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## CIVIL AERONAUTICS MANUALS—Volume VI

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### Supplement No. 6

April 15, 1958

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SUBJECT: Revisions to Civil Aeronautics Manual 40 dated April 1, 1956, and Civil Aeronautics Manual 41 dated February 1956.

Part 40 is revised to correct the title of section 40.356-1 of the Civil Aeronautics Manual so that it conforms with the title of section 40.356 of the Civil Air Regulations. Also, section 40.406-2 (c) (11), regarding the application of obstruction clearance criteria in determining landing ceiling minimums, is revised to present more realistic figures in the typical example.

Part 41 is revised to correct the terminology of section 41.121-1 of the Civil Aeronautics Manual so that it conforms with that of section 41.121 of the Civil Air Regulations and to bring it into agreement with the language in section 40.356-1 of the Civil Aeronautics Manual.

New and revised material is indicated by black brackets.

*Remove and destroy the following pages:*

CAM 40—ix through xi  
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CAM 41—v and vi  
31 and 32

*Insert the following new pages:*

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*Roy Keeley*

ROY KEELEY,  
Director, Office of Flight  
Operations and Airworthiness.

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(Published in 22 F. R. 8997, November 9, 1957, effective November 25, 1957.)

40.303-1 *Pilot route and airport qualification requirements (CAA interpretations which apply to sec. 40.303)*. In order to meet the knowledge requirements of section 40.303 (b), the pilot-in-command must demonstrate adequate knowledge of the subjects listed in section 40.303 (b) for a route on which he is to serve between the regular, refueling, or provisional airports listed in the air carrier's operations specifications and any major differences which may exist between that route and any other route over which he may serve between such airports. In such case, the pilot is considered qualified over any off-airway route listed in the Form 514A or a civil airway, control area extension, or control zone between such airports if he has also met the provisions of sections 40.303 (c) and (d) where applicable.

(Published in 18 F. R. 6619, October 17, 1953, effective January 1, 1954.)

40.307-1 *Flight engineer qualifications for duty (CAA interpretations which apply to sec. 40.307)*. An airman assigned to flight-check other flight engineers must meet the recent experience requirements of this part before serving as a flight engineer in air transportation. However, the time spent in giving flight engineer checks may be applied toward the 50-hour recent experience requirements on a particular type of aircraft. Unless such experience has been obtained within the preceding 6-month period, a check by the air carrier or an authorized representative of the Administrator is required.

(Published in 21 F. R. 678, January 31, 1956, effective February 15, 1956.)

### Flight Operations

40.355-1 *Manipulation of controls (CAA interpretations which apply to sec. 40.355 (a) and (b))*. The phrase "qualified on the airplane" means a certificated pilot holding a type rating for the aircraft utilized, or a copilot, not holding

a type rating if he has met the qualification requirements of the Civil Air Regulations: *Provided*, That a certificated pilot with at least a commercial rating may, at the discretion of the pilot in command, manipulate the controls except during takeoff and landing.

(Published in 18 F. R. 6619, October 17, 1953, effective January 1, 1954.)

40.356-1 *Admission to flight deck (CAA interpretations which apply to sec. 40.356)*. The term "flight deck" as used in section 40.356 is interpreted to mean all of the area forward of the door or window required by Parts 4a and 4b of the Civil Air Regulations to be located between the pilot compartment and the passenger compartment.

(Published in 18 F. R. 6619, October 17, 1953, effective January 1, 1954, amended in 23 F. R. 2097, March 29, 1958, effective March 29, 1958.)

