TITLE 14 - AERONAUTICS AND SPACE

CHAPTER I - FEDERAL AVIATION AGENCY

[Regulatory Docket No. 326; Amendment 42-29]

PART 42 - IRREGULAR AIR CARRIER AND OFF-ROUTE RULES

Installation of Flight Recorders on Turbine-Powered Airplanes

The Federal Aviation Agency published a notice of proposed rule making in the Federal Register (25 F.R. 2734) stating that it had under consideration certain amendments to Parts 40, 41, and 42 of the Civil Air Regulations to require the installation and use of flight recorders on all large (more than 12,500 pounds maximum certificated takeoff weight) turbine-powered airplanes after September 1, 1960. The proposal was circulated to the aviation industry as Draft Release 60-6, dated March 28, 1960, and comments were requested on or before May 3, 1960.

Comments received from certain of the manufacturers of flight recorders indicated that the September 1, 1960, date would not provide them with a sufficient period of time to manufacture and deliver equipment ordered for installation on those turbine-powered airplanes now in operation which previously have not been required to be so equipped. In addition, certain manufacturers stated that more recently developed flight recorders capable of recording additional parameters can be supplied by late 1960, and early 1961, and confirmed that some air carriers had indicated a very definite interest in these newer types of recorders.

The FAA recognizes that flight recorders capable of recording additional operations and maintenance parameters would make available information which would be most useful for incident and accident investigations and for accident

prevention purposes. Furthermore, it appears that such recorded information would be used by the air carriers in developing more efficient maintenance and operations procedures and in developing new methods of establishing maintenance schedules for engine, accessory, and component overhauls.

After consideration of all the comments received and upon further investigation thereof, FAA concluded that a longer period of time should be authorized for compliance with this regulation as it applies to turbine-propeller powered airplanes, exclusive of the turbojet airplanes which are currently required to be equipped with flight recorders. The FAA recognizes that difficulties may be encountered by the air carriers in accomplishing an orderly procurement and installation program and that a brief period of relief may be granted with respect to turbine-powered airplanes other than the turbo-jets without adversely affecting safety in air carrier operations. Accordingly, a compliance date of November 1, 1960, has been adopted in this final rule. Also, provision has been made in the regulation for the Director, Bureau of Flight Standards, to further extend the November 1, 1960, date for any air carrier who, prior to September 1, 1960, submits to the Federal Aviation Agency, in writing, a request for such an extension, together with substantiating data, which shows to the satisfaction of the Director:

(1) That the air carrier will be unable to comply with the November 1, 1960, date due to flight recorder procurement or installation problems and;

(2) The action the air carrier has undertaken to insure that a progressive installation of the required flight recorder equipment will be completed at the earliest practicable date following November 1, 1960. In no event will the November 1, 1960, date be extended beyond May 1, 1961.

This relaxation of the original proposal will provide the air carriers further opportunities to investigate the various types of recorders available and to proceed with the orderly procurement and installation of the required equipment at the earliest practicable time following the effective date of this rule.

It will be noted that neither the November 1, 1960, compliance date nor the provision for extension thereof applies to the large turbojet airplanes or large nonturbine-powered airplanes certificated for operations above 25,000 feet altitude, since they are required by currently effective regulations to be equipped with flight recorders.

One comment received requested that consideration be given to exempting turbine-powered airplanes under 35,000 pounds maximum certificated takeoff weight from the requirements of this rule. The FAA classifies all airplanes of more than 12,500 pounds maximum certificated takeoff weight as large airplanes. The newer turbine-powered airplanes are capable of operating at high speeds and at high altitudes. The FAA, in its notice of proposed rule making, explained that it was proposing this regulation specifically to encompass all of the newer types of high-speed turbine-powered airplanes, whether certificated to operate above or below 25,000 feet, since they are frequently subjected to similar atmospheric forces. The Agency remains convinced that all large turbine-powered airplanes should be equipped with flight recorders. Accordingly, the

rules adopted herein make no exception for any turbine-powered airplane of more than 12,500 pounds maximum certificated takeoff weight.

This amendment also clarifies the FAA's intent to require continuous operation of the flight recorder from the instant the airplane starts its takeoff roll until it has completed its landing roll at an airport. Operation of the recorder is not required during taxi operations to or from the runway. Interested persons have been afforded an opportunity to participate in the making of this regulation and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, Part 42 of the Civil Air Regulations (14 CFR Part 42) is hereby amended effective August 18,1960, except as otherwise specified: (1) by deleting paragraph (c) of section 42.22, (2) by redesignating section 42.22a as section 42.22b, and (3) by adding a new section 42.22a to read as follows:

§ 42.22a Flight recorders.

(a) An approved flight recorder which records at least time, altitude, airspeed, vertical acceleration, and heading shall be installed in accordance with the following requirements:

(1) On all airplanes of more than 12,500 pounds maximum certificated takeoff weight which are certificated for operations above 25,000 feet altitude; and

(2) On and after November 1, 1960, on all turbine-powered airplanes of more than 12,500 pounds maximum certificated takeoff weight; Provided, That, the Director, Bureau of Flight Standards, or his authorized

representative, may extend the November 1, 1960, compliance date for any air carrier who, prior to September 1, 1960, submits to the Federal Aviation Agency in writing a request for approval for such an extension, together with substantiating data, which shows to the satisfaction of the Director or his authorized representative:

(i) That the air carrier will be unable to comply with the November 1, 1960, date due to flight recorder procurement or installation problems, and;

(ii) The action the air carrier has undertaken to insure that a progressive installation of the required flight recorder equipment will be completed at the earliest practicable date following November 1, 1960. In no event will the November 1, 1960, compliance date be extended beyond May 1, 1961.

(b) When a flight recorder is installed it shall be operated continuously from the instant the airplane commences the takeoff roll until it has completed the landing roll at an airport.

(c) Recorded information shall be retained by the air carrier for a period of at least 60 days. For a particular flight or series of flights, the information shall be retained for a longer period if requested by an authorized representative of the Administrator or the Civil Aeronautics Board.

(d) In the event of failures of the flight recorder, the airplane may continue flight to the next stop where repairs or replacements can be made.

(Secs. 303, 313(a), 601, 604, 72 Stat. 747, 752, 775, 776, 49 U.S.C., 1344, 1354, 1421, 1424).

E Alyssada
Administrator

Issued in Washington, D. C., on July 12, 1960.

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