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## NATA Aircraft Maintenance & System Technology Committee Best Practices

### *9 Seats or Less Configuration*

When it comes to operating an aircraft under 14 CFR Part 135, the number of passenger seats available is the distinguishing factor chosen by the Federal Aviation Administration (FAA) to define maintenance requirements. The FAA recently issued controversial guidance material that has resulted in tons of industry attention as well as FAA safety inspector confusion. This quarter, we will review the regulation and guidance material that frame up the issue and attempt to provide some direction for those who need some help in interpreting how it may affect their operation.

The regulation in question is 14 CFR Part 135.411 (a):

#### **Sec. 135.411 applicability**

- (a) This subpart prescribes rules in addition to those in other parts of this chapter for the maintenance, preventive maintenance, and alterations for each certificate holder as follows:
  - (1) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, shall be maintained under Parts 91 and 43 of this chapter and Secs. 135.415, 135.417, 135.421, and 135.422. An approved aircraft inspection program may be used under Sec. 135.419.
  - (2) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of 10 seats or more, shall be maintained under a maintenance program in Secs. 135.415, 135.417, 135.423, through 135.443.

The purpose of this regulation is to define the applicability of Subpart J, titled Maintenance, Preventive Maintenance, and Alterations, of 14 CFR Part 135 and further define the applicability of different sections of the subpart if there are any distinguishing factors. The passenger seating configuration seat count, not counting the pilot seats, is divided between nine and 10. Hence, the common terms used throughout the industry to distinguish between (a) (1) and (a) (2) of Part 135.411 are "nine or less" vs. "10 or more."

#### **The Differences**

The key difference in the applicability of the rule is found in the portion of the rule that follows the phrase "shall be maintained under" in both paragraph (a) (1) and (a) (2). Basically, an aircraft operating under 14 CFR Part 135 with nine or less passenger seats is to be maintained primarily under the requirements of 14 CFR Parts 91 and 43. In addition, the nine or less operator must comply with sections 135.421 and 135.422. (Note: Sections 135.415, and 135.417 all apply to

both nine or less aircraft as well as 10 or more aircraft. So, for the purposes of this discussion they are irrelevant.)

In comparison, an aircraft operating under 14 CFR Part 135 with 10 or more passenger seats is to be maintained under a maintenance program created under sections 135.423 through 135.443. Herein lies the problem. The requirements contained in sections 135.423 through 135.443 include development of a maintenance organization, a maintenance program, a maintenance manual, required inspection personnel, continuing analysis and surveillance, and training programs just to name a few. These requirements can add a significant additional burden to a Part 135 operator. For many, the obvious preference is to operate aircraft with a passenger-seating configuration of nine or less.

### **History**

For more than a decade now the basic requirement of 14 CFR Part 135.411 has been the same. It has really only changed since its inception due to changes deeper in the regulation like the addition or deletion of other sections. Because this rule has been in place for many years, there are obviously many aircraft that are operating under the requirements of both “nine and less” and “10 or more” (135.411 (a)(1) and (a)(2), respectively).

As an industry, we all experience the unfairness of multiple interpretations of certain rules by the many different FAA offices and even, at times, between different FAA safety inspectors within an office. The FAA interpretation of this rule, however, has been fairly clear. What happened that caused uproar and attention is that a few operators have decided to push the limits and interpretation of the rule in an effort to minimize their administrative requirements by trying to make their 10 or more aircraft a nine or less aircraft. FAA headquarters in Washington took a look at this trend and issued guidance material in 2006 (FAA handbook bulletin HBAW 04-06) in an effort to prevent misinterpretation of the rule. This information was later incorporated into the FAA FSIMS Order 8900.1. However, this guidance material has itself been misunderstood and misinterpreted and thus has caused a great deal of discussion throughout the Part 135 sector of our industry. The link below provides the most current copy of the 8900.1 Inspector handbook guidance regarding 9 or less.

