NextGen.

**Internal Work Activity: Improve Visibility, Access, and Security within the NAS Systems Engineering Portal (SEP)**

Deliver strategic software changes to evolve and support collaboration, analysis, and problem solving between NAS planners, engineers, modelers and architects.

**Activity Target 1:**
Provide technical support to publish NAS EA/NSIP 2017. Due January 31, 2017

**Activity Target 2:**
Develop, design, and implement NPE Use Case Scenario 4 - Decision Point Slip use case. Due September 30, 2017

**Activity Target 3:**
Update the Hazard Traceability View (HTV) prototype to reflect Safety/ NAS EA model changes. Determine production readiness. Due September 30, 2017

**Internal Work Activity: Improve Access to Trusted Data and Information**

Promote flexibility, discovery and secure exchange of trusted data and inform through technology and governance.

**Activity Target 1:**
Work with Integrated Systems Engineering Framework (ISEF) Stewardship Community of Practice (SCoP) to gain preliminary agreement on data stewards, sources, data sensitivity and visibility of approved classes within the ISEF meta-model. Due June 30, 2017

**Internal Work Objective: Deliver Benefits Through Technology and Infrastructure - Focus to Achieve the Benefits of NextGen**

Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services. Provide enterprise level benefit and cost analysis to inform an optimal transition to NextGen.

**Internal Work Initiative: Operational Performance Analysis**

Provide value-added analyses and results on operational performance impacts and benefits from NextGen improvements.

**Internal Work Activity: Operational Performance Analysis of FY2016 Improvements**

Analyze, interpret and, as necessary, project future operational performance impacts and benefits from NextGen improvements deployed in FY2016.

**Activity Target 1:**
Develop an analysis plan for an assessment of NextGen improvements deployed in FY2016. Candidate assessments include SoCal Metroplex, Wake RECAT at additional sites, DataComm - DCL, and NAS-wide reroutes. Due November 30, 2016

**Activity Target 2:**
Analyze and interpret operational performance impacts and benefits from select NextGen improvements deployed in FY2016. If applicable, incorporate industry feedback through NAC SC JAT activities. Due September 30, 2017

**Activity Target 3:**
Airfield Delay Simulation Model (ADSIM+) Model Enhancements: Model the impact to airport capacity in standalone and Metroplex modes by improving the fidelity of the SIDs and STARs representation, as well as modeling arrival and departure fix balancing. ADSIM+ development will also include an expanded data-mining capability to support automated taxi-path generation. Due September 30, 2017

**Internal Work Initiative: Cost Benefit Analysis in Support of Investment Planning**

Conduct NextGen cost-benefit analyses in support of agency investment planning.

**Internal Work Activity: NextGen Cost Benefit Analysis**

Update the 2017 cost and benefit estimates for NextGen.

**Activity Target 1:**
In collaboration with ANG-B2, ANG-C and AFN, update NextGen cost estimates, incorporating: the 2018 President's Budget, GA & avionics costing data, and forecasting FAA costing "wedge" not included in CIP. Due July 31, 2017
Activity Target 2:
Update NextGen benefits estimates, incorporating: the 2018 President’s Budget, TAF, and NSIP. Due August 31, 2017

Activity Target 3:
Update NextGen cost-benefits for internal use, and provide explanations for changes from previous years. Due September 30, 2017

Internal Work Activity: Enhanced Modeling Capabilities
Enhance the System-Wide Analysis Capability (SWAC) to address agency and NextGen modeling and analysis needs.

Activity Target 1:
SWAC Model enhancements: Modeling of Unmanned Aerial systems (UAS) in the National Airspace system (NAS); Implement the ability to model FAA pre-departure surface data sharing in SWAC. Due September 30, 2017

Internal Work Initiative: Benefit Analysis in Support of NextGen Programs and JRC Investment Decisions
Perform benefit analyses in support of ANG and PMO programs to assist senior FAA leaders in making informed investment decisions.

