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Federal Aviation Agency

Washington, D.C.

Civil Aeronautics Manual 46

Scheduled Air Carrier Helicopter Certification and Operation Rules

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Supplement No. 2, CAM 46 dated August 1959 **July 15, 1961**

SUBJECT: Revisions to CAM 46.

This supplement is issued to incorporate into CAM 46 Special Civil Air Regulations Nos. SR-425C and SR-446.

Special regulation SR-425C concerns provisional certification and operation of aircraft. It was issued May 31, 1961, to become effective June 6, 1961, and supersedes Special Civil Air Regulation No. SR-425B.

Special regulation SR-446 concerns the use of portable frequency modulation (FM) type radio receivers on aircraft during flight. It was issued May 4, 1961, to become effective May 25, 1961.

With the discontinuance of the distribution of individual amendments to the Civil Air Regulations, it is believed that the preamble material contained in the amendments should be reproduced in the manuals. Therefore, this supplement incorporates into CAM 46 the preambles of all amendments to Part 46 of the Civil Air Regulations issued since the part was adopted. In addition to the preamble, the date of adoption, the effective date, Federal Register citation, and the sections affected are given for each amendment.

These preambles are set up as an addendum to CAM 46 and the page numbers are prefixed with the letter "P." It is recommended that these pages be retained in the back of the current CAM 46. Additional pages will be added as amendments to Part 46 are issued.

Changes on the index page submitted with this supplement are enclosed in black brackets. However, because of its length, the other material is not so marked.

Remove the following pages:	*Insert the following new pages:*
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—	P-1 through P-6

George C. Prill

GEORGE C. PRILL, *Director,*
Flight Standards Service.

Attachments.

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SPECIAL CIVIL AIR REGULATION NO. 425C

Effective: June 6, 1961
Adopted: May 31, 1961
Published: June 6, 1961
(26 F.R. 4990)

Provisional Certification and Operation of Aircraft

Special Civil Air Regulation No. SR–425A was adopted on July 22, 1958, to provide for provisional certification of turbine-powered transport category airplanes in order to permit certain air carriers and manufacturers to conduct crew training, service testing, and simulated air carrier operations prior to introduction of the airplanes into commercial service. The objective of this regulation was to provide a means whereby the air carriers and manufacturers could obtain as much experience as possible with turbine-powered airplanes which, although safe for flight, had not been approved for the issuance of a type certificate.

Special Civil Air Regulation No. SR–425B, which superseded SR–425A, was adopted on April 7, 1960, to extend the application of the regulation to: (1) piston-engine transport category aircraft, including rotorcraft; and (2) personal and executive type aircraft, including rotorcraft, irrespective of powerplant type. In addition, this regulation permitted operations such as sales demonstrations and market surveys with aircraft having a provisional type and airworthiness certificate.

To accomplish this, SR–425B provided for, among other things, the issuance of two classes of provisional type and airworthiness certificates. Class I provisional and airworthiness certificates could be issued for all types of aircraft for operation by the aircraft manufacturer. Class II provisional type and airworthiness certificates could be issued only for transport category aircraft, but these aircraft could be operated by either the aircraft manufacturer or a certificated air carrier. In general, the requirements for the issuance of Class I provisional certificates were less stringent, and the operating limitations less confining, than those for the issuance of Class II provisional certificates.

Under the provisions of SR–425B, however, eligibility to apply for Class I provisional certificates was limited to aircraft manufacturers. A recommendation that this eligibility be extended to include engine manufacturers had been evaluated by the Agency prior to the adoption of SR–425B, but rule making action on such extension was deferred until additional experience with provisional certification could be acquired.

Experience accumulated since the adoption of SR–425B has indicated that it would be practicable for engine manufacturers, who have altered a type certificated aircraft by installing type certificated engines of their own manufacture in place of the original engines, to show compliance with the currently effective requirements for issuance of Class I provisional type and provisional airworthiness certificates; and that compliance with these requirements will insure safe operation of provisionally certificated aircraft by such engine manufacturers. Further, the Agency

believes that operations conducted by engine manufacturers under the terms of Class I provisional certificates, for the purpose of sales demonstrations, market surveys, and other similar activities related to the sale of their engines, would contribute to the promotion and development of civil aeronautics in the United States.

SR–425B is therefore being superseded by SR–425C to permit certain engine manufacturers to apply for Class I provisional type and provisional airworthiness certificates if they have applied for the issuance of a supplemental type certificate.

Since this is a superseding regulation which relieves restrictions and imposes no additional burden on any person, notice and public procedures hereon are unnecessary, and this regulation may be made effective on less than 30 days' notice.

