

# Flight Technologies and Procedures Division



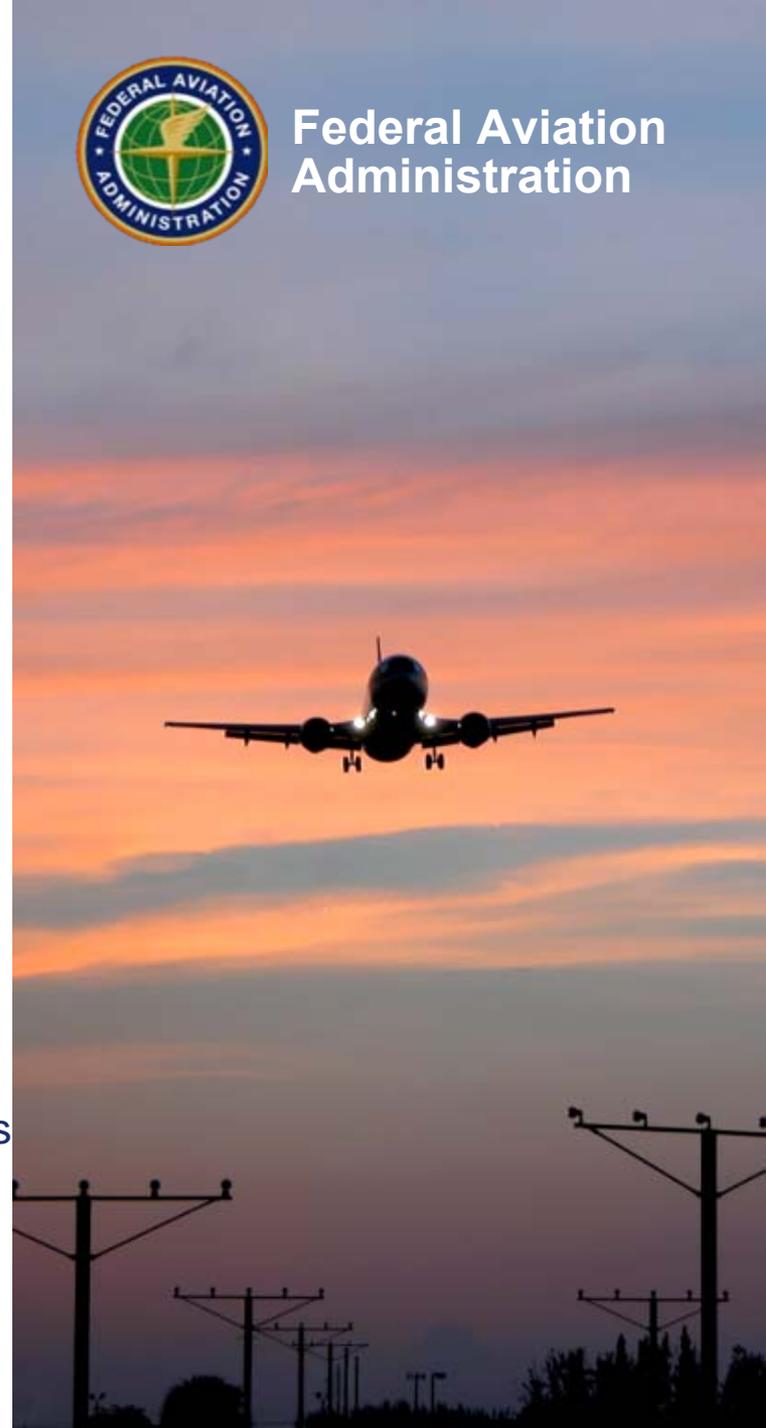
Federal Aviation  
Administration

## Operations Approvals

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# Overview

- Components of Operational Approval
- Approval Processes
- Challenges

U.S. Department of Transportation Federal Aviation Administration		Operations Specifications	
<b>C384</b>	<b><u>Required Navigation Performance (RNP) Procedures With Special Aircraft and Aircrew Authorization Required (SAAAR)</u></b>	<b>HQ Control:</b> <b>HQ Revision:</b>	<b>09/23/05</b> <b>000</b>
<p>a. The certificate holder is authorized to conduct required navigation performance (RNP) instrument approach procedures (IAP) published in accordance with 14 CFR 97 that specify special aircraft and aircrew authorization required (SAAAR). Such operations shall be conducted in accordance with the provisions of these operations specifications.</p> <p>b. <u>Authorized Aircraft and Equipment</u>. The certificate holder is authorized to conduct RNP SAAAR IAP using the eligible aircraft and area navigation systems listed in Table 1 under the following conditions:</p> <ol style="list-style-type: none"><li>(1) The certificate holder must ensure the aircraft is properly certificated.</li><li>(2) The certificate holder must ensure the aircraft and aircrew are qualified to conduct RNP SAAAR operations.</li><li>(3) The AFM must specify the RNP capability for the lowest RNP IAP authorized by this operations specification in Table 1.</li><li>(4) The aircraft and equipment listed in Table 1 must be maintained in accordance with the manufacturer's instructions.</li></ol>			

# Components of Operational Approval

- Eligible/qualified/approved **aircraft and navigation equipment** - performance and functionality

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- **Procedures** for flight crew/pilots, maintenance, and dispatch - as appropriate

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- **Training** for personnel – ground/simulator/flight



- **Approval/authorization** mechanism (for example, Operations Specification) - as necessary

# U.S. Operational Approval Process

- **Phase 1 PRE-APPLICATION**
  - Application initiated
- **Phase 2 FORMAL APPLICATION**
  - Operator submits a proposal
- **Phase 3 DOCUMENT COMPLIANCE**
  - FAA's analysis and evaluation
- **Phase 4 DEMONSTRATION AND INSPECTION**
  - Operator's demonstration
