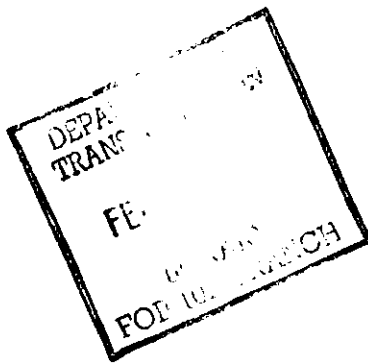




U.S. Department
of Transportation
**Federal Aviation
Administration**



Advisory Circular

Obsolete

Subject: AIRWORTHINESS DIRECTIVES

Date: 4/8/87

AC No: 39-7B

Initiated by: AFS-340

Change:

1. **PURPOSE.** This advisory circular (AC) provides guidance and information to owners and operators of aircraft concerning their responsibility for complying with airworthiness directives (AD's) and recording AD compliance in the appropriate maintenance records.
2. **CANCELLATION.** AC 39-7A, Airworthiness Directives for General Aviation Aircraft, dated September 17, 1982, is canceled.
3. **RELATED FEDERAL AVIATION REGULATIONS (FAR).** FAR Part 39; FAR Part 43, Sections 43.9 and 43.11; FAR Part 91, Sections 91.163, 91.165, and 91.173.
4. **BACKGROUND.** Title VI of the Federal Aviation Act of 1958, as amended by Section 6 of the Department of Transportation Act, defines the Federal Aviation Administration (FAA) role regarding the promotion of safety of flight for civil aircraft. One safety function charged to the FAA is to require correction of unsafe conditions discovered in any product (aircraft, aircraft engine, propeller, or appliance) after type certification or other approval, when that condition is likely to exist or develop in other products of the same type design. AD's are used by the FAA to notify aircraft owners and operators of unsafe conditions and to require their correction. AD's prescribe the conditions and limitations, including inspections, repair, or alteration under which the product may continue to be operated. AD's are FAR codified in FAR Part 39 and issued in accordance with the public rulemaking procedures of the Administrative Procedure Act, Title 5, U.S.C. Section 553.
5. **AD CATEGORIES.** Since AD's are FAR, they are published in the Federal Register as amendments to FAR Part 39. Depending on the urgency, AD's are issued as follows:
 - a. Normally a notice of proposed rulemaking (NPRM) for an AD is issued and published in the Federal Register when an unsafe condition is believed to exist in a product. Interested persons are invited to comment on the NPRM by submitting such written data, views, or arguments as they may desire. The comment period is usually 30 days. Proposals contained in the notice may be changed or withdrawn in light of comments received. When the final rule resulting from the NPRM is adopted, it is published in the Federal Register, printed, and distributed by first class mail to the registered owners of the products affected.

b. Emergency AD's. AD's of an urgent nature are adopted without prior notice (NPRM) under emergency procedures as immediately adopted rules. The AD's normally become effective in less than 30 days after publication in the Federal Register and are distributed by telegram or first class mail to the registered owners of the product affected.

6. AD'S WHICH APPLY TO OTHER THAN AIRCRAFT. AD's may be issued which apply to engines, propellers, or appliances installed on multiple makes or models of aircraft. When the product can be identified as being installed on a specific make or model aircraft, AD distribution is made to the registered owners of those aircraft. However, there are times when a determination cannot be made, and direct distribution to the registered owner is impossible. For this reason, aircraft owners and operators are urged to subscribe to the Summary of Airworthiness Directives which contains all previously published AD's and a biweekly supplemental service. The Summary of Airworthiness Directives is sold and distributed for the Superintendent of Documents by the FAA in Oklahoma City. AC 39-6L, Announcement of Availability--Summary of Airworthiness Directives, provides ordering information and subscription prices on these publications. AC 39-6L may be obtained, without cost, from the U.S. Department of Transportation, Utilization and Storage Section, M-443.2, Washington, D.C. 20590.

7. APPLICABILITY OF AD'S. Each AD contains an applicability statement specifying the product (aircraft, aircraft engine, propeller, or appliance) to which it applies. Some aircraft owners and operators mistakenly assume that AD's are not applicable to aircraft with experimental or restricted airworthiness certificates. Unless specifically limited, AD's apply to the make and model set forth in the applicability statement regardless of the kind of airworthiness certificate issued for the aircraft. Type certificate and airworthiness certification information are used to identify the product affected. When there is no reference to serial numbers, all serial numbers are affected. Limitations may be placed on applicability by specifying the serial number or number series to which the AD is applicable. The following are examples of AD applicability statements:

a. "Applies to Robin RA-15-150 airplanes." This statement makes the AD applicable to all airplanes of the model listed, regardless of type of airworthiness certificate issued to the aircraft and includes standard, restricted, limited, or experimental airworthiness certificates.

b. "Applies to Robin RA-15-150 airplanes except those certificated in the restricted category." This statement, or one similarly worded, incorporates all airplanes of the model listed, except those in the restricted category and is applicable to experimental aircraft.

c. "Applies to Robin RA-15-150 airplanes certificated in all categories excluding experimental aircraft." This statement incorporates all airplanes including restricted category of the model listed except those issued experimental certificates.

8. AD COMPLIANCE. AD's are regulations issued under FAR Part 39. Therefore, no person may operate a product to which an AD applies, except in accordance with the provisions of the AD. It should be understood that to "operate" not only means piloting the aircraft, but also causing or authorizing the product to be used. Compliance with emergency AD's can be a problem for operators of leased aircraft. The FAA has no means available for making notification to other than registered owners. Therefore, it is important that owners of leased aircraft make the AD information available to the operators leasing their aircraft as expeditiously as possible. Unless this is done, the lessee may not be aware of the AD and safety may be jeopardized.

