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

July 11, 1962

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 62-34

SUBJECT: Instrument Proficiency Requirements for Type Rating Flight Tests

The Flight Standards Service of the Federal Aviation Agency has under consideration amendments to Part 20 of the Civil Air Regulations to require applicants for a type rating to demonstrate instrument proficiency during the type rating flight test. If an instrument demonstration is not made, the type rating would be restricted to operations under visual flight rules. The reasons for these amendments 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 September 17, 1962.

Director,

Flight Standards Service

FEDERAL AVIATION AGENCY

FLIGHT STANDARDS SERVICE

[14 CFR Part 20]

[Regulatory Docket No. 1291; Draft Release No. 62-34]

NOTICE OF PROPOSED RULE MAKING

Instrument Proficiency Requirements for Type Rating Flight Tests

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 September 17, 1962, 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 at any time.

At present, an instrument-rated private or commercial pilot may pilot any type of aircraft under instrument flight rules, whether or not he has demonstrated instrument proficiency in the type of aircraft to be flown, if he complies with the rating requirements of § 43.63 of the Civil Air Regulations. Experience indicates that some companies who operate large aircraft are reluctant to voluntarily authorize the use of such aircraft for the purpose of giving their pilots instrument training because of the expense involved.

The majority of users of large aircraft (more than 12,500 pounds maximum certificated takeoff weight) in general aviation employ professional pilots who were hired shortly after World War II. These pilots continued flying aircraft in their new employment with which they had had past instrument experience and formal training. Recently, however, aircraft of greater complexity have become available to general aviation users from surplus airline and military equipment; and aircraft manufacturers are designing similar equipment specifically for general aviation operations. The increasing trend to exchange older equipment for the more modern and complex equipment now results in many of these same pilots being

checked out in aircraft with which they have had no previous experience.

The problem is directly related to the matter of flight training standards for transition from one type aircraft to another. However, Part 43, under which these users of large aircraft operate, is not a convenient medium for applying training standards to such diverse operations and equipment as are conducted under the part. It is thus more practical to establish attainment standards, and leave the training necessary to meet these standards up to the operator.

The overall safety record of the users of large aircraft in general aviation is good, but the trend toward inadequate transition training programs for new types of aircraft would lower the safety margin of this group. This lowering of safety margins may be expected to increase unless realistic standards appropriate to safe operations of large aircraft are adopted through type rating tests that are consistent with the use to be made of the aircraft.

The purpose of the proposal amendment is to require a demonstration of instrument proficiency for each type of large aircraft for which a type rating is obtained, or alternatively to limit the type rating in large aircraft to VFR operations if instrument proficiency in that type is not demonstrated. The amendment would apply to large helicopters as well as to large airplanes.

The instrument proficiency demonstrations required would include standard instrument approaches, complying with traffic control instructions and standard holding procedures; recovery from emergency situations such as missed approaches, radio or instrument failure, and failure of an engine if the test is conducted in multiengine aircraft.

Those who presently hold an instrument rating and one or more type ratings would retain the same privileges for those ratings as before adoption of this proposal. It is felt that the great majority of these pilots have had sufficient instrument training and experience in those aircraft for which they hold type ratings. However, if the amendment is not adopted,

it is believed that safety deficiencies could develop in the future that would be beyond the normal surveillance capabilities of the Agency to discover. This lack would not permit corrective action required to maintain at least the present level of safety.

A person who holds an instrument rating and who applies for a new or additional type rating would have to demonstrate instrument proficiency in the type aircraft for which the rating is sought; otherwise, the new or additional rating would be limited to VFR operations.

A person who obtains an instrument rating after the effective date of the amendment would have a "VFR ONLY" limitation placed on each type rating other than the type rating for aircraft in which a demonstration of instrument competence has been made.

The subject of this notice was discussed at the Air-Share meetings held in April and May 1961, and met with generally favorable response. Strong feeling was expressed that provision should be made for a type rating limited to VFR rather than requiring an instrument rating as a qualification for a type rating. This reasoning has been followed because of the large number of industrial special purpose aircraft in use, which are not operated under IFR or IFR conditions, many of which do not have instruments required for an instrument flight test.

To accomplish these objectives, § 20.121(b) would be changed to apply only to class ratings, and a new § 20.121(c) would be added to apply to type ratings and to specify instrument proficiency requirements. In addition, § 20.111(b) would be amended so that instrument proficiency requirements would apply to type ratings secured by applicants on the basis of military competence.

Section 20.121(b)(1) would be clarified by specifying that the experience required to secure an additional class rating must be obtained in the class of aircraft for which the rating is sought. This is clearly the intent of the present regulation and has been complied with by applicants in the past without question

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 \$20.111(b) by adding a new sentence at the end thereof to read as follows: "Unless an applicant for a type rating holds an instrument rating, or concurrently obtains an instrument rating, under the provisions of paragraph (c) of this section, and presents reliable evidence of a military instrument flight check in that type aircraft, the type rating shall be limited to VFR ONLY."
- 2. By amending § 20.121 by revising paragraph (b) and adding a new paragraph (c) to read as follows: 20.121 Additional aircraft ratings. * * *
- (b) Class rating. An applicant for an additional class rating must:
- (1) Have made at least five takeoffs and landings in an aircraft of the class for which the rating is sought, either in solo flight or as sole manipulator of the controls when accompanied by a pilot rated to carry pasengers in the aircraft; and
 - (2) Pass an appropriate flight test.
 - (c) Type rating.
- (1) An applicant for an additional type rating must:
- (i) Hold or concurrently obtain an instrument rating;
- (ii) Meet the requirements of paragraph (b) of this section in the type of aircraft for which the rating is sought; and
- (iii) Demonstrate proficiency during the flight test for such rating solely by reference to instruments under the requirements of § 20.128(a), (b) (4) and (b) (5) of this part.
- (2) An applicant who does not meet the requirements of paragraphs (c) (1) (i) and (iiI) of this section may obtain a type rating limited to VFR ONLY. Upon meeting these requirements the VFR ONLY limitation may be removed for the particular type of aircraft in which instrument proficiency is demonstrated.

The format of any final rules adopted pursuant to this proposal will be subject to such changes as may be necessary for recodification under the Agency's recodification program recently announced in Draft Release No. 61–25 (26 F.R. 10698).

These amendments are proposed under authority of sections 313(a), 601, 602, of the Federal Aviation Act of 1958 (72 Stat. 752, 775, 776: 49 U.S.C. 1354, 1421, 1422).

Acting Director,

Flight Standards Service.

Issued in Washington, D.C., on July 11, 1962.