

## Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Agency  
SUBCHAPTER E—AIRSPACE

[Docket No. 7435; Amdts. 61-90; 61-96]

### PART 61—CERTIFICATION: PILOTS AND FLIGHT INSTRUCTORS

#### PART 91—GENERAL OPERATING AND FLIGHT RULES

##### Glider Towing Operations

The purpose of these amendments to Parts 61 and 91 of the Federal Aviation Regulations is to provide general rules for conducting glider towing operations without obtaining certificates of waiver. They add to Part 61 required qualifications for a pilot in command of a civil aircraft towing a glider, and add to Part 91 requirements on towlines, towlines, and notification of control towers or FAA flight service stations as to towing operations within control zones, and a prohibition against unsafe intentional release of the towline by the towing aircraft after the glider is released. These amendments were proposed in Notice 66-23 issued on June 10, 1966, and published in the FEDERAL REGISTER on June 16, 1966 (31 F.R. 8439).

The comments received on Notice 66-23 generally supported the objectives of the proposals. Only one comment opposed the proposal to replace the issuance of individual waivers with general rules, asserting that valuable control would be lost by the elimination of the waiver requirement. However, as stated in the notice, there is adequate justification to eliminate the administrative burden involved in the issuance of individual certificates of waiver for routine glider towing operations. Also, the regulatory approach is more positive, and it provides more standardization and uniformity of requirements.

A number of the generally favorable comments recommended changes in the proposals. The principal change suggested on qualifications for a pilot in command of a towing aircraft, was either that the 200 required hours of flight time experience for a private pilot should be acquired in powered aircraft, or that the number of hours should be reduced to 100 hours. The former approach would prevent, for example, an airman with as little as 35 or 40 hours of powered flight experience but with the remainder of the 200 hours in gliders, from acting as the tow pilot in command. Proponents of the latter approach asserted that the 200-hour requirement would disqualify many experienced tow pilots who have been operating pursuant to certificates

of waiver. They also contended that the other requirements proposed by the notice would assure satisfactory competency without a flight experience requirement as great as 200 hours. Still a third suggested change was that the 200 required hours should be specifically allocated between hours in powered aircraft and other aircraft.

Upon further consideration of the matter in light of the comments received, the Agency has concluded that it is appropriate to provide that a private pilot may use 100 hours of pilot flight experience in powered aircraft as an alternative method of meeting the total pilot flight time requirement. The 200-hour flight time requirement proposed in the notice did not specify a minimum amount of powered aircraft time, therefore private pilots with a substantial amount of other than powered aircraft time could meet that requirement. While glider flight experience undoubtedly is valuable for a pilot who wishes to tow gliders, powered aircraft flight experience is of greater significance from the standpoint of qualification to operate a towplane. At the same time, however, it may be noted that a commercial pilot certificate with an airplane or rotorcraft rating may be obtained with a minimum of 100 hours of the total flight experience in powered aircraft, and the holder of that certificate meets the pilot certificate requirements of Notice 66-23.

Some comment was concerned with the 80 percent minimum breaking strength requirement for towlines proposed for § 91.17(a)(3), asserting that breaking strength should be related to thrust versus drag, or that it should be determined by a drag-load formula rather than the maximum certificated operating weight of the glider. Other comment was concerned with the breaking strength of the safety link specified for use where the breaking strength of the towline is permitted to exceed twice the weight of the glider. After further consideration of this matter, the Agency has concluded that the proposed criteria are reasonable and needed for safety. Other comments, beyond the scope of the notice, recommended specifying a minimum length for the towline, or that metallic cable should not be allowed.

Some comment apprehended that notification required under proposed § 91.17(a)(4) would be necessary before each flight within a control zone. Other comment felt that an agreement on a course of action by the pilots involved should not be necessary before each flight, as proposed for § 91.17(a)(5). The Agency agrees with the substance of these comments. Accordingly, these amendments provide that the notification need be given only before conducting towing operations within a control zone (unless re-

quired by ATC before each flight where there is an operative control tower within the zone). Also, it is provided that prior agreement of the pilots on a course of action must be reached before engaging in any towing operations but not necessarily before each flight.

Some comment suggested that it should be made clear that the prohibition of proposed § 91.17(b) against releasing a towline in a manner so as to endanger the life or property of another applies only after the glider has been released. This was the intent of the proposal, and it has been clarified in these amendments.

Interested persons have been afforded an opportunity to participate in the making of these amendments, and due consideration has been given to all matter presented.

