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

[redacted]

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

DEC -3 2015

Keith Siilats
[redacted]

Re: Whether Maintenance Service Bulletins Referenced in a Current Inspection Program Recommended by the Manufacturer and Selected by the Owner or Operator of an Aircraft under 14 C.F.R. § 91.409(f)(3) are Mandatory

Dear Mr. Siilats:

This responds to your August 13, 2015 request for an interpretation on whether maintenance service bulletins that are incorporated in an aircraft manufacturer's recommended inspection program are mandatory if the aircraft operator or owner has adopted that program under the provisions of 14 C.F.R. § 91.409(f)(3).[1] The answer is no, except for the parts, if any, of those *maintenance* service bulletins that contain *inspection* requirements and that are included in the program at the time the operator or owner adopted it. In addition, if the FAA has mandated the service bulletin by rule, such as an Airworthiness Directive (AD), compliance with it also would be mandatory. Our explanation applies to all manufacturer-issued maintenance service bulletins that are contained in a manufacturer-recommended inspection program under § 91.409(f)(3), whether they appear directly in the program, or whether they are incorporated into it by reference.

At the outset, we note the difference between inspection and other maintenance.[2] Inspection is a sub-set of maintenance—its tasks are different from the *other maintenance* that may be required as a result of performing an inspection. Inspection is the act of inspecting, and "inspect" may be defined as: "To examine in detail, esp. for flaws."[3] Simply stated, if an inspection detects a "flaw" (defect or discrepancy) in an aircraft, that finding would trigger another maintenance action to correct or

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[1] This interpretation addresses aircraft operated under 14 C.F.R. part 91, and inspected in accordance with a current inspection program recommended by the manufacturer under § 91.409(f)(3). The reasoning set forth herein that manufacturer's maintenance service bulletins are not part of the inspection program at issue also applies to aircraft inspected under the provisions of § 91.409(a) and (b) (annual and 100-hour inspections). This reasoning may not apply to aircraft inspected in accordance with an inspection program referenced in § 91.409(f)(1) or (2), *i.e.*, a program used by a person operating aircraft under 14 C.F.R. parts 121 or 135. This is because those programs may require the operator to follow and comply with later-issued revisions and, sometimes, manufacturer-issued service bulletins.

[2] Maintenance is defined in 14 C.F.R. § 1.1 to mean "inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance."

[3] Webster's II, New Riverside University Dictionary, Copyright 1984 by Houghton Mifflin Company.

disposition the defect or discrepancy. The corrective maintenance action(s) could be described in the manufacturer's maintenance manual or Instructions for Continued Airworthiness (ICA), or in whole or in part in one or more of the manufacturer's later-issued service bulletins.

We also note that § 91.409 is captioned "**Inspections**," and this makes no mention of other maintenance. Paragraph (e) of that section applies to your airplane (an Eclipse Model 500), and states, in pertinent part:

> No person may operate a . . . turbojet multiengine airplane, . . . unless the replacement times for life-limited parts specified in the aircraft specifications, type data sheet, or other documents approved by the Administrator[4] are complied with and the airplane . . . is inspected in accordance with an inspection program selected under the provisions of paragraph (f) of this section, . . . .

Paragraph (f) of § 91.409 lists and describes four types of inspection programs, one of which operators of your size and type of aircraft must select. Two of these (paragraphs (f)(1) and (f)(2)) describe inspection programs already in use by persons operating aircraft under 14 C.F.R. parts 121 or 135. The other two comprise the recommended inspection program you selected ((f)(3)), and a program established by the owner or operator of the aircraft and approved by the FAA ((f)(4)).[5] Note that under § 91.409(f)(1) and (2), a program that is part of an operator's continuous airworthiness maintenance program or FAA-approved inspection program may contain references to future manufacturer-developed revisions or references to maintenance manuals or service bulletins that must be incorporated into the program.[6]

Because the size and type of your aircraft is governed by § 91.409(e), you were required to and did select an inspection program under paragraph (f) of the section. Under paragraph (f)(3), you selected the manufacturer's recommended inspection program that was current when you adopted it. Accordingly, unless you select a different program under paragraph (f), you are bound to follow the program you selected. As we have explained previously in legal interpretations,[7] once you select the current inspection program under paragraph (f)(3), that program remains the one you must follow regardless of any revision the manufacturer subsequently makes—unless the revision is mandated by

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[4] The phrase "other documents approved by the Administrator" refers to other documents approved as part of an aircraft's type design, such as the Airworthiness Limitations section (ALS) of the Instructions for Continued Airworthiness (ICA). This could also include airworthiness directives (AD).