In consideration of the foregoing, the following Special Civil Air Regulation is adopted to become effective June 6, 1961:

GENERAL

1. ***Applicability.*** Contrary provisions of the Civil Air Regulations notwithstanding, provisional type and airworthiness certificates, amendments to provisional type certificates, and provisional amendments to type certificates, will be issued as prescribed in this regulation to a manufacturer or au air carrier. As used in this regulation, a manufacturer shall mean only a manufacturer who is a citizen of the United States; and the term air carrier shall not include au air taxi operator.

2. ***Eligibility.***

(a) A manufacturer of aircraft manufactured by him within the United States may apply for Class I or Class II provisional type and provisional airworthiness certificates, for amendments to provisional type certificates held by him, and for provisional amendments to type certificates held by him.

(b) An air carrier holding au air carrier operating certificate authorizing him to conduct operations under Parts 40, 41, 42, or 46 of the Civil Air Regulations may apply for Class II provisional airworthiness certificates for transport category aircraft which meet the conditions of either subparagraphs (1) or (2) of this paragraph.

(1) The aircraft has a currently valid Class II provisional type certificate or an amendment thereto;

(2) The aircraft has a currently valid provisional amendment to a type certificate which was preceded by a corresponding Class II provisional type certificate.

(c) An engine manufacturer who has altered a type certificated aircraft by installing different type certificated engines, manufactured by him within the United States, in place of the original engines, may apply for Class I provisional type and provisional airworthiness certificates for such aircraft, and for amendments to Class I provisional type certificates held by him, if the basic aircraft, before alteration was type certificated in the normal, utility, acrobatic, or transport category.

3. ***Application.***

(a) General. Applications for provisional type and airworthiness certificates, for amendments to provisional type certificates, and for

provisional amendments to type certificates, shall be submitted to the Chief, Flight Standards Division, FAA, of the Regional Office in which the manufacturer or air carrier is located and shall be accompanied by the pertinent information specified in this regulation.

4. Duration. Unless sooner surrendered, superseded, revoked, or otherwise terminated, certificates and amendments thereto, shall have periods of duration in accordance with paragraphs (a) through (f) of this section.

(a) A Class I provisional type certificate shall remain in effect for 24 months after the date of its issuance or until the date of issuance of the corresponding type or supplemental type certificate, whichever occurs first.

(b) A Class I provisional type certificate shall expire immediately upon issuance of a Class II provisional type certificate for aircraft of the same type design.

(c) A Class II provisional type certificate shall remain in effect for 6 months after the date of its issuance or 60 days after the date of issuance of the corresponding type certificate, whichever occurs first.

(d) An amendment to a Class I or a Class II provisional type certificate shall remain in effect for the duration of the corresponding provisional type certificate.

(e) A provisional amendment to a type certificate shall remain in effect for 6 months after its approval or until the amendment to the type certificate is approved, whichever occurs first.

(f) Provisional airworthiness certificates shall remain in effect for the duration of the corresponding provisional type certificate, amendment to a provisional type certificate, or a provisional amendment to the type certificate.

5. ***Transferability of certificates.*** Certificates issued pursuant to this regulation are not transferable except that a Class II provisional airworthiness certificate may be transferred to an air carrier eligible to apply for such certificate under section 2 of this regulation.

6. ***Display of certificates and markings.*** A provisional airworthiness certificate shall be prominently displayed in the aircraft for which it is issued. The words "Provisional Airworthiness" shall be painted in letters not less than 2 inches high on the exterior of such aircraft adjacent to each entrance to the cabin and cockpit of the aircraft.

REQUIREMENTS FOR ISSUANCE

7. Class I provisional ***type certificates.*** A Class I provisional type certificate and amendments thereto will be issued for a particular type design when the eligible aircraft or engine manufacturer shows compliance with the provisions of paragraphs (a) through (f) of this section, and an authorized representative of the Administrator finds, on the basis of information submitted to him by the manufacturer in compliance with the provisions of this section and of other relevant information, that there is no feature, characteristic, or condition which would render the aircraft unsafe when operated *in* accordance with the limitations established in paragraph (d) of this section and in section 13 of this regulation.

(a) The manufacturer has applied for the issuance of a type or supplemental type certificate for the aircraft.

(b) The manufacturer certifies that the aircraft has met the provisions of subparagraphs (1) through (3) of thii paragraph.

(1) The aircraft has been designed and constructed in accordance with the airworthiness requirements applicable to the issuance of the type or supplemental type certificate for the aircraft;

(2) The aircraft substantially complies with the applicable flight characteristics requirements for the type or supplemental type certificate;

(3) The aircraft **can** be operated safely under the appropriate operating limitations specified in this regulation.

