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

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

August 11, 2006

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Michael D. Busch
[redacted]

Re: Request for Interpretation of 14 C.F.R. § 43.13(a) and part 43, appendix D

Dear Mr. Busch:

On November 10, 2005, you requested, via E-mail, an interpretation of the above-referenced regulations in the context of whether a procedure specified as "required" in a service bulletin issued by a manufacturer is mandatory under the Federal Aviation Administration's (FAA) maintenance regulations (14 C.F.R. part 43) for an aircraft operated only under 14 C.F.R. part 91. In general, unless a service bulletin is incorporated either directly or by reference into a document that makes its requirements mandatory, the answer is no.

Based on the information you provided, we see nothing that indicates the service bulletin referenced in your inquiry is mandatory under the FAA's regulations. Nevertheless, you opined that manufacturer-issued service bulletins are mandatory under the regulations if they specify a particular procedure or method of doing an item required by the regulations—in this case a cylinder compression test performed during an annual or 100-hour inspection required by 14 C.F.R. part 43, appendix D. In support you stated that 14 C.F.R. § 43.13(a) "requires that it [maintenance, specifically, the compression test] be done in accordance with manufacturer's instructions . . . ." You also stated: "Furthermore, 14 CFR 43.13(a) requires that the maintenance shall be done using methods, techniques and practices prescribed by the manufacturer or other methods, techniques and practices acceptable to the Administrator."

The text of section 43.13(a), however, states in pertinent part: "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 prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator." The text of that section provides a person performing maintenance, alteration, or preventive maintenance on a product with a number of permissible options when performing that work. A manufacturer may legitimately incorporate a service bulletin into one of its maintenance manuals by reference. If it

does so, the data specified, and the method, technique, or practice contained therein, may be acceptable to the Administrator. However, unless the method, technique, or practice prescribed by a manufacturer is specifically mandated by a regulatory document, such as an Airworthiness Directive, its contents are not mandatory.

Your specific question concerns the application of a service bulletin issued by an engine manufacturer to an inspection item required by 14 C.F.R. part 43, appendix D, "Scope and Detail of Items (As Applicable To The Particular Aircraft) To Be Included In Annual And 100 Hour Inspections." The inspection item at issue is at paragraph (d)(3) of the appendix, which states:

> (d) Each person performing an annual or 100-hour inspection shall inspect (where applicable) components of the engine and nacelle group as follows:
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> * * * * *
>
> (3) Internal engine—for cylinder compression and . . . . If there is weak cylinder compression, for improper internal condition and internal improper tolerances.

According to your inquiry, on March 28, 2003, Teledyne Continental Motors (TCM) issued Service Bulletin SB03-3, titled "Differential Pressure Test and Borescope Inspection for Cylinders." As you stated, the service bulletin "transmits TCM's current guidance concerning how differential pressure tests (compression tests) of cylinders are to be done on TCM engines, and supersedes TCM's previous guidance on the subject (service bulletin M84-15)." You note that a major difference between the two service bulletins is that the later bulletin requires that a borescope inspection be done in conjunction with the differential pressure test. The above-referenced paragraph of appendix D, though requiring an inspection for improper internal condition and tolerances if the compression test shows weak cylinder compression, does not specify a particular method for doing so, *i.e.*, it does not require a borescope inspection as the means for determining the internal condition of the cylinders. Other methods could be used, for example, cylinder disassembly and inspection. In fact, if no weak cylinder compression is observed, no further cylinder inspection is required under that paragraph of appendix D.

In your example, although it would be good practice in view of the manufacturer's recommendation to do a borescope inspection, its performance would not be required. If the borescope inspection were not performed, the engine inspection would nevertheless have to meet the criteria specified in section 43.13(a), *i.e.*, it would have to be done in accordance with the "methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator." No violation of the regulation would be incurred if the borescope inspection were not performed provided the engine inspection was accomplished using methods, techniques, and practices acceptable to the Administrator.

A contrary result would lead to serious legal objections. It would mean that our regulations effectively authorize manufacturers to issue "substantive rules," as that term is used in the Administrative Procedures Act (APA), *i.e.*, it would enable them to impose legal requirements on

the public. This would be objectionable for at least two reasons. First, the FAA does not have authority to delegate its rulemaking authority to manufacturers. Second, "substantive rules" can be adopted only in accordance with the notice-and-comment procedures of the APA, which does not apply to manufacturers.

In sum, the fact that "'TCM requires a cylinder borescope inspection . . . ,'" does not make the borescope inspection mandatory from a regulatory perspective. If TCM were to incorporate this inspection into its current maintenance manual or Instructions for Continued Airworthiness and if compliance with either of those documents were specifically mandated by regulation, or the FAA were to incorporate SB03-3 into an AD or some other regulatory document, then the borescope inspection would become mandatory.

We hope the above answer responds to your needs.

Sincerely,

Rebecca MacPherson
Assistant Chief Counsel for Regulations
Office of the Chief Counsel