<http://fsims.faa.gov/PICDetail.aspx?docId=E38300974B2083F586257832006A4348>

The committee believes the most pivotal point in the guidance – is the term "type-certificated passenger seating configuration". The question "What is the type certificate passenger configuration?" is answered in the Order 8900.1 Volume 2 Chapter 4 paragraph 2-508 in this way:

A. " The Federal Aviation Administration (FAA) establishes the aircraft’s type certificated (TC) passenger seating configuration during the type certification process and lists it on the Type Certificate Data Sheet (TCDS)." Some factors that determine this number are the applicant’s design, certification basis, emergency exit requirements, oxygen requirements, demonstration of emergency evacuation procedures, and the structural strength of the floor. Once established, the only means of changing the TC’d passenger seating configuration is through TC amendment or a Supplemental Type Certificate (STC). The manufacturer (TC/STC holder) may provide several aircraft passenger seating options and include them in the airplane flight manual or other documents, but unless these options are part of the TC or a STC, these changes do not change the TC’d passenger seating configuration of the aircraft, especially for the purposes of § 135.411.”

So what does this really mean? Well, the type certificate data sheet provides a "maximum" seating configuration, not the only seating configuration and a seating configuration must be approved either by means of the type certificate or a supplemental type certificate.

An aircraft receives its certificate of airworthiness from the factory once it "conforms to the type design and is in condition for safe operation" (see your airworthiness certificate). That means that the signature on the airworthiness certificate is in itself certification that the aircraft conforms to type design, which is all of the data that supports the issuance of the type certificate from the FAA to the aircraft manufacturer. This can get a little muddy when you consider that some aircraft receive an airworthiness certificate before the interior has been installed. To find out if your aircraft was originally certificated without a complete interior you must dig a little deeper into the records of the aircraft. If the aircraft was sent to a completion center for installation of the interior, then the approval of the interior installation becomes the supporting means of the seating configuration. The supporting approval for that installation is likely an STC. So, if the aircraft was originally placed into service with a seating configuration of nine or less passenger seats either directly from the factory or from a completion center, the approval means for the seating configuration is very likely complete and adequate to support a nine or less operation. You may need to do a little research, but you should be able to obtain adequate certification.

### **Stretching the Rule**

Following are some examples of what operators have done in trying to stretch the rule to fit their needs. First of all, it may not be a major alteration to remove a seat from the aircraft. However, simply removing the seat so you can't seat 10 passengers does not change the "aircraft's type certificated passenger seating configuration" as that phrase is interpreted in the FAA guidance. In another example, it is not a major alteration to place a placard on a seat that informs passengers that the seat must not be occupied for takeoff and landing; however, this simple placard does not change the type certificated seating configuration of the aircraft.

It is possible that your aircraft-seating configuration was altered without an STC through the Field Approval process. This has been an acceptable means of completing a major alteration since there was a reason to distinguish between major alterations and minor alterations. However, with the issuance of this particular guidance document (HBAW 04-06) and subsequent revisions or updates to the current 8900.1 guidance, the FAA has taken a position that any seating configuration change that was previously approved by means of an FAA Field Approved 337 Form for the purpose of reducing the passenger seating configuration to nine or less is not an approved change.

To enforce the new guidance material, many FAA safety inspectors are taking one look at the type certificate data sheet for the aircraft in question and making a decision about your operational requirements based on that. This is another example of a complex manufacturing issue being inadequately explained to the flight standards field inspectors, and consequently poorly implemented in the field. Even with the issuance of the latest handbook guidance to explain the situation, some field inspectors are mishandling the issue. Most operators find themselves having to choose the lesser of two evils. Should industry push back with the FAA and keep the nine or less status or should we develop the maintenance organization and programs required for 10 or more? Sadly, most are choosing the 10 or more path.

So, the committee offers the following encouragement. If your seating configuration was not changed after the aircraft was placed into service, most likely there was an approval process that you can look to that meets the requirements of the FAA's policy. If your seating configuration was changed later in the life of the aircraft and an STC was used to certify the alteration, your aircraft should also meet the requirements of the FAA's policy. But you may need to educate your FAA safety inspector in order to gain his or her acceptance. Be gentle as you educate.

If your interior does not meet either of those two cases, you may be in the difficult position of choosing whether to pursue an STC for that interior so the aircraft can remain under the 9 or less program, or start the process of transitioning to a 10 or more program.