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BY ELECTRONIC SUBMISSION VIA E-MAIL

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Federal Aviation Administration
Engine and Propeller Directorate
Engine and Propeller Standards Staff (ANE-110)
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Subject: Proposed Policy Statement No. ANE-200X-33.3-X, Repair and Alteration of Rotating Turbine Engine Life Limited Parts

Dear Ms. Grant:

The Aeronautical Repair Station Association (ARSA) appreciates the opportunity to comment on the above-referenced document. We apologize for this late submission, but wanted our comments on this important draft policy to be as thorough and useful as possible. Accordingly, ARSA urges the Federal Aviation Administration (FAA) to consider these comments in developing its final policy.

ARSA represents entities certificated under 14 CFR Part 145. These entities would be directly impacted should this proposed policy be implemented.

ARSA supports the FAA's efforts to ensure that repairs and alterations of rotating turbine engine life limited parts (RTE-LLP) are performed in accordance with sound technical data. However, ARSA strongly disagrees with the FAA's intention to treat all RTE-LLP repairs and alterations as major, thus requiring the technical data to be approved in each case.

ARSA submits that the proposed policy is flawed because it is inconsistent with the Federal Aviation Regulations (FARs), namely the definitions of "major repair" and "major alteration" found in 14 CFR Part 1 and Part 43, Appendix A,¹ and existing FAA guidance. As such, if the FAA issues the policy as currently written, changes to existing regulations must be accomplished in accordance with the Administrative Procedure Act (APA) and other statutes, executive orders and internal FAA and DOT procedures associated with the rulemaking process.

¹ All regulations cited in these comments are contained in Title 14 CFR unless otherwise indicated.

I. Regulations and Guidance

a. The Regulations

Title 14 CFR contains a definition of “major repair”, found in § 1.1 and lists examples of actions that must be considered “major” in Appendix A of Part 43. The definition in § 1.1 includes repairs that might affect airworthiness if done improperly, or repairs that are “not done according to accepted practices or cannot be done by elementary operations.” In ARSA’s view, elementary operations are those that are accomplished in accordance with documented procedures that ensure consistent results. They are established by industry professionals, performed in accordance with accepted practices and can be accomplished with the proper facilities, equipment and materials by appropriately trained personnel.

The definition of “major alteration,” also found in § 1.1, is an alteration that is not listed in the aircraft, aircraft engine, or propeller specifications that appreciably affects airworthiness or that is not done according to accepted practices or cannot be done by elementary operations. Again, Appendix A to Part 43 lists examples of actions that must be consider “major alterations”.

The list of major repairs in Appendix A of Part 43 is narrower than the Part 1 definition. Paragraph (b)(2) of Appendix A lists three types of powerplant repairs that qualify as major. The first two are crankcase or crankshaft repairs to reciprocating engines while the third is more general. Paragraph (b)(2)(iii) states that “**special** repairs to structural engine parts by welding, plating, metalizing, or other methods” constitute major repairs (emphasis added).

The operative word in this definition is “special” and it clearly does not apply to all welding, plating, or metalizing repairs. Most of these repair processes are standardized and can be performed using elementary operations. In the Association’s view, a special repair is a process that is not an accepted industry practice, is used infrequently and requires equipment and training not ordinarily found in a typical powerplant rated repair station or air carrier engine shop.

Appendix A also contains a similar definition of major alterations. The listed major powerplant alterations include several actions that ordinarily would not involve RTE-LLP, such as removing a required accessory or installing an unapproved accessory. Two types of alterations could involve RTE-LLP, however. Replacing aircraft engine structural parts with parts not supplied by the original equipment manufacturer or approved by the Administrator; or converting an engine from one model to another involving substitution of major engine parts which require extensive rework and testing.

There is nothing in any of the regulatory citations to support the notion that any repair or alteration to RTE-LLP is automatically major simply because it is performed on a RTE-LLP.