9. COMPLIANCE TIME OR DATE.

a. The belief that AD compliance is only required at the time of a required inspection, e.g., at 100 hours of annual inspection is not correct. The required compliance time is specified in each AD, and no person may operate the affected product after expiration of that stated compliance time without an exemption or a special flight authorization when the AD specifically permits such operation.

b. Compliance requirements specified in AD's are established for safety reasons and may be stated in numerous ways. Some AD's are of such a serious nature they require compliance before further flight. In some instances the AD authorizes flight, provided a ferry permit is obtained, but without such authorization in the AD, further flight is prohibited. Other AD's express compliance time in terms of a specific number of hours of operation, for example, "compliance required within the next 50-hours time in service after the effective date of this AD." Compliance times may also be expressed in operational terms such as, "within the next 10 landings after the effective date of this AD." For turbine engines, compliance times are often expressed in terms of cycles. A cycle normally consists of an engine start, takeoff operation, landing, and engine shutdown. When a direct relationship between airworthiness and calendar time is identified, compliance time may be expressed as a calendar date. Another aspect of compliance times to be emphasized is that not all AD's have a one-time compliance. Repetitive inspections at specified intervals after initial compliance may be required. Repetitive inspection is used in lieu of a fix because of costs or until a fix is developed.

10. ADJUSTMENTS IN COMPLIANCE REQUIREMENTS. In some instances, a compliance time other than that specified in the AD would be advantageous to the owner/operator. In recognition of this need, and when equivalent safety can be shown, flexibility is provided by a statement in the AD allowing adjustment of the specified interval. When adjustment authority is provided in an AD, owners or operators desiring to make an adjustment are required to submit data substantiating their proposed adjustment to their FAA district office for consideration. The person authorized to approve adjustments in compliance requirements is normally identified in the AD.

11. EQUIVALENT MEANS OF COMPLIANCE. Most AD's indicate the acceptability of an equivalent means of compliance. It cannot be assumed that only one specific repair, modification, or inspection method is acceptable to correct an unsafe

condition; therefore, development of alternatives is not precluded. An equivalent means of compliance must be substantiated and "FAA approved." Normally the person authorized to approve an alternate method of compliance is indicated by title and address on the AD.

12. RESPONSIBILITY FOR AD COMPLIANCE AND RECORDATION. Responsibility for AD compliance always lies with the registered owner or operator of the aircraft.

a. This responsibility may be met by ensuring that certificated and appropriately rated maintenance persons accomplish the maintenance required by the AD and properly record it in the maintenance records. This must be accomplished within the compliance time specified in the AD or the aircraft may not be operated.

b. Maintenance persons may also have direct responsibility for AD compliance, aside from the times when AD compliance is the specific work contracted for by the owner/operator. When a 100-hour, annual, or progressive inspection, or an inspection required under FAR Parts 125 or 135 is accomplished, FAR Section 43.15(a) requires the person performing the inspection to perform it so that all applicable airworthiness requirements are met, which includes compliance with AD's.

c. Maintenance persons should note that even though an inspection of the complete aircraft is not made, if the inspection conducted is a Progressive Inspection, an inspection required by FAR Part 125 determination of AD compliance for those portions of the aircraft inspected is required.

d. For aircraft inspected in accordance with a continuous inspection program under FAR Part 91, Section 91.169(f), inspection persons are required to comply with AD's only when the portions of the inspection program provided to them require compliance. The program may require a determination of AD compliance for the entire aircraft by a general statement, or compliance with AD's applicable only to portions of the aircraft being inspected, or it may not require compliance at all. This does not mean AD compliance is not required at the compliance time or date specified in the AD. It only means that the owner or operator has elected to handle AD compliance apart from the inspection program. The owner or operator remains fully responsible for AD compliance.

e. The person accomplishing the AD is required by FAR Part 43, Section 43.9, to record AD compliance. The entry must include those items specified in FAR Section 43.9(a)(1) through (a)(4). The owner is required, by FAR Part 91, Section 91.165, to ensure that maintenance personnel make appropriate entries and, by FAR Section 91.173, to maintain those records. It should be noted that there is a difference between the records required to be kept under FAR Section 91.173 and those FAR Section 43.9 requires maintenance personnel to make. Owners and operators may add this required information themselves or request maintenance personnel to include it in the entry they make. In either case, the owner/operator is responsible for keeping proper records.

f. Certain AD's permit pilots to perform checks of some items under specific conditions. The AD's normally include recording requirements which are the same as those specified in FAR Section 43.9. However, if the AD does not include recording requirements for the pilot, FAR Parts 43 and 91,

Section 91.173(a)(1) and (a)(2), require the owner/operator to make and keep certain minimum records for specific times. The person who accomplished the work, who returned the aircraft to service, and the status of AD compliance are among these required records.

13. SOME AD'S REQUIRE REPETITIVE OR PERIODIC INSPECTION. In order to provide for flexibility in administering such AD's, an AD may provide for adjustment of the inspection interval to coincide with inspections required by FAR Part 91, or other regulations. The conditions under which this may be done and approval requirements are stated in the AD. If the AD does not contain such provisions, adjustments are not permitted. However, amendment, modification, or adjustment of the terms of the AD may be requested by contacting the office which issued the AD or by the petition procedures provided in FAR Part 11.

14. SUMMARY. The registered owner or operator of the aircraft is responsible for compliance with AD's applicable to airframes, powerplants, propellers, appliances, and parts and components thereof for all aircraft they operate. Maintenance personnel are also responsible for AD compliance when they accomplish an inspection required by FAR Part 91.



William T. Brennan

Acting Director of Flight Standards