 CAA Library MAY 9 1962

U. S. Department of Commerce — Civil Aeronautics Administration

Civil 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. 8 — May 1, 1952

SUBJECT: 40.101
Weather Minimums

40.101-1 Ceiling and Visibility Minimums

The Office of Aviation Safety announces changes to the policy statement on ceiling and visibility minimums issued on December 29, 1950.

This supplement is issued to clarify the present material, and to incorporate additional criteria for the approval of take-off minimums for twin-engine and four-engine aircraft under subparagraph (i) and subparagraph (ii) of section 40.101-1(b)(1).

In order to effect the foregoing changes, the attached new sheets should be inserted in lieu of the present page 40.101(b)(1)(i) dated December 29, 1950.

E. S. Hensley

E. S. Hensley
Director, Office of
Aviation Safety

Attachment

Distribution: Air 4, 4a, 11, 14, 40 all tabs,
40B, 40D, 40-F-1, 40-1

53214

JUN 25 1952

"Miscellaneous Requirements.

"CAR 40.101 Weather minimums. Authorization of ceiling and visibility minimums for purposes of flight clearance and for transition from instrument to visual-contact flights and vice versa will be made by the Administrator and will be based upon the following considerations affecting the clearance and completion of the flight:

"(a) The terrain conditions affecting the flight area necessary for the working out of an approach and let-down-through procedure, or for a climb-up-through procedure; and

"(b) The skill and experience of dispatcher personnel; and

"(c) The skill and experience of pilot personnel; and

"(d) The type and maneuverability of the aircraft; and

"(e) The obstructions to flight, considered both vertically and horizontally, in the vicinity of the landing area; and

"(f) The quality and quantity of meteorological service and of other ground aids to flight available."

40.101-1 CEILING AND VISIBILITY MINIMUMS. (CAA policies which apply to section 40.101.)

(a) GENERAL. The ceiling and visibility minimums authorized by the Administrator for scheduled air carriers will be included in the operations specifications issued to the air carriers. The policies hereinafter set forth will be used by the Civil Aeronautics Administration in authorizing the ceiling and visibility minimums contained in the operations specifications.

(1) MILITARY AIRPORTS. When an air carrier is authorized to use a military airport, the ceiling and visibility minimums approved for take-off and landing at that airport will not be less than those agreed upon by the military authorities having jurisdiction over the facility.

(b) TAKE-OFF MINIMUMS.

(1) REGULAR, PROVISIONAL OR REFUELING AIRPORTS.

(i) TWIN-ENGINE AIRCRAFT. Take-off minimums may be approved as low as 300 feet and one mile if, after a consideration of all obstructions in the immediate vicinity of the end of the runway used and of the facilities and procedures used to avoid all obstacles in the take-off area, it is determined that a safe climb to the minimum en route altitude can be made. Take-off minimums lower than 300-1 and as low as 200-1/2 may be approved when the air carrier is authorized landing minimums lower than 300-1 through utilization of the ILS or GCA facilities serving the airport, provided such take-off minimums will not be less than the straight-in landing minimums approved for the particular airport and conditions are such that a straight-in ILS or GCA approach can be executed in accordance with the limitations set forth in the air carrier operating certificate.

Take-off minimums as low as 200-1/2 may also be approved at airports not served by ILS or GCA facilities, or at airports equipped with ILS or GCA when conditions are such that a straight-in ILS or GCA approach cannot be made in accordance with the above paragraph. Such approval, however, will be contingent upon the specification in the flight clearance of an alternate airport having an approved instrument approach procedure located within twenty-five miles of the take-off airport. In addition, at the time of dispatch, the weather at such alternate airport must be at or above alternate landing minimums and forecasted to remain so for a period of two hours thereafter. In submitting applications for approval of such minimums, the lowest take-off minimums applicable without a take-off alternate should be shown in the take-off minimum column of the Operations Specifications - Airport. The take-off minimums applicable when a take-off alternate is specified in the flight clearance should be shown in the "Remarks" section of the Operations Specifications - Airport as follows: "....(Show minimums applicable) authorized in accordance with paragraph .... Airport Preface Pages."

(ii) FOUR-ENGINE AIRCRAFT. Take-off minimums may be approved as low as 200 feet and one-half mile if, after a consideration of all obstructions in the immediate vicinity of the end of the runway used and of the facilities and procedures used to avoid all obstacles in the take-off area, it is determined that a safe climb to the minimum en route altitude can be made. At airports, where take-off minimums of 200-1/2 have been approved, take-off minimums of 200-1/4 may also be authorized on runways equipped with high intensity runway lights, provided such lights are on and in normal operation in order to insure that the pilot has adequate visual reference to the line of forward motion during the take-off run.

(2) ALTERNATE AIRPORTS. Take-off minimums for both two and four-engine aircraft may be approved as low as 300 feet and one mile if, after a consideration of all obstructions in the immediate vicinity of the end of the runway used and of the facilities and procedures used to avoid all obstacles in the take-off area, it is determined that a safe climb to the minimum en route altitude can be made. When an air carrier has been approved for take-off minimums of 200-1/2 at an airport for regular, provisional or refueling use, this air carrier may have minimums of 200-1/2 authorized at the same airport when it is used as an alternate.

(c) LANDING MINIMUMS. In the approval of ceiling and visibility minimums for landing, two methods of approach will be considered. These are: A regular approach, involving a maneuver of the aircraft or circling of the airport in order to effect a landing, and a straight-in approach from a navigational aid to a landing. A landing is considered as straight-in when the difference between the runway direction and the track from the navigation aid to the approach end of that runway is 30° or less.