

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

**N 1100.340**

National Policy

Effective Date:  
08/24/12

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**SUBJ:** Realignment of Assistant Administrator for NextGen

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- 1. Purpose of this Notice.** This notice describes the Office of the Assistant Administrator for NextGen (ANG) and its mission, responsibilities, supplemental relationships, and lines of succession at the director level.
- 2. Audience.** This notice applies in general to the Federal Aviation Administration (FAA) and specifically to ANG employees.
- 3. Where can I Find This Notice?** You can find this notice on the MyFAA employee Web site at [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/) and on the public Web site at [http://www.faa.gov/publications\\_polices/orders\\_notices/](http://www.faa.gov/publications_polices/orders_notices/).
- 4. Explanation of Changes.** This notice reflects the updated organizational structure, roles, and responsibilities for the Assistant Administrator for NextGen, the Deputy Assistant Administrator for NextGen and its Directors as of October 1, 2012.
- 5. Background.** Provides updates to the organizational structure and clarification of roles and responsibilities for the Office of the Assistant Administrator for NextGen.

## **Assistant Administrator for NextGen**

**1. Mission.** Realize the future vision of aviation by providing integrated strategies and solutions that achieve national and international goals. The Next Generation Air Transportation System (NextGen) Organization champions the evolution of the National Airspace System (NAS) through technical and integration expertise, NAS-wide change stewardship, and an operating model that drives collaboration and accountability across FAA staff offices and lines of business.

### **2. Responsibilities.**

#### **a. Assistant Administrator.**

(1) Executes the mission of the FAA and the evolution of the FAA to the NextGen environment. Establishes goals, safety and security of National Airspace System (NAS) systems, long-term strategies, budgets, priorities, and resource allocations that improve service and achieve performance targets. Ultimately accountable for ensuring NextGen benefits realization throughout the NAS lifecycle.

(2) Executes the mission of the NextGen Organization. Ensures its offices establish near- and mid-term goals, budgets and priorities and collaborates with the Air Traffic Organization (ATO) and other FAA staff offices and lines of business to provide a comprehensive and coherent plan for evolving the FAA to the NextGen environment. Allocates and manages resources and meets NextGen performance targets.

(3) Conducts research aimed at increasing safety, flexibility, and sustainability of the future air transportation system.

(4) Transfers technology from research programs to federal agencies with operational responsibilities and to the private sector, in order to optimize safety, capacity, and security, and reduce negative environmental impacts.

(5) Establishes enterprise-level requirements, manages, and implements technologies identified in the NextGen Implementation Plan to transition the NAS to meet forecasted demand.

(6) Establishes and maintains the NextGen Implementation Plan and the NextGen Segment Implementation Plan and supporting budget, planning, and portfolio management documentation. Works closely with all FAA staff offices and lines of business to ensure plans are executed. Informs internal and external stakeholders of NextGen status.

(7) Establishes and manages the NAS Concept of Operations, the Enterprise Architecture, and the NAS Operational Portfolios to ensure they meet current and future service requirements.

(8) Develops plans to monitor and track execution of NextGen programs and supporting implementation initiatives throughout the Idea to In-Service framework. Through its NAS Lifecycle Integration Office, integrates initiatives, activities and capabilities to ensure implementation of the NAS improvements to meet current and future air travel demands.

(9) Plans, analyzes, researches, and develops advanced concepts, new technologies, and prototypes. Manages NAS service analysis and systems engineering to support initial and final investment decisions.

(10) Executes the corporate NextGen planning and budget process and the NAS portfolio management process to ensure alignment between plans and budget requests.

(11) Executes the corporate research, engineering, and development planning and budget process for the Administrator.

(12) Ensures that laboratories, facilities, and support services of the William J. Hughes Technical Center are available and meet the requirements of the FAA staff offices and lines of business and external customers.

(13) Ensures that NAS systems and new acquisitions (equipment, hardware, software) receive test, evaluation, verification, and validation services throughout their lifecycle.

(14) Ensures that NAS planning and implementation activities are synchronized with internal and external partners to support future operational requirements.

(15) Develops, enhances, and validates fast-time modeling tools to simulate and analyze airport/airspace capacities and overall NAS performance.

(16) Manages and oversees the agency's research and development program.

(17) Serves on the NextGen Management Board, of which the Deputy Administrator is chair. Serves on the Joint Resources Council and the Strategy, Budget and Performance Committee.

**b. Deputy Assistant Administrator.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities for NextGen at the enterprise level. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) In the event that the Assistant Administrator for NextGen is not available, serves as back-up in the execution of the duties above.

(3) Manages specific NextGen Directorates or Offices as assigned by the Assistant Administrator. Duties include supervision of the Director of the organizations assigned.

(4) Represents the NextGen organization on the FAA Safety Management System (SMS) Executive Council.

