

VOLUME 3 GENERAL TECHNICAL ADMINISTRATION**CHAPTER 18 OPERATIONS SPECIFICATIONS****Section 3 Part A Operations Specifications—General**

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OPSPEC/MSPEC/LOA A061, USE OF ELECTRONIC FLIGHT BAG.

A. Applicability. Paragraph A061 is an optional authorization available to all operators conducting aircraft operations under 14 CFR parts 91 subpart K (part 91K), 121, 125, 125M (Letter of Deviation Authority (LODA)), and 135. Paragraph A061 authorizes the use of portable Electronic Flight Bag (EFB) hardware and EFB applications, and describes the conditions and limitations for EFB use.

NOTE: Questions regarding the issuance of OpSpec/MSpec/LOA A061 should be directed as appropriate to:

- Flight Technologies and Procedures Division (AFS-400) at 202-267-8790;
- Air Transportation Division (AFS-200) at 202-267-8166; or
- General Aviation and Commercial Division (AFS-800) at 202-267-8212.

B. General. Aircraft operations conducted under parts 91K, 121, 125 (including deviation holders), and 135, all EFBs will be authorized for use by OpSpec/MSpec/LOA A061 as applicable. FAA Flight Standards (AFS) Principal Inspectors (PIs) may authorize the use of portable or installed EFBs with Type A and/or Type B applications.

1) EFB hardware (with Type A and/or B applications) must be demonstrated to reliably meet intended EFB function(s). It is the responsibility of the applicant to ensure their EFB hardware and Type A and/or Type B EFB applications can accurately perform intended functions.

2) The AFS aircraft evaluation group (AEG) is available to assist with questions and guidance regarding EFB operational evaluations. As appropriate, the principal operations inspector (POI), principal maintenance inspector (PMI), principal avionics inspector (PAI), cabin safety inspector (CSI), and/or dispatch safety inspector (DSI), should contact the AEG when an operator submits a request for authorization to use an EFB that includes a new or novel function.

3) AEG evaluation of EFB hardware or Type B applications will be at the AEG's discretion and, if evaluated, published in an Operational Suitability Report (OSR) for the particular EFB hardware. The AEG may issue a hardware manufacturer or Type B software developer a letter of operational suitability (OSL). These letters do not grant operational authorization, but show some previous FAA evaluation of performance. These letters are not posted with FSB or OSR reports since they are not complete operational evaluations. Normally these letters are distributed by the manufacturer but can also be obtained from the AEG. OSRs

are available at <http://fsims.avs.faa.gov> under “Publications,” “MMEL & AEG Guidance Documents,” “Flight Standardization Board (FSB) Reports.” ASIs should ensure that an operator complies with these reports when they are available for specific EFB hardware or software applications.

C. Background. The current edition of FAA Advisory Circular (AC) 120-76, *Authorization for Use of Electronic Flight Bags*, provides information to stake holders on authorization requirements for portable and installed EFB hardware and associated Type A and/or B EFB applications. There is a common misconception that a hardware device, by itself, can be described as an EFB. With a few exceptions, the hardware device, whether it’s an installed avionics display or portable commercial-off-the-shelf (COTS) device, commonly referred to as a portable electronic device (PED), is not considered an EFB unless the hardware hosts and actively displays a Type A or B EFB application listed in the current edition of AC 120-76 Appendix 1 or 2. An EFB is the combination of hardware and software application(s) to support an intended function. While it may be true a certified display is capable of hosting Type A or B EFB functions, it is only considered an EFB when it is hosting and actively displaying one or more Type A or B EFB applications for an intended EFB function. When the display is hosting Automatic Dependent Surveillance – Broadcast (ADS-B) in-trail procedures (ITP), for example, and is not hosting and actively displaying one or more Type A or B EFB applications, it is no longer an EFB. It is considered an installed display device being driven by certified avionics software.

1) In AC 120-76 and FAA Order 8900.1 Volume 4, Chapter 15, Section 1 - *Electronic Flight Bag Operational Authorization Process*, the words “approved”, “approval”, “accepted”, and “acceptance” are used in many instances when referring to actions that may be accomplished by PIs. The uses of these words are intended to reflect the general process for approval or acceptance. The general process of approval or acceptance of certain operations, programs, documents, procedures, methods, or systems is an orderly method used by AFS inspectors to ensure that such items meet regulatory standards and provide for safe operating practices. It is a modular, generic process that can be applied to many types of approval or acceptance tasks. It is important for ASIs to understand this process is a tool to be used with good judgment. Refer to FAA Order 8900.1 Volume 3, Chapter 1, Section 1 – General, and Volume 3, Chapter 32, Section 1 – Manuals, Procedures, and Checklists for 14 CFR parts 91 subpart K (91K), 121, 125 and 135 for additional information on the general process and definition of “approved” versus “accepted”.

