

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

ORDER 8100.5E

National Policy

Effective date: 04/09/2023

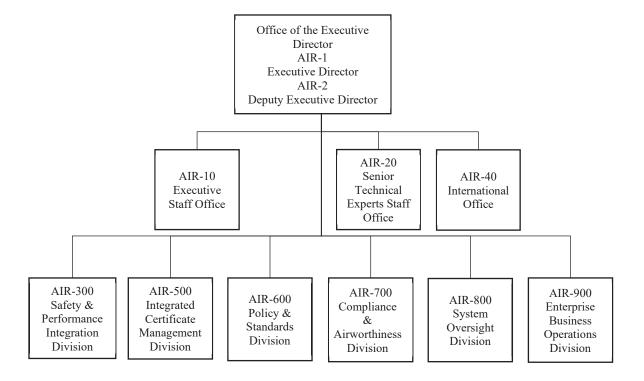
SUBJ: Aircraft Certification Service – Organizational Structure and Functions

- **1. Purpose of This Order.** This order describes the organizational structure and functions of the Aircraft Certification Service (AIR).
- **2. Audience.** All FAA and AIR personnel, delegated organizations and designees, and external stakeholders.
- **3.** Where Can I Find This Order. You can find this order on the FAA website at http://www.faa.gov/regulations_policies/orders_notices and on the Dynamic Regulatory System website at https://drs.faa.gov.
- **4. What This Order Cancels.** FAA Order 8100.5D, *Aircraft Certification Service Mission, Vision, Organizational Structure and Functions*, dated April 14, 2021, and FAA Order 8000.80A, *Aviation Safety (AVS) Chief Scientific and Technical Advisor (CSTA) and Senior Technical Specialist (STS) Program*, dated August 20, 2010.
- **5. Explanation of Policy Changes.** This revision describes the functions of AIR divisions, branches, and offices to include the following changes:
 - **a.** Formation of a new Integrated Certificate Management Division (AIR-500).
 - **b.** Consolidation of twelve Aircraft Certification Offices into three certification branches.
 - (1) East Certification Branch (AIR-750).
 - (2) Central Certification Branch (AIR-760).
 - (3) West Certification Branch (AIR-770).
- c. Realignment of the Senior Technical Expert Program (STEP) and the research and development (R&D) functions into the Senior Technical Experts Office (AIR-20) that will support the entire organization.
- **d.** Creation of an Integration & Performance Branch (AIR-x40) structure to standardize interfaces across functional divisions.
- **e.** Implementation of minor realignments within AIR-300, AIR-600, and AIR-900 to support greater integration and collaboration across divisions.

Distribution: Electronic Initiated By: AIR-1

- f. Enhancement of AIR's cross-divisional focus on international engagement efforts.
- 6. Effective Date. 04/09/2023.
- **7. FAA Mission.** Our continuing mission is to provide the safest, most efficient aerospace system in the world.
- **8. FAA Vision Statement.** We strive to reach the next level of safety and efficiency and to demonstrate global leadership in how we safely integrate new users and technologies into our aviation system. We are accountable to the American public and our aviation stakeholders.
- **9. AIR Organizational Structure.** AIR consists of the Office of the Executive Director, Executive Staff Office, Senior Technical Experts Staff Office, International Office, and six divisions. AIR-1 reports to the Associate Administrator for Aviation Safety (AVS-1). All AIR staff offices and divisions throughout the United States and overseas report to the Office of the Executive Director. AIR's organizational structure is outlined below in Figure 1.

Figure 1. Aircraft Certification Service Organizational Structure



10. AIR Overview. AIR divisions and offices share responsibility for design and production approval, airworthiness certification, and continued airworthiness programs of the United States, civil and foreign aviation products, and articles. AIR collaborates across the Office of Aviation Safety (AVS), as well as other FAA organizations, United States government agencies, the International Civil Aviation Organization (ICAO), safety teams, and other Civil Aviation Authorities (CAA) to enhance the safety of the national airspace system and to maintain and further the safety of the international air transportation system.

11. AIR Functions. AIR is responsible for the following functions:

- **a.** Developing and maintaining regulations and safety standards, managing overall fleet safety, and providing policy and educational tools to assist in regulatory compliance;
- **b.** Issuing design approvals, production approvals, and airworthiness certificates, and executing continued operational safety (COS) processes;
- **c.** Providing oversight of all systems and processes associated with FAA approvals including design, testing, production, issuance of certificates for domestic and foreign products, designee and delegation programs, and safety management or compliance assurance systems;
- **d.** Supporting aerospace innovation by partnering with industry to develop safety requirements for new technology;
- **e.** Monitoring and assessing the overall organizational performance of AIR, and providing strategic leadership for planning and effective program integration within the organization;
- **f.** Providing core services that enable success throughout AIR, including workforce development and management, financial management, real estate management, emergency management and continuity of operations (COOP) oversight, records management oversight and information technology (IT) sustainment and operational support.