Internal Work Activity: Provide Subject Matter Expertise in Benefits Modeling and Analysis
Provide subject matter expertise in the area of benefits modeling and analysis for the Advanced Surveillance Enhanced Procedural Separation (ASEPS) (previously known as Reduced Oceanic Separations) program, GBAS, UAS and Commercial Space. These activities include assisting the program going through initial investment decision, cost/benefits modeling and refining the CBA results as needed by the program office, and shortfall identification for potential Investment Analysis Readiness Decision (IARD).

Activity Target 1:
Update Advanced Surveillance Enhanced Procedural Separation (ASEPS) benefit results. Due April 30, 2017

Activity Target 2:
Finalize/update Ground Based Augmentation System (GBAS) cost/benefit results. Due July 31, 2017

Activity Target 3:
Define requirements and validating assumptions for modeling ADS-B backup. Due August 31, 2017

Activity Target 4:
Develop draft estimation of civil and commercial UAS traffic projections and modeling requirements. Due September 30, 2017

Activity Target 5:
Complete initial run of System-Wide Analysis Capability (SWAC) to evaluate commercial space launch Concept of Operations. Due September 30, 2017

Internal Work Activity: Internal Work Activity: Provide Benefit Input to Joint Resources Council (JRC) Program
Provide value-added contributions, especially in the area of shortfalls and cost/benefit analyses, in support of systems engineering to promote a system-wide perspective on program benefits.

Activity Target 1:
Collaborate with ANG-B13 to provide benefit input on at least 1 JRC program. Due September 30, 2017

Internal Work Initiative: Alignment of NextGen Improvement Benefit Expectations Across FAA
In collaboration with other organizations within the FAA, improve methodology for investigating benefit potential and actual benefits from NextGen improvements. Provide subject matter expertise to other LOB’s to refine language used to describe benefit mechanisms, identify benefit trade-offs, and more accurately communicate benefit expectations.

Internal Work Activity: Establish fuel burn estimation methodology in support of benefit analysis of procedural improvements across the NAS.
Collaborate with other organizations to improve fuel estimation methodology for evaluating performance trade-offs.

Activity Target 1:
In collaboration with ANG-C55, develop a methodology for estimating changes in fuel burn with a focus on trade-offs between changes in speed, and vertical and horizontal flight efficiency. Due September 30, 2017
**Internal Work Initiative: Collaborate with Key FAA Offices Influencing the Quantification of NextGen Benefits**

Develop strategic partnerships with key FAA offices influencing the quantification of NextGen benefits.

**Internal Work Activity: Collaborate with Key Stakeholders for Operational Analysis, Modeling, and Benefit Input to Programs**

Develop strategic inputs for the development of Ops Assessment Plan considering the priorities of key FAA stakeholders; determine appropriate ANG-B7 benefit modeling for UAS and Commercial Space Stakeholders; and collaborate with stakeholders to determine the priority for support to the JRC.

**Activity Target 1:**
Collaborate with AJV, ANG-C and PMO to define list of recommended sites for post operational analysis and possible JAT assessment. Due January 31, 2017

**Activity Target 2:**
Collaborate with ANG-B13, AJV, and AFN to provide benefit input on at least 1 JRC program. Due September 30, 2017

**Internal Work Objective: Promote Sound Strategic Technical Decisions with Proactive Engineering Analysis**

Promote sound strategic technical decisions with proactive engineering analysis by engaging partner organizations and ensuring the Enterprise Architecture (EA) and Roadmaps support and reflect those decisions.

**Internal Work Initiative: Conduct Enterprise Planning**

Conduct Enterprise Planning by representing key FAA strategies, capability implementations, and infrastructure investments in the NAS EA Roadmaps and NAS Segment Implementation Plan (NSIP).

**Internal Work Activity: Update and Improve the NAS EA Roadmaps and Improve Data Accuracy**

Update and refine the NAS EA Roadmaps and improve the accuracy of the data contained therein.