2) AFS PIs have no authority to “approve” EFB hardware or EFB applications and may only “authorize for use” associated hardware/application combinations. The guidance in this section is not intended to inhibit or restrict the operational use EFBs, but rather to clarify the role of AFS PIs with respect to issuance of OpSpec/MSpec/LOA A061 as applicable.

D. Guidance. Figure 1, within OpSpec/MSpec/LOA A061 as applicable, will be used to document an operator’s authorization for an EFB program. Reference must be made to the location, within the Operations Manual, for each aircraft make, model, and series (M/M/S), specifically authorized EFB hardware and software applications are listed. An example of the Operations Manual entry is referenced in Figure 2.

Figure 1: Example A061 entry when EFB applications are authorized for use.

Authorized Use of EFB	
Aircraft M/M/S	Operations Manual Reference
B-737-300	- Specifically authorized EFB hardware and software applications for B-737-300 are contained in section 6.5.2.3 in Operations manual.

Figure 2: Example of Operations Manual Entry.

Authorized EFB Hardware/Software		
Hardware Manufacturer, and Model (N/A if installed)	EFB Application Name - <i>Function</i>	Restrictions and Limitations
Microsoft® Surface RT – A784	- Boeing Performance - <i>Aircraft performance calculation (Take off & landing)</i> -ForeFlight - <i>Aeronautical Charts</i>	<i>No Restrictions</i> <i>Temporary Authorization to conduct 6-month operational validation testing</i>

1) Compliance with the requirements in A061 should be validated during routine inspections and in accordance with authorization processes identified in FAA Order 8900.1 Volume 4, Chapter 15, Section 1, paragraph 4-1649. PIs should use the following guidance when reviewing the Operations Manual entry for information regarding authorized EFB Hardware/Software:

a) All Type A EFB *application names* and *general function performed* must be listed in the Operational Manual. These applications do not require formal authorization by FAA PIs.

b) All Type B EFB *application names* and *general functions performed* must be listed in the Operations Manual and may require formal authorization in accordance with authorization processes identified in FAA Order 8900.1 Volume 4, Chapter 15, Section 1, paragraph 4-1649.

c) EFB application names (e.g., Aero) may be different from the general function performed (e.g., aeronautical charts). AC 120-76, Appendix 1 & 2, identify general function descriptions by underlining key terms. See AC 120-76 for additional information.

d) Any amendments to the Operations Manual must be accepted by the PI prior to use, however, unless the following list of factors is identified, the PI should must make every attempt possible to approve the Operations Manual in an expeditious manner.

- Initial EFB Program Authorization.
- Major Type B EFB Application updates or changes requiring a change to flightcrew training or procedures.
- Major Operating System Software updates or changes requiring a change to flightcrew training or procedures.
- EFB Hardware updates or changes
- EFB Program Procedural/Checklist changes

e) It is important PIs conduct routine surveillance activities to ensure the aircraft operator is only using EFB applications which have been authorized for use.

f) The use of the non-standard text field (sometimes referred to as “Text 99”) in the OpSpec/MSpec/LOA template requires approval from the appropriate FAA headquarters policy division (see FAA Order 8900.1 Volume 3, Chapter 18, Section 2, subparagraph 3-713 for additional information).

g) Temporary Authorizations must be identified in the Operations Manual for specific hardware/software. The PI should consider the EFB hardware, EFB application, impact on safety and guidance in FAA Order 8900.1 Volume 4, Chapter 15, Section-1 prior to determining an operational demonstration period.

Note: Operational demonstration testing period formally begins when the certificate holder/operator/program manager is issued A061 and the temporary authorization text is added to the Operations Manual for the specific hardware/software being tested.

2) Aircraft Certification Service (AIR) must provide design, installation, and airworthiness approval for EFB hardware that is permanently installed on an aircraft. This is accomplished by incorporating the display into the aircraft type certificate (TC), STC or amended STC.

