



News from the Hill

BY JASON DICKSTEIN
AEA GENERAL COUNSEL

The Case of the Very Limited Inspection: A Documentation Story

Recently, one of our members told me an interesting story. We'll call him "AEA Member X."

AEA Member X was performing an inspection found in component maintenance manual, and had a question about the procedure. He contacted the manufacturer for more information. The manufacturer's representative provided the information, but cautioned AEA Member X that the inspection procedure was insufficient to support an approval for return to service; he explained that AEA Member X should NOT complete an 8130-3 tag to reflect the completion of this inspection.

This story caught my attention for two reasons. First, it is certainly a misstatement of the law. But more importantly, it appears to reflect an all-too-common misunderstanding of the scope and purpose of the approval for return to service.

The matters addressed in this article may be quite familiar to many AEA members, but I urge you to review it, and (1) to share it with all of your co-workers to make sure that they understand their obligations under the regulations, and (2) to share it with your business partners to make sure they understand the true meaning of the approval for return to service documentation (both what it stands for and also what it does not stand for).

Documentation Law

The law on this subject is fairly plain, if you just dig deep enough. Whenever someone performs main-

tenance, preventative maintenance, alteration or rebuilding on an aircraft item, a record of the work performed must be completed—a record that meets the requirements of 14 C.F.R. § 43.9.

What do we mean by aircraft item? We mean an airframe, aircraft engine, propeller, appliance or component part of an aircraft. If it was removed from an aircraft or is intended to be installed into an aircraft, and you perform maintenance, preventative maintenance or alteration on it, then you should generally consider it to fall within the scope of Part 43 and you should be following the requirements of the maintenance rules found in Part 43.

At first glance, this appears to exclude the inspection performed by AEA Member X in the example. But a deeper analysis of the regulations shows that the term "maintenance" is more broadly defined than many laymen would guess. Maintenance is specifically defined in the regulations to mean "inspection, overhaul, repair, preservation, and the replacement of parts." Thus, when AEA Member X performed an inspection that yielded objective results, he was performing a maintenance activity. As maintenance activities are regulated under Part 43 of the Federal Aviation Regulations, AEA Member X must follow the regulations concerning the documentation of the work he has performed.

It is worth noting that the compo-

nent maintenance manual in question specified the equipment to use for the inspection. The regulations require AEA Member X to either use the manufacturer-recommended equipment/test apparatus or else use equivalent equipment/test apparatus that is acceptable to the FAA. AEA Member X used the manufacturer-specified equipment as described in the component maintenance manual.

What Must Be in the Record?

Because AEA Member X performed an inspection that was a maintenance activity, he was required, under the regulations, to make a record of that activity. The rules for such a record can be found at 14 C.F.R. § 43.9. The record must contain at least four things:

(1) A description of the work performed. This can be a reference to data acceptable to the FAA, such as a reference to a section of (or specific procedure in) a component maintenance manual.

(2) The date of completion of the work performed. This is important, because some people will use the date on which the record was signed (FAA Order 8130.21D anticipates that the record will be signed when the work is completed and that the two dates will be the same). If the two dates are different, then it is a good idea to record both but the date of completion

is the date that must be recorded.

(3) If the work has been performed satisfactorily, the following information must be included:

(a) a signature that approves the work for return to service (this is the signature of an authorized representative of the repair station);

(b) the certificate number of the person who did the work (for repair station work, this is the repair station's certificate number because the repair station is the legal 'person' who is doing the work—employees are acting on behalf of the repair station); and

(c) the identity of the kind of certificate held by the person approving the work for return to service (for most AEA members this will be a repair station certification, although for some readers it may be an A&P certificate or even an operator's certificate issued under Part 121 or Part 135).

(4) The name of the person performing the work if other than the person specified in item, above. Once again, the person performing the work may be an entity, like a repair station, as opposed to a natural person (the person who acted on behalf of the legal entity).

The assertion of the manufacturer's representative—that the inspection is somehow insufficient to warrant an approval for return to service—is clearly incorrect. Because it is an inspection, it is a maintenance activity. Maintenance activities on aircraft components are regulated under Part 43, and Part 43 requires documentation (and when the work has been completed correctly, that documentation reflects an approval for return to service).

Where is the Work Documented?

Many people ask about the regulatory requirements for where the approval for return to service must be located. The common preference is to

place such a record in the logbook of the associated aircraft, but the regulations clearly state that the 43.9 record must be placed "in the maintenance record of [the] equipment." Thus, while an installation should usually be recorded in the aircraft logbook, component-level work (ranging from troubleshooting to software upgrades) will usually not afford the repair station an opportunity to access the aircraft logbooks. In such a case, the preferred practice is to attach a written record to the equipment. While yellow-tags were once the preferred method of documenting the work, repair stations are increasingly relying on the 8130-3 tag as the mechanism for recording work details and the approval for return to service. It is also possible to use a form 337, although the modern trend is to use that form to supplement the approval for return to service document (under appendix B to Part 43, a repair station must use a Form 337 to record a major alteration and either a Form 337 or a maintenance release entered on the customer's work order to record a major repair).

What Does the Approval Mean?

Why would the manufacturer's representative suggest to AEA Member X that AEA Member X cannot complete an approval for return to service for performing certain inspections? The answer may lie in a misunderstanding of what is being approved.

The signature on the 43.9 record constitutes the approval for return to service only for the work performed. This is an important distinction because many people believe that the approval for return to service, alone, connotes airworthiness. It does not. When the approval for return to service reflects a test of one system in an aircraft, that does not mean that the other systems have checked-out fine.

Similarly, if the approval for return to service attached to a component indicates only that a particular test was performed, then the document indicates only that repair station was approving that particular work – and nothing else.

The only time that an approval for return to service can be read as being dispositive of the airworthiness of an article is when the scope of work reflects the total airworthiness of the article. For example, an overhaul tag indicates that the complete article has been overhauled, so we know (based on the definition of overhaul found in the regulations) that the overhauled item was airworthy at the time of overhaul (of course, due to damage or degradation, the article may be no longer airworthy upon receipt, which is why installers are always required to confirm airworthiness at the time of installation to meet their Part 43 obligations).

The manufacturer's representative who counseled AEA Member X may have been simply mistaken about the scope of the approval for return to service, mixing it up with an approval issued to connote complete airworthiness of the article. If so, then this explains why he was concerned, but it also makes it clear that his advice to AEA Member X was incorrect.

If you have had issues with business partners who do not understand the limits or requirements of the approval for return to service issued by an AEA member company, please feel free to share this article ... or better yet, get them a subscription to *Avionics News*!

Do you have a query or concern? Is someone's regulatory misinformation impeding your business efforts? Helping resolve these difficulties is what AEA is here for! Contact AEA at (816) 373-6565 and let us know how we can help! □