There is some question as to whether the definition or list of major repair and major alterations is controlling in the event of a conflict. However, industry practice is to conduct an analysis under both rules. Nevertheless, many RTE-LLP repairs and alterations are minor, such as cosmetic repairs to small nicks and dents. These are evaluated by maintenance and/or engineering personnel, technical and substantiating data is obtained and the repairs and alterations are accomplished routinely and safely.

Section 1.1 defines a minor repair as “a repair other than a major repair,” and a minor alteration as “an alteration other than a major alteration.” Therefore, if an RTE-LLP repair or alteration does not qualify as major, then it must necessarily be considered minor. If the FAA implements its policy, however, repairs and alterations that are currently minor under the regulations would become major. Thus, the FAA would be changing its rules by issuing guidance, something it may not do under the Administrative Procedure Act.

b. The Guidance

The FAA has established guidance on the technical data requirements for repairs and alterations generally, including the need to secure FAA approval of the data when the repair or alteration is major. AC 120-77 explains the process for developing technical data when performing repairs and alterations outside the maintenance manual or other manufacturer’s service information. The AC is significant for several reasons: First, it references and reiterates the definitions of major and minor repairs and major and minor alterations as they exist in § 1.1 of the regulations.²

Second, AC 120-77 acknowledges the fact that not all data requires FAA approval. For example, Paragraph 10(a)(2) of the AC notes that “technical data, when substantiated, is considered acceptable to the Administrator even in cases when it does **not** require the FAA’s explicit approval.”

Third, the AC stresses that even if data need not be approved; it must still result in an airworthy repair or alteration and must therefore be substantiated. This concept is crucial because it underscores the need for repair stations and other maintenance providers to demonstrate that the data complies with the pertinent airworthiness standards even when it does not need FAA approval.

II. Recommendations

ARSA believes that the current rules governing RTE-LLP repairs are adequate. Nonetheless, the draft policy statement offers two rationales justifying this sweeping change in the classification of RTE-LLP repairs and alterations: Inadequate data provided on RTE-LLP repairs and alterations, and maintenance providers erroneously classifying RTE-LLP repairs and alterations as minor.

² See AC 120-77, Paragraphs 5(k),(l),(o), and (p).

ARSA contends that if the FAA wishes to address these two concerns, it could do so in a manner consistent with the regulations and AC 120-77. Specifically, the FAA could amend draft AC 33-XX to explain exactly what data is needed to support minor and major RTE-LLP repairs, and give maintenance providers a clear picture of exactly what type of repairs and alterations should be considered major or minor. If the FAA believes that a significant amount of the data packages submitted in support of major RTE-LLP repairs is inadequate, improved training and oversight of DERs along with appropriate enforcement actions will accomplish the agency's objectives in a manner consistent with existing regulations.

ARSA recognizes the importance of providing adequate technical and substantiating data. The proposed policy, far from being narrowly tailored to address these concerns, simply deems all RTE-LLP repairs and alterations major, thereby requiring approved technical data in all cases. The proposed policy ignores the fact that many cosmetic repairs and alterations to RTE-LLP are minor, thus imposing a significant burden on maintenance providers to obtain approved data in each case.

Because the proposal is not supported by the regulations, it cannot be made through a policy statement. If the FAA is determined to treat all such repairs and alterations as major, the agency should institute rulemaking procedures, conduct the necessary cost benefit and other analyses required by law and provide the public with an opportunity to comment on the proposal.

III. Conclusion

For the reasons cited above, ARSA urges the FAA to reconsider this proposed policy statement. ARSA believes the existing system for RTE-LLP repairs and alterations is sufficient. Nevertheless, ARSA would support efforts by the FAA to clarify RTE-LLP data requirements and major/minor classifications through the issuance of amended or new guidance. Should the FAA continue to pursue this broad change in the handling of RTE-LLP repairs and alterations, it should do so through the rulemaking process.

If you have any questions or require additional information please feel free to contact the undersigned at 703 739 9543.

Respectfully submitted,



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