3) Maintenance and Avionics Inspectors must ensure that the aircraft and equipment have the proper airworthiness approvals for any permanent power, data bus connections, or installed mounting (see AC 20-173).

4) Training for the use and/or maintenance of the EFB by the certificate holder/program manager must be documented and included in the operator’s approved training program and applicable maintenance program.

5) The certificate holder/program manager will specify the procedures for updating and maintaining any databases necessary to perform the intended functions of the EFB in their manual(s). Certificate holders/program managers must have procedures established to control revisions to EFB software applications in their manual(s).

6) The principal inspector (PI) is responsible for conducting a review of the system performance to ensure acceptability prior to granting authorization for use and evaluate use of EFB normal and abnormal procedures.

7) Simulator and/or in-flight demonstration tests may be needed to fully determine the suitability of the use of an EFB (see current edition of AC 120-76). Each certificate holder/program manager's EFB application package will vary, and scenarios should be customized for the particular situation by the PIs and applicant. It is the certificate holder/program manager's responsibility to demonstrate EFB reliability and that the hardware/application combination meets the intended function. Demonstration flight scenarios should be used to ensure the EFB hardware/application combination meets the intended function and adequate transition into the operator's overall training and operations programs. In some cases, the demonstration testing will be completed entirely with an EFB, while in other cases the EFB device may be used together with other sources of information, such as paper charts or documents, depending on the capabilities of the EFB device and its operational implementation. The required EFB demonstration flight scenario differences could be affected by other factors, such as:

- Hardware: Portable or Installed, which include factors such as location in the flight deck and connectivity to other aircraft systems;
- Aircraft/Operations: Single pilot versus dual pilot, single EFB versus dual EFB; and
- Weather conditions: Visual versus instrument; very-low visibility.

E. PI Action. PIs must review section A061 and provide pertinent information to certificate holders/program managers for which they are assigned oversight responsibility.

1) PIs will provide technical and operational guidance to their certificate holders/program managers, when requested, to assist them in validating their selected EFB hardware devices and EFB applications. Technical and operational guidance is located in the current editions of FAA AC 120-76 and FAA Order 8900.1 Volume 4, Chapter 15, Section 1 - *Electronic Flight Bag Operational Authorization Process*.

2) If the certificate holder/program manager has OpSpec/MSpec/LOA A025 issued for electronic recordkeeping, signatures, or electronic manual systems, without the use of an EFB, it is not necessary to reissue that operator's OpSpec/MSpec/LOA A025. Electronic recordkeeping, signatures, or electronic manual system functions may co-reside on an EFB authorized for use in A061, and if so, OpSpec/MSpec/LOA A025 as well as OpSpec/MSpec/LOA A061 should be issued. The certificate holder must update OpSpec A025 when the operator utilizes recordkeeping, signatures, or electronic manual system functions to comply with 14 CFR 121.663 and .631.

3) A certificate holder/program manager obtains OpSpec/MSpec/LOA 009, *Airport Aeronautical Data*, to authorize use of airport aeronautical data. If the certificate holder/program manager uses the same source(s) listed in OpSpec/MSpec/LOA A009 for airport aeronautical data on an EFB, it is not necessary to reissue that operator's OpSpec/MSpec/LOA A009. If aeronautical data on an EFB is not referenced in A009, then A009 should be amended to reflect the data source and distribution method.

4) A certificate holder/program manager obtains OpSpec/MSpec A010, *Aviation Weather Information*, to authorize use of specific sources for obtaining weather reports and forecasts for the purpose of controlling flight movements (operations). If the certificate holder/program manager uses the same source(s) listed in OpSpec/MSpec A010 for weather functions on an EFB, it is not necessary to reissue that operator's OpSpec/MSpec A010. Viewing weather and aeronautical information on an EFB requires additional authorization for use via OpSpec/MSpec A061. See 8900.1 Volume 3 Chapter 26 Section 5 Use of Flight Information Services on the Flight Deck – Parts 91K, 121, and 135 for the authorization requirements.

F. Program Tracking and Reporting Subsystem (PTRS) Input. ASIs should use the following PTRS activity codes to record EFB related oversight activities:

- 1443 ACFT/ELECTRONIC FLT BAG (121, 125, 135, 21, 43, 91)
- 3443 ACFT/ELECTRONIC FLT BAG (121, 125, 135, 21, 43, 91)
- 5443 ACFT/ELECTRONIC FLT BAG (121, 125, 135, 21, 43, 91)