[5] Note that an FAA-approved inspection program could contain references to future manufacturer-developed revisions to the program. In some cases, the approved program also could contain other maintenance information, including references to maintenance manuals or service bulletins. That would be the case if the owner or operator who developed the program included that information and the FAA approved the program for that owner or operator.

[6] For example, the approved aircraft inspection program referenced in § 91.409(f)(2), which is approved under § 135.419, requires in paragraph (d)(3) of the section that the program contain, among other things: "Instructions and procedures for recording discrepancies found during inspections and *correction* or deferral of discrepancies . . . ." (Emphasis added.)

[7] See, e.g., Legal Interpretation of 14 C.F.R. § 91.409(f)(3) from Assistant Chief Counsel for Regulations, AGC-200, to the Manager, Aircraft Maintenance Division, AFS-300 (dated December 5, 2008), and Clarification of Legal Interpretation of 14 C.F.R. § 91.409(f)(3) from Assistant Chief Counsel for Regulations, AGC-200, to Paul N. Sissons (dated May 3, 2010).

an FAA-issued AD or other FAA rule. If the inspection program you selected under § 91.409(f)(3) is laced with other maintenance practices (*e.g.*, how to repair or replace items or otherwise resolve discrepancies, including reference to service bulletins (whether or not categorized as "mandatory" by the manufacturer)), those items, unless required by an AD or other FAA rule, are not considered mandatory by the FAA.

Insight into the regulatory difference between inspection and other maintenance is found in 14 C.F.R. parts 43 and 91. For example, Appendix D to part 43 provides the "Scope and Detail of Items . . . to be Included in Annual and 100-Hour Inspections." Note that the appendix's subparagraphs (b) through (j) require only "inspecting" the listed items—no corrective maintenance items are specified in the appendix D inspection program. It is axiomatic that defects found during the inspection must be corrected by appropriate maintenance action. Further context for the inspection/other maintenance dichotomy is found in § 91.405(a), which requires that:

> Each owner or operator of an aircraft—
> (a) Shall have that aircraft inspected as prescribed in subpart E of this part and shall between required inspections, except as provided in paragraph (c) of this section, have discrepancies repaired as prescribed in part 43 of this chapter.

The maintenance on your aircraft is governed by parts 43 and 91. Section 43.13 is the over-arching maintenance performance rule. Specifically, that section applies to persons performing maintenance and sets forth performance rules those persons must follow. Although following a manufacturer's maintenance manual is generally a best practice, other methods, techniques, and practices may be employed, as well. In pertinent part, § 43.13(a) states: "Each person performing maintenance, alteration, or preventive maintenance on an aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness [ICA] prepared by its manufacturer, or *other* methods, techniques, and practices acceptable to the Administrator, except as noted in § 43.16." (Emphasis added.) As we stated in a 2012 legal interpretation,[8] the option to use other methods, techniques, and practices acceptable to the Administrator means a maintenance provider is not bound to follow only the manufacturer's maintenance information so long as what is used is acceptable to the FAA.

