



Federal Aviation Administration

Memorandum

Date: November 20, 2015

To: Manager, Boeing Aviation Safety Oversight Office, ANM-100B

From: Manager, Transport Airplane Directorate, ANM-100

Prepared by: Jim Cashdollar. ANM-100B

Subject: INFORMATION: Equivalent Level of Safety (ELOS) Finding for the Formatting of Boeing Instructions for Continued Airworthiness Manuals- Airworthiness Limitations on Models 787-8/-9/-10, 747-8/-8F, 737-600/-700/-700C/-800/-900/-900ER, 737-7/-8/-9, 767-200/-300/-300F/-400ER/-2C, 777-200/-300/-300ER/-200LR/777F; (Project Nos. PS06-0413, PS06-0414, TC6918SE-T, PS06-0496, PS06-0497, PS13-0546, PS14-1031, PS05-0211, PS05-0212, PS12-0037, PS12-0038, PS12-0039, PS09-0863, PS12-0169, and LB09-0013)

ELOS Memo#: TC6918SE-T-G-8

Regulatory Ref: §§ 25.1529, 25.1729 and Appendix H of 14 CFR part 25

This memorandum informs the certificate management aircraft certification office of an evaluation made by the Transport Airplane Directorate (TAD) on the establishment of an equivalent level of safety (ELOS) finding for the Boeing Models listed above.

This memo was subsequently revised to extend this ELOS to the Boeing Model 787-10 airplane.

Background

The Boeing Company has proposed a format for the airworthiness limitations sections (ALS) applicable to the models listed above that does not meet the literal requirements of Title, 14 Code of Federal Regulations (14 CFR) 25.1529 (Instructions for Continued Airworthiness) and 25.1729 (Instructions for Continued Airworthiness: EWIS). Specifically, the ALS format proposed by Boeing would not be provided as part of the "principal manual," as required by Appendix H25.4(b) of part 25. Boeing has also proposed using the title, "Airworthiness Limitations and Certification Maintenance Requirements," in lieu of "Airworthiness Limitations" as required in Appendix H25.4(a) of part 25.

Boeing will continue to provide the ALS data in Section 9 of the maintenance planning data (MPD) document. However, this data will not be included in the "principal manual;" rather it will be made available within a single electronic repository available via the internet at www.myboeingfleet.com.

Applicable regulation(s)

§§ 25.1529, 25.1729 and Appendix H25.4(a) and (b).

Regulation(s) requiring an ELOS

§§ 25.1529, 25.1729 and Appendix H25.4(a) and (b).

Description of compensating design features or alternative standards which allow the granting of the ELOS (including design changes, limitations or equipment need for equivalency)

Sections 25.1529 and 25.1729 state that the applicant must prepare instructions for continued airworthiness (ICA) in accordance with appendix H to part 25.

Appendix H, Sec. H25.2, Format, states:

- (a) The Instructions for Continued Airworthiness must be in the form of a manual or manuals as appropriate for the quantity of data to be provided.
- (b) The format of the manual or manuals must provide for a practical arrangement.

Appendix H, Section H25.4, Airworthiness Limitations Section, states in pertinent part:

- (b) If the Instructions for Continued Airworthiness consist of multiple documents, the section required by this paragraph (i.e., ALS) must be included in the principal manual.

Boeing has proposed to provide all operators of Boeing airplanes with all required ICA documents, but the ALS will not be part of the "principal manual" as required by the rule. The ICA documents (i.e., many electronic files) would be contained within a single electronic repository available via the internet at www.myboeingfleet.com (MBF), including references to the applicable engine ICAs required by § 33.4. Airline customers would be able to download this information and customize it to fit the structure of their specific general maintenance manuals.

In addition, the Maintenance Planning Document (MPD) Section 9 Airworthiness Limitations Section document and all the related sub-documents will be completed at issuance of the type certificate, or prior to delivery of the first airplane or issuance of a standard certificate of airworthiness, whichever occurs later.

Explanation of how design features or alternative standards provide an equivalent level of safety to the level of safety intended by the regulation

This proposal establishes the basis for an equivalent level of safety by allowing ALS information to be provided in a format appropriate for the quantity of data and in a practical arrangement as discussed in §§ 25.1529, 25.1729 and Appendix H25.2 of part 25.

This method of distributing ALS information is expected to improve flow times and streamline the document revision process for both the FAA and Boeing. These improvements would enable operators to obtain updates more frequently. Digital data users will also benefit by being able to locate airworthiness limitations easier and more quickly as compared to the past format.

FAA approval and documentation of the ELOS

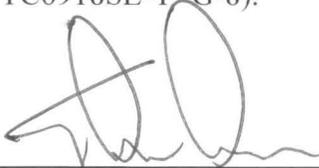
The FAA has approved the aforementioned ELOS finding in project Issue Paper G-8 or Administrative Collector Issue Paper G-6.

The following provides an ELOS to the requirements of §§ 25.1529, 25.1729 and part 25 Appendix H25.4(a) and (b):

- The MPD Section 9 Airworthiness Limitations Section is not required to be included within the "principal manual" as required by Appendix H25.4(b),
- The MPD Section 9 document may be titled "Airworthiness Limitations and Certification Maintenance Requirements," in lieu of "Airworthiness Limitations" as required in Appendix H25.4(a).
- The MPD Section 9 document may identify other individual AWL documents, including an electrical wiring interconnection systems (EWIS) document, should one ever be developed. These additional AWL documents are considered part of the instructions for continued airworthiness required by §§ 25.1529 and 25.1729.
- Access to these documents must be provided to the FAA.
- Access to these documents must be provided to the airline customers and modifiers, provided the parties requesting access agree to Boeing's conditions for access and proper contracts are in place.

This memorandum provides standardized documentation of the ELOS finding that is nonproprietary and can be made available to the public. The TAD has assigned a unique ELOS memorandum number (see front page) to facilitate archiving and retrieval of this ELOS. This ELOS memorandum number should be listed in the type certificate data sheet under the certification basis section. An example of an appropriate statement is provided below.

Equivalent Level of Safety Findings have been made for the following regulation(s):
§§ 25.1529, 25.1729 and Appendix H25.4 to 14 CFR part 25 (documented in TAD ELOS Memo
TC6918SE-T-G-8).



11-30-15

Transport Airplane Directorate
Aircraft Certification Service

Date

ELOS Originated by Boeing Avition Oversight Office	BASOO Manager: Angelos Xidias	Routing Symbol: ANM-100B
--	----------------------------------	-----------------------------