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Civil Aeronautics Manual 54

Parachute Loft Certificates and Ratings

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NOTE

This manual contains Civil Air Regulations Part 54 dated December 15, 1959, Amendment 54-1, and then editorial changes required by Special Regulation SR-430 effective December 31, 1958.

As amendments and other pertinent materials pertaining to Part 54 are issued, they will be included in this manual.

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Parachute Loft Certificates and Ratings

Ratings

54.1 *Parachute loft ratings.* The following ratings may be issued prescribing the type of work the holder of a parachute loft certificate is qualified to perform:

(a) General maintenance and minor repair;

(b) Canopy overhaul;

(c) Harness overhaul;

(d) Metal parts and container overhaul;

(e) Drop testing.

Requirements

54.2 *Certificate requirements.* To be eligible for a rating as a parachute loft and certification as such an applicant shall comply with the following requirements:

(a) *Personnel.* Applicant shall have adequate personnel certificated in accordance with the provisions of Part 25 of this subchapter and qualified to perform or supervise the type of work involved.

(b) *Facilities and equipment.* Applicant shall have such equipment, facilities, and material as are necessary for the competent and efficient performance of the type of work for which a rating is sought. Such facilities shall include suitable and adequately heated, lighted, and ventilated housing; an adequate system of inspection; adequate equipment for making drawings; and adequate facilities for the segregation and storage of parts and materials.

NOTE: A manual will be issued outlining facilities, equipment, and personnel which will comply with the requirements of this section.

Issuance and Duration

54.3 *Application.* Application for a parachute loft certificate and appropriate ratings shall be made upon the applicable form prescribed and furnished by the Administrator.

54.4 *Duration.* A parachute loft certificate shall remain in effect indefinitely, unless suspended or revoked: *Provided,* That such certificate may be canceled by the Administrator at any time within 60 days after issuance.

54.5 *Application to amend.* Application for a change in the Parachute Loft Rating Record of a certificated parachute loft shall be made upon the applicable form prescribed and furnished by the Administrator.

54.6 *Change of location.* No change in a location of an approved parachute loft shall be made without the prior written approval of the Administrator. Requests for approval of change of location shall be mailed to the Regional Administrator of the Federal Aviation Agency in the area in which the agency is located.

Regulations and Limitations

54.10 *Display.* A parachute loft certificate shall be displayed in a prominent place in the parachute loft.

54.11 *Transfer.* A parachute loft certificate may not be transferred.

54.12 *Surrender.* Upon the suspension, revocation, or expiration of a parachute loft certificate, the holder thereof upon request shall surrender such certificate to any officer or employee of the Administrator.

54.13 *Inspection.* An applicant for a parachute loft certificate shall cooperate fully in any inspection or examination which may be made of such applicant, applicant's personnel, facilities, equipment, and records, upon proper request by an authorized representative of the Administrator, prior or subsequent to the issuance of a parachute loft certificate.

54.14 *Revocation.* No person whose parachute loft certificate has been revoked shall apply for or be issued a parachute loft cer-

tificate or any rating for a period of one year after the revocation of such certificate except as the order of revocation may otherwise provide.

54.15 *Records.* The holder of a parachute loft certificate shall maintain adequate records, which shall include the names of the persons who performed the work and the type of work performed. Such records shall be kept for at least two years.

54.16 *Parachute Loft Rating Record.* An appropriate Parachute Loft Rating Record prescribed and issued by the Administrator shall be attached to each parachute loft certificate issued. The record shall contain the type of repair, operation, maintenance, and overhaul of parachutes for which the holder of such certificate is rated.

54.17 *Recording major repair and alteration operations.* The holder of a parachute loft certificate authorized to perform major repair and alteration operations on a parachute canopy, harness, container, accessory, or any combination thereof, shall execute such repair and alteration forms as may be prescribed and furnished by the Administrator and shall deliver a copy of such form to the owner of the parachute.

54.18 *Maintenance, personnel, facilities, equipment, and material.* The holder of a currently effective parachute loft certificate shall maintain personnel, facilities, equipment, and material at least equal in quantity and quality to those currently required for original issuance of such a certificate and the appropriate ratings.

54.19 *Quality of maintenance, repairs, and alterations.* The holder of a parachute loft certificate shall perform maintenance, repair, and alteration operations in a workmanlike manner and so as to maintain the equipment in, or restore it to an airworthy condition.

54.20 *Materials.* The holder of a parachute loft certificate shall use materials in connection with maintenance, repair, and alteration operations of such quality and strength as to be suitable for the purposes used.

54.21 *Reporting defects or unairworthy conditions.* The holder of a parachute loft certificate shall report upon the applicable forms prescribed and furnished by the Administrator all recurring or serious defects or other unairworthy conditions of parachutes or parts thereof.

54.22 *Agencies authorized to perform maintenance, repairs, alterations, and inspections.* Maintenance, repairs, alterations and inspections of parachutes may be performed by:

(a) A certificated parachute technician of appropriate grade and ratings (see Part 25 of this subchapter for service limitations of certificated parachute technicians); or

(b) A certificated parachute loft having an appropriate rating; or

(c) The manufacturer of the parachute; or

(d) Another parachute manufacturer deemed competent by the Administrator: *Provided,* That all maintenance, repairs, alterations, and inspections shall be performed in accordance with manuals and specifications approved by the Administrator.[1]

[1] Manuals and specifications may be issued by a parachute manufacturer or by the Administrator. In either case they must be approved by the Administrator.

