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

September 21, 1961

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 61-19

SUBJECT: Addition of Rotorcraft Class Ratings for Pilot Certificates

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The Flight Standards Service of the Federal Aviation Agency has under consideration amendments to Part 20 of the Civil Air Regulations to establish rotorcraft category class ratings of gyroplane and helicopter. The reasons therefor are set forth in the explanatory statement of the attached proposal which is being published in the Federal Register as a notice of proposed rule making.

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

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

It should be noted that comments should be submitted, preferably in duplicate, to the Docket Section of the Federal Aviation Agency, and in order to insure consideration must be received on or before November 30, 1961.

Acting Director,
Flight Standards Service

FEDERAL AVIATION AGENCY

FLIGHT STANDARDS SERVICE

[14 CFR Part 20]

[Regulatory Docket No. 903; Draft Release No. 61-19]

NOTICE OF PROPOSED RULE MAKING

Addition of Rotorcraft Class Rating for Pilot Certificates

Pursuant to the authority delegated to me by the Administrator (14 CFR 405.27), notice is hereby given that there is under consideration a proposal to amend Part 20 of the Civil Air Regulations as hereinafter set forth.

Interested persons may participate in the making of the proposed rules by submitting such written data, views, or arguments as they may desire. Communications should be submitted, preferably in duplicate, to the Docket Section of the Federal Aviation Agency, Room C-226, 1711 New York Avenue, N.W., Washington 25, D.C. All communications received on or before November 30, 1961, will be considered by the Administrator before taking action on the proposed rules. The proposal contained in this notice may be changed in the light of comments received. All comments submitted will be available in the Docket Section for examination by interested persons when the prescribed date for return of comments has expired.

Section 20.120 provides for the classification of aircraft ratings issued to private and commercial pilots. At present all aircraft using rotating airfoils as a source of lift are grouped under the category "rotorcraft," with no further breakdown into classes of rotorcraft. The majority of such aircraft are helicopters; however, there are some gyroplanes, and indications are that there will be many others in the near future.

A gyroplane, including the autogiro, is a class of rotorcraft, the rotors of which are caused to rotate by the action of the air when the rotorcraft is in motion, with the propulsion system independent of the rotor system except for initial starting. The helicopter, on the other hand, is a rotorcraft which depends principally for its support and motion in the air upon the lift generated by one or more power-driven rotors, on substantially vertical axes.

The flight characteristics of helicopters and gyroplanes are substantially different. In actual practice, under the present Federal Aviation Agency policies set forth in Civil Aeronautics Manual 20, an applicant for a rotorcraft rating is required to accomplish the airplane flight maneuvers if he is examined in a gyroplane, and the helicopter maneuvers if he is examined in a helicopter. Therefore, an applicant who obtains a rotorcraft rating in a gyroplane will not have demonstrated ability to handle a helicopter, with its distinctive takeoff, flying, maneuvering, and hovering characteristics; and an applicant who obtains a rotorcraft rating in a helicopter will not have demonstrated ability to handle a gyroplane.

The suggested need for rotorcraft class ratings was discussed in the Air-Share meetings the FAA held recently, and met with generally favorable response among the relatively few rotorcraft pilots who attended. However, some dissent was expressed. The principal objection was that if a person obtains a rotorcraft category rating in one class of rotorcraft, he should be able to qualify in the other by logging a satisfactory flight check given by a flight instructor.

The question of transitional qualifications for other kinds of aircraft was a consistent topic at the Air-Share meetings, and will result in a study of the question as a whole. Furthermore, the advanced state of aircraft design requires consideration of the entire section on aircraft ratings. Under consideration are a "gyrodyne" rating for rotorcraft, type ratings for essentially unconventional aircraft not fitting into existing classifications, multiengine ratings in tandem-powered airplanes, and classifications of rotorcraft with multiple-lifting rotors. However, this amendment to § 20.120 is being published as a notice of proposed rule making at this time to provide for the expected large increase in the use of gyroplanes in the near future.

The distinctive differences in flight characteristics between helicopters and gyroplanes are at least as great, if not greater, than the distinctive differences between classes of airplanes. Therefore, an amendment to provide for separate pilot qualification and rating on each class of rotorcraft flown is necesssary in the interest of safety, and would be consistent with the present practice of determining airplane class qualifications.

Adoption of this amendment would also require amendment to § 20.5 to include definitions of "helicopter" and "gyroplane." The definitions proposed are the same as presently contained in Parts 6 and 7 of the Civil Air Regulations. In addition, the present definition of "rotorcraft" would be changed to read the same as the definition of "rotorcraft" in Parts 6 and 7. The present definition of "class (of aircraft)" would be changed to "class of airplane" and a new definition "class of rotorcraft" added.

It is believed a 6-month grace period should be ample for the continued validity of present rotorcraft category ratings. Provision is made to permit exchange of the superseded rotorcraft category rating for the new category and class ratings at any time after the effective date of this proposed amendment. The class of rotorcraft in which the certificate holder qualified initially will determine the class rating received. Where a certificate holder who qualified initially in a helicopter has had at least 10 hours as pilot in command of a gyroplane within the 12 months im-

mediately preceding the effective date of the amendment, the gyroplane class rating may be added to the certificate.

