FEDERAL AVIATION AGENCY
FLIGHT STANDARDS SERVICE
Washington 25, D. C.

October 16, 1961.

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 61- 22

SUBJECT: Installation and Use of Flight Recorders, and Continuation of Flight With Inoperative Anti-Collision Light, in Certain Aircraft Operated Under the Provisions of Part 43

The Flight Standards Service of the Federal Aviation Agency has under consideration amendments to Part 43 of the Civil Air Regulations to require the installation and use of approved flight recorders on all large airplanes certificated for operation above 25,000 feet altitude, and on all large turbine-powered airplanes. In addition, the amendments would clarify the provisions for continuation of flight with an inoperative anti-collision light. The reasons for these amendments are set forth in the explanatory statement of the attached proposal, which is being published in the Federal Register as a notice of proposed rule making.

The Flight Standards Service desires that all persons who will be affected by the requirements of this proposal be fully informed as to its effect upon them and is therefore circulating copies in order to afford interested persons ample opportunity to submit comments as they may desire.

Because of the large number of comments which we anticipate receiving in response to this draft release, we will be unable to acknowledge receipt of each reply. However, you may be assured that all comment will be given careful consideration.

It should be noted that comments should be submitted in duplicate to the Docket Section of the Federal Aviation Agency, and in order to insure consideration must be received on or before December 21, 1961.

Director,
Flight Standards Service

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FEDERAL AVIATION AGENCY

FLIGHT STANDARDS SERVICE

[14 CFR Part 43]

[Regulatory Docket No. 933; Draft Release No. 61–22]

NOTICE OF PROPOSED RULE MAKING

Installation and Use of Flight Recorders, and Continuation of Flight With Inoperative Anti-Collision Light

Pursuant to the authority delegated to me by the Administrator (14 CFR 405.27), notice is hereby given that there is under consideration a proposal to amend Part 43 of the Civil Air Regulations as hereinafter set forth.

Interested persons may participate in the making of the proposed rules by submitting such written data, views, or arguments as they may desire. Communications should be submitted in duplicate to the Docket Section of the Federal Aviation Agency, Room C–226, 1711 New York Avenue, N.W., Washington 25, D.C. All communications received on or before December 21, 1961, will be considered by the Administrator before taking action on the proposed rules. The proposal contained in this notice may be changed in the light of comments received. All comments submitted will be available in the Docket Section for examination by interested persons when the prescribed date for return of comments has expired.

For several years the air carrier certification and operation rules have required the installation and use of approved flight recorders on certain airplanes. These requirements apply to all turbine-powered airplanes of more than 12,500 pounds maximum certificated takeoff weight, and to all other airplanes of this weight if they are certificated for operations above 25,000 feet altitude.

On May 1, 1961, following several air carrier training accidents in turbine-powered airplanes, Part 43 was amended by Amendment 43–13 (26 F.R. 3985) to require flight recorders on certain airplanes used by air carriers or commercial operators for flights conducted in accordance with the general operation rules. This requirement was issued to make certain that flight recorders would be operating during training flights, ferry flights, airworthiness test flights, and similar operations. The rule applies only to flights conducted by air carriers or commercial operators, and to those airplanes on which flight recorders are required by the air carrier rules. Airplanes operated by other individuals, businesses, or corporations for their own transportation were not affected by this amendment.

The value of flight recorder information in accident investigation work is well recognized. In accidents involving modern high-speed airplanes, the information needed to determine the probable cause is often available only from a recording device operating at the time of the accident, and some invstigations have been hampered by the lack of such information when recorders were inoperative or not installed. At a public conference on March 7 and 8, 1961, at Atlantic City, New Jersey, where the requirements for airborne flight recorders were discussed, FAA and Civil Aeronautics Board participants explained the value of recorded information in accident investigations, and recommended that flight recorders be required on all large modern airplanes, regardless of the type of operation in which they engage.

Many individuals, businesses, and corporations today are using large high-speed airplanes for their own transportation; in many cases, the same types of airplanes as are used in air carrier operations. The improvements in safety that result from thorough investigations of accidents and incidents involving these airplanes are as important to the private operators as they are to the air carriers and commercial operators. The Agency believes that the proper discharge of its responsibilities under the Federal Aviation Act of 1958 requires that it have available as much information as possible to assist in the investigation of accidents and incidents involving modern high-performance airplanes operated in accordance with the general operation rules of Part 43, and that the use of these flight recorders will help it achieve this objective.