(5) Serves as the NextGen organization authority for matters relating to the FAA's Acquisition Management System (AMS).

**c. Chief Scientist - NextGen.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities for NextGen at the enterprise level. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Provides technical advice and expertise on all aspects of NAS lifecycle development, integration, and implementation to the Assistant Administrator for NextGen and other senior FAA executives. Serves as a senior advisor to the Assistant Administrator for NextGen and other senior executives in the assessment of the alignment of the annual budget request and NextGen plans, goals and priorities.

(3) Serves as a member of the FAA Enterprise Architecture Board and the technical expert for the NAS Enterprise Architecture.

(4) Leads NextGen's international coordination.

**d. Chief Scientist – Software.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Provides technical advice and expertise relating to the development, integration, and implementation of software in the NAS to the Assistant Administrator for NextGen and other senior FAA executives.

(3) Serves as the FAA's lead technical expert for NextGen software issues. Provides expert assistance to the NAS Lifecycle Integration Directorate, ATO Program Management Office (PMO), and FAA staff offices and lines of business.

(4) Serves as technical expert informing the FAA Enterprise Architecture Board and the NAS Enterprise Architecture.

**e. Director, Systems Analysis & Modeling Staff.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Analyzes the impact of NextGen technologies, procedures, and infrastructure on overall NAS performance using simulation tools and techniques. Develops mathematical models to analyze the future operational performance of NextGen and the NAS.

(3) Coordinates with the Office of Environment and Energy to evaluate the environmental impact of NextGen technologies, procedures, and infrastructure.

(4) Performs pre-implementation operational analyses of NextGen technologies, procedures, and infrastructure.

(5) Develops life-cycle cost estimates, economic benefits estimates, and quantitative risk estimates in support of the Office of Advanced Concepts and Technology Development.

(6) Conducts performance and cost analysis in support of portfolio trade studies.

(7) Provides enterprise-level NextGen cost and benefit estimates to support NextGen budget development.

(8) Develops integrated business cases in support of the NextGen Portfolio investments.

(9) Uses computer modeling techniques to assist in developing top-level NAS requirements.

(10) Supports evolution of the NAS by evaluating NextGen technologies and operational procedures through simulation and modeling techniques.

**f. Director, Management Services.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Provides services to the NextGen organization to enable efficient administrative, human capital, budget, and contracting operations.

(3) Ensures efficient and effective operation of the NextGen Organization by establishing, implementing, and maintaining internal administrative, business, and logistical processes, and ensuring adherence to policy.

(4) Enhances the leadership and mission of the NextGen Organization by supporting human capital management, succession planning, and technical training plans and requirements.

(5) Prepares and reviews special reports, projects, and presentations for NextGen Organization leadership. Develops, distributes, and maintains internal communications for employees in support of NextGen performance goals.

(6) Provides timely data, analyses, plans, justifications, and reports to the Office of Finance and Management for the NextGen budget to promote cost efficient financial management in the FAA.

(7) As NextGen communications focal point, tracks briefing papers, testimony, audits, reports

and responses prepared internally for the U.S. Congress, the DOT's Office of the Inspector General, and the Office of the Administrator.

(8) Distributes, manages, and tracks all official correspondence for the NextGen Organization.

(9) Communicates FAA financial policies, processes, and requirements to the NextGen Organization.

(10) Establish a portfolio of contract vehicles and provide contract administration to secure services for the NextGen Organization and other FAA offices as required. Serve as the liaison to the FAA senior executives responsible for acquisitions and support all NextGen directorates in determining the best-fit for the delivery of requirements. Establish and maintain contract tracking framework and performance metrics. The Contract portfolio includes but is not limited to the Systems Engineering 2020 (SE-2020) contract, the Centers of Excellence (COEs), and the Center for Advanced Aviation System Development (CAASD).

(11) Provides all administrative support and funding for FAA- based RTCA activities to support agency goals and activities.

**g. Director, NAS Systems Engineering Services.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Provides configuration management of enterprise-level National Airspace System (NAS) engineering artifacts (e.g., NAS ConOps, NAS Enterprise Architecture (EA), NAS requirements) and management and integration of system engineering information.

(3) Supports planning for future NAS cost efficiencies through integration, analysis, and standardization of data contained in various NAS System Engineering tools (e.g., Integrated Master Schedule, DOORS, System Architect, and the NASEA Portal).

(4) Supports development and maintenance of the NAS operational requirements in coordination with appropriate stakeholders.

(5) Supports the NAS Lifecycle Integration Directorate in the development and maintenance of functional requirements by configuration management of NAS requirements across the lifecycle, including functional requirements, operational requirements and system requirements.

(6) Manages the NAS EA to define the operational and technical framework for all capital assets of the FAA, to describe the agency's current and target architectures, and to plan the transition strategy for moving from the current to the target architecture in an affordable manner.