It is necessary to make provision for the exchange of certificates issued prior to September 1, 1957, bearing helicopter or autogiro category ratings. Such exchange is necessary in order to establish a uniform system of aircraft rating classification. Upon presentation of their certificates for exchange, those persons who hold autogiro or helicopter category ratings will be issued rotorcraft category ratings with a helicopter or gyroplane class rating corresponding to the category rating held at the time of the exchange. No showing of recent experience or flight test is required for this exchange. Where the holder of a helicopter category rating has had at least 10 hours as pilot in command of a gyroplane within the 12 months immediately preceding the effective date of the amendment, the gyroplane class rating may be added to the certificate.

Possession of a current medical certificate is not necessary for the purpose of the exchange provisions of this amendment. Therefore, to clarify any abiguity which may arise from the use of the words "valid pilot certificate," the proposed amendment expressly states that a current medical certificate is not required to exchange a certificate.

In consideration of the foregoing, it is proposed to amend Part 20 of the Civil Air Regulations (14 CFR Part 20) as follows:

1. By amending § 20.5 by adding in proper alphabetical order new definitions to read as follows:

20.5 *Definitions.* * * *

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Class of rotorcraft. A class of rotorcraft is a classification of such aircraft differentiating between gyroplanes and helicopters.

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Gyroplane. A gyroplane is a rotorcraft which depends principally for its support upon the lift generated by one or more rotors which are not power-driven, except for initial starting, and which are caused to rotate by the action of the air when the rotorcraft is in motion. The propulsion is independent of the rotor system and usually consists of conventional propellers.

Helicopter. A helicopter is a rotorcraft which depends principally for its support and motion in the air upon the lift generated by one or more power-driven rotors, rotating on substantially vertical axes.

2. By amending § 20.5 by changing the word "aircraft" to "airplane" in the title of the definition "Class (of aircraft)" and by revising the definition to read as follows:

20.5 *Definitions.* * * *

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Class of airplane. A class of airplane is a classification of such aircraft differentiating between single-engine and multiengine and land and water configurations.

3. By amending § 20.5 by revising the definition "Rotorcraft" to read as follows:

20.5 *Definitions.* * * *

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Rotorcraft. A rotorcraft is any aircraft deriving its principal lift from one or more rotors.

4. By amending § 20.120 by redesignating paragraph (c) as paragraph (d), and adding a new paragraph (c) so that § 20.120 reads as follows:

20.120 *Aircraft ratings.* Aircraft ratings issued to private and commercial pilots shall be classified as follows:

(a) *Category ratings.*
- (1) Airplane.
- (2) Rotorcraft.
- (3) Glider.

(b) *Airplane class ratings.*
- (1) Single-engine land.
- (2) Multiengine land.
- (3) Single-engine sea.
- (4) Multiengine sea.

(c) *Rotorcraft class ratings.*
- (1) Gyroplane.
- (2) Helicopter.

(d) *Type ratings.* Each type of aircraft having a maximum certificated takeoff weight of more than 12,500 pounds.

5. By adding a new § 20.122 to read as follows:

20.122 *Validity and exchange of rotorcraft, helicopter, or autogiro ratings issued prior to (effective date of this amendment).*

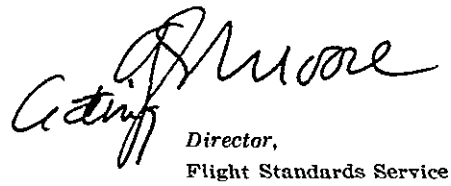
(a) The holder of a valid pilot certificate bearing a rotorcraft category rating issued prior to (the effective date of this amendment) may exercise the privileges of such rating until (6 months after the effective date of this amendment). At any time after (the effective date of this amendment) such person may, without a further showing of competence, exchange his rotorcraft category rating for a rotorcraft category rating with a class rating determined by the class of rotorcraft in which he originally qualified for the issuance of the rotorcraft rating, whether by flight test or on the basis of military competence. A certificate holder who qualified initially in a helicopter may obtain a gyroplane class rating without a further showing of competence if he has had at least 10 hours as pilot in command of a gyroplane within the 12 months preceding (the effective date of this amendment).

(b) The holder of a valid pilot certificate bearing a helicopter or autogiro category rating issued prior to September 1, 1957, may exercise the privileges of such rating or ratings until (6 months after the effective date of this amendment). Such person may, without a further showing of competence, exchange his helicopter category rating for a rotorcraft category rating with helicopter class rating, and his autogiro category rating for a rotorcraft category rating with

gyroplane class rating, at any time after the effective date of this amendment by presenting his certificate for exchange. The holder of a helicopter category rating may obtain a gyroplane class rating without a further showing of competence if he has had at least 10 hours as pilot in command of a gyroplane within the 12 months preceding (the effective date of this amendment).

(c) Exchange of pilot certificates in accordance with paragraphs (a) and (b) of this section will not require the holder of the certificate to possess a current medical certificate at the time of the exchange.

These amendments are proposed under the authority of sections 313(a), 601, 602 of the Federal Aviation Act of 1958 (72 Stat. 752, 775, 776; 49 U.S.C. 1534(a), 1421, 1422).



Director,
Flight Standards Service

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