**Activity Target 1:**
Create the interrelationship team to facilitate data consistency amongst the NAS EA Roadmaps, NSIP, and other ANG planning products and support alignment with relevant NAS EA models; and conduct the first quarterly meeting. Due June 30, 2017

**Activity Target 2:**
Update and refine Business and Technology (B&T) Improvements to include creating Increments and updating Supporting Activities. Post Business and Technology Roadmap data to the Systems Engineering Portal for better visibility to NAS planners and decision-makers. Due September 30, 2017

**Activity Target 3:**
Develop the NAS Enterprise Planning Framework to establish objectives, processes and relationships amongst the planning products. Due September 30, 2017

**Internal Work Activity: Establish a Common Naming Convention to Consistently Categorize and Forecast F&E Investments**

Establish a common naming convention to consistently categorize and forecast all F&E investments across the FAA

**Activity Target 1:**
Develop a draft framework that defines F&E investment categories, naming schemas, and business rules; aligns existing investments to these categories. Due April 30, 2017

**Activity Target 2:**
Extend the Framework to describe how forecasted investments may be identified and captured on the Infrastructure Roadmaps. Due September 30, 2017

**Internal Work Activity: Conduct the Annual NAS Enterprise Architecture (EA) and NAS Segment Implementation Plan (NSIP) Update**

Provide oversight and support over the annual NAS Enterprise Architecture (EA) / NSIP update.

**Activity Target 1:**
Spearhead the 2017 NAS EA/NSIP Update effort from start to finish with publication to the NAS SE Portal. Due January 30, 2017
Activity Target 2:
Publish the NSIP Lite. Due February 28, 2017

Activity Target 3:
Support the evolution of the NSIP by developing proposed NSIP report format and proposed Systems Engineering Portal structural changes to accommodate the inclusion of baselined Business and Technology Improvements and associated Increments. Due September 30, 2017

Activity Target 4:
Finalize the NAS EA/NSIP Management Plan. Due September 30, 2017

Internal Work Initiative: Conduct Enterprise Analysis
Conduct Enterprise Analysis by developing key NAS enterprise solutions and conducting key NAS enterprise integration studies.

Internal Work Activity: Develop Enterprise Analysis Framework
Develop the Enterprise Analysis Framework as a guidance document that defines the analysis activities that will be undertaken and how they will be performed.

Activity Target 1:

Activity Target 2:
Deliver Final Enterprise Analysis Framework (Version 2). Due February 28, 2017

Activity Target 3:
Propose changes to governance documentation (e.g. ISEF). Due September 30, 2017

Internal Work Activity: Perform FY17 Readiness and Feasibility Assessments (RA/FA)
Perform FY17 Readiness and Feasibility Assessments (RA/FA) and report the results.

Activity Target 1:
Develop FY17 RA/FA plan. Due December 31, 2016

Activity Target 2:
Conduct FY17 RA/FA. Due June 30, 2017

Activity Target 3:
Report out FY17 RA/FA results. Due August 31, 2017

Internal Work Activity: Develop an FY17 Strategic Outlook Report
Develop and apply a prioritization schema to identify focused area analysis activities to be undertaken.

Activity Target 1:

Activity Target 2:
Develop Final Prioritization Schema for the Strategic Outlook Report. Due February 28, 2017

Activity Target 3:
Apply Prioritization Schema to identify Focus Area Analysis Activities for FY17. Due March 31, 2017

Internal Work Activity: Perform Focus Area Analysis
Perform focus area analysis on identified priorities

Activity Target 1:
Assign Focus Area Analysis activities to staff. Due April 30, 2017

Activity Target 2:
Develop draft Focus Area Analysis report. Due July 31, 2017

Activity Target 3:
Develop final Focus Area Analysis report. Due September 30, 2017

Internal Work Initiative: Promote Strategic Technical Decisions with Proactive Engineering Analysis
Conduct customer driven, domain specific subject matter expert studies and analyses.