### Dispatching Rules

40.390-1 *Alternate airport landing minimums for airports not served by a radio navigation facility (CAA policies which apply to sec. 40.390 (c))*. When there is no minimum en route instrument altitude associated with an alternate airport, the approval of alternate airport landing minimums under overcast conditions will be contingent upon (a) the incorporation of appropriate minimum en route altitudes in the air carriers operations manual in order to provide a basis for establishing weather minimums in accordance with section 40.390 (c) and (b) the availability of radio navigation facilities of sufficient adequacy to permit safe navigation over such alternate airport. The latter may be accomplished by using any of the following or a combination thereof:

(1) Radio bearings from the airport of intended destination,

(2) Radio range course from the airport of intended destination,

(3) Radio range course projected over the alternate airport on a line with the intended course to be flown,

(4) Radio bearing from a radio facility located beyond the alternate airport on a line with the intended course to be flown, or

(5) Radio bearing from a radio facility located along the intended course to be flown.

(Published in 19 F. R. 7451, November 19, 1954, effective November 30, 1954.)

40.390-2 *Establishment of alternate airport landing minimums at airports where ILS or GCA only available instrument approach aids (CAA interpretations which apply to sec. 40.390 (a)).* Alternate airport landing minimums as low as 600-2, 700-1½, or 800-1 may be approved at airports where an ILS or GCA is the only instrument approach aid serving such airport: *Provided*, That adequate radio facilities are available to accomplish transition to the ILS or GCA.

(Published in 20 F. R. 3559 on May 21, 1955, effective June 15, 1955.)

40.390-3 *Establishment of alternate airport landing minimums at airports served by ILS (CAA policies which apply to sec. 40.390 (a)).* The landing minimums prescribed in section 40.390 (a) may be authorized at airports where the ILS is not equipped with approach lights.

(Published in 21 F. R. 4999, July 6, 1956, effective July 12, 1956.)

40.391-1 *Circumstances when incorporation of procedures may be authorized in the air carrier's manual for continued operation beyond a scheduled terminal (CAA policies which apply to sec. 40.391 (b)).* Authority to incorporate procedures in the air carrier manual for the continuation of flight beyond a scheduled terminal with an airplane which has inoperative required equipment<sup>8</sup> will be given to an air carrier when the air carrier shows that:

(1) Such procedures specify the required equipment that may be inoperative and the particular circumstances and conditions under which the airplane may continue in air transportation beyond a scheduled terminal without adversely affecting the safety of the flight; and

(2) Such procedures specify the place to which the flight may be continued and the inoperative required equipment will be repaired or replaced in lieu of the terminal stop: *Provided*, That the airplane may not continue

flight beyond a place at which it is normally scheduled for the accomplishment of the next daily service or inspection by the air carrier.

(Published in 20 F. R. 6212 on August 25, 1955, effective September 15, 1955.)

40.406-1 *Takeoff and landing weather minimums (CAA rules which apply to sec. 40.406 (b)).*

(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).

(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 instrument approach and landing or takeoff for that runway only.<sup>9</sup>

(Published in 20 F. R. 9039, December 9, 1955, effective December 15, 1955.)

40.406-2 *Ceiling and visibility minimums—IFR (CAA policies which apply to sec. 40.406).*

(a) *General.* The policies set forth in this section will be used by the Civil Aeronautics Administration in authorizing the ceiling and visibility minimums contained in the operations specifications issued to scheduled air carriers. Specific deviations from these policies may be approved in instances where CAA and industry representatives concur that the safety of the operation would not be prejudiced.

(1) *Military airports.* When an air carrier is authorized to use a military airport, the ceiling and visibility minimums approved for takeoff and landing at that airport will not be less than those agreed upon by the military authorities having jurisdiction over the airport.

<sup>9</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.

<sup>8</sup> Required equipment is that equipment which is specified in section 40.170.

(b) *Takeoff minimums.*(1) *Regular, refueling, and provisional airports.*

(i) *General; all aircraft.* In approving takeoff minimums for scheduled air carriers, consideration will be given to the following factors:

(a) Obstructions and terrain in the vicinity of the airport.

(b) Effective length of each runway to be used by the air carrier.

(c) The performance characteristics of each type aircraft to be used by the air carrier at the airport.

(d) IFR departure procedures in use at the airport.

