4-1641 REPORTING SYSTEMS. Use the Safety Assurance System (SAS) to record Electronic Flight Bag (EFB)-related oversight activities.

A. SAS Activity Recording (AR). For Title 14 of the Code of Federal Regulations (14 CFR) parts 91 subpart K (part 91K) and 125, use activity codes 1443, 3443, and 5443.

B. SAS. For 14 CFR parts 121 and 135 operations, the principal inspector (PI) or aviation safety inspector (ASI) will utilize this guidance related to SAS Elements 2.1.1 (OP) Training of Flight Crewmembers, 2.2.1 (OP) Airmen Duties/Flight Deck Procedures, 2.3.1 (OP) Appropriate Operational Equipment, 4.6.1 (AW) Avionic Systems/Programs, 5.1.1 (OP) Training of Flight Attendants, and 5.2.1 (OP) Crewmember Duties/Cabin Procedures. A Custom Data Collection Tool (C DCT) may be used to report the EFB oversight activities in SAS.

4-1642 PURPOSE. This section provides references, information, and guidance to be used to evaluate an operator’s initial application for operations specification (OpSpec)/management specification (MSpec)/Letter of Authorization (LOA) A061 or to evaluate a significant modification to an existing EFB program.

4-1643 APPLICABILITY. This guidance applies to parts 91K, 121, 125, and 135 PIs in coordination with the appropriate cabin safety inspector (CSI) and dispatch safety inspector (DSI), if applicable.

4-1644 BACKGROUND.

A. EFB Program. An EFB is any device, or combination of devices, running EFB software applications. Operators seeking EFB program authorization may utilize the language within Advisory Circular (AC) 120-76, Authorization for Use of Electronic Flight Bags, to develop an EFB program. The program specifics (i.e., operating procedures, pertinent training modules, checklists, operations manuals, training manuals, maintenance programs, minimum equipment lists (MEL), other pertinent documents, and reporting procedures) are developed and incorporated into operator policy before the Federal Aviation Administration (FAA) grants authorization. FAA authorization for an EFB program is granted through the issuance of OpSpec/MSpec/LOA A061.

B. EFB Program Authorization. The initial authorization for an EFB program establishes a baseline for an operator’s authorized use of EFB hardware and software. The authorization recognizes the operator’s ability to manage their EFB program with an appropriate level of FAA involvement. PIs are given authority to tailor the formality and process of an assessment appropriate to the scope of the modifications proposed by the operator.
4-1645 RESOURCES. The following are resources to be referenced in the evaluation process.

A. AC 120-76. This Flight Standards (FS) AC addresses considerations for EFB hardware, EFB software applications, and all the required and applicable elements that should be incorporated into an EFB program. AC 120-76 provides a means of addressing many elements that an operator may incorporate into an EFB program. Some elements are necessary to every program (e.g., EFB program catalog), and others are optional elements (e.g., electronic charts). An operator may elect to provide an alternate means; however, such action may require further FAA evaluation at the discretion of the Principal Operations Inspector (POI).

B. Aircraft Evaluation Division (AFS-100). AFS-100 evaluates installed EFB equipment and approved EFB software applications for operational suitability and may recommend additional training, checking, and currency considerations. Evaluation of portable EFB hardware or nonapproved commercial off-the-shelf (COTS) EFB software applications will be at the discretion of the division.

C. Flight Standardization Board Reports (FSBR) and Operational Suitability Reports (OSR). FSBRs and OSRs may contain information that can help an inspector evaluate an EFB program application. FSBRs or OSRs containing recommendations pertaining to EFBs for a particular model aircraft are controlling. FSBRs and OSRs are published on the FAA’s Dynamic Regulatory System (DRS) (https://drs.faa.gov) under “AEG Guidance Documents, MMELs and Electronic Flight Bag,” in the “Flight Standardization Board Reports (FSBR)” section.

D. Letter of Operational Suitability (OSL). An OSL may be issued by AFS-100 to a hardware manufacturer or Type B software developer. These letters do not grant operational authorization, but indicate some previous FAA evaluation of performance. OSLs are not published on DRS because they are not complete operational evaluations. Normally, these letters are distributed by the manufacturer, but can also be obtained directly from AFS-100.

E. FS Assistance. The following FS divisions can be contacted regarding EFB policy:

- Air Transportation Division (AFS-200) at 202-267-8166.
- Aircraft Maintenance Division (AFS-300) at 202-267-1675.
- Flight Technologies and Procedures Division (AFS-400) at 202-267-8790.
- General Aviation and Commercial Division (AFS-800) at 202-267-1100.


4-1646 INITIAL EFB PROGRAM EVALUATION. An operator seeking to use EFBs in its flight operations must develop an EFB program and submit an application for OpSpec/MSpec/LOA A061. PIs must use the five-phase process described in Volume 3, Chapter 1, Section 1 as a guideline for the evaluation and authorization of initial EFB program applications. PIs should also utilize the checklists within Volume 4, Chapter 15, Section 2 to validate an operator’s initial EFB program application. The following is additional guidance for initial EFB program evaluation.
A. Review Published Guidance. FAA personnel responsible for evaluating any part of an OpSpec/MSpec/LOA A061 application should read AC 120-76; Volume 3, Chapter 18, Section 3 (A061); and this guidance (Volume 4, Chapter 15, Sections 1 and 2) in their entirety to ensure an understanding of the FAA’s EFB policy. The AC and the Order 8900.1 sections are complementary documents. Inspectors must use the AC as the primary reference to assess an EFB program application. Inspectors responsible for accepting and evaluating an application should use the checklist in Volume 4, Chapter 15, Section 2 as an additional aid to help identify specific requirements defined in the AC.