Internal Work Activity: Develop an Enterprise Surveillance Solution
Develop an Enterprise Surveillance Solution which identifies a plan for the efficient consolidation and replacement of legacy surveillance radars and beacon systems.

Activity Target 1:
Develop draft Enterprise Cooperative Surveillance strategy and solution. Due June 30, 2017
Internal Work Activity: Develop UAS NAS EA Program Strategy
Develop UAS NAS EA Program Strategy working across organizational boundaries to ensure all stakeholders are included.

Activity Target 1:
Establish UAS NAS EA Program Strategy stakeholder group. Due February 28, 2017

Activity Target 2:
Develop draft UAS NAS EA Program Strategy Outline. This includes a review by all the Stakeholders. Due May 31, 2017

Activity Target 3:
Develop draft UAS NAS EA Program Strategy. Due September 30, 2017

Internal Work Activity: Develop International Civil Aviation Organization (ICAO) NextGen Satellite Communications (SATCOM) Standards and Recommended Practices (SARPs)
Develop the EU/U.S. Air-Ground Datalink Harmonization Strategy document Develop, in close collaboration between the FAA and SJU, a document which describes the approach for achieving Datalink Harmonization between the U.S. and EU.

Activity Target 1:
Prepare a Coordination Committee (CCOM) approved Datalink Harmonization Strategy Document. Due August 31, 2017

Internal Work Activity: Develop a US/Europe Harmonized Navigation Roadmap
Develop a US/Europe harmonized navigation roadmap

Activity Target 1:
Develop a draft NextGen/SESAR harmonized navigation roadmap. Due November 30, 2016

Activity Target 2:
Develop an FAA/NextGen Joint Undertaking agreed, final, navigation roadmap. Due July 31, 2017

Internal Work Activity: Develop a NAS Systems Sustainment Index Model
Develop a NAS Systems sustainment index model.

Activity Target 1:
Develop an initial concept for a NAS sustainment index. Due February 28, 2017

Activity Target 2:
Develop a prototype NAS sustainment index model. Due September 30, 2017

Internal Work Activity: Develop Aircraft Cyber Security Standards
Develop cyber security standards for aircraft.

Activity Target 1:
Evaluate Security Dialogue Service (SDS) for FANS I/A. Due August 31, 2017

Activity Target 2:
Develop validation plan for ICAO Secured Dialogue Service (SDS) - SDS - ATN Applications over IPS air/ground communication security standards. Due September 30, 2017

Activity Target 3:
Prepare a report on the evaluation of RTCA SC-228 Phase 1 MOPS, Appendix D (communication security controls for C2 terrestrial and SatCom networked systems addressing communication end-to-end security and air-to-ground control plane security). Due September 30, 2017

Internal Work Initiative: Architecture Maturity Assessment
Establish and execute a process for assessing the maturity of the NAS Enterprise Architecture.

Internal Work Activity: Assess the Maturity of the NAS Enterprise Architecture (EA)
Perform and document a maturity assessment of the NAS EA.

Activity Target 1:
Develop and document a plan to assess the maturity of NAS Enterprise Architecture data, products, and processes. This will define how to measure maturity against common industry and government maturity models, reports, and assessments. Due July 31, 2017

Activity Target 2:
Perform and document a maturity assessment of the NAS Enterprise Architecture data, products, and processes, and document how the architecture has addressed recommendations
Internal Work Objective: Internal Work Objective: NAC
Recommendation: Improved Multiple Runway Operations
The efficiency of Multiple Runway Operations (MRO), particularly those that are closely spaced, has been limited by a variety of factors that influence safety risk, including collision avoidance and the interplay of wake vortices (also known as wake turbulence) with nearby aircraft. Multiple Runway Operations capabilities improve access to these runways and can increase basic runway capacity and throughput by reducing separation between aircraft based on improved collision and wake mitigating separation standards. Improved access will enable more arrivals and/or departures during less than visual meteorological conditions, which will increase efficiency and reduce flight delays.

