



Federal Aviation Administration

Memorandum

Date: August 9, 2016

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, 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/-8/-9; FAA Project Numbers PS06-0413, PS06-0414, PS06-0496, PS06-0497, PS05-0211, PS05-0212, PS12-0037, PS12-0038, PS12-0039, PS09-0863, PS12-0169, LB09-0013, PS16-0330 and PS13-1000

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 is revised to add Boeing Models 777-8 and 777-9 and to rearrange existing wording to the appropriate sections.

Background

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.

The Boeing Company proposes 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 proposal is not provided as part of the “principal manual,” as required by Appendix H25.4(b) of part 25. Boeing also proposes 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 continues 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 finding

§§ 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)

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 document is titled “Airworthiness Limitations and Certification Maintenance Requirements,” in lieu of “Airworthiness Limitations” as required in Appendix H25.4(a).
- The MPD Section 9 document identifies 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 is provided to the FAA.

- Access to these documents is 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.

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 finding

The FAA has approved the aforementioned ELOS finding in project Issue Paper G-8, “Inclusion of Airworthiness Limitations within the Boeing ICA Manuals.”

This memorandum provides standardized documentation of the ELOS finding that is non-proprietary 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).

Original Signed by

John Bell

Transport Airplane Directorate,
Aircraft Certification Service

August 17, 2016

Date

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| ELOS Originated by: Boeing Aviation Safety Oversight Office | BASOO Manager: John Piccola | Routing Symbol: ANM-100B |
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