12. Office of the Executive Director.

- **a.** Executive Director (AIR-1) and Deputy Executive Director (AIR-2). AIR-1 and AIR-2 are responsible for the following functions:
- (1) Providing advice and assistance to the Associate Administrator in support of strategic planning, operational mission accomplishment, safety outcomes, resource management, and the administration of executive decisions;
- (2) Developing and maintaining productive relationships with the public, the aviation industry and community, and other government agencies; and
 - (3) Providing executive vision, leadership, and direction to all AIR personnel.

- **b.** Executive Staff Office (AIR-10). AIR-10 is responsible for the following functions:
 - (1) Managing the executive support functions for the Office of the Executive Director;
- (2) Providing direction, guidance, and oversight for work assigned to AIR to include facilitating daily operations, managing workflow, and participating in policy implementation and integration of initiatives;
- (3) Assigning tasks to AIR divisions, monitoring progress, and reviewing completed work products for quality, consistency, and technical accuracy;
- (4) Managing meetings, including division leadership meetings, and engagements for AIR executive leadership;
- (5) Leading development of AIR's key messages and conveying them to internal and external stakeholders; and
- (6) Providing consultation and coordination in complex matters related to aircraft certification, production and airworthiness, and COS within the FAA, other government departments and agencies, and industry organizations.
- **c.** <u>Senior Technical Experts Staff Office (AIR-20)</u>. AIR-20 is responsible for the following functions:
- (1) Providing holistic and interdisciplinary scientific expertise, research, technical advice, and knowledge sharing capabilities to include:
 - (a) Strategic advice on technologies, operations, and workforce;
- (b) Collaboration on projects where policy and training are not yet developed or would benefit from improvements;
 - (c) Interpretation on project policy and guidance;
 - (d) Collaboration on particularly complex or impactful projects or activities;
 - (e) Supporting resolutions on technical conflicts;
- (f) Facilitating the development of standards with standards organizations and international bodies;
 - (g) Identification of issues or topics that merit organizational attention.

(2) Providing professional development sponsorship of the AVS workforce within the senior technical expert disciplines;

- (3) Sharing technical knowledge and information across the FAA and aviation community; and
- (4) Directing requirements for research and development to position AVS to be successful in a changing global aviation community.
- **d.** <u>International Office (AIR-40)</u>. AIR-40 has offices in key domestic and international locations and is responsible for the following functions:
- (1) Providing leadership to AIR and the international community for the advancement of global aviation safety and efficiency by facilitating the seamless exchange of aeronautical products in the global system;
- (2) Establishing new bilateral and multilateral partnerships, strengthening existing relationships, promoting FAA safety standards, and collaborating with foreign CAAs and the ICAO;
- (3) Negotiating, establishing, and managing implementation procedures for airworthiness and similar international aviation agreements;
- (4) Leading system assessments and technical evaluations for determining the initial and ongoing scope of international aviation agreements for airworthiness and working procedures;
 - (5) Developing AIR's international strategy and priorities;
- (6) Developing and issuing policy and guidance for the implementation of international aviation agreements and working procedures;
- (7) Planning and executing bilateral relationship management meetings with bilateral partners and coordinates with stakeholders to achieve operational and strategic objectives;
- (8) Representing AIR at ICAO and on the Interagency Group on International Aviation (IGIA);
- (9) Developing, maintaining, and analyzing data metrics for making management decisions involving bilateral relationships to include certification and validation activities with CAAs;
- (10) Liaising with other offices within AVS, the FAA, the Department of Transportation, and other United States government agencies with international aviation responsibilities;

(11) Providing executive leadership with analysis and recommendations on how to resolve issues with international implications;

- (12) Coordinating technical assistance requests or any other aspect of aviation safety when it is determined to enhance international aviation safety; and
- (13) Supporting the sharing of safety information, best practices, risk assessments, and mitigations through established international safety groups.