54.23 *Drop testing of parachutes.* The holder of a parachute loft certificate shall drop test any major repaired or altered parachute canopy, harness, container, accessory, or any combination thereof, when in the opinion of the inspecting certificated parachute technician such repairs or alterations may have affected its structural, functional, or other airworthiness characteristic. Drop tests shall be conducted in accordance with the following conditions:

(a) *Functional tests.* If it is necessary to determine the functional characteristics of the entire assembly, such assembly shall be drop tested with a 150-pound dummy man (not including the weight of the parachute) at an indicated air speed of 70 miles per hour and a minimum altitude of 500 feet above the ground.

(b) *Strength tests.* If it is necessary to determine the material values in the entire assembly, such assembly shall be drop tested with a 190-pound dummy man (not including the weight of the parachute) at an indicated air speed of 120 miles per hour and a minimum altitude of 500 feet above the ground.

(c) *Airworthiness tests.* If it is necessary to determine material airworthiness of the entire assembly prior to repairs of any kind, such assembly shall be drop tested with a 190-pound dummy man (not including the weight of the parachute) at an indicated air speed of 120 miles per hour and at a minimum altitude of 500 feet above the ground.

(d) *Agencies authorized to perform drop testing operations.* Parachute drop testing operations shall be performed only by:

(1) The manufacturer of the parachute; or

(2) Another parachute manufacturer deemed competent by the Administrator; or

(3) A certificated parachute loft having an appropriate rating.

Definitions

54.30 *Parachute.* A parachute shall mean a contrivance, including its component parts, designed to retard the descent of a falling body or object through the air.

(a) *Canopy.* That part of a parachute combination which is designed to retard the descent of a falling body or object.

(b) *Harness.* That part of a parachute combination which is designed to enfold or carry the body or object and to serve as an attachment between the canopy and the body or object.

(c) *Container.* That part of a parachute combination designed to hold or contain a folded canopy.

(d) *Accessory.* That part or parts of a parachute combination necessary to complete a unit as designed by the manufacturer and approved by the Administrator.

54.31 *Manufacturer.* Manufacturer shall mean any individual, firm, partnership, company, association, or joint stock association, including any trustee, assignee or other similar representative thereof, which

(a) holds a type or production certificate for a parachute, or

(b) manufactures an approved parachute.

54.32 *Maintenance.* Maintenance shall mean the upkeep and preservation of parachutes, including the component parts thereof.

54.33 *Minor repair.* Minor repair shall mean a repair other than a major repair.

54.34 *Major repair.* Major repair shall mean a repair which might have an effect on the structural, functional, or handling characteristics of a parachute.

54.35 *Alteration.* Alteration shall mean any change in the design of a parachute.

54.36 *Repair.* Repair shall mean the restoration of a parachute to a condition for safe use after damage or deterioration.

APPENDIX

SPECIAL CIVIL AIR REGULATION NO. SR–397

Effective: June 30, 1953
Adopted: June 30, 1953

Authorization for the United States Forest Service To Deviate From the Civil Air Regulations

The Forest Service of the United States Department of Agriculture uses both public and civil aircraft to carry personnel and equipment to fire areas. The aircraft and pilots are certificated and, where possible, Forest Service operations are conducted in accordance with the Civil Air Regulations. In order to deal effectively with fire control and other Forest Service specialized activities, however, it is often necessary to use uncertificated personnel as parachute riggers during peak-load periods, to remove seats and safety belts from aircraft in which firefighters are carried, to drop equipment and supplies from aircraft, and to deviate from other provisions of the Civil Air Regulations such as minimum altitudes and visibility conditions. Due to the exigencies of the particular situation, it is usually impracticable for the Forest Service to seek authority in each particular instance to deviate from the provisions of the Civil Air Regulations. In view of the public service rendered by this organization and the well organized supervisory control which the Forest Service exercises over its operations, it is considered desirable that the Board authorize the Forest Service to deviate from the Civil Air Regulations and normal practices thereunder when necessary for their operations.

This regulation authorizes the Chief of the Forest Service to permit aircraft and airmen, while engaged in Forest Service operations, to deviate from the Civil Air Regulations to the extent that he finds necessary for the expeditious conduct of such operations. The regulation also provides that the Administrator shall establish a procedure for notification by the Chief of the Forest Service of those deviations which he has authorized.

Interested persons have been afforded an opportunity to participate in the making of this regulation, and due consideration has been given to all relevant matter presented. Since this regulation imposes no additional burden on any person, it may be made effective without prior notice.

In consideration of the foregoing the Civil Aeronautics Board hereby makes and promulgates the following Special Civil Air Regulation, effectively immediately:

Contrary provisions of the Civil Air Regulations notwithstanding, the Chief, Forest Service, United States Department of Agriculture, is authorized to permit aircraft and airmen, while engaged in operations conducted for the United States Forest Service, to deviate from the provisions of the Civil Air Regulations to the extent that