(c) The manufacturer has submitted a report showing that the aircraft had been flown in all maneuvers necessary to show compliance with the flight requirements for the issuance of the type or supplemental type certificate and to establish that the aircraft **can** be operated safely in accordance with the limitations specified in this regulation.

(d) The manufacturer has established limitations with respect to weights, speeds, flight maneuvers, loading, operation of controls and equipment, and all other relevant factors. The limitations shall include all the limitations required for the issuance of a type or supplemental type certificate for the aircraft: ***Provided,*** That, where such limitations have not been established, appropriate restrictions on the operation of the aircraft shall be established.

(e) The manufacturer has established an inspection and maintenance program for the continued airworthiness of the aircraft.

(f) A prototype aircraft has been flown by the manufacturer for at least 50 hours pursuant to the authority of an experimental **cer**tifieate issued under Part 1 of the Civil Air Regulations or under the auspices of a United States military service: ***Provided,*** That the number of flight hours may be reduced by the authorized representative of the Administrator in the case of an amendment to a provisional type certificate.

8. Class I ***provisional airworthiness certificates.*** Except as provided in section 12 of this regulation, a Class I provisional airworthiness certificate will be issued for an aircraft, for which a Class I provisional type certificate is in effect, when the eligible aircraft or engine manufacturer shows compliance with the provisions of paragraphs (a) through (d) of thii section, and an authorized representative of the Administrator finds that there is no feature, characteristic, or condition of the aircraft which would render the aircraft unsafe when operated in accordance with the limitations established in sections 7(d) and 13 of this regulation.

(a) The manufacturer **is** the holder of the provisional type certificate for the aircraft.

(b) The manufacturer submits a statement that the aircraft conforms to the type design corresponding with the provisional type certificate and has been found by him to be in safe operating condition under the applicable limitations.

(c) The aircraft **has** been flown at least 5 hours by the manufacturer.

(d) The aircraft has been supplied with a provisional aircraft flight manual or other document and appropriate placards containing the limitations required by sections 7(d) and 13 of this regulation.

9. *Class II* provisional *type certificates.* A Class II provisional type certificate and amendments thereto will be issued for a particular transport category type design when the manufacturer of the aircraft shows compliance with the provisions of paragraphs (a) through (h) of this section, and *an* authorized representative of the Administrator finds, on the basis of information submitted to him by the manufacturer in compliance with the provisions of this section and of other relevant information, that there is no feature, characteristic, or condition which would render the aircraft unsafe when operated in accordance with the limitations established in paragraph (f) of this section and in sections 13 and 14 of this regulation.

(a) The manufacturer has applied for the issuance of a transport category type certificate for the aircraft.

(b) The manufacturer holds a type certificate and a currently effective production certificate for at least one other aircraft in the same transport category as the subject aircraft.

(c) The Agency's official flight test program with respect to the issuance of a type certificate for the aircraft is in progress.

(d) The manufacturer certifies that the aircraft has met the provisions of subparagraphs (1) through (3) of this paragraph.

(1) The aircraft has been designed and constructed in accordance with the airworthiness requirements applicable to the issuance of the type certificate for the aircraft;

(2) The aircraft substantially complies with the applicable flight characteristics requirements for the type certificate;

(3) The aircraft can be operated safely under the appropriate operating limitations specified in this regulation.

(e) The manufacturer has submitted a report showing that the aircraft had been flown in all maneuvers necessary to show compliance with the flight requirements for the issuance of the type certificate and to establish that the aircraft can be operated safely in accordance with the limitations specified in this regulation.

(f) The manufacturer has prepared a provisional aircraft flight manual which includes limitations with respect to weights, speeds, flight maneuvers, loading, operation of controls and equipment, and all other relevant factors. The limitations shall include all the limitations required for the issuance of a type certificate for the aircraft: *Provided,* That, where such limitations have not been established, the provisional flight manual shall contain appropriate restrictions on the operation of the aircraft.

(g) The manufacturer has established an inspection and maintenance program for the continued airworthiness of the aircraft.

(h) A prototype aircraft has been flown by the manufacturer for at least 100 hours pursuant to the authority of either an experimental certificate issued under Part 1 of the Civil Air Regulations or a Class I provisional airworthiness certificate: *Provided,* That the number of Eight hours may be reduced by the authorized representative of the Administrator in the case of an amendment to a provisional type certificate.

