

# **FAA EFB Policy Update**

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# **Discussion Topics**

- FAA Guidance
- ICAO/FAA Policy Integration
- Aircraft Certification/Flight Standards Interaction
- Questions & Answers





## **Current FAA Guidance**

- AC 120-76D
- Order 8900.1, Flight Standards
  Information Management System (FSIMS)
  - Volume 3, Chapter 18, A061 Section
  - Volume 4, Chapter 15, Section 1 & 2
  - Principal Inspector (PI) Job Aids
- AC 20-173





- Significant Changes since AC 120-76C
  - Further clarify EFB functionality is the applications
  - Clarify EFB definition to underscore only a device displaying EFB applications is considered an EFB
  - Eliminated Type C applications, since they are non-EFB applications
  - Eliminated EFB Classes 1, 2, and 3, and introduced simpler concept of portable and installed equipment supporting EFB applications
  - Provides means for in-flight depiction of EFB own-ship position on select EFB applications, such as electronic charts





- Significant Changes since AC 120-76C
  - Reorganized Types A and B EFB applications to align them to the safety criticality of their function
  - Provide a pathway to add new EFB applications to Appendix A and Appendix B lists coordinated with Aircraft Certification
  - Provide guidance to start and manage the required elements of an EFB program to support an authorization for use under Operations Specification (OpSpec) A061, Electronic Flight Bag (EFB) Program





# AC 120-76D EFB Program

- Details on EFB Program Management
- Operator responsible for program compliance and FAA monitors
- Program Catalog
  - Limits FAA Resources Dedicated to Minor Changes:
  - Adding/Updating Type A EFB applications
  - Adding/Updating Type B EFB applications
  - Incorporating OS updates





- EFB Type B applications with Own-Ship Position In-flight require:
  - <u>Concurrent Use</u> Requires operationally similar avionics display installed as part of the aircraft type design for use as primary reference
  - <u>Differentiation</u> Flightcrew must always be able to "differentiate" between the installed avionics display information and the supplemental or "secondary" EFB information to resolve discrepancies
  - Installed components comply with latest AC 20-173





- EFB Own-Ship Position In-flight
  - Recommends using installed GNSS position source
  - Regardless, operator is responsible for position source to support function
  - Only EFB Type B applications currently with EFB own-ship capability (each require specific installed equipment):
    - Aeronautical charts
    - Weather
    - Interactive plotting for oceanic and remote navigation





#### Order 8900.1

Volume 3, Chapter 18, A061 Section

Figure 3-225. Sample A061 Table 1 – Aircraft Authorized Under an EFB Program

Aircraft M/M/S 🎱	Remarks/Limitations**
B737-300 EMB-120-QC A-300	Limited evaluation of XXX EFB hardware. See ABC Flight Crew Bulletin XX-2017 for details.
	Temporary authorizations to conduct limited evaluation of XYZ EFB Application, Version 6.7 (see Flight Crew Bulletin ## - XX-XX-XXXX).

Note: Enter "None" in the "Remarks/Limitations" column if there are currently no imposed restrictions, limitations, limited evaluations, or temporary authorizations.





- Order 8900.1
  - Volume 4, Chapter 15, Section 1 & 2
    - Section 1
      - Initial/New EFB Authorizations
        - » Five Phase Process
      - Modifications to EFB Program
        - » Operator & PI Interaction
    - Section 2 Checklist
      - Validation of EFB Program Specifics
      - Use as tool for continuous inspections/surveillance
    - Letter of Operational Suitability (OSL)





- Order 8900.1
  - Principal Inspector (PI) Job Aids
    - Legibility of Information
    - EMC In-Flight Testing Procedures



## AC 20-173 revision in progress

- Currently being updated to harmonize with and support AC 120-76D
  - Eliminates EFB Classes and instead uses portable and installed terminology
  - Provides installed component guidance enabling the airborne depiction of EFB own-ship position as an overlay on EFB applications
  - Eliminates references to Type C applications
  - Provides installed component guidance supporting EFB data interface to the aircraft





# **ICAO/FAA Policy Integration**

#### ICAO EFB Definition

 An electronic information system, comprised of equipment and applications for flight crew, which allows for storing, updating, displaying and processing of EFB functions to support flight operations or duties."

#### EFB SARPS

International Standards and Recommended Practices,
 Operation of Aircraft — International <u>Commercial Air</u>
 <u>Transport</u> — Aeroplanes (Annex 6, Part I to the Convention on International Civil Aviation).





# **ICAO/FAA Policy Integration**

# ICAO EFB Manual (Doc 10020)

- Does not conflict with existing regulatory guidance among CAA participants
- FAA guidance <u>does not</u> have requirement for EFB administrator
- Display of aircraft own-ship position is limited
- AC 120-76D incorporates all other aspects of ICAO EFB Manual guidance

# **Aircraft Certification / Flight Standards Interaction**

## New and Novel Applications for Review

 Appendices A and B identify accepted Type A and B applications. New applications may be proposed as an EFB application if their failure condition classification at the aircraft-level is agreed to by FAA HQ review to be minor, or no safety effect

#### Blended Solutions

- EFBs may have both portable and installed components supporting EFB applications
- If function is not listed in Appendices A or B as Type A or B application, then it is **not** EFB
- POI / PAI need to ensure requirements are satisfied





# **EFB Primary POCs & Questions**

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