- **Phase 5 CERTIFICATION**
  - Approval or acceptance
    - Operations Specifications (OpsSpecs)
    - Management Specifications (MSpecs)
    - Letter of Authorization (LOA)



# Flexibility in Approval Processes

- **Inspector Assessment**

- The complexity of the certification process is based on the inspector's assessment of the applicant's proposed operation
- For simple certifications, some steps can be condensed or eliminated

**-FAA Order 8900.1**



# Flexibility in Approval Processes

- **Differences Among Applicants**

- Some applicants may lack a basic understanding of what is required for certification
- Other applicants may propose a complex operation, but be well prepared and knowledgeable
- Because of the variety in proposed operations and differences in applicant knowledge, the process must be thorough enough and flexible enough to apply to all possibilities

-FAA Order 8900.1



# Approval / Concurrence by Office

- **Headquarters**
  - Develops policy development and national guidance
- **Regions**
  - Provides technical and geographic expertise
- **Field** (local operations inspectors)
  - Approves operation if equipment, procedures, and training are satisfactory



# Challenges

- **Development of necessary operator and inspector guidance along with training to promote understanding of requirements**
- **Determination of aircraft/equipment, procedures, and training suitability for proposed operation**
- **Availability of authorization mechanisms (and adequate resources)**

# U.S. Approval Mechanisms (for PBN)

- **For domestic operations, approvals are categorized by flight phase/operation**
  - Terminal procedures
    - Departures
    - Arrivals
  - Approach
  - En route
- **For oceanic operations, separate approvals are given for navigation specification and area of operation**

# U.S. Approval Mechanisms

- **Approvals are dependent upon factors such as:**
  - Anticipated users
  - Maturity of technology
  - Supporting certification standards and amount of operational mitigations (possibly requiring additional procedures and training)
  - Complexity of operation (including other Communication Navigation Surveillance (CNS)/ Air Traffic Management (ATM) considerations)



# U.S. Approval Mechanisms

- In general, commercial operators require specific authorization for PBN operations
  - Not the case with less “complex” operations for non-commercial/general aviation operators



# Questions?