NOTE: PIs must contact AFS-400 for assistance with the evaluation of any proposed EFB function not listed in AC 120-76, appendix A or B. AFS-400 may also be contacted to assist in evaluations of applications outlining a means other than what is described in the AC.

B. EFB Program Catalog. The EFB program catalog is one of the most important aspects of an EFB program and PIs should make sure the catalog and the processes associated with it are well-defined and demonstrated. The catalog is a reference of the EFB hardware (make and model (M/M)) and EFB software applications used by crewmembers on each aircraft make, model, and series (M/M/S). An EFB program should have a process defined to keep the catalog current. In addition, a record of all EFB program catalog revisions must be maintained by the operator. PIs must have access to the current catalog, when requested, to facilitate the performance of surveillance and oversight functions.

C. EFB Program Modifications. POIs must verify that an operator’s proposed EFB program has the processes in place to identify, incorporate, and evaluate minor EFB program changes, as defined by AC 120-76. POIs must have a reasonable expectation with the process because EFB program authorization is intended to allow operators to manage their EFB program with a limited level of FAA involvement. Operators must demonstrate their ability to autonomously manage minor changes while identifying appropriate times for FAA involvement (i.e., significant changes). Operators must update the program catalog with all minor and significant program changes.

D. Demonstration.

1) The POI must observe and verify the operator’s ability to manage an EFB program and conduct flight operations in a planned demonstration period. The demonstration phase for an initial EFB program must:

- Begin with the issuance of OpSpec/MSpec/LOA A061 with a temporary authorization condition (see details in subparagraph 4-1646E, below);
- Include at least 6 months of flight operations;
- Allow observation and data collection of the EFB use in actual flight operations, which may be supplemented by ground exercises, such as simulators or well-structured tabletop simulations; and
- Allow observation of EFB program management processes, to include the ability to evaluate program modifications, revise software applications, and manage the EFB program catalog.
2) The demonstration concludes when the POI determines the operator has provided sufficient proof to satisfy the FAA’s requirement for meeting all the plan objectives, or when the operator is unable to complete them satisfactorily.

3) The POI may reduce the 6-month demonstration period with the following considerations:
   - Size and scope of the operator;
   - Type and complexity of EFB applications to be used;
   - Previous experience with EFBs under other operating parts (e.g., extensive EFB usage during part 91 operations); and
   - Satisfactory observation of the operator’s ability to manage an EFB program and conduct flight operations (in actual flight operations and/or ground exercises).

E. Temporary Authorization. When operations are being conducted with a temporary authorization, the operator must have an additional independent means of acquiring required information in flight (i.e., a backup) in the event of a failure or common mode error of the evaluated items. The backup strategy and the EFB are not used simultaneously during the demonstration period, but the backup strategy must be available. Once OpSpec/MSpec/LOA A061 is issued without temporary authorization, the backup may be removed.

4-1647 Evaluating Modifications to EFB Programs. Once an operator receives authorization for an EFB program, the operator may elect to modify the hardware, software applications, procedures, or aircraft associated with the program. PIs should utilize the checklists within Volume 4, Chapter 15, Section 2 to validate, as applicable, an operator’s EFB program modification in accordance with subparagraphs A and B below.

A. Minor Modifications. Operators issued OpSpec/MSpec/LOA A061 are allowed to incorporate and evaluate minor changes into their EFB programs. An authorized EFB program must have a process for the operator to determine if a modification is minor. All minor modifications incorporated by an operator must be recorded in the EFB program catalog, and operators must keep a record of all revisions to the catalog.

B. Significant Modifications. The POI must conduct a formal assessment of any modification to an EFB program that is not considered minor. POIs are encouraged to use Volume 4, Chapter 15, Section 2 as a general outline for the evaluation and authorization of new modifications. Because an operator can seek to modify their authorized EFB program in a variety of ways, it is impracticable to define a standard assessment to fit all possible requests. The POIs must work with the operator to define/develop an assessment with the formality, timeline, and demonstration parameters appropriate to the modification requested. Past operator experience and performance should also be considered.

4-1648 Limited Evaluations. An operator may desire to conduct a limited evaluation of a program modification in actual flight operations for business/safety case purposes. POIs can authorize these evaluations by issuing a remark in OpSpec/MSpec/LOA A061. In general, this should only be a consideration if all other means (e.g., simulator testing) of evaluating an EFB
program modification are considered inadequate. These types of evaluations should be small in scope (i.e., approximately 15 percent or less of total pilots and/or flight attendants (F/A)), performed by experienced crewmembers, and have defined test parameters. The FAA and the operator must reach a common understanding of what will be necessary to achieve the goals of the evaluation and define the limitations and conditions (if necessary).

**RESERVED.** Paragraphs 4-1649 through 4-1652.