(e) Runway lighting facilities and runway pavement marking available at the airport.

(f) Radio navigation facilities serving the airport.

(ii) *Two-engine aircraft.* The lowest takeoff minimums for two-engine aircraft normally will be 300-1. However, minimums as low as 200-½ may be approved in accordance with certain specific conditions and limitations prescribed in the air carrier's operations specifications.

(iii) *Four-engine aircraft.* The lowest takeoff minimums for four-engine aircraft will normally be 200-½. However, takeoff minimums as low as 200-¼ may be approved in accordance with certain specific conditions and limitations prescribed in the air carrier's operations specifications.

(2) *Alternate airports.* Takeoff minimums for both two- and four-engine aircraft may be approved as low as 300-1 when the air carrier is authorized to use a particular airport as an alternate airport only. When an airport is used as an alternate airport and such airport is also authorized in the air carrier's operations specifications as a regular, refueling, or provisional airport, the takeoff minimums shown on the applicable Form ACA-511 may be used: *Provided*, That the pilot-in-command is cur-

rently qualified into the airport in accordance with the applicable Civil Air Regulations, otherwise, takeoff minimums of 300-1 or the takeoff minimums shown on the Form ACA-511, whichever are greater, will be applicable.

(c) *Landing minimums, regular, refueling, or provisional airports.*

(1) *Circling approach.* When it is necessary to circle an airport to effect a landing, higher landing minimums are required for aircraft with higher maneuvering, approach, and landing speeds than are required for slower type aircraft. The stall speed at maximum certificated landing weight with full flaps, landing gear extended and power-off will be used to differentiate between the two types of aircraft. Circling approach minimums are normally the same for all instrument approach procedures without regard to the type of radio navigational facility used to conduct the instrument approach, and will be established in accordance with the following:

(i) *Aircraft with stall speed in excess of 75 m. p. h.* The minimum ceiling will be, (a) at least 500 feet above the established elevation of the airport, (b) not less than 300 feet above all obstructions within a radius of 2 miles from the airport boundary and (c) 300 feet above all obstructions within a distance of 2 miles on each side of the final approach course from the radio facility to the airport. The minimum visibility that will be authorized for such aircraft will normally be 1½ miles. However, a minimum visibility of not less than 1 mile may be authorized by application of the sliding scale authorized in the air carrier's operations specifications. A minimum visibility of 1 mile may also be authorized for those two-engine aircraft having a stall speed in excess of 75 m. p. h., which can be safely maneuvered within a radius of not more than ½ mile.

(ii) *Aircraft with stall speed of 75 m. p. h. or less.* Such aircraft will normally be authorized to operate into airports with minimums of 100-½ lower than the minimums es-

outer marker will provide at least 500 feet obstruction clearance for a distance of at least 10 miles outward from the outer marker within an area of 5 miles on each side of the centerline of the localizer course.

(b) *When both outer marker and outer compass locator inoperative.* Straight-in landing minimums of 300- $\frac{3}{4}$  may be approved when there is no fix, other than the middle marker or middle compass locator, available along the localizer course. When an instrument approach is conducted under these conditions aircraft must, of necessity, proceed outbound along the localizer course from the middle marker for the purpose of conducting a procedure turn. In such cases 300- $\frac{3}{4}$  will be approved only when approaching aircraft can clear by 300 feet all obstructions from the approach end of the ILS runway to the point of glide slope interception within the approach area described in Regulations of the Administrator 609.10 (f) (1) (i) and (iii). The ceiling minimum may be approved to the nearest 100 feet as provided by subparagraph (11) of this paragraph, if a flight check has shown such ceiling minimum to be safe. The final approach altitude between the point of procedure turn is completed and the point of glide slope interception will be at least equal to the minimum altitude at glide slope interception inbound as specified in the applicable ILS instrument approach procedure. Straight-in landing minimums of 300- $\frac{3}{4}$  may also be predicated on the glide slope obstruction clearance criteria outlined in Regulations of the Administrator 609.10 (f): *Provided*, That in addition to the middle marker or middle compass locator, a fix can be obtained along the ILS localizer course within 7 miles from the approach end of the ILS runway by means of (1) surveillance radar, (2) a fan marker which provides the same degree of accuracy as an ILS outer marker installation, (3) a reliable fix as described in subparagraph (9) (i), or (4) a radio facility which provides the same degree of accuracy as an ILS outer compass locator installation.