(7) Develops, implements and oversees the NextGen organization's Safety Management System ensuring compliance with international and agency requirements.

(8) Meets national and international safety and information security standards for programs within the purview of the NextGen organization, ensuring a viable future for air transportation through comprehensive safety and security risk management.

(9) Integrates safety and security strategies for strategic investments to reduce the potential for accidents and incidents, while maintaining the safety and integrity of the NAS.

(10) Develops enterprise-level information system security requirements and architecture. Conducts information security risk assessments. Manages the information system security certification and accreditation and training for the NextGen organization.

(11) Manages NAS Systems Engineering Services' and NAS EA tools and business processes, and supports NAS Systems Engineering Services' configuration management activities. Manages other tools as needed for the NextGen directorates.

(12) Develops and maintains technical content for online and classroom systems engineering, NextGen and NAS EA training.

(13) Manages and maintains configuration management of the System Engineering Manual (SEM) and ensures SEM processes are well-documented and communicated.

#### **h. Director, Advanced Concepts and Technology Development.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Manages, directs, and coordinates the agency's human factors research and engineering program.

(3) Develops human performance information used in reducing human error and in improving pilot, inspector, maintenance technician, air traffic controller, and system technician task performance.

(4) Manages cross-functional portfolios within the Directorate, to assure proper alignment of program activities toward common objectives.

(5) Represents and coordinates work performed in these portfolios, internally within ANG, and externally to FAA staff offices and lines of business and other Government Agencies.

(6) Supports work across the Idea to In-Service process flow with developmental engineers. Establishes, maintains, and configures ground and airborne test beds for collaboration with NextGen partners.

(7) Manages the entry process of concepts into the NAS Concept of Operations.

(8) Decomposes the Concept of Operations into operational requirements and works with NAS Systems Engineering Services to reflect updates in the NAS EA.

(9) Works with NAS Lifecycle Planning to reflect Operational Improvements and Operational Sustainments in NAS Portfolio and NextGen Segment Implementation Plan.

(10) Develops prototypes and demonstrates, validates, and transitions new air traffic technology. Develops demonstrations that mature concepts.

(11) Maintains and enhances a modeling and simulation infrastructure to validate operational concepts, procedures, and technologies.

(12) Enhances NAS weather capabilities to mitigate the impact of weather to NAS users by establishing and coordinating strategic direction for weather initiatives within the ATO, between FAA lines of business, with other relevant government agencies, and with the domestic and international aviation community.

(13) Plans, researches, develops, prototypes, and helps integrate into the NAS new weather capabilities and technologies that enhance safety and capacity and meet current and future aviation needs.

**i. Director, NAS Lifecycle Integration.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Provides enterprise-level (legacy, current, future) planning, programmatic tracking, integration, and implementation oversight that drives the evolution of the FAA into the NextGen environment. Works across programs to ensure economies of scale with NextGen capability integration. Leads the Capture Team process and organizes responsible resources from involved organizations to engage in the end-to-end process.

(3) Manages Investment Portfolio Leads who interface directly with the ATO Program Management Office, ATO and other FAA staff offices and lines of business to ensure NAS operational capabilities, both improvements and sustainments, are executed in a comprehensive, integrated environment, and ensures operational and functional requirements are accurately translated into system requirements by the ATO Program Management Office.

(4) Serves as responsible organization for enterprise-level integration of NAS lifecycle products that drive the evolution of the FAA into the NextGen environment.

(5) Provides cross-program system integration to support trade studies between and among programs resulting in functional and requirement allocations. Manages and coordinates changes to the trade studies, allocations, and system engineering as the programs evolve.

(6) Ensures that appropriate integration of systems and capabilities occurs across and within FAA staff offices and lines of business by collaborating with internal and external stakeholders to lead cross-domain systems engineering and to serve as NextGen steward for the NAS. Works closely with

the ATO Program Management Office to support the alignment of cross-domain systems engineering with program function management.

(7) Ensures NAS Planning products, documents and tools such as NAS Concept of Operations, NAS Enterprise Architecture, NextGen Segment Implementation Plan, and Integrated Master Schedule reflect current and future demands of the NAS by executing effective lifecycle planning and portfolio management.

(8) Ensures that appropriate integration of systems, capabilities, and programs occurs across and within FAA staff offices and lines of business in support of NextGen. If required, establishes agreements with research partners and Agency staff offices and lines of business to conduct NextGen Implementation Plan activities and deliver required capabilities, systems, services and operational benefits.

(9) Conducts programmatic performance and financial reviews of portfolio and agreements and tracks programmatic performance of NextGen commitments.

(10) Ensures that the integration and implementation of operational changes are orchestrated across field operations, programs, and other staff offices and lines of business from concept development through post-implementation analysis, also known as Idea to In-Service framework. Ensures appropriate participation by internal and external stakeholders in NAS lifecycle planning, development, implementation and execution.