10. Class ***II provisional airworthiness certificates.*** Except as provided in section 12 of this regulation, a Class II provisional airworthiness certificate will be issued for an aircraft, for which a Class II provisional type certificate is in effect, when the applicant shows compliance with the provisions of paragraphs (a) through (e) of this section, and an authorized representative of the Administrator finds that there is no feature, characteristic, or condition of the aircraft which would render the aircraft unsafe when operated in accordance with the limitations established in sections S(f), 13, and 14 of this regulation.

(a) The applicant submits evidence that a Class II provisional type certificate for the aircraft has been issued to the manufacturer.

(b) The applicant submits a statement by the manufacturer that the aircraft has been manufactured under a quality control system adequate to insure that the aircraft conforms to the type design corresponding with the provisional type certificate.

(c) The applicant submits a statement that the aircraft has been found by him to be in a safe operating condition under the applicable limitations.

(d) The applicant submits a statement that the aircraft has been flown at least 5 hours by the manufacturer.

(e) The aircraft has been supplied with a provisional aircraft flight manual containing the limitations required by sections 9(f), 13, and 14 of this regulation.

11. ***Provisional amendments to type certificate.*** A provisional amendment to a type certificate will be approved when the manufacturer of the type certificated aircraft shows compliance with the provisions of paragraphs (a) through (g) of this section, and an authorized representative of the Administrator finds, on the basis of information submitted to him by the manufacturer in compliance with the provisions of this section and of other relevant information, that there is no feature, characteristic, or condition which would render the aircraft unsafe when operated in accordance with the limitations established in paragraph (e) of this section, and section 13 and, if applicable, section 14 of this regulation.

(a) The manufacturer has applied for an amendment to the type certificate.

(b) The Agency's official flight test program with respect to the amendment of the type certificate is in progress.

(c) The manufacturer certifies that the aircraft has met the provisions of subparagraphs (1) through (3) of this paragraph.

(1) The modification involved in the amendment to the type certificate has been designed and constructed in accordance with the airworthiness requirements applicable to the issuance of the type certificate for the aircraft;

(2) The aircraft substantially complies with the applicable flight characteristics requirements for the type certificate;

(3) The aircraft can be operated safely under the appropriate operating limitations specified in this regulation.

(d) The manufacturer has submitted a report showing that the aircraft incorporating the modifications involved had been flown in all maneuvers necessary to show compliance with the flight require-

ments applicable to these modifications and to establish that the aircraft can be operated safely in accordance with the limitations specified in this regulation.

(e) The manufacturer has established, in a provisional aircraft flight manual or other document and appropriate placards, limitations with respect to weights, speeds, flight maneuvers, loading, operation of controls and equipment, and all other relevant factors. The limitations shall include all the limitations required for the issuance of a type certificate for the aircraft: ***Provided,*** That, where such limitations have not been established, appropriate restrictions on the operation of the aircraft shall be established.

(f) The manufacturer has established an inspection and maintenance program for the continued airworthiness of the aircraft.

(g) Au aircraft modified in accordance with the corresponding amendment to the type certificate has been flown by the manufacturer for the number of hours found necessary by the authorized representative of the Administrator, such flights having been conducted pursuant to the authority of an experimental certificate issued under Part 1 of the Civil Air Regulations.

12. ***Provisional airworthiness certificates corresponding with provisional amendment to type certificate.*** A Class I or a Class II provisional airworthiness certificate, as specified in section 2 of this regulation, will be issued for an aircraft, for which a provisional amendment to the type certificate has been issued, when the applicant shows compliance with the provisions of paragraphs (a) through (e) of this section, and au authorized representative of the Administrator finds that there is no feature, characteristic, or condition of the aircraft, as modified in accordance with the provisionally amended type certificate, which would render the aircraft unsafe when operated in accordance with the limitations established in sections 11(e) and 13 and, if applicable, section 14 of this regulation.

(a) The applicant submits evidence that approval has been obtained for the relevant provisional amendment to the type certificate for the aircraft.

(b) The applicant submits evidence that the modification to the aircraft was accomplished under a quality control system adequate to insure that the modification conforms to the provisionally amended type certificate.

(c) The applicant submits a statement that the aircraft has been found by him to be in a safe operating condition under the applicable limitations.

(d) The applicant submits a statement that the aircraft has been flown at least 5 hours by the manufacturer.

(e) The aircraft has been supplied with a provisional aircraft Bight manual or other document and appropriate placards containing the limitations required by sections 11(e) and 13 and, if applicable, section 14 of this regulation.

OPERATING LIMITATIONS

13. ***Operation of provisionally certificated aircraft.*** An aircraft for which a provisional airworthiness certificate has been issued shall

be operated only by a person eligible to apply for a provisional airworthiness certificate in accordance with section 2 of this regulation. Operations shall be in compliance with paragraphs (a) through (j) of this section.

