

Comment Issue No. 1: Remove Warnings Following Compliance to the Proposed AD

What is the commenter's concern?

The commenter, for clarity and completeness, requests that the AD call out removing the warning placards after compliance with Cessna Conquest Service Bulletin No.: CQB02-1, Revision 2, dated October 7, 2002.

What is FAA's response to the concern? We concur with the commenter and for clarity and completeness will change the final rule AD action to incorporate this change.

Comment Issue No. 2: Validity of the 200-Hour Time-in-Service (TIS) Recurrent Inspection Requirement

What is the commenter's concern?

The commenter states that the 200-hour TIS recurrent inspection is not necessary because the commenter's specific aircraft is 24 years old and has more than 7,900 hours TIS and inspection finds only minor chafing of one wire. Further, the commenter states that the 200-hour TIS recurrent inspection increases the likelihood of creating fuel leaks because of the constant reopening and resealing of the fuel boost pump panels. The commenter disagrees with the 200-hour TIS recurrent inspection requirement. Because the commenter did not request an alternative time, we infer that the commenter wants the repetitive inspection deleted from the AD.

What is FAA's response to the concern? We do not concur. Initial investigation revealed harnesses and fuel boost pump leads with virtually no chafing, some with minor chafing, and several with excessive chafing that appeared to have been arcing. Additionally, all of the above conditions were found on aircraft with relatively low TIS to high TIS. The 200-hour TIS recurrent inspection is necessary to assure continued airworthiness of repaired wire harnesses.

We are not changing the final rule AD action as a result of this comment.

Comment Issue No. 3: Allow the Aircraft To Be Operated With Greater Than 80 Pounds or 12 Gallons of Fuel in Either Wing Tank Instead of Replacing the Wire Harnesses and Fuel Boost Pumps

What is the commenter's concern?

The commenter states that the wire harness is submerged in fuel when 80 pounds or 12 gallons of fuel remain in each wing tank. The commenter requests that the proposed AD allow the

aircraft to be flown with greater than 80 pounds or 12 gallons of fuel remaining in either wing tank instead of replacing the wire harnesses and fuel boost pumps that exhibit chafing of the wire harness.

What is FAA's response to the concern? We do not concur. There are two wire harnesses in each wing tank, each with the potential for chafing and subsequent arcing if not corrected. The potential for arcing within the fuel tank continues to exist until replacing or repairing both sources of possible arcing. The request to allow operation with 80 pounds of fuel remaining in either tank only assures the fuel boost pump lead wires to remain covered with fuel. Engineering evaluation has determined that safe operation without repaired or replaced wire harnesses requires approximately 300 pounds to assure both wire harnesses are submerged in fuel.

We are not changing the final rule AD action as a result of this comment.

Comment Issue No. 4: Replace the Fuel Boost Pumps

What is the commenter's concern?

The commenter states that the fuel boost pump wire harness is the reason for the AD action and the fuel boost pumps remain in an acceptable operating condition. The commenter disagrees with replacing the fuel boost pumps. The commenter states that the problem is with the fuel boost pump wire harnesses and replacement of the fuel pumps is an undue and unnecessary burden on the operators.

What is FAA's response to the concern? We do not concur. Chafing has been found to occur on both the fuel boost pump lead wires and the wire harness extending from the fuel boost pump housing to wing structure on several aircraft with varying times-in-service.

We are not changing the final rule AD action as a result of this comment.

Comment Issue No. 5: Correct Cost Estimate for Replacing the Wire Harnesses and Fuel Boost Pumps

What is the commenter's concern?

The commenter disagrees with the estimated cost of replacing the wire harnesses and fuel boost pumps. The commenter justifies disagreement with cost data from one service center.

What is FAA's response to the concern? We do not concur. The cost estimate associated with the cost impact with the proposed AD has been coordinated with Cessna, and found to be valid.

We are not changing the final rule AD action as a result of this comment.

Comment Issue No. 6: Adequacy of the 1,200-Hour TIS Phase 11 Inspection

What is the commenter's concern?

The commenter requests that, once the wire harnesses have been replaced and the fuel boost pumps have been replaced or repaired, the inspection criteria on the 1,200-hour TIS Phase 11 inspection include specific instructions to inspect the wire harnesses and fuel boost pump leads for chafing and security. The commenter further states that including specific instructions to inspect the wire harnesses and fuel boost pump leads would assure continued airworthiness of the harnesses and boost pump leads.

What is FAA's response to the concern? We do not concur. The Model 441 Maintenance Manual was revised on July 1, 2002, with specific instructions to visually inspect all wire bundles/electrical components in the fuel storage area. Cessna and FAA agreed that inspection of these areas would occur every 600 hours TIS or 24 calendar months, whichever occurs first, to coincide with the general electrical wiring and component inspection interval. The FAA will monitor the service history and take further rulemaking action if it shows that normal maintenance practices are not eliminating the problem.

We are not changing the final rule AD action as a result of this comment.

FAA's Determination

What is FAA's final determination on this issue? We carefully reviewed all available information related to the subject presented above and determined that air safety and the public interest require the adoption of the rule as proposed except for the changes discussed above and minor editorial questions. We have determined that these changes and minor corrections:

- Provide the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Cost Impact

How many airplanes does this AD impact? We estimate that this AD affects 370 airplanes in the U.S. registry.

What is the cost impact of this AD on owners/operators of the affected airplanes? We estimate the following costs to accomplish the inspection: