



Federal Aviation Administration

Memorandum

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To: All Aircraft Certification Office (ACO) Managers and Directorate Standards Staff Managers
Transport Airplane Directorate Standardization Branch, ANM-113
(See Distribution List)

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Prepared by: Delegation and Airworthiness Programs Branch, AIR-140

Subject: Authorization and Delegation of Functions Related to the Widespread Fatigue Damage Rule

This memorandum addresses using Designated Engineering Representatives (DER) and Organization Designation Authorization (ODA) engineering Unit Members (UMs) to support implementation of the new Title 14, Code of Federal Regulations (14 CFR) part 26 and § 25.571, Amendment 25-xxx, requirements as they pertain to the Widespread Fatigue Damage (WFD) rule. It describes the proper use of delegated functions and authorized areas related to Design Approval Holder (DAH) support by structures DERs and UMs (reference: Federal Aviation Administration (FAA) Order 8110.37 Chart A). It is expected this may result in changes in authority to existing DERs and UMs with part 25 structures authority. As such, affected DERs and ODA holders should be made aware of the requirements and qualifications for the delegation of functions related to the WFD rule as soon as possible.

Background

The new 14 CFR part 26 and § 25.571, Amendment 25-xxx, regulations require Type Certificate (TC) and Supplemental Type Certificate (STC) holders and applicants to establish a limit of validity of the engineering data that supports the structural maintenance program, hereafter referred to as the Limit of Validity (LOV). The LOV corresponds to the period of time, stated as a number of total accumulated flight cycles or flight hours or both, during which it has been demonstrated that widespread fatigue damage will not occur in the airplane.

The process for establishing an LOV and evaluating structure for WFD typically includes determining if WFD is likely to occur and, if it will, when. The process also includes determining what maintenance actions might be necessary to prevent WFD from occurring before reaching the LOV and when those maintenance actions should begin. It is expected that the LOV and any extended LOV, along with the substantiation data, will be developed in accordance with §§ 25.571, 26.21 or 26.23 (extended LOV), as applicable, and Advisory Circular (AC) 25.571-1X or AC 120-YY. Structural DERs defined in FAA Order 8110.37, Appendix 2, Figure 1, Chart A and corresponding ODA UMs can be authorized with delegated functions 3 and 12, fatigue analysis and damage tolerance evaluations, for approving data that support an LOV with the limitations described in this memo. This includes the establishment of the LOV or extending an LOV.

Delegation

As of the date of this memorandum, the WFD evaluation may be delegated under §§ 25.571, 26.21 or 26.23 only for DERs and UMs with Chart A, Functions 3 and 12, fatigue analysis and damage tolerance evaluations. DERs and UMs with Chart A, Functions 3 and 12 for part 25, may approve WFD evaluation data under § 25.571 with no change to their authority required.

Part 26 WFD evaluation authority for DERs and UMs will be established in the form shown in Table 1 of this memorandum or a subset of Table 1 that lists the specific part 26 sections for which they are authorized. For DERs, this table or list, and any associated limitations or specific delegations, will be provided to the DER and also captured in the Designee Information Network (DIN). For ODAs with WFD authority, this table or list, and any associated limitations or specific delegations will be addressed in their procedures for UM authorization. Specific UM authority will be identified for each affected UM and documented in the organization's unit member list.

FAA Retained Items

The FAA retains findings of compliance for all of part 26 except those sections identified in Table 1 as possible for delegation. Compliance plans required in the DAH rules of § 26.21 and § 26.23 are not delegated for approval or recommend–approval. For §§ 25.571, 26.21, and 26.23 the FAA retains approval of the WFD evaluation methodology and the approval of the LOV, including any extended LOV.

The DER or UM may not make a compliance finding for a WFD evaluation without prior approval of the WFD methodology. When a compliance plan is specifically required for a project, the DER or UM may not make a compliance finding for a WFD evaluation without prior approval of the compliance plan as well.

Future Policy

This information will be included in future revisions to FAA Order 8110.37 and FAA Order 8100.8. It is expected that this policy will serve to standardize all future designee appointments that involve the Chart A Functions 3 and 12, Fatigue Analysis and Damage Tolerance Evaluations for part 26 WFD rule-related delegated functions.

Widespread Fatigue Damage Areas of Delegated Authority.

Table 1 shows the sections of 14 CFR part 26 that are eligible for authorization/delegation.

Table 1 – WFD Areas of Delegated Authority

Part 26	Delegation Possibility (Yes/No)	Notes/Limitations
§ 26.21	No	N/A
§ 26.21 (a)	No	N/A
§ 26.21 (b)(1)	Yes	The FAA retains approval of the limit of validity of the engineering data that supports the structural maintenance program, hereafter referred to as the limit of validity (LOV). First airplane model retained for LOV supporting compliance data. Subsequent submittals of LOV supporting compliance data may be delegated.
§ 26.21 (b)(2)	Yes	First airplane model retained for list of service information for maintenance actions and for supporting compliance data. Subsequent submittals may be delegated. The FAA retains approval of the binding schedule for providing service information for maintenance actions.
§ 26.21 (b)(3)	No	N/A
§ 26.21 (b)(4)	No	Note: Data supporting approval is developed in accordance with § 26.21(b)(1) and approval of that data in accordance with that section.
§ 26.21 (c)-(g)	No	N/A
§ 26.23	No	N/A
§ 26.23 (a)	No	N/A
§ 26.23 (b)(1)	Yes	The FAA retains approval of the LOV. Designees may APPROVE or RECOMMEND-APPROVE supporting compliance data.
§ 26.23 (b)(2)	No	Note: Data supporting approval is developed in accordance with § 26.23(b)(1) and approval of that data in accordance with that section.
§ 26.23 (b)(3)	No	Note: Data supporting approval is developed in accordance with § 26.21(b)(1) and approval of that data in accordance with that section.

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