THE VIEW FROM WASHINGTON

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Are You Getting 'Brother-in-Law' Advice from Your FAA Inspector?

During this year's various AEA Regional Meetings, there were three consistent topics of discussion:

• A "new" generation of FAA inspectors seem to be in place.

• PIPP (principle inspector's personal preference) is reemerging into the repair station manuals.

• A few FAA employees still prefer to regulate by opinion.

This month's column focuses on the regulations, guidance and policies of alterations and repair station manuals, as well as provides guidance and encouragement to develop and begin a structured self-audit program of your repair station.

Are there new inspectors? Absolutely. The FAA is a large, dynamic organization with nearly constant turnover. As senior inspectors retire, some GA inspectors might move to air carrier oversight or to more senior positions within the district office. The end result: GA is constantly affected by FAA turnover.

To this end, we must conduct our businesses to weather this constantly moving force. How can we do this? By using the industry-accepted processes offered by the AEA.

The AEA offers industry-accepted standards for evaluating alterations. The process is based on the Federal Aviation Regulations and is a solid, standard evaluation tool.

When used, a repair station minimizes the use of resource-wasting, "just-in-case" field approvals. More importantly, the process minimizes the financial impact of a "new" interpretation every time you get a new primary avionics inspector.

Remember, the first step is to evaluate the alteration. The next step is to record the results of the analysis in the aircraft logbook. As many of you have heard, it is completely reasonable for anyone who reviews a logbook to ask for the highest level of alteration documentation (FAA Form 337) if there is no clarifying language.

If you determine an alteration is "minor," make certain you record this fact in the logbook — years later, it will help the person looking for paperwork. You do not use a FAA Form 337 for minor alterations.

It is important to use the tools the FAA has provided to us.

The Regulations

Title 14 of the Code of Federal Regulations (14 CFR), Section 21.113, clearly define "when" someone must apply for a supplemental type certificate. If the demands of your inspector do not match this requirement, he or she is regulating by opinion.

Alteration data does not fall into only two categories: field approval or STC. In fact, depending on whether the maintenance task is a repair or an alteration, there are as many as 23 separate sources of approved data; the field approval of your alteration data by the local ASI is simply one of the 23.

14 CFR, Section 43.7(c), authorizes the holder of a repair station certificate to approve an aircraft, airframe, aircraft engine, propeller, appliance or component part for return-to-service as provided in Part 145 of this chapter.

What does Part 145 state? 14 CFR, Section 145.201(a), authorizes a repair station to perform maintenance, preventive maintenance or alterations in accordance with Part 43 on any article for which it is rated and within the limitations in its operations specifications.

In addition, 14 CFR, Section 145.201 (c)(2), prohibits a repair station from approving any article after a major repair or major alteration for return-to-service unless the major repair or major alteration was performed in accordance with applicable approved technical data.

A major repair is clearly defined in 14 CFR, Part 1 and Part 43, Appendix A. As AEA members know from attending the annual training on evaluating alterations, a major alteration also is defined in 14 CFR, Part 1 and Part 43, Appendix A.

However, the most important definition contained in the regulations is that of a minor alteration. The FARs define a minor alteration as "an alteration other than a major alteration."

This means, if you or your FAA inspector cannot clearly define a proposed alteration as a major alteration using the regulations, the alteration — by regulation — must be a minor alteration.

The Guidance

FAA Advisory Circular 43-210 describes standardized procedures for requesting field approvals for certificated products. It describes:

• the field approval process,

• data that supports making an alteration or repair, and

• the purpose and uses of the aircraft flight manual supplements, as well as Instructions for Continued Airworthiness.

This AC also provides instructions for completing the field approval checklist and shows a sample compliance checklist format.

FAA Advisory Circular 43.9-1F provides instructions for completing FAA Form 337, "Major Repair and Alteration (Airframe, Powerplant, Propeller or Appliance)."

The Policies

FAA Order 8900.1, Volume 4, Chapter 9, Section 1, "Perform Field Approval of Major Repairs and Major Alterations," provides guidance to the FAA airworthiness safety inspector in determining the category of a repair or alteration and ensuring the aircraft, engine or accessory can be returned to service in accordance with the field approval process, regardless of the rules under which the aircraft is operated.

FAA Order 8900.1, Volume 4, Chapter 9, Section 2, "Field Approvals of Turbine/Turboprop Engine Installations on Piston-Engine Powered Aircraft," advises aviation safety inspectors of the methods of approval for alterations converting aircraft from piston to turbine/turboprop powerplants.

These policies, as well as all other flight standards policies, can be viewed at http://fsims.faa.gov.

Reviewing Manuals

During this fall's AEA Regional Meetings, there was a good deal of discussion about a renewed interest in reviewing repair station manuals and the addition of "PIPP" — remember that one: principle inspector's personal preference.

