## CIVIL AERONAUTICS MANUAL 42

## U. S. Department of Commerce

## Civil Aeronautics Administration

Civi Aeronautics Manuals and supplements thereto are issued by the Office of Aviation Safety, Civil Aeronautics Administration, for the guidance of the public and are published in the Federal Register and the Code of Federal Regulations.

Supplement No. 4

December 15, 1955

SUBJECT: Revisions to Civil Aeronautics Manual 42 dated August 1954.

This supplement is issued to provide subscribers to CAM 42 with a revised section 42.56-2. This section has been revised to permit greater flexibility in the operational use of runway weather observations. These revised rules become effective December 15, 1955. Remove and destroy the following pages:

Insert in lieu thereof the following pages:

41 and 42

41 and 42

Note: Revised material is indicated by brackets [ ].

For William B. Davis, Acting Director, Office of Aviation Safety.

Attachments.

other parts of the aircraft referred to in this section include, but are not limited to, carburetors, windshields, pitot-static tubes, and empennage surfaces.

(Published in 14 F. R. 7040, November 22, 1949, effective upon publication.)

- "42.55 Weather minimums. No flight shall be started unless the takeoff, en route operation, and landing at destination can be conducted in accordance with the weather requirements of Part 60 of this subchapter (i. e., the Civil Air Regulations), but in no case less than the minimums specified below:
- "(a) For VFR takeoff, en route operation, or landing, the weather minimums shall be a ceiling of 1,000 feet and visibility of 1 mile for day and 2 miles for night, unless otherwise authorized by an air traffic clearance obtained from air traffic control.
- "(b) For IFR operations the weather minimums, including alternate airport requirements, shall not be less than those specified in Parts 609 and 610 of the Regulations of the Administrator, or as otherwise specified or authorized by the Administrator. These weather minimums, including alternate airport requirements, also may be found in the Approach and Landing Charts and Radio Facility Charts of the Coast and Geodetic Survey and in the Airman's Guide.

42.55-1 Deleted.

42.55-2 Air traffic clearance (CAA interpretations which apply to sec. 42.55 (a)). An air traffic clearance obtained from air traffic control is an approval for the flight, or portion thereof, only with regard to known traffic conditions and does not authorize a pilot to violate the Civil Air Regulations pertaining to weather minimums. Regardless of any air traffic clearance obtained from air traffic control, the minimum visibility shall be not less than 1 mile for day and 2 miles for night in control zones, and 3 miles in control areas.

(Published in 14 F. R. 7040, November 22, 1949, effective upon publication.)

42.55-3 IFR takeoff and landing minimums (CAA policies which apply to sec. 42.55).

(a) The basic IFR takeoff minimums and landing minimums for each type of instrument approach procedure are prescribed in the operations specifications issued to an air carrier or commercial operator under the authority of this part. Frequently, these minimums are higher than those published in Part 609 of the Regulations of the Administrator. However, by application to the local CAA Aviation Safety Agent having certificate responsibility, minimums down to the lowest minimums prescribed in Part 609 for a particular airport may be authorized if such airport is regularly used by an air carrier or commercial operator (e. g., main operations base). To obtain such authorization, the air carrier or commercial operator will be required to demonstrate that its pilot training program and overall operating proficiency is adequate for the use of lower minimums. Such lower minimums, when approved, will be applicable only to those pilots-in-command who (1) have served as a pilot or as an observer member of the crew on the flight deck during operations conducted into the particular airport within the previous twelve months, (2) have been checked in accordance with section 42.44-2 of this subchapter on the type of facility for which the lower minimums are authorized, and (3) have been so certified by a company check pilot as being qualified to operate at the lower minimums.