(a) The aircraft shall not be operated in air transportation unless so authorized in a particular case by the Director, Bureau of Flight Standards.

(b) Operations shall be restricted to the United States, its Territories and possessions.

(c) The aircraft shall be limited to the types of operations listed in subparagraphs (1) through (7) of this paragraph.

(1) Flights conducted by the aircraft or engine manufacturer in direct conjunction with the type or supplemental type certification of the aircraft ;

(2) Training of flight crews, including simulated air carrier operations;

(3) Demonstration flights conducted by the manufacturer for prospective purchasers;

(4) Market surveys by the manufacturer;

(5) Flight checking of instruments, accessories, and equipment, the functioning of which does not adversely affect the basic airworthiness of the aircraft ;

(6) Service testing of the aircraft:

(7) Such additional operations as may be specifically authorized by the authorized representative of the Administrator.

(d) All operations shall be conducted within the prescribed limitations displayed in the aircraft or set forth in the provisional aircraft Bight manual or other document containing the limitations for the safe operation of the aircraft: ***Provided,*** That operations conducted in direct conjunction with the type or supplemental type certification of the aircraft shall be subject to the experimental aircraft limitations of section 1.74 of Part 1 of the Civil Air Regulations, and all "flight tests" as defined in section 60.60 of the Civil Air Regulations shall be conducted in accordance with the requirements of section 60.24 of that part.

(e) The operator shall establish procedures for the use and guidance of flight and ground personnel in the conduct of operations under this section. Specific procedures shall be established for operations from and into airports where the runways require takeoffs or approaches over populated areas. All procedures shall be approved by an authorized representative of the Administrator. All operations shall be conducted in accordance with such approved procedures.

(f) The operator shall insure that each flight crewmember is properly certificated and possesses adequate knowledge of, and familiarity with, the aircraft and the procedures to be used by him.

(g) The aircraft shall be maintained in accordance with applicable Civil Air Regulations, with the inspection and maintenance program established in accordance with this regulation, and with any special inspections and maintenance conditions prescribed by an authorized representative of the Administrator.

(h) No aircraft shall be operated under authority of a provisional airworthiness certificate if the manufacturer or the authorized

representative of the Administrator determines that a change in design, construction, or operation is necessary to insure safe operation, until such change is made and approved by the authorized representative of the Administrator. Section 1.24 of Part 1 of the Civil Air Regulations shall be applicable to operations under this section.

(i) Only those persons who have a bona fide interest in the operations permitted under this. section or who are specifically authorized by both the manufacturer and the authorized representative of the Administrator may be carried in provisionally certificated aircraft: ***Provided,*** That they have been advised by the operator of the provisional certification status of the aircraft.

(j) The authorized representative of the Administrator may prescribe such additional limitations or procedures as he finds necessary. This shall include limitations on the number of persons who may be carried aboard the aircraft.

14. ***Additional limitations to operations by air carriers.*** In addition to the limitations in section 13 of this regulation, operations by air carriers shall be subject to the provisions of paragraphs (a) through (d) of this section.

(a) In addition to crewmembers, the aircraft may carry only those persons who are listed in section 40.356(c) of Part 40 of the Civil Air Regulations or who are specifically authorized by both the air carrier and the authorized representative of the Administrator.

(b) The air carrier shall maintain current records for each flight crewmember. These records shall include such information as is necessary to show that each flight crewmember is properly trained and qualified to perform his assigned duties.

(c) The appropriate instructor, supervisor, or check airman shall certify to the proficiency of each flight crewmember and such certification shall become a part of the Aight crewmember's record.

(d) A log of all flights conducted under this regulation, and accurate and complete records of inspections made and maintenance accomplished, shall be kept by the air carrier and made available to the manufacturer and to an authorized representative of the Administrator.

15. ***Other operations.*** The Director, Bureau of Plight Standards, may credit toward the aircraft proving test requirements of the applicable air carrier regulations such operations conducted pursuant to this special regulation as he finds have met the applicable aircraft proving test requirements: ***Provided,*** That he also finds that there is no significant difference between the provisionally certificated aircraft and the aircraft for which application is made for operation pursuant to an air carrier operating certificate.

CERTIFICATES ISSUED UNDER SR–425A AND SR–425B

16. ***Duration.*** Currently valid provisional type and airworthiness certificates issued in accordance with Special Civil Air Regulations Nos. SR–425A and SR–425B shall remain in effect for the durations and under the conditions prescribed in those regulations.

This special regulation supersedes Special Civil Air Regulation No. SR–425B and shall terminate on June 30, 1963, unless sooner superseded, rescinded, or otherwise terminated.

