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

Office of the Chief Counsel

800 Independence Ave., SW.
Washington, DC 20591

FEB 26 2009

Bombardier Learjet
David M. Coleal
Vice President and General Manager
P.O. Box 7707
Wichita, Kansas 67277-7707

Re: Request for Interpretation of Applicable Rules in 14 C.F.R. parts 43, 91, and 135 Pertaining to Whether a Pilot of a Transport Category Aircraft May Check Tire Pressure During a Normal Preflight Inspection

Dear Mr. Coleal:

By letter dated January 8, 2009, you requested a legal interpretation that would answer the question whether a pilot could legally check tire pressure on a transport category aircraft that was being operated under 14 C.F.R. parts 91 or 135. You noted that this issue had been discussed at three meetings between representatives of Bombardier Learjet and officials from various offices of the FAA, including the Flight Standards Service (AFS). Your request was supplemented by a letter dated January 30, 2009, from David M. Hernandez, attorney for Bombardier Learjet. Mr. Hernandez's letter provided additional information and legal analysis. For the reasons discussed below, it is our opinion that checking tire pressure on the transport category Learjet Model 60, the aircraft addressed in the correspondence, is preventive maintenance.

While your question was framed in the context of transport category aircraft, your inquiry, including as supplemented by Mr. Hernandez, is specific to the Learjet Model 60 aircraft. You referenced an FAA Continued Operational Safety (COS) initiative in which, in November 2008, the FAA's Wichita ACO (Aircraft Certification Office) requested an AFM (Airplane Flight Manual) limitation for the Learjet Model 60 that would require daily tire pressure checks. The issue, as you alluded to in your letter, is whether checking tire pressure on the Learjet Model 60 is considered to be a maintenance or preventive maintenance function, versus a simple preflight inspection task. Your correspondence correctly observed that, under 14 C.F.R. § 43.3(g), for aircraft not operated under part 121, 129, or 135 (*e.g.*, part 91), a pilot may perform preventive maintenance on an aircraft operated by that pilot.

As you know, under the Federal Aviation Regulations, *maintenance* is defined to mean: "inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance." 14 C.F.R. § 1.1. And, *preventive maintenance* is defined to mean "simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations." *Id.* Preventive maintenance, in general, includes tasks that are less complex than those deemed to be maintenance, and requires less sophistication in terms of the knowledge, skill, and tools required.

Many preventive maintenance tasks are listed in 14 C.F.R. part 43, appendix A, paragraph (c). The paragraph sets forth in 32 numbered subparagraphs items the FAA has determined to be preventive maintenance. Even though the introductory text of subparagraph (c) states that "[p]reventive maintenance is *limited* to the following work . . . ." (emphasis added), in view of the broader definition of preventive maintenance in section 1.1, we believe that such limitation is not controlling. Similarly, for the same reason, we also believe that the following sentence in Advisory Circular 43-12A, Preventive Maintenance (which was referenced in Mr. Hernandez's letter), is overly restrictive. That sentence, found in Paragraph 3(b)(1), states: "If a task or maintenance function does not appear in the list, it is not preventive maintenance." As with the other paragraphs of Appendix A (*i.e.*, on major repairs and major alterations), the lists are better viewed as examples of the tasks in each category–they cannot be considered all-inclusive. There are, no doubt, many "simple or minor preservation operations [tasks]" and many "replacement[s] of small standard parts not involving complex assembly operations" performed daily, especially on small general aviation aircraft, that the agency would consider to be preventive maintenance, though they are not included in the 32 listed items. It is our understanding that Flight Standards' Aircraft Maintenance Division is planning to clarify this issue in a future revision to the AC.

Mr. Hernandez's letter observes that the first item listed as preventive maintenance in Appendix A, paragraph (c), is "Removal, installation, and repair of landing gear tires," and notes that checking tire pressure is not listed as a preventive maintenance item. The implications appear to be two-fold: First, because checking tire pressure is not listed, it must not be preventive maintenance. Second, because checking tire pressure is but a simplistic and small subset of the tasks necessary in removing, installing, and repairing landing gear tires, it does not rise to the level of even preventive maintenance, and should therefore be considered an appropriate pre-flight inspection task. We do not agree. Paragraph 3(b)(1) of AC 43-12A also cautions that "because of differences in aircraft, a function may be preventive maintenance on one aircraft and not on another." The above reference to changing and repairing landing gear tires illustrates this maxim. The FAA may agree that the pilot of a small general aviation airplane may change and repair its landing gear tire, but the agency would not consider the changing and repair of a landing gear tire on a large transport category airplane to be preventive maintenance that a pilot could permissibly do.

Your letter stated that Bombardier Learjet's engineering and pilot specialists believe ample precedent exists for "qualified pilots to safely perform tasks that require mechanical, physical interaction with the airframe under the umbrella of preflight checks." You followed with a long list of examples of pre-flight actions performed daily by professional pilots, including many actions that require use of a calibrated device. Our response to your request takes no position on the propriety of any of the cited examples as pre-flight tasks.

We have discussed this issue with officials in the FAA's Flight Standards Service Aircraft Maintenance Division (AFS-300) and concur with their determination that checking tire pressure on a Learjet Model 60 aircraft is preventive maintenance and not a simple pre-flight inspection task. We believe their determination is a reasonable one based on the relevant facts and circumstances. These include the high tire air pressure (up to 219 psig), the need for a proper and calibrated gauge, and the possibility of an incorrect reading if the check is not performed properly. Accordingly, a pilot operating that aircraft under the operating rules of 14 C.F.R. part 91 may, in accordance with the provisions of 14 C.F.R. § 43.3(g), perform daily landing gear tire pressure checks. Under the same regulation, however, a pilot of that aircraft operating under 14 C.F.R. part 135 may not perform that task.

As you know, under 14 C.F.R. part 11, an affected party may seek relief from an FAA regulation by filing a petition for an exemption. This is an avenue open to persons operating the Learjet Model 60 airplane under Part 135 who would be adversely affected by the requirement that only a certificated mechanic may check the tire pressure. Each operator seeking such relief should specify in its petition the relief sought and the reasons for the relief. In addition, each petition must state the reasons why a grant of relief would be in the public interest and why granting the exemption would not adversely affect safety, or how the exemption would provide a level of safety at least equal to that provided by the rule from which exemption is sought. As to whether the FAA would entertain a request to grant a "blanket exemption" applicable to all operators upon their completion of "pre-determined criteria," we note that it is not the FAA's policy to do so.

This response was prepared by Edmund Averman, an Attorney in the Regulations Division of the Office of the Chief Counsel and coordinated with the Aircraft Maintenance Division of the Office of Flight Standards. If you have additional questions regarding this matter, please contact us at your convenience at (202) 267-3073.

Sincerely,

Rebecca B. MacPherson
Assistant Chief Counsel for Regulations, AGC-200

Cc: David M, Hernandez, Esquire