The amendments proposed herein would require the installation and use of an approved flight recorder that records at least time, altitude, airspeed, vertical acceleration, and heading on all turbine-powered airplanes of more than 12,500 pounds maximum certificated takeoff weight, and on all other airplanes of more than 12,500 pounds maximum certificated takeoff weight when such airplanes are certificated for operations above 25,000 feet altitude. These amendments would be made effective six months after issuance, to

allow those operators who are not presently required to have flight recorders a reasonable period of time to install them on their airplanes. The proposed rule also contains provisions for continued use of an airplane after a failure of the flight recorder, so that an operator would be allowed to continue a trip until he reached a place where repairs or replacements could be made without undue delay.

The provisions for "continuation of flight" with a flight recorder inoperative, as now contained in § 43.32, were designed for operations conducted by air carriers or commercial operators. These provisions might be unduly restrictive for the type of operations normally conducted by individuals or companies who use an airplane for their own transportation. The more flexible provisions of § 43.30(b)(3), as applied to continuation of flight with an anti-collision light inoperative, would seem to be more appropriate in this case for all operations except training flights. For training flights, the proposed rule would allow an operator to complete a flight if the recorder became inoperative after the flight was started, but would not permit a training flight to be started in an airplane with an inoperative flight recorder.

The term "continue flight", as used in §43.30(b)(3), has caused some misunderstanding as to the meaning of the word "flight." This term is readily understandable when applied to air carrier operations, where aircraft are usually dispatched and operated as numbered flights, but many persons who use aircraft for company or personal transportation do not use this system of numbering or naming their flights. The amendments proposed herein would clarify the continuation of flight provisions of § 43.30(b)(3), by the use of a more meaningful term. The proposed wording should make it clear that when an anti-collision light fails, an operator is allowed to continue his trip as planned, including intervening stops. He is not required to repair or replace the device until he arrives at a stop where this can be done without causing an undue delay in his operations with the aircraft. These amendments would also delete the obsolete term "NC powered aircraft" from the title of § 43.30, and would substitute the term "visual flight rules" for the obsolete term "contact flight rules" throughout the section.

In consideration of the foregoing, it is proposed to amend Part 43 of the Civil Air Regulations as follows:

1. By amending § 43.30 by changing the term "contact flight rules" to "visual flight rules" wherever it appears, and by revising the title of the section and paragraph (b)(3) to read as follows:

43.30 Instruments and equipment for powered aircraft with standard U. S. airworthiness certificates

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(b) *Visual flight rules (night).*

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(3) An approved anti-collision light system for aircraft having a maximum certificated takeoff weight of more than 12,500 pounds and for all aircraft which are required by the terms of their airworthiness certificate to have anti-collision light systems installed; except that, in the event of failure of any light of such system, operations with the aircraft may be continued until arrival at a stop where repairs or replacements can be made without undue delay.

2. By amending § 43.32 to read as follows:

43.32 Flight Recorders

(a) No person shall operate any of the following civil aircraft of the United States unless there is installed on the airplane an approved flight recorder which records at least time, altitude, airspeed, vertical acceleration, and heading:

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

(2) Turbine-powered airplanes of more than 12,500 pounds maximum certificated takeoff weight.

(b) The requirement for a flight recorder prescribed in paragraph (a) of this section shall not apply to a newly acquired airplane operated from the place where possession is taken to the place where a flight recorder is to be installed. In all other cases the flight recorder required by that paragraph shall be operated continuously from the instant the pilot commences the takeoff roll until he has completed the landing roll, subject to the following exceptions:

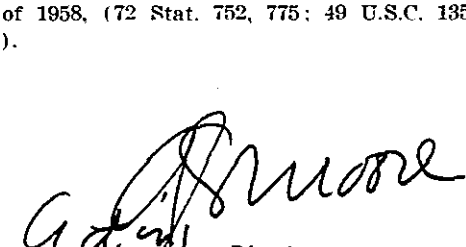
(1) When a flight recorder becomes inoperative, operations with the airplane, other than training flights and flights conducted in accordance with the air carrier certification and operation rules, may be continued until arrival at a stop where repairs or replacements can be made without undue delay;

(2) When a flight recorder becomes inoperative after commencement of the takeoff roll of a training flight, that particular training flight may be continued and completed as planned; and

(3) During an airworthiness flight test, the flight recorder may be turned off for any period of time necessary to conduct tests of the operation of the recorder, or of any communication or electrical equipment installed in the airplane.

(c) Recorded information shall be retained by the operator 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.

These amendments are proposed under the authority of sections 313(a) and 601 of the Federal Aviation Act of 1958, (72 Stat. 752, 775; 49 U.S.C. 1354(a), 1421).



Director,
Flight Standards Service

Issued in Washington, D.C., on October 16, 1961.