U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel

800 Independence Ave., S.W.
Washington, D.C. 20591

JAN 2 9 2016

Michael Bowers
P.O. Box 671255
Chugiak, AK 99567

Re: Whether altering an aircraft in accordance with a Supplemental Type Certificate requires completion of FAA Form 337

Dear Mr. Bowers:

This is in response to your September 1, 2015 letter that requests a legal interpretation regarding the record keeping requirements that apply when altering an aircraft in accordance with a Supplemental Type Certificate (STC). You suggested that the person performing the alteration was not required to complete FAA Form 337 when altering an aircraft in accordance with an STC because the change is part of the aircraft specifications. You asked the following two questions:

> (1) Is there a specific regulatory requirement to complete FAA Form 337 when installing an STC on an approved model aircraft referenced in the STC or the STC approved model list?
>
> (2) Would a § 43.9(a) maintenance record entry in the aircraft records for the STC installation meet the recording requirements of Title 14 of the Code of Federal Regulations (CFR)?

Regarding your first question, reading the applicable regulations together, altering an aircraft in accordance with certain STCs would require completion of FAA Form 337. A major alteration must "be entered on a form, and the form disposed of, in the manner prescribed in appendix B [to part 43], by the person performing the work." 14 CFR § 43.9(d). Appendix B to part 43 requires, among other things, that the person performing a major alteration execute FAA Form 337. A "major alteration" is defined in 14 CFR §1.1 as

> an alteration not listed in the aircraft, aircraft engine, or propeller specifications—(1) [t]hat might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or (2) [t]hat is not done according to accepted practices or cannot be done by elementary operations.

An STC is a design approval for a major change in type design. 14 CFR § 21.113. A minor change is "one that has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product. All other changes are 'major changes.'" 14 CFR § 21.93(a). Therefore, a major change in type design has an appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product.

A standard STC is limited to a single type certificate, and an Approved Model List-STC is a multi-model approval method that allows a set of compliance data to be designated as "baseline data" that is applicable to various aircraft models. Regardless of the type of STC, the approved design change does not become part of the specifications of a particular aircraft, aircraft engine, or propeller until the particular aircraft, aircraft engine, or propeller has been altered in accordance with the STC. Therefore, an alteration done in accordance with a STC would constitute a major alteration if it "might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness" or "is not done according to accepted practices or cannot be done by elementary operations." 14 C.F.R. § 1.1. Any such alteration would require the completion of FAA Form 337.

With respect to your second question, a maintenance record entry in the aircraft records for the alteration that satisfied 14 CFR 43.9(a) would not be sufficient. The person performing an alteration in accordance with an STC must comply with all of the requirements of section 43.9.

This response was prepared by Benjamin Berlin, an attorney in the Regulations Division of the Office of the Chief Counsel and coordinated with the Aircraft Maintenance Division (AFS-300) in the FAA's Flight Standards Service. If you have any questions in regard to this letter, please feel free to contact my office at (202) 267-3073.

Sincerely,

Lorelei Peter
Assistant Chief Counsel for Regulations, AGC-200

Office of the Chief Council
800 Independence Ave.
Washington, D.C. 20591

09/01/2015

Dear Sir,

As an A&P Mechanic with IA privileges I have become aware of a difference of opinion pertaining to submitting FAA form 337 when installing an STC (Supplemental Type Certificate) on an aircraft specifically approved by make and model in the STC body or on an STC approved model list (AML).

We have noted it is the opinion of some FAA Inspectors that an STC (if listed by aircraft make and model in the STC or STC AML) is in fact as its name implies *supplemental* to the aircraft's existing Type Certificate and thus does not meet the definition of a "major alteration". Subsequently the only documentation requirement is a §43.9(a) maintenance record entry in the aircraft records.

Other FAA Inspectors insist that installation of an STC is a major alteration and an FAA 337 Form be completed and submitted to AFS-750. When pressed for an explanation of which rule requires the submittal of Form 337 when installing an approved STC these inspectors cite FAR §43.9(d).

Our primary question: **Is there a specific regulatory requirement for documenting the installation of an STC on FAA form 337?**

The Definition of an STC from the FAA Aircraft Certification Website
http://www.faa.gov/aircraft/air_cert/design_approvals/stc/
"A supplemental type certificate (STC) is a type certificate (TC) issued when an applicant has received FAA approval to modify an aircraft from its original design. The STC, which incorporates by reference the related TC, approves not only the modification but also how that modification affects the original design."

Definition of a Major Alteration under 14 CFR part 1.1
Major alteration **means an alteration not listed in the aircraft, aircraft engine, or propeller specifications—**
(1) That might appreciably affect weight, balance, structural strength, performance, power plant operation, flight characteristics, or other qualities affecting airworthiness; or
(2) That is not done according to accepted practices or cannot be done by elementary operations.

It is our understanding an STC or type certificate (from the Aircraft Certification definition under Design approvals) is now considered to be a listed specification for the aircraft model to which the amended T/C or STC/TC was issued.

Major Changes to type design requires issuance of an amended Type Certificate (TC) or the issuance of a STC/TC from the definition above 14 CFR FAR § 21.97 (2).

The fact that the requirements of §21 Subpart E - Supplemental Type Certificates, §21.113, §21.115 and §21.117 were met and the amended T/C or STC/TC was approved and issued by

the Aircraft Certification Service, the STC/TC is now a listed specification for the purposes of §1.1 (see definition of major alteration).

My opinion is that the STC would be treated the same as if the original Type Certificate (TC) holder amended the TC. That change is now considered a specification for the aircraft and there would be no requirement to complete FAA Form 337 when that STC is applied to the aircraft.

We understand that completion of FAA Form 337 has been routinely accomplished on installation of STCs and even TC listed changes (i.e., engine/prop changes) and appreciate the effect of updating the official FAA database for the aircraft.
The ultimate questions are;

1) Is there a specific regulatory requirement to complete FAA Form 337 when installing an STC on an approved model aircraft referenced in the STC or the STC approved model list?

2) Would a §43.9(a) maintenance record entry in the aircraft records for the STC installation meet the recording requirements required by 14 CFR?

Thank You,

Michael Bowers

P.O. Box 671255

Chugiak, AK 99567