In consideration of the foregoing, Parts 61 and 91 of the Federal Aviation Regulations are amended, effective May 17, 1967, as follows:

1. By inserting the following new section after § 61.37:

§ 61.38 Glider towing: Experience and instruction requirements.

No person may act as pilot in command of an aircraft towing a glider unless he meets the following requirements:

(a) He holds a current pilot certificate (other than a student pilot certificate) issued under this part.

(b) He has—

(1) An endorsement in his pilot logbook from a person authorized to give flight instruction in gliders stating that, on the ground or in a glider, he has been given instruction in, and found to be familiar with, the techniques and procedures essential to the safe towing of gliders, including airspeed limitations, emergency procedures, signals used, and maximum angles of bank; and

(2) Made and entered in his pilot logbook one of the following series of flights:

(i) At least three flights as sole manipulator of the controls of an aircraft towing a glider, while accompanied by a pilot who has made and logged at least 10 flights as pilot in command of an aircraft towing a glider (each flight pursuant to a certificate of waiver or after he has otherwise qualified under this paragraph); or

(ii) At least three flights as sole manipulator of the controls of an aircraft, simulating glider towing flight procedures, while accompanied by a pilot with the qualifications required of an accompanying pilot in subdivision (1) of this subparagraph, and in addition at least three flights as pilot or observer in a glider being towed by an aircraft.

However, any person who, before May 17, 1967, made, and entered in his pilot

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logbook, 10 or more flights as pilot in command of an aircraft towing a glider in accordance with a certificate of waiver need not comply with subparagraphs (1) and (2) of this paragraph.

(c) If he holds a private pilot certificate he must have had, and entered in his pilot logbook at least—

(1) 100 hours of pilot flight time in powered aircraft; or

(2) 200 total hours of pilot flight time in powered or other aircraft.

2. By amending § 91.17 to read as follows:

**§ 91.17 Towing: Gliders.**

(a) Except when authorized under § 91.18, no person may operate a civil aircraft towing a glider unless the following conditions are met:

(1) The pilot in command of the towing aircraft is qualified under § 61.38 of this chapter.

(2) The towing aircraft is equipped with a tow hitch of a kind, and installed in a manner, approved by the Administrator.

(3) The towline used has a breaking strength not less than 80 percent of the maximum certificated operating weight of the glider, and not more than twice this operating weight. However, the towline used may have a breaking strength more than twice the maximum certificated operating weight of the glider if—

(i) A safety link is installed at the point of attachment of the towline to the glider, with a breaking strength not less than 80 percent of the maximum certificated operating weight of the glider, and not greater than twice this operating weight; and

(ii) A safety link is installed at the point of attachment of the towline to the towing aircraft with a breaking strength greater, but not more than 25 percent greater, than that of the safety link at the towed glider end of the towline, and not greater than twice the maximum certificated operating weight of the glider.

(4) Before conducting any towing operations within a control zone, or before making each towing flight within a control zone if required by ATC, the pilot in command notifies the control tower if one is in operation in that control zone. If such a control tower is not in operation, he must notify the FAA flight service station serving the control zone before conducting any towing operations in that control zone.

(5) The pilots of the towing aircraft and the glider have agreed upon a general course of action including takeoff and release signals, airspeeds, and emergency procedures for each pilot.

(b) No pilot of a civil aircraft may intentionally release a towline, after release of a glider, in a manner so as to endanger the life or property of another.

(c) Each certificate of waiver issued before May 17, 1967, for towing a glider terminates upon May 16, 1967.

3. By inserting the following new section after § 91.17:

**§ 91.18 Towing: Other than under § 91.17.**

(a) No pilot of a civil aircraft may tow anything with that aircraft (other than under § 91.17) except in accordance with the terms of a certificate of waiver issued by the Administrator. However, a certificate of waiver is not issued to tow a glider unless the pilot in command of the towing aircraft is qualified under § 61.38 of this chapter.

(b) An application for a certificate of waiver under this section is made on a form and in a manner prescribed by the Administrator and must be submitted to the nearest Flight Standards District Office.

(Secs. 807(c), 813(a), 801, Federal Aviation Act of 1958; 49 U.S.C. 1348, 1354, 1421)

NOTE: The recordkeeping and reporting requirements contained herein have been approved by the Bureau of the Budget in accordance with the Federal Reports Act of 1942.

Issued in Washington, D.C., on February 10, 1967.

WILLIAM F. McKEE,  
Administrator.