(c) *Use of ILS back course.* The foregoing may also be applied to the back course of an ILS which is normally provided with all components of a complete ILS.

(ii) *Straight-in approaches—More than one ILS component inoperative.* The air carrier operations specifications permit straight-in ILS approaches down to minimums of 300-1 when the localizer and either the outer marker or outer compass locator are the only components of the ILS in normal operation, or when these are the only components that can be received by the aircraft. Minimums of 300-1 may be approved under these conditions when approaching aircraft can clear by 300 feet all obstructions from the approach end of the ILS runway to the outer marker within the approach area described in Regulations of the Administrator 609.10 (f) (1) (i) and (iii). The ceiling minimum may be approved to the nearest 100 feet as provided by subparagraph (11) of this paragraph, if a flight check has shown such ceiling minimum to be safe. The final approach altitude over the outer marker will provide at least 500 feet obstruction clearance for a distance of at least 10 miles outward from the outer marker within an area of 5 miles on each side of the centerline of the localizer course. The foregoing may also be applied to ILS back courses equipped with either an outer marker or outer compass locator.

(iii) *Circling ILS approaches when ILS components inoperative.* Circling ILS landing minimums will be established in accordance with subparagraph (1), except that 300 feet obstruction clearance may be provided from the approach end of the ILS runway to the outer marker within the approach area described in Regulations of the Administrator 609.10 (f) (1) (i) and (iii), in lieu of the 2-mile distance each side of the final approach course to the airport as specified in subparagraph (1). The air carrier operations specifications permit circling ILS approaches to be conducted down to such minimums when the localizer and either the outer marker or outer compass locator are the only components in normal operation, or when these are the only components that can be received by the aircraft. The final approach altitude over the outer marker will provide at least 500 feet obstruction clearance for a distance of at least 10 miles outward from the outer marker within an area of 5 miles on each side of the localizer course. The foregoing may also

be applied to ILS back courses equipped with either an outer marker or outer compass locator.

(9) *Instrument approach procedures using ILS localizer.*

(i) *General.* Ceiling and visibility minimums for instrument approach procedures predicated on (a) the use of the localizer course of an ILS (either front or back course) and (b) a reliable fix located on the ILS localizer course, will normally be established in accordance with subparagraph (1) of this paragraph for circling approaches, and subparagraph (2) of this paragraph for straight-in approaches. Such instrument approach procedures will normally not be established when the radio fix is located at a distance greater than 7 miles from the airport. The obstruction clearance will be determined within the approach area described in Regulations of the Administrator 609.10 (f) (1) (i) and (iii). For the purpose of this subparagraph, a reliable fix is considered to be a fix formed by the intersection of the localizer course and a bearing from a radio facility located within 25 miles of the fix and such bearing intersects the localizer course at an angle of at least 45 degrees.

(ii) *Lower minimums using additional or improved aids.* Straight-in approach minimums as low as 300-1 may be authorized on an ILS front course or back course when the fix located on the localizer course within 7 miles of the ILS runway is (a) a fan marker which provides the same degree of accuracy as an ILS outer marker installation (b) a radio facility which provides the same degree of accuracy as an ILS outer compass locator installation, or (c) surveillance radar.