SPECIAL CIVIL AIR REGULATION NO. SR-446

Effective: May 25, 1961
Adopted: May 4, 1961
Published: May 10, 1961
(26 F.R. 4011)

Use of Portable Frequency Modulation (FM) Type Radio Receivers on Aircraft During Flight

In the latter part of 1958, the former Civil Aeronautics Administration received reports that certain portable electronic devices operated by passengers aboard aircraft were causing interference to aircraft communications and navigational systems. The reports received were very limited in number and not conclusive enough to warrant regulatory action at that time. However, since these reports indicated that such interference was possible, the CAA published a notice to airmen (NOTAM) in the Airman's Guide warning airmen and operators of this possibility.

Since 1958, various agencies, both government and industry, have conducted studies of this problem. Recently, during tests conducted by the Federal Aviation Agency's Bureau of Research and Development, it was found that radio receivers having local oscillators operating within or near the VHF omnirange (VOR) frequency band (108 to 118 me.) cause interference which adversely affects the operation of an aircraft's VOR navigational system. Various types of portable radio receivers (i.e., radio receivers capable of being carried aboard an aircraft by a passenger) were used in these tests to determine which would produce interference to the VOR equipment. It was determined that the portable frequency modulation (FM) radio receiver is the only type radio receiver, which is commonly used by the general public, that would create this unwanted interference. Therefore, I find that immediate regulatory action is necessary in order to provide adequately for safety in air commerce.

The rule adopted herein will prohibit the operation of portable FM radio receivers during flight on all aircraft operated by an air carrier or commercial operator. It also prohibits the operation of portable FM radio receivers on all other VOR-equipped civil aircraft of the U.S. while such VOR equipment is being used for navigational purposes. The added restriction in the case of aircraft operated by an air carrier or commercial operator is necessary since most of these aircraft are equipped with VOR navigational equipment and it would be difficult, if not impossible, for a passenger to know when the pilot in command was depending upon this equipment for navigational purposes.

It is realized that not all portable FM radio receivers utilize a local oscillator which will create interference with the airborne VOR equipment. However, it would not be feasible to expect the general public,

airline personnel, or air crewmembers to distinguish which portable FM radio receiver will cause this interference. Accordingly, the provisions of this rule will apply to all portable FM radio receivers.

Since this Special Civil Air Regulation is of an emergency nature, I find that compliance with the notice and public procedure provisions of the Administrative Procedure Act would be impractical, and that good cause exists for making this regulation effective on less than 30 days' notice.

In consideration of the foregoing, the following Special Civil Air Regulation is hereby adopted to become effective on May 25, 1961:

No person shall operate, nor shall any operator or pilot in command of an aircraft permit the operation of, a portable frequency modulation (FM) radio receiver on the following civil aircraft of the United States while such aircraft are engaged in flight in air commerce: (a) aircraft operated by an air carrier or commercial operator; and (b) any other aircraft equipped with VHF omnirange (VOR) navigational equipment while such VOR equipment is being used for navigational purposes.

This Special Civil Air Regulation shall remain in effect for one year unless sooner superseded or rescinded by the Federal Aviation Agency.

Addendum

Preambles of Amendments to Civil Sir Regulations Part 46

NOTE

Part 46 of the Civil Air Regulations was adopted by the Civil Aeronautics Board on April 2, 1958, to become effective on October 1, 1958. The preamble of the new part, and the preambles of amendments thereto, are given in the attached pages.

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New Part 46

Scheduled Air Carrier Helicopter Certification and Operation Rules

Adopted: Apr. 2, 1958
Effective: Oct. 1, 1958
Published: Apr. 8, 1958 (23 F.R. 2264)

Special Civil Air Regulation No. SR–400A, effective January 25, 1956, continued in effect the provisions of SR–400 and SR-369 and provides for regulation, on an interim basis, of the certification and operation of scheduled air carrier helicopters. These Special Civil Air Regulations also gave authority to the Administrator to issue air carrier operating certificates to scheduled air carrier helicopter operators and to permit deviations from Parts 40 and 61 as in effect December 31, 1953.

As the regulatory requirements of Parts 40 and 61 are not directly applicable to helicopter operations, it has been necessary for the Administrator to use the authority contained in SR–400A to grant waivers where necessary and appropriate.

In the interest of establishing specific regulatory requirements for scheduled helicopter operations, Civil Air Regulations Draft Release No. 50–2, "Scheduled Air Carrier Helicopter Certification and Operation Rules," was prepared and circulated to all interested parties for comment on February 20, 1950. As a result of the comments and recommendations received at that time, it was decided that immediate adoption of helicopter regulations was premature.