13. AIR Divisions.

- **a.** <u>Safety & Performance Integration Division (AIR-300)</u>. In coordination with other divisions or offices, AIR-300 is responsible for the following functions:
- (1) Managing the AIR internal State Safety Program, monitoring operational performance, and integrating programs through collaboration across AIR.
- (2) Developing, tracking, and analyzing effective performance measures for AIR operations;
- (3) Managing AIR's strategic priorities and ensuring strategic goals are achieved through effective implementation of the FAA, AVS, and AIR strategic plans;
- (4) Conducting targeted analysis and providing recommendations to improve AIR's safety program and the efficiency and effectiveness of the service;
- (5) Integrating and supporting major cross-divisional programs and projects regarding data and analytics to ensure effective coordination, management of activities, and compliance with strategy, laws, regulations, and policies;
 - (6) Centralizing AIR responsibilities for our State Safety Program;
- (7) Coordinating responses to safety recommendations, tracking implementation of strategic safety initiatives, and identifying emerging safety issues to ensure cross-functional collaboration;
- (8) Coordinating AIR activity associated with incident and accident response from the time of the incident to documentation and institutionalization of lessons learned; and
- (9) Integrating major cross-divisional programs including, but not limited to, certification program intake, appeals, audit activities related to Office of Inspector General, General Accounting Office, and Office of Management and Budget inquiries, to ensure effective coordination, management oversight, and compliance with laws, regulations, and policies.

b. <u>Integrated Certificate Management Division (AIR-500)</u>. AIR-500 is responsible for the following functions:

- (1) Integrating design and production certificate management for assigned products.
- (2) Issuing FAA design approvals for domestic applicants and validation of foreign design approvals for assigned products;
 - (3) Executing processes associated with the COS of assigned products and articles;
 - (4) Conducting compliance and enforcement activities as necessary;
- (5) Appointing, overseeing, and renewing engineering and manufacturing designees and certain delegated organizations authorized to work on behalf of the FAA;
- (6) Using common oversight philosophy, consistent with agency-wide oversight objectives, to oversee design approval holders (DAH), production approval holders (PAH), and organization designation authorization (ODA) holders, including those located outside of the United States;
 - (7) Overseeing systems associated with design and production activities;
- (8) Working closely with other AIR divisions to confirm that systems recognized and accepted through bilateral agreements are performing, being maintained, and providing the expected safety outcomes;
- (9) Issuing production approvals, airworthiness certificates, and special flight authorizations; and
- (10) Collaborating with Compliance and Airworthiness Division (AIR-700) and System Oversight Division (AIR-800) to integrate common practices associated with the function and responsibility of the respective organizations through integrated teams and communities of practice.

Note: AIR-500 product responsibilities are further described in the AIR Delegation of Signature Authority memo, available through the AIR-10 office.

- **c.** <u>Policy & Standards Division (AIR-600)</u>. AIR-600 is responsible for the following functions:
- (1) Supporting aerospace innovation by developing regulations, policy, and standards for aerospace products.

(2) Developing and maintaining the safety and effectiveness of aircraft certification related rules, regulations, standards, policy, and guidance;

- (3) Enabling system solutions to improve effectiveness of risk-based safety management and oversight;
- (4) Providing project specific policy support, such as establishing certification basis', establishing means and methods of compliance outside of approved guidance, and equivalent level of safety findings;
- (5) Advancing fleet safety by examining the effectiveness of regulations, policy, and guidance based on product development and operational experience;
 - (6) Supporting and promoting proactive environmental performance improvements;
- (7) Enabling a safe and efficient deployment of new and emerging products and technological concepts;
- (8) Supporting greater awareness and harmonization of regulations, policy, and standards through engagement and education of FAA staff, industry, and other domestic and international stakeholders;
- (9) Providing liaison support to industry and government initiatives, committees, and standards development organizations; and
- (10) Partnering with other AIR divisions and lines of business in common areas to advance agency strategic priorities and plans and ensure responsiveness to congressional directives.
- **d.** Compliance & Airworthiness Division (AIR-700). AIR-700 is responsible for the following functions:
- (1) Issuing FAA design approvals for domestic applicants and validation of foreign design approvals;
 - (2) Executing processes associated with the COS of products and articles;
- (3) Supporting overall fleet safety through the interaction and sharing of product safety knowledge to enable risk-based decision making for each division;
 - (4) Conducting compliance and enforcement activities as necessary;
- (5) Appointing, overseeing, and renewing engineering designees authorized to work on behalf of the FAA;

(6) Providing flight test expertise for support of other divisions and managing the AIR flight test program; and

(7) Providing engineering support to AVS services and offices (e.g., process specifications, field approvals, expertise, etc.).

Note: Functions are for products described in AIR Delegation of Signature Authority memo, available through AIR-10.