Internal Work Initiative: NAC
Recommendation: Improved Multiple Runway Operations
In the past, the degree to which two aircraft were separated for wake turbulence concerns was primarily based on aircraft weight. The FAA has replaced that model at numerous airports in the past few years with newly approved wake turbulence categories that group aircraft more optimally based on their wake turbulence characteristics. Since these initial implementations, additional research has defined pair-wise wake separation standards for each aircraft leader-follower pair. Analysis for the implementation of these standards is underway to address the needs of a given airport to increase site-specific benefits by developing unique wake categories based on the local fleet mix.

Internal Work Activity: Benefits Assessment to Upgrade RECAT Sites to Phase II
RECAT Phase II categorical implementations can be optimized for the fleet mix in a given Terminal Radar Approach Control Facility (TRACON) and may provide a significant increase in benefits over the current RECAT version for the primary airport in a TRACON, while generally maintaining or improving throughput at smaller airports and the TRACON airspace when compared to RECAT Phase 1.5.

Activity Target 1:
Complete an analysis of sites where Wake RECAT has already been implemented to see if it is both beneficial and operationally feasible to upgrade to RECAT Phase II. Due June 30, 2017

Internal Work Objective: NextGen Enterprise Risk Management
Establish a comprehensive process for managing NextGen related enterprise risks including identifying and assessing risks and effective risk response.

Internal Work Initiative: NextGen Enterprise Risk Management
Effectively identify, assess, and mitigate NextGen risks, issues, and opportunities.

Internal Work Activity: NextGen Enterprise Risk Management
Work across the FAA to establish and implement a comprehensive process to manage NextGen related enterprise risks.

Activity Target 1:
Stand up the NextGen Enterprise Risk Management Board. Due October 31, 2016

Activity Target 2:

Activity Target 3:
Work with Risk Owners to develop draft risk response plans for the updated list of Enterprise Risks. Due April 30, 2017

Enhance Global Leadership
The Global Leadership strategic initiative will deliver an internal governance structure that allows us to make better FAA-wide decisions about how we engage globally using an integrated data-informed approach. We will make decisions about our international activities and programs based on our ability to enhance U.S. influence and better target our resources to shape global standards and assist countries to improve aviation safety, efficiency, and environmental sustainability.

Of course, a large component of NextGen's success is dependent on our international partnerships. Our modernization efforts will only go so far if we are not harmonized and interoperable on a global scale. Our relationship across borders strives to do just that - to harmonize and create a seamless airspace. We place great value in the work we do with others, and our existing agreements, such as the ones with Single European Sky ATM Research (SESAR) and Eurocontrol, have been
effective in moving global modernization forward. We are pleased with the progress made thus far, and we look forward to continued collaboration.

**Strategic Objective: Global Leadership**
Improve safety, air traffic efficiency, and environmental sustainability across the globe through an integrated, data-informed approach that shapes global standards and enhances collaboration and harmonization.

**Strategic Initiative: Ensure Efficient Global ATS to Support U.S. Economy**
Proactively manage air transportation across international boundaries in a manner that is operationally efficient and seamless, with fully harmonized procedures and technologies utilizing the best practices of the industry.

**Strategic Activity: International NextGen Enhancement**
Working with strategic Asia Pacific partners and ICAO, develop a minimum path for NextGen air traffic management (ATM) transformation.

**Activity Target 1:**
Incorporate the Global Air Navigation Plan "minimal path" and NextGen core programs into the FAA international efforts with the Association of Southeast Asia Nations and with the U.S. Department of Commerce. Due September 30, 2017

**Activity Target 2:**
Collaborate with the U.S. Department of Commerce to conduct a workshop for at least one Association of Southeast Asia Nations member State. Due September 30, 2017

**Empower and Innovate with the FAA's People**
The FAA is embarking on a major strategic transformation that can only be accomplished if it has a workforce that is prepared with the skills and mindsets to drive this change. Strong change leadership is required from all levels of the agency to communicate the vision, implement the priority initiatives, and ensure sustained impact from the transformation.