In late 1951, a revised draft of proposed Part 46 was prepared hut issuance of this draft was delayed until such time as it could be made to conform with the general policy then being established in new Part 40 entitled "Scheduled Interstate Air Carrier Certification and Operation Rules."

Subsequently, Draft Release 53–12, "Scheduled Air Carrier Helicopter Certification and Operation Rules," was circulated on July 23, 1953, for comment by interested parties. The comment on this draft release was consolidated and circulated, and a meeting was held in Washington in June of 1954 for the purpose of discussing the revised proposal. Following this meeting, proposed Part 46 was again revised, published in the Federal Register, and circulated as Draft Release 56–2 on January 19, 1956.

The suggestions made in the comments submitted thereon have been carefully studied and where considered appropriate have been included in this part. These comments also brought to light several controversial matters. These matters which are discussed below have been resolved as equitably as possible and in the opinion of the Board the determinations which have been reached will assure reasonable and satisfactory standards, of safety.

The Board is of the opinion that the use of c&ideated dispatchers in exercising operational control of scheduled air carrier helicopters is not essential to safety and need not be required. In reaching this determination the Board took into consideration that two of three presently certificated helicopter air carriers have operated for a number of years with an excellent safety record without utilizing certificated dispatchers and have developed means of securing operational control of helicopters in flight and prior to release for flight which are satisfactory to the Administrator; that generally all operations are conducted in a limited metropolitan area under visual flight rules; and that flight stage lengths are short in all cases. In addition consideration was given to the nature of the route structures and the fact that emergency landing areas will be available at almost all points along the route. A requirement that the carrier establish and maintain a training program to insure that all operations personnel who perform duties involving operational control of helicopters are adequately trained in their duties and responsibilities has, however, been included in this part.

Comment received revealed a wide variance of opinion concerning the proper method of computing flight time in helicopter operations. Some persons Contended that "block-to-block time" as presently required in Part 40 is also appropriate for Part 46. Others contended that "rotor time" (the time from which the rotors start turning for the purpose of flight until they stop at the end of a flight or series of flights) is the only valid measure Of determining pilot fatigue time. In view of this controversy, the Board, published in the

Federal Register (22 F.R. 10768) and on December 20, 1957, circulated as Draft Release 57–29, a notice that oral argument would be heard on the issue of the definition of "flight time" in Part 46. This argument was heard on January 23, 1958. After careful consideration of the comments and arguments presented, the Board has concluded that the "block-to-block" method of computing flight time limitations which is presently applicable to all scheduled air carrier operations, including helicopters, is a safe and reasonable method to determine such limitations and should be used in this part. In reaching this conclusion, the Board found that the difference between airplane and helicopter ground operations is not of such significance as to warrant different methods of determining maximum flight time limitations. One of the factors considered was that devices have been developed by which helicopter flight controls can be secured while the rotors are in motion on the ground. These devices relieve the pilot of most of the duties which were generally required during ground operation of helicopters. In addition, the Board considers that the present and anticipated use of two-pilot crews in scheduled helicopter operations and other improvements in equipment will also materially reduce the time and attention required of pilots in their duties while the helicopter is on tbe ground with the rotors turning.

Sections 46.30 and 46.31, which concern routes, specify that definite routes and route widths shall be established and approved by the Administrator. This concept is considered essential in view of the fact that 8.11 of the helicopters presently certificated for civil operations are single-engine and there is an attendant need for satisfactory emergency landing areas at all times in the event of engine failure. Furthermore, all of the present operations are conducted over and adjacent to metropolitan areas where much caution must be exercised in determining helicopter routes. The Board is also persuaded by the fact that the Administrator has considered it necessary in the past to establish and approve routes with a designated width for all certificated scheduled helicopter operations.

With respect to the proposed requirements for section 46.261(b), the Board has concluded that it is desirable to incorporate in this part the provisions of Part 40 presently in effect which require the use of a copilot when instrument operations are authorized or when helicopters weighing more than 12,500 pounds are used.

Concerning the proposed requirements of section 46.200(c) which pertain to instrument lights, the Board is of the opinion that this requirement should conform, as closely as possible, to the corresponding provisions in Part 40. Although some changes have been made in this paragraph there is no intention to change the present interpretation which is being followed regarding instrument light requirements.

With respect to the proposed requirements of section 46.304(c) concerning tbe maintenance and reestablishment of route qualifications, the Board is of the opinion that a 3-month period is more realistic in view of the operation involved than the 12-month period as proposed in Draft Release 56–2 or the B-month period proposed in Draft Release 53–12. Since current practice presently achieves this objective, no burden will be imposed by setting the requirement at 3 months.