Your request was triggered in part based on your seeking a ferry permit (special flight permit) from the FAA's Miami International Field Office (IFO) to operate your aircraft from the Dominican Republic to the United States. On the permit application, the Miami IFO listed five "mandatory and recommended SB-s [service bulletins] [that] have not been accomplished." You stated that the Miami office took the position that you must comply with those maintenance service bulletins. We note that on each of these service bulletins, the manufacturer placed one of the following statements: The company considers this to be a: "Mandatory inspection/repair that should be accomplished . . . ;" "Mandatory upgrade that must be accomplished . . . ;" "mandatory inspection and/or modification that must be accomplished . . .;" mandatory bulletin that must be accomplished . . . ;" "required action." Four of the bulletins stated: "This Service Bulletin is based on engineering data that is FAA-

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[8] Legal Interpretation of "Current" as it Applies to Maintenance Manuals and Other Documents Referenced in 14 C.F.R. §§ 43,13(a) and 145.109(d), from the Assistant Chief Counsel for Regulations, AGC-200, to the Manager, AWP-230 and the Manager, Sacramento FSDO (dated August 13, 2010).

approved, and the modification herein complies with the applicable regulations." Despite the manufacturer stating the maintenance service bulletins are "mandatory," the manufacturer's statement to that effect, without more, does not make it so. The five service bulletins have revision issue dates ranging between July 14, 2010 and June 25, 2015. You advised us that those service bulletins had not been issued at the time you adopted the inspection program in January 2008. Accordingly, even if these bulletins were inspection bulletins, which they are not, none of them are part of the inspection program you selected and adopted for your Eclipse airplane in 2008.

If inspection of an item addressed by a service bulletin shows the item is not airworthy, corrective action must be taken to remedy the discrepant condition before the aircraft may be approved for return to service and operated. In many cases, following the manufacturer's maintenance manual, including the information in applicable service bulletin, may be the most expedient resolution. As noted above, the maintenance provider may use methods, techniques, and practices other than those found in the manufacturer's maintenance manual or ICA, so long as they are acceptable to the FAA and the resultant product is at least equal to its original or properly altered condition. If a manufacturer refuses to perform needed work unless its own service bulletins are followed to the letter, you may take your airplane to another authorized maintenance facility. Again, any variation from a maintenance manual must also be acceptable to the FAA.

You also stated that one of the service bulletins at issue requires replacement of engine fire bottles even though the old bottles are good until 2018. Note 3 on the Eclipse EA500 Type Certificate Data Sheet (TCDS) No. S00002AC provides that the FAA-approved Airworthiness Limitations for inspection time limits and maintenance checks are found in Chapter 4 of the Aircraft Maintenance Manual (AMM), Document No. 06-117751. Note that Section 04-00-00 of the document at page 1 (Feb 28/08) is captioned AIRWORTHINESS LIMITATIONS, and page 2 of the section contains the limitation for Engine Fire Extinguisher Canister (PN FX00200-0). This FAA-approved limitation states: "Discard – 10 years from date of manufacture." Despite the FAA-approved limitation of 10 years, Service Bulletin SB 500-26-001, Rev C, purports to require replacement of left and right engine FEC [Fire Extinguisher Cartridge] (P/N FX00200-2 and FX00200-3) with new FEC, P/N 26-123127-1001, stating that this replacement is considered by Eclipse to be a "Mandatory upgrade that must be accomplished not later than December 31, 2012." Assuming the 10-year limitation period for your fire bottles ends in 2018, complying with this service bulletin would cause you to replace the fire extinguisher canisters after only about 40 percent of their allowable time in service. Based on the information you provided, no FAA regulation requires this.

The preceding discussion generally addresses manufacturer-issued service bulletins. The particular bulletins at issue in your inquiry are intended to replace or upgrade certain parts that may well be in an airworthy condition. Neither those bulletins, nor service bulletins intended to remedy a discrepant condition that might render the product unairworthy, are mandatory by the FAA's regulations, as other means dispositioning the discrepant condition could also be acceptable.[9]

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[9] Exceptions may exist for aircraft inspected and maintained in accordance with an FAA-approved program. *See* footnote 1, above.

I trust this letter is responsive to your questions. This response was prepared by Edmund Averman, an attorney in the Regulations Division in 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 additional questions regarding this matter, please call us on (202) 267-3073.

Sincerely,

Lorelei Peter
Acting Assistant Chief Counsel for Regulations, AGC-200