(10) *Effect of distance between radio facility and airport on landing minimums.*

(i) *Using a radio range (L/MF or VOR) or nondirectional L/MF radio facility.*

(a) For both circling and straight-in instrument approach procedures, the following minimums may be established after consideration of the obstruction clearance requirements of Part 609 of the Regulations of the Administrator, when the radio facility is located at distances greater than 7 miles from the airport:

- (1) Over 7 to 10 miles—  
Straight-in, 500-1 day, 500-2 night  
Circling,<sup>10</sup> 500-1½ day, 500-2 night
- (2) Over 10 to 12 miles—  
Straight-in, 700-1 day, 700-2 night  
Circling,<sup>10</sup> 700-1½ day, 700-2 night
- (3) Over 12 miles—  
Straight-in, 1000-1 day, 1000-2 night  
Circling,<sup>10</sup> 1000-1½ day, 1000-2 night

When a radio facility is over 7 miles from an airport, straight-in landing ceiling minimums will not be lower than the circling landing ceiling minimums established at the particular airport.

[(11) *Application of obstruction clearance criteria in determining landing ceiling minimums.* Unless safety requires otherwise, landing and ceiling minimums for instrument approaches using a radio range (L/MF or VOR) or a non-directional L/MF radio facility will be shown on the applicable instrument approach procedure form to the nearest 100 feet. For example, for an airport with an elevation of 200 feet m. s. l. and assuming a 300-foot obstruction clearance requirement with a controlling obstruction of 449 feet m. s. l., a ceiling minimum of 500 feet would normally be considered as meeting the obstruction clearance requirements outlined in subparagraphs (1) through (5) of this paragraph. On the other hand, if such obstruction were 450 feet m. s. l., a ceiling minimum of 600 feet would normally apply. In cases where the ILS obstruction clearance criteria cannot be met, the ceiling arrived at by application of the formula contained in subparagraph (6) (v) (a) will normally be shown to the nearest 100 feet; except that a flight check is required where application of the formula indicates a ceiling of less than 300 feet.]

(d) *Airports not served by a radio navigational facility.* Takeoff and landing minimums at such airports will be approved in accordance with VFR.

<sup>10</sup> Visibility minimums for two-engine aircraft may be established in accordance with subparagraphs (1) (i) or (1) (ii) of this paragraph.

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40.406-3 *Instrument approach procedures and IFR landing weather minimums at airports served by both ILS and GCA (CAA interpretations which apply to sec. 40.406 (c)).*

(a) The instrument approach must be conducted in accordance with the information provided the pilot from the primary aid. The landing minimums must be those prescribed in the operations specifications based on the operative components of the primary aid. The information provided the pilot from the secondary aid must be used for monitoring purposes. Either ILS or GCA (PAR) may be used as the primary approach aid. When GCA (PAR) is used as a secondary aid, specific authorization for use of such aid is not required, however, the procedures specified in the Radar Procedures for Air Traffic Control Towers for monitored approaches must apply.

(b) Both the elevation and azimuth (or localizer and glide slope) elements of the secondary aid must be operating.

(c) The ILS and PAR must be aligned with the same runway. Straight-in or circling approaches may be made provided that weather conditions equal to or higher than the prescribed minimums for the primary aid are found to exist by the pilot-in-command upon reaching the authorized minimum altitude associated with the type of approach (straight-in or circling) being conducted.

(d) The use of operational military radar (other than training units) as a secondary aid is permissible without individual authorizations.

(e) The phrase "ceiling or visibility" as used in section 40.406 (c) means that either or both elements of the weather report may be reported below minimums.

(Published in 19 F. R. 7224, November 6, 1954, effective November 15, 1954.)

## Required Records and Reports

40.501-1 *Crew member and dispatcher records (CAA policies which apply to sec. 40.501).*

(a) The following pertinent information is considered the minimum necessary in the airman record required by this section.