Paragraph (b) of section 46.304 requires a pilot utilized in night helicopter operations as pilot in command to make at least one trip each 30 days during daylight over the route he is 'scheduled to fly. This is considered necessary due to the congested areas over which helicopter operations are conducted and the need for familiarization and knowledge concerning all obstructions, hazards, and emergency landing areas along the route. This can best be achieved during daylight hours.

This part will become effective 6 months after adoption in order to allow ample time for the air carriers and the Administrator to prepare for its implementation. It is fully realized that in the past, when a major part of the regulation has been implemented, difficulty has been encountered by the air carriers in the preparation of manuals, establishing personnel training programs and operational procedures, and familiarization of all personnel concerned with the details of the new requirements. The Administrator has, on occasion, also been handicapped by lack of time to fully and properly prepare Civil Aeronautics Manual material concerning a new part of, the regulations and to distribute guidance material to CAA field personnel who must enforce such regulations and assist the air carriers in implementing new procedures and practices.

Interested persons have been afforded an opportunity to participate in the making of this amendment (21 F.R. 631), and due consideration has been given to all relevant matter presented.

Amendment 46-1

Absence of Flight Crew Members From Their Duty Stations

Adopted: Apr. 17, 1959
Effective: Apr. 22, 1959
Published: Apr. 23, 1959 (24 F.R. 3155)

Section 46.354 of the Civil Air Regulations requires all flight crew members to remain at their respective stations with seat belts fastened during takeoff or landing, and while en route except when the absence of one such flight crew member is necessary in connection with his "regular duties." As used in this regulation the term "regular duties" was intended to mean those duties involving the operation of the aircraft. It was not intended to encompass activities related to furthering public relations or other activities not related to operational safety of the aircraft. The absence of a flight crew member from his duty station for the performance of such activities unnecessarily reduces the degree of vigilance, attention to duty, and availability for emergency action required for the operation of modem aircraft under conditions of high density traffic.

Accordingly, section 46.354 is being amended to clarify its intention and application. Similar amendments are being made simultaneously to Parts 40, 41, 42, and 60 of the Civil Air Regulations to provide identical rules for all operations covered by those parts.

Inasmuch as this amendment is a clarification of the present requirements and imposes no additional burden on any person, compliance with the notice, procedures and effective date provisions of section 4 of the Administrative Procedure Act is unnecessary and not required.

Amendment revised section 46.354.

Amendment 46-2

Frequency of Pilot Proficiency Checks

Adopted: Sept. 24, 1959
Effective: Oct. 29, 1959
Published: Sept 30, 1959 (24 F.R. 7866)

Part 46 of the Civil Air Regulations presently requires each pilot in command to successfully pass pilot proficiency checks at least twice in each 12-month period. Section 46.302 (b) requires such checks to be given at intervals of not less than 4 months nor more than 8 months

Parts 40, 41, 42, and 46 specify the time interval between pilot proficiency checks differently which has resulted in varying interpretations as to requirements and administrative practices. Since no difference is intended between air carrier operations in this respect, all of the air carrier parts are being amended to make the frequency requirement of pilot proficiency checks the same.

Since this regulatory action imposes no additional burden upon any person, notice and public procedure hereon are unnecessary.

Amendment revised paragraph (b) of section 46.302.

Amendment 46-3

Frequency of Pilot Line Checks

Adopted: Apr. 27, 1960
Effective: June 1, 1960
Published: May 4, 1960 (25 F.R. 3850)

Section 46.302(a) of the Civil Air Regulations presently requires in part that a pilot shall satisfactorily accomplish a line check prior to serving as pilot in command and at least once each 12 months thereafter. This has normally been termed within the industry as the annual or yearly line check for the pilot in command.

By letter dated February 9, 1960, the Air Transport Association of America, on behalf of its member air carriers, recommended that the time interval between line checks be specified in the same manner as Civil Air Regulations Amendments 40-19 and 41-26 which clarified the time intervals between proficiency checks. The ATA advises that such a clarification will simplify recordkeeping and administration of the line check in the same may that the proficiency check requirements have been simplified.

The FAA has considered the foregoing recommendation and believes that the requirements with respect to the frequency of pilot line checks should be amended to provide the clarification requested and to make such requirements consistent with the frequency requirements for pilot proficiency checks.

Since this regulatory action imposes no additional burden upon any person, notice and public procedure hereon are unnecessary, and it may be made effective on less than 30 days' notice.

Amendment revised section 46.302(a) by adding two new sentences after the fist sentence.

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