The FAA has been under public scrutiny lately and, as a result, has been reviewing many repair station manuals. The review isn't much of a problem — it is nice to have a second set of eyes comparing what you said you were going to do to what you actually are doing.

The problem lies within the results of FAA local audits: "I don't like ...." That simply is not an acceptable response. Period.

There are two absolute "must haves" in a repair station manual. First and foremost, the procedures in your repair station, quality control and training manuals must conform to all of the applicable FARs. This is not negotiable, unless you petition for an exemption.

Secondly, a repair station's processes must be performed exactly how they are described in the manuals.

Responses such as, "I don't like the lay out of your manual" or "I don't like this wording" or "I'd like to see such and such in your manual," simply are not acceptable.

There are only two correct responses you should receive following an audit: "Your manual doesn't conform to 14 CFR, Section (X) (with a precise reference to the part and section your manual fails to address)," or "You are not following Paragraph (X) (again, the specific reference) of your repair station, quality or training manual."

Beyond that, your inspector is offering "brother-in-law" advice (a non-regulatory critique). Inspectors audit many organizations and they get to see the best practices the industry has to offer, as well as the failures of other organizations; so, don't ignore them. Listen and evaluate the inspector's comments — it might save you time, money or a violation.

When your inspector offers "brother-in-law" advice, take it for what it is: advice. Remember, AC 145-9, Paragraphs 1-5, state, "Part 145 sets forth the requirements for content, not format."

According to AC 145-9, "The format used for the procedures in the manual should fit the size and complexity of the facility. If there are existing procedure manuals in the facility, the manual writer may wish to include the same format in the RSM(s). If facility employees are accustomed to a particular format, the manual writer should continue to use that format."

So, let's look at auditing a repair station and manuals yourself — before the FAA comes knocking.

The Regulations

14 CFR, Section 145.209, defines what each repair station manual must include. There is guidance in advisory circular and FAA policy describing many of the simple requirements of the regulations. However, the basic requirements of the repair station manual are clearly defined in Section 145.209.

Section 145.211(c)(1) requires the repair station to describe its maintenance and quality system and to describe the procedures the repair station uses to ensure quality, safety and reliability. Each area of responsibility is defined in Section 145.211.

The last of the three manuals is required by 14 CFR, Section 145.163. This section defines the requirements for an FAA-approved employee training program. While Section 145.163 requires an "approved program," the repair station cannot comply with this requirement without a written plan or manual.

The Guidance

FAA AC 145-9 provides information and guidance material for all repair station certificate holders or applicants under 14 CFR, Part 145, to develop and evaluate a repair station manual and quality control manual. The material presented in this AC describes an acceptable means to develop a manual and comply with the referenced regulations.

AC 145-10 provides information about developing a repair station employee training program required under 14 CFR, Part 145, Section 145.163, "Categories of Training, Training Program Components and Sample Training Programs."

AC 145-10 also provides an acceptable means of showing compliance with 14 CFR, Section 145.163.

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The Policy

The FAA has inspector guidance on evaluating repair stations piece by piece. These policy documents are invaluable for the repair station that chooses to establish a monthly proactive self-audit program.

In a 14-month cycle, a repair station could inspect each critical process using the following FAA's guidance:

FAA Order 8900.1, Volume 6, Chapter 9, Part 145 Inspections

Section 1. Inspect a Repair Station Certificate Requirements

Section 3. Inspect a Repair Station Record System

Section 4. Inspect a Repair Station Manual System

Section 5. Inspect a Repair Station Housing and Facilities

Section 6. Inspect a Repair Station Tools and Equipment

Section 7. Inspect Repair Station Technical Data

Section 8. Inspect a Repair Station Quality Control System

Section 9. Inspect a Repair Station Parts and Material Program

Section 10. Inspect Repair Station Personnel

Section 11. Inspect a Repair Station Training Program

Section 12. Inspect a Repair Station Maintenance Process

Section 13. Inspect a Repair Station Authorization for Work Away From Its Fixed Location

Section 14. Inspect a Repair Station Contract Maintenance Program

Section 15. Inspect a Repair Station Maintenance/Alterations Requirements

These policies, as well as all other flight standards policies, can be viewed at http://fsims.faa.gov.

Contrary to what I hear occasionally, there are no "secret" FAA policies; there are no "official instructions given over the phone from FAA headquarters;" and there are no instructions by e-mail, which your inspector "cannot show you."

The FAA has worked hard at being transparent in its regulation of the public. Your FAA inspector should be able to show you the regulation, guidance or policy for any recommendation he or she makes. If he or she cannot or will not offer the reference, do your own homework and research the recommendation.

If you cannot link the recommendation to the FARs, assume the recommendation is "brother-in-law" advice and treat it accordingly. ❑