- **e.** System Oversight Division (AIR-800). AIR-800 is responsible for the following functions:
- (1) Appointing, overseeing, and renewing manufacturing designees and certain delegated organizations authorized to perform work on behalf of the FAA;
 - (2) Conducting compliance and enforcement activities as necessary;
- (3) Conducting and coordinating whistleblower, hotline, and suspected unapproved part (SUP) investigations and activities;
- (4) Using common oversight philosophy, consistent with agency-wide oversight objectives, to oversee DAHs, PAHs, and ODA holders, including those located outside of the United States;
 - (5) Overseeing systems associated with design and production activities;
- (6) Working closely with other AIR divisions to confirm that systems recognized and accepted through bilateral agreements are performing, being maintained, and providing the expected safety outcomes;
- (7) Issuing production approvals, airworthiness certificates, and special flight authorizations;
- (8) Supporting production and airworthiness of unmanned programs, such as unmanned aircraft systems (UAS), unmanned aerial vehicles (UAV), and optionally piloted aircraft (OPA) systems;
- (9) Collaborating with other divisions to provide oversight of Safety Management Systems for assigned design and production certificate holders; and
- (10) Partnering with other lines of business and AIR divisions in common areas such as design approvals, COS, and oversight to strengthen interfaces, share best practices, and enhance agency system performance.

f. Enterprise Business Operations (EBO) Division (AIR-900). AIR-900 is responsible for the following functions:

- (1) Servicing stakeholders to guide collaboration toward solutions for AIR business operations, offering location-level administration, project management, AIR Freedom of Information Act (FOIA) services, AIR records management oversight, real estate and space management, conference and event management, and emergency management;
- (2) Providing oversight and management for all of AIR's appropriations to ensure accountability for all laws, policies, and procedures. This ensures financial demands and commitment resources are properly managed for all appropriations and reimbursable agreements;
- (3) Supporting AIR's workforce with services to recruit, hire, and retain a high performing and diverse workforce for individual and organizational effectiveness;
- (4) Supporting AIR's compliance with collective bargaining agreements, Accountability Board, and Equal Employment Opportunity requirements;
- (5) Leading workforce development initiatives for AIR personnel, and designee and ODA unit members, to develop and maintain a highly skilled workforce and support AIR's workforce development initiatives. This includes developing, procuring, scheduling, enrolling, monitoring, tracking, and executing delivery to meet AIR's foundational and leadership, technical, recurrent, continuing education, and on-the-job training requirements; and
- (6) Enabling the AIR workforce to access the relevant FAA technology resources, services, and solutions needed to ensure the accessibility, availability, and security of the operational technology and systems that are critical to AIR's mission.



Lirio Liu Executive Director Office of Aviation Safety Aircraft Certification Service 04/09/2023 8100.5E Appendix A

Appendix A. Administrative Information

- 1. **Distribution.** This order is distributed to all AIR employees and internal FAA stakeholders.
- **2. Authority to Change This Order.** The issuance, revision, or cancellation of the material in this order is the responsibility of AIR-1. However, changes cannot alter delegations of authority, relationships, or responsibilities set by FAA Order 1100.1, *FAA Organization Policies and Standards*.
- 3. Suggestions for Improvements. Please forward all comments on deficiencies, clarifications, or improvements regarding the contents of this order to the Directives Management Officer at 9-AVS-AIR-Directives-Management-Officer@faa.gov or complete the feedback form online at Dynamic Regulatory System. Your suggestions are welcome. FAA Form 1320-19, Directive Feedback Information, is in appendix B of this order for your convenience.
- **4. Records Management.** Refer to FAA Order 0000.1, FAA Standard Subject Classification System; FAA Order 1350.14, Records Management; or your office Records Management Officer (RMO)/Directives Management Officer (DMO) for guidance regarding retention or disposition of records.

Appendix B. Directive Feedback Information

Please submit any written comments or recommendation for improving this directive or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: Order 8100.5E, Aircraft Certification Service – Organizational Structure and Functions To: Directive Management Officer: 9-AVS-AIR-Directives-Management-Officer@faa.gov (Please mark all appropriate line items) An error (procedural or typographical) has been noted in paragraph on page Recommend paragraph _____ on page ____ be changed as follows: (attach separate sheet if necessary) In a future change to this order, please include coverage on the following subject: (briefly describe what you want added.) Other comments: I would like to discuss the above. Please contact me. Submitted by: _____ Date: ____ Telephone Number: Routing Symbol: FAA Form 1320-19 (08/21) Supersedes Previous Edition