- (1) Name (full);
- (2) Current date of assignment (pilots, flight engineer, dispatchers, etc.),
- (3) Airman certificates (type, number and ratings);
- (4) Date, result and class of last physical examination;
- (5) Date, place, aircraft type and number, duration, and result of last proficiency and/or line check for each pilot-in-command;
- (6) Record of the flight time of each flight crew member including, where applicable, instrument flight time and the flight time in the make and model aircraft on which he is currently qualified;
- (7) Routes over which and airports into which applicable flight crew members and dispatchers are currently qualified together with qualification records, grades and dates;
- (8) Dates, results, and types of training given to all crew members, flight crew members, and dispatchers;
- (9) Check pilot authorization where applicable;

(Published in 18 F. R. 6622, October 17, 1953, effective January 1, 1954.)

40.503-1 *Dispatch release form (CAA interpretations which apply to sec. 40.503 (a) (2)).* The dispatch release form may contain a trip or code number for the clearance of the particular trip instead of specifying each terminal and intermediate airport. This number used in the dispatch release must correspond with the number listed in the air carrier's published schedule or operations manual, which will list all the regular and intermediate stops of the particular trip for which clearance was given. In the event field condition, weather, etc., are such that routine operations are not to be conducted in accordance with the number for the particular trip, the dispatch release will specify the exceptions indicating the reason for the non-routine operation.

(Published in 19 F. R. 7081, October 30, 1954, effective November 15, 1954.)



40.511-1 *Purpose and form of maintenance release (CAA interpretations which apply to sec. 40.511).*

(a) The purpose of the maintenance release is to assure that when any maintenance and/or inspection is performed or is required to be performed, such maintenance and/or inspection is completed satisfactorily in accordance with the air carrier's instructions and the Civil Air Reg-

ulations; and that no known condition exists at the time the release is signed which would render the aircraft unairworthy.

(b) The form of the maintenance release is considered to be optional on the part of the air carrier provided such release fulfills the purpose of section 40.511 of this part.

(Published in 21 F. R. 1697, March 17, 1956, effective March 31, 1956.)

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### Flight Radio Operator

41.68-1 *Crew complement; flight radio operator (CAA rules which apply to sec. 41.68).*

(a) *Determination of need.* Radiotelegraphy shall be required over any area, route or route segment where it has been determined that this means of communication is necessary to insure adequate air-ground communication over the area, route or route segment under normal operating conditions.

(Published in 15 F. R. 9232, December 23, 1950, effective upon publication in the Federal Register.)

### Flight Engineer

41.73-1 *Crew complement; flight engineer (CAA rules which apply to sec. 41.73).*

(a) *Design of aircraft.* A flight crew member serving in the capacity of a flight engineer shall be required on all 4-engine aircraft certificated for more than 80,000 pounds maximum takeoff weight as prescribed in section 41.73, and on all other 4-engine aircraft certificated for more than 30,000 pounds maximum takeoff weight when so specified in the airplane flight manual for the particular aircraft.

(b) *Type of operation.* The Administrator has considered the type of operation presently being conducted in aircraft of the 30,000-80,000 pound weight category and has determined that a flight engineer is not required as a result of such operation.

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41.75-1 *Flight engineer qualifications for duty (CAA interpretations which apply to sec. 41.75).*

An airman assigned to flight-check other flight engineers must meet the recent experience requirements of this part before serving as a flight engineer in air transportation. However, the time spent in giving flight engineer checks may be applied toward the 50-hour recent experience requirements on a particular type of aircraft. Unless such experience has been obtained within the preceding 12-month period, a check by the air carrier or an authorized representative of the Administrator is required.

(Published in 21 F. R. 678, January 31, 1956; amended in 21 F. R. 678, effective February 15, 1956.)

(Rev. 4/15/58)

### Flight Navigator

41.80-1 *Crew complement; flight navigator (CAA rules which apply to sec. 41.80).* The rules hereinafter set forth have been issued pursuant to section 41.80 and shall be followed in determining when celestial navigation or other specialized means of navigation are necessary.