The movements toward risk-based decision making and transforming the NAS through right-sizing, acceleration of NextGen benefits, and integrating new user entrants require new technical and functional skills, and a cultural shift in how the agency works.

We support the office of Human Resources (AHR) in the preparation of FAA's human capital for the future, by identifying, recruiting, and training a workforce with the leadership, technical, and functional skills to ensure the U.S. has the world's safest and most productive airspace system.

**Internal Work Objective: EEO/Diversity and Inclusion Action Committee (EAC)**
The EAC oversees and supports the FAA efforts to create a diverse and inclusive workplace that ensures equal opportunity for all its employees.

**Internal Work Initiative: Diverse and Inclusive Workforce**
In FY 2017, ACR in collaboration with FAA LOB/SO’s will work to ensure a diverse and inclusive workplace. We will ensure that at least 2.67% of all FAA new hires are Persons with Targeted Disabilities (PWTD). LOB/SO will develop and implement strategies to increase the participation rate of Hispanics and women in the FAA workforce, as compared against the national civilian labor force (CLF). LOB/SO will work to improve workplace behavior by ensuring 60% of management and 10% of employees complete at least one Equal Employment Opportunity (EEO) training course. In support of Alternative Dispute Resolution (ADR) engagement, will ensure that 70% of all managers engage in mediation when requested by employees.

**Internal Work Activity: ANG Diverse and Inclusive Workforce**
In FY 2017, ACR in collaboration with ANG will work to ensure a diverse and inclusive workplace. We will ensure that at least 2.67% of all FAA new hires are Persons with Targeted Disabilities (PWTD). LOB/SO will develop and implement strategies to increase the representation of Hispanics and women in the FAA workforce, as compared against the national civilian labor force (CLF). LOB/SO will work to improve workplace behavior by ensuring 60% of management and 10% of employees complete at least one Equal Employment Opportunity (EEO) training course. In support of Alternative Dispute Resolution (ADR) engagement, will ensure that 70% of all managers engage in mediation when requested by employees.

**Activity Target 1:**
ANG will support agency's goal of 2.67% PWTD hires, by attending bi-monthly EAC with limited delegation. Implement strategies developed in coordination with PWTD Tiger Team to ensure
PWTD new hire goal is achieved. Due September 30, 2017

**Activity Target 2:**
ANG will identify strategies and actions to improve groups with lower than expected participation rates, based on data provided by ACR during the Part G checklist review. Due November 30, 2016

**Activity Target 3:**
Develop and implement outreach and recruitment strategies to increase the representation rates of Hispanics and women in the FAA workforce, as compared against the national civilian labor force (CLF). Due September 30, 2017

**Activity Target 4:**
Designate one (1) representative to participate in the two (2) new executive-led EAC workgroups, focusing on increasing underrepresentation of Hispanics and women via outreach and recruitment. The workgroups will develop strategies to retain the underrepresented groups once onboard. Due December 31, 2016

**Activity Target 5:**
Ensure 90% of ANG reasonable accommodation requests are processed within 25 business days or less. Due September 30, 2017

**Activity Target 6:**
Utilizing various learning platforms, monitor the delivery of EEO training to 60% of ANG managers and 10% of ANG employees. Due September 30, 2017

**Activity Target 7:**
Assist Agency effort with ADR engagement by ensuring that 70% of all ANG managers engage in mediation when requested by employees. Due September 30, 2017

**Internal Work Objective:**
**Workforce of the Future Mission Support**
Support the FAA in meeting its goals and objectives with a back to basics approach to leverage HR’s most valuable resource, PEOPLE.