(11) Creates FAA policy and guidelines for the Concepts and Requirements Definition (CRD) phase of the Acquisition Management System (AMS); coordinates proposals with FAA lines of businesses and staff offices; and delivers the policy and guidelines to the FAA Acquisition Executive for approval, to work toward approved FAA policy and guidance for the CRD phase of AMS.

**j. Director, William J. Hughes Technical Center.**

(1) Executes the mission of NextGen. Establishes integrated goals, strategies, budgets, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Manages, operates, maintains, and provides engineering services within the FAA's NAS laboratories. Supports research, development, testing, upgrades, and second-level field support of new, potential, and existing NAS systems.

(3) Conduct analyses and evaluations from comprehensive air transportation system, local airport, airspace, and user perspectives.

(4) Characterizes performance of current system and effects of proposed Next Generation Air Transportation System changes on pilots, controllers, aircraft, and related system components.

(5) Transfers technology to aviation industry partners in a timely and cost effective manner. Develops partnerships with academia, industry, government agencies, and professional societies to

ensure smooth transition.

(6) Maintains facilities and support services for all properties at the William J. Hughes Technical Center, including land, buildings, and infrastructure.

(7) Manages, formulates, and coordinates the FAA's research and development program including strategic planning and direction, policy formulation, program assessment and development, and acquisition.

(8) Supports NextGen and other FAA goals through research and development projects with research organizations, industry, and academia.

(9) Aligns research programs with the FAA Flight Plan and the NextGen Implementation Plan. On behalf of the Administrator, prepares the National Aviation Research Plan (NARP) for submission to Congress.

(10) Services and develops technologies, test methods and procedures, analytical tools and models, and technical data and criteria for the Associate Administrator for Aviation Safety (AVS) and the Associate Administrator for Airports (ARP).

(11) Tests, evaluates, verifies, validates, and monitors performance of NAS components, services, and procedures through the solution implementation phase of the acquisition lifecycle and other lifecycle phases.

(12) Establishes aviation research investment priorities, along with other agencies, advisory boards, and international organizations, to identify research gaps, reduce duplication of efforts, leverage available resources, and maintain United States leadership.

(13) Supports rule development for aircraft, airport certification and operation, associated advisory materials and means of compliance.

(14) Coordinates and supports cross agency technology research, development and test efforts with the state-of-the-art William J. Hughes Technical Center capabilities and resources.

**k. Director, NextGen Performance and Outreach.**

(1) Executes the mission of NextGen. Establishes goals, strategies, budgets, and priorities. Allocates and manages resources, meets performance targets, and supplies services to meet requirements.

(2) Works with FAA staff offices and lines of business and stakeholders to gather, integrate, and report performance metrics by which NextGen benefits can be measured.

(3) Supports the NextGen Management Board and subordinate teams in its role in setting strategy, vision, and policy and provides commitment assurance for key elements of NextGen.

(4) Provides coordination for FAA-based RTCA NextGen Advisory Committee activities to support agency goals and activities.

(5) Provides strategic messaging around NextGen progress and plans based on research and aviation community observations (both internal and external).

(6) Develops and publishes the annual NextGen Implementation Plan and other related outreach products.

**3. Supplemental Relationships.** Members of senior staff represent NextGen in the following groups:

- a. NextGen Management Board
- b. NextGen Review Board
- c. Joint Resources Council
- d. Acquisition Executive Board
- e. Acquisition Workforce Council
- f. Strategy, Budget, and Performance Committee
- g. FAA Enterprise Architecture Board
- h. FAA Safety Management System (SMS) Executive Council
- i. Research, Engineering, and Development Advisory Committee.
- j. Representative for Department of Transportation on the Federal Committee for Meteorological Science and Support Research (FCMSSR).
- k. Representative to the Interdepartmental Committee for Meteorological Science and Supporting Research (ICMSSR).

**4. Line of Succession.** In the absence of the Assistant Administrator, the following individuals, in order, direct the NextGen Organization.

- a. Deputy Assistant Administrator for NextGen
- b. Director, NAS Lifecycle Integration
- c. Director, William J. Hughes Technical Center
- d. Director, Advanced Concepts and Technology Development
- e. Director, NAS Systems Engineering Services
- f. Director, NextGen Performance and Outreach

g. Director, Management Services

**5. Organizational Chart.** ANG Organization Chart is attached (Appendix A).

**6. Distribution.** This notice is distributed to the division level in Washington, and field offices.

A handwritten signature in black ink, appearing to read "Michael P. Huerta", with a large circular flourish at the end.

Michael P. Huerta  
Acting Administrator

### Appendix A. Assistant Administrator for NextGen (ANG) Organizational Chart