(a) *Determination of need.* Where the desired precision and reliability in air navigation, i. e., accurate line of position or fixes available, cannot normally be achieved from the pilot's station by visual or nonvisual ground aids for a period of:

(1) More than 1 hour, celestial or other specialized means of navigation shall be required;

(2) One hour or less, determination shall be made by the Administrator as to the need for celestial or other specialized means of navigation, taking into consideration such factors having a bearing on safety as weather, air traffic control, traffic congestion, size of land at destination and fuel requirements, whether or not sufficient fuel is carried for return to point of departure, or whether flight is predicated upon operation "beyond point of no return."

(Published in 15 F. R. 1565, March 31, 1950, effective April 18, 1950; amended in 18 F. R. 6783, October 24, 1953, effective December 1, 1953.)

### Flight Operation Rules

#### Instrument Approach and Landing Rules

41.119-1 *Standard instrument approach procedures (CAA rules which apply to sec. 41.119).* Standard instrument approach procedures prescribed by the Administrator are published in Part 609 of Chapter II (i. e., Regulations of the Administrator) of this title.

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

41.119-2 *Takeoff and landing weather minimums (CAA rules which apply to sec. 41.119).*

(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 landings or takeoff for all runways of an airport except as provided in paragraph (b).

(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.<sup>10</sup>

(Published in 20 F. R. 9039, December 9, 1955, effective December 15, 1955.)

## Miscellaneous Operations Rules

41.120-1 *Copies of operations manual (CAA rules which apply to sec. 41.120).* A copy of the operations manual shall be delivered to the Aviation Safety Agent or Advisor assigned to the air carrier by the Administrator. Upon receipt of the copy of the manual, the Aviation Safety Agent or Advisor will inform the air carrier if additional copies are required and the persons to whom they shall be delivered.

(Published in 19 F. R. 2442, April 27, 1954.)

[41.121-1. *Admission to flight deck (CAA interpretations which apply to sec. 41.121).* The term "flight deck" as used in section 41.121 shall mean all of the area forward of the door or window required by Parts 4a and 4b of this subchapter to be located between the pilot compartment and the passenger compartment.]

(Published in 15 F. R. 620, February 4, 1950, effective February 4, 1950, upon publication in the Federal Register; amended in 23 F. R. 2097, March 29, 1958, effective March 29, 1958.)

41.128-1 *Route proving flights (CAA rules which apply to sec. 41.128).*

(a) *Introduction.* The Administrator has the responsibility of determining when route proving flights are necessary. When an air carrier believes that actual route proving flights are not required by the regulations in this sub-

chapter, its officials must submit to the Civil Aeronautics Administration office handling the air carrier's operating certificate, a written request for elimination of such flights. The Administration will undertake an investigation, during which consideration will be given to the nature of the operation to be conducted, and the personnel, equipment, and facilities involved. After investigation, the air carrier will be advised by the Administration that the proposed route modification is minor, and actual route proving flights are not essential to safety, or that actual route proving flights shall be required. (For example, a scheduled air carrier may have been granted a minor extension to an existing route, and the extension may be over an airway that is adequately implemented with conventional aids to air navigation. In many such instances, it might be obvious that the proposed operations could be conducted over such a route in accordance with existing safety standards, and in such cases the proving flights would serve no useful purpose.)

(b) *Purpose.* The purpose of route proving flights is to determine the air carrier's ability to conduct the proposed operation in compliance with applicable provisions of the regulations in this subchapter and in accordance with the minimum safety requirements of the Civil Aeronautics Administration. Such determination is predicated upon the adequacy of the facilities provided by, or available to, the air carrier, including, but not limited to, aircraft, airports, lighting facilities, maintenance facilities, communication and navigation facilities, fueling facilities, and ground and aircraft radio facilities, and upon the competency of the pilot, dispatcher, and other airmen or personnel.

(c) *Application.* At least 30 days prior to the scheduling of route proving flights, officials of the air carrier shall submit to the Civil Aeronautics Administration office handling its operations specifications, a written request for the assignment of Civil Aeronautics Administration personnel to observe the flights. This request must be accompanied by an original

<sup>10</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.