**Internal Work Initiative: HR Core Services**
Improve the efficiency, effectiveness and timeliness of HR programs and services in support of the FAA’s mission and workforce.

**Internal Work Activity: Workforce Planning (Phase 2)**
Improve efficiency and effectiveness of HR resource management through position management governance.

**Activity Target 1:**
Reduce the number of duplicative active vacant positions in Federal Payroll and Processing System (FPPS) by 10%. Due September 30, 2017

**Activity Target 2:**
Analyze provided FPPS organizational structure to address any inconsistencies found in a crosswalk of what is in FPPS to the current ANG organizational charts and work with AHR to address and correct the inconsistencies. Due September 30, 2017

**Internal Work Objective:**
**Workforce of the Future**
Empower and innovate with the FAA’s people. Prepare FAA’s human capital for the future, by identifying, recruiting, and training a workforce with the leadership, technical, and functional skills to ensure the U. S. has the world’s safest and most productive aviation sector.

**Internal Work Initiative: Implement ANG-B Workforce Development Initiatives**
Continue implementation of the Systems Engineering & Integration Office’s Workforce Development Roadmap and other initiatives focused on attracting, developing, retaining and engaging a high quality work force.

**Internal Work Activity: Skills Development**
Develop training courses and implement other methods aimed at skills development.

**Activity Target 1:**
Partner across the directorate to implement SME teams as a mechanism for employee development. Due September 30, 2017

**Activity Target 2:**
Collaborate with ANG-B1 to develop an Information Management overview course. Due September 30, 2017

**Internal Work Activity: Support the Workforce by Providing Access to**
Leadership, Technical, and Functional Information
Continue to develop a robust Knowledge Management environment that enables knowledge capture and knowledge sharing.

Activity Target 1:
Develop and deliver outreach activities within ANG-B for records management and knowledge sharing. Due September 30, 2017

Internal Work Initiative: Workforce Development and Recruitment
Maintain a highly skilled workforce.

Internal Work Activity: Recruitment - NextGen Pathways Program
Recruit and hire Student Interns to assist in the agencies succession planning goals.

Activity Target 1:
Subject to position availability recruit new students into the NextGen Pathways Student Internship Program. Due September 30, 2017

Activity Target 2:
Subject to position and funding availability, convert program participants to full-time permanent employees, without further competition, after successful completion of the program. Due September 30, 2017

Internal Work Objective: Enabling FAA's Employees to Work Smarter
AFN will promote a new work environment and supporting technology to enable FAA employees to work smarter, faster, and with greater flexibility and mobility. Successful accomplishment of this objective will be demonstrated through Workplace Evolution transformation efforts, implementing upgraded bandwidth circuits at FAA facilities approved for the first phase of installation, implementing wireless networks at FAA facilities approved for the third phase of installation, developing a mobility strategy, and updating the FAA's Acquisition Workforce Strategy.

Internal Work Initiative: Strong Acquisition Workforce
Ensure FAA has the staffing and skill mix to successfully manage NextGen and other major acquisitions by implementing and annually updating FAA's Acquisition Strategy and training, developing and certifying personnel in key acquisition professions.

Internal Work Activity: Implement and Annually Update FAA's Acquisition Workforce Strategy
ANG will support AFN in the annual update of the FAA's Acquisition Workforce Strategy before LOB coordination and external publication.

Activity Target 1:
Contribute information to be published in the annual update of FAA's Acquisition Workforce Strategy and coordinate final draft with ANG leadership, once received from AFN. Due September 30, 2017

Internal Work Activity: Train and Certify FAA’s Acquisition Workforce
ANG will train, develop, and certify agency personnel in key acquisition professions.

Activity Target 1:
Ninety percent of program managers managing ACAT 1-3 programs and/or major acquisition programs as defined by FAA and OMB Circular A-11 will attain/maintain certification requirements in accordance with AMS policy. Due September 30, 2017