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Sent Via: E-mail

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RE: Independently Developed Maintenance and Alteration Specifications

Dear Dan and Dave,

The Aeronautical Repair Station Association (ARSA) is writing to request your assistance in formulating a uniform policy with respect to independently developed maintenance and alteration processes. Many of our members develop their own maintenance or alteration specifications (really, maintenance manuals, Instructions for Continued Airworthiness (ICAs) or service bulletins) to perform maintenance or alterations, and approve that work for return to service in accordance with their ratings.

When the action will result in a major repair or alteration, the repair station will get the specification approved by the agency through an Aircraft Certification Office (ACO), Flight Standards District Office (FSDO) or a Designated Engineering Representative (DER). Due to varying treatment members have experienced from the Federal Aviation Administration (FAA) across the country, ARSA requests the FAA provide guidance on this growing practice.

Up to now, the FAA has handled the practice of repair stations developing their own maintenance or alteration specifications in an ad hoc manner. ARSA is aware of repair stations that have encountered major disruptions because of local FSDO or ACO "disapproval" of DER approved maintenance specifications. At the other end, ARSA knows that repair stations have been able to get DER approved maintenance specifications accepted by the local FSDO, without ACO review, as appropriate data for accomplishing maintenance or alteration activities. Others have entered into a Memorandum of Understanding with their local FSDO and ACO to establish uniform procedures for the development, review and approval of maintenance specifications. Still other repair stations have been flatly told if the manufacturer does not provide maintenance or alteration information, the FAA will not allow the work to be accomplished.

Repair stations will continue to develop and use independently-derived methods, techniques and practices to perform maintenance or alterations under their ratings. Much of this activity will result in major repairs and/or alterations. Title 14 CFR is very general on the development and approval of technical data supporting major repairs

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and alterations. Therefore, ARSA makes the following suggestions to establish the requirements and present a uniform structure that will yield predictable results for the FAA and for repair stations wishing to develop their own repair/alteration instructions:

1. When a repair station develops its own methods, techniques and practices to perform maintenance, it should be given the uniform name "maintenance specifications." Similarly, if a repair station develops an alteration, it should be called an "alteration specification". This eliminates any confusion with the term "process specifications" used under a limited rating for specialized services that gains approval through a different process and which must be listed on a repair station's Operations Specifications.
2. Each actor (repair station, FSDO, and ACO/DER) in the approval process will have well defined roles and responsibilities.
  - a. The repair station will:
    - i. Develop the maintenance or alteration specification in a manner similar to how the manufacturer develops instructions. That may be in the form of maintenance or overhaul manual, instructions or a service bulletin.
    - ii. Develop a substantiation data package establishing that the maintenance/alteration specification meets the applicable airworthiness standards. This means that the data package will establish that application of the maintenance/maintenance specification will return an article to its original or properly altered condition. The data must be capable of being approved by the FAA, either by the ACO or an appropriately authorized DER (regardless of whether the action will be deemed major or minor). The technical data will only have to be approved if the action will result in a major repair or alteration.
    - iii. Perform a test of the maintenance/alteration specification on an article to establish that the article will be returned to its original or properly altered condition and that the repair station is capable of performing the work set forth in the specification. The results of the test shall be included in the technical data package maintained for the article.
    - iv. Determine and document whether the repair or alteration is major or minor.
      - a. If minor maintain the technical and substantiating data as set forth below.
      - b. If major, either:
        - i. Submit the technical and substantiating data necessary to an appropriately authorized DER for approval; or,
        - ii. Submit the technical and substantiating data package through the FSDO to the ACO for approval. The data shall include the verification that the process was tested on an article and established that the

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- methods, techniques and practiced used returned the article to its original or properly altered condition.
- iii. Submit an executed original FAA Form 8110-3 to the FSDO, when using DER approval.
  - v. Retain all technical and substantiating data used to establish the maintenance/alteration specification and make it available for review by the FAA.
  - vi. Ensure it has the appropriate rating and capabilities before using the repair or alteration specification. If the work will result in a major repair or alteration, the repair station must also ensure that the technical and substantiating data are approved prior to using the repair or alteration specification.
- b. The responsible FSDO will:
- i. If the specification has not been approved by an appropriately authorized DER,
    - a. Ensure the maintenance/alteration specification contain acceptable methods, techniques and practices for performing maintenance or alterations under the repair station's ratings and within its operations specifications; and,
    - b. Provide the ACO with copies of the technical and substantiating data forwarded by the repair station within 72 hours of receipt, along with verification that the specification was tested on appropriate articles by the repair station.
  - ii. Upon receiving notification from a DER (receipt of a properly executed Form 8110-3) or ACO that the maintenance specifications comply with the applicable airworthiness standards, ensure the repair station has the housing, facilities, equipment and personnel to perform the maintenance procedure (unless established in another manner or before hand).
- c. Responsible ACO will:
- i. Review any submission from the FSDO in a timely manner, normally within 30 days of receipt of all information forwarded from the FSDO.
  - ii. Take no action against the repair station when the technical data supporting a maintenance/alteration specification is approved by an authorized DER.
3. Once a repair station has received approval for a maintenance or alteration specification it will be able to use it in the same manner as any other data that is required to perform maintenance or alteration activities (i.e., maintenance manuals, ICAs, service bulletin, etc.). In other words, if the repair station is appropriately rated and develops a minor repair or alteration specification under this procedure, it may

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begin using the methods, techniques and practices without further action. If the repair or alteration specification is major and the repair station has obtained approval of its technical and substantiating data from a DER, it need only submit the same to the FSDO. It may use the methods, techniques and practices without further action from the FAA provided the article is within the repair station's ratings and capabilities.


4. The FAA may only challenge a repair station's approved maintenance specifications by requesting the withdrawal of the DER or ACO approval.
5. In order to withdraw the DER or ACO approval, the FAA must show that the data presented did not meet the applicable airworthiness standards.

ARSA believes that a standardized procedure is the only way to ensure predictable and uniform results across the industry. We also recognize that this is a national issue that affects all repair stations, the agency and the industry as whole. ARSA encourages the FAA to adopt its approach, but at the least stresses the need for the agency to address this issue in a clear and direct manner.

We are aware that the FAA has received information on this practice through a contractor's review of "process specifications". We urge the agency not to take action on that information without full consultation with the industry and/or without a thorough understanding of the regulatory basis for each type of process. We are fearful that the information it may have received through its contractor may not have a regulatory basis for the conclusions or recommendations. The process specifications required under a limited specialized service rating are different than the specifications used to perform "normal" maintenance or alteration activities.

ARSA looks forward to working with the FAA on this issue and towards an ultimate resolution.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Sarah MacLeod", with a stylized flourish at the end.

Sarah MacLeod  
Executive Director