"42.56 Instrument approach. No instrument approach procedure shall be executed or landing made at an airport when the latest United States Weather Bureau report for that airport indicates the ceiling or visibility to be less than that prescribed by the Administrator for landing at such airport. Provided, That, if an instrument approach procedure is initiated when the current U.S. Weather Bureau report indicates that the prescribed ceiling and visibility minimums exist and a later weather report indicating below minimum conditions is received after the aircraft (a) is on an ILS final approach and has passed the outer marker, or (b) is on a final approach using a radio range station or comparable facility and has passed the appropriate facility and has reached the authorized landing minimum altitude, or (c) is on GCA final approach

<sup>&</sup>quot;8 See Parts 609 and 610 of the Regulations of the Administrator, or refer to the Approach and Landing Charts and Radio Facility Charts of the Coast and Geodetic Survey, and to the Airman's Guide for specific en route, takeoff, and landing minimums for particular routes and airports."

and has been turned over to the final approach controller, such approach may be continued and a landing may be made in the event weather conditions equal to or better than the prescribed minimums for the airport are found to exist by the pilot in command of the flight upon reaching the authorized landing minimum altitude."

42.56-1 Standard instrument approach procedures (CAA rules which apply to sec. 42.56). Standard instrument approach procedures prescribed by the Administrator are published in part 609 of this title (i. e. Regulations of the Administrator).

(Published in 16 F. R. 7351, July 27, 1951, effective upon publication.)

**[**42.56–2 Takeoff and landing weather minimums (CAA rules which apply to sec. 42.56).

- (a) General. The ceiling and visibility contained in the main body of the latest weather report furnished by the U. S. Weather Bureau or a source approved by the Weather Bureau shall be used for instrument approach and landing or takeoff for all runways of an airport except as provided in paragraph (b).
- **I**(b) Runway visibility. Whenever the latest weather report furnished by the U. S. Weather Bureau or a source approved by the Weather Bureau, including an aural report from the control tower, contains a visibility value specified as runway visibility for a particular runway of an airport, such visibility shall be used for a straight-in approach and landing or takeoff for that runway only. §84
- "42.57 Airport lighting for night operations. No air carrier shall use an airport for the take-off or landing of an aircraft at night unless such airport is adequately lighted."
- 42.57-1 Minimum facilities (CAA policies which apply to sec. 42.57). The minimum facilities and equipment for airport lighting where night operations are authorized and conducted shall include at least the following:
- (a) Adequate boundary lights defining the boundaries of the usable area and/or adequate contact (runway marker) lights identifying the outer limits of the runways. Lights of the

- open-flame type (flare pots) are not considered adequate contact lights, except in an emergency. Range lights (aviation green) shall be installed and operating in conjunction with the boundary or contact (runway marker) lights.
- (b) Floodlights, either of a permanent or portable type, shall be provided and operated to illuminate the ramp, apron, and passengerloading area.
- (c) Obstructions on and in the vicinity of the landing area should be obstruction lighted. The criteria for determining obstructions to air navigation and for the lighting of obstructions to air navigation are contained in Technical Standard Orders available from the Aviation Information Office, Civil Aeronautics Administration, Washington 25, D. C.
- (d) An illuminated wind direction indicator shall be provided and located so as to be clearly visible from the ground and the air.

(Published in 18 F. R. 1719, March 27, 1943, effective April 15, 1953.)

"42.58 Navigational aids for IFR flight. IFR operations shall be conducted only over civil airways and at airports equipped with radio ranges or equivalent facilities, unless the Administrator has found that instrument navigation can be conducted by the use of radio direction finding equipment installed in the aircraft or by other specialized means and has approved or otherwise authorized such operation in the air carrier operating certificate."

42.58-1 Off-airway instrument operation (CAA rules which apply to sec. 42.58).

- (a) Off-airway instrument operation may be authorized provided the aircraft is properly equipped, and the flight crew demonstrates they are capable of navigating along a predetermined flight path over a proposed route without deviating more than 5 miles or 5° on either side (whichever is the lesser) from a straight line drawn between the point of departure and the next point of arrival.
- (b) This term "off-airways," as used in this manual and in the printed Standard Operations Specifications (Form ACA-1014), does not apply where a projected course of a radio range extends along the route to be flown. Therefore, no special authorization will be required where complete coverage by radio range projected courses is provided and radio facilities for authorized instrument approach and let-

<sup>¶&</sup>lt;sup>8</sup>\*\* Information respecting the official runway visibility observations reported by the control tower operator may be obtained from the Office of the U.S. Weather Bureau for the airport concerned. Such office maintains a continuous graph recording of the runway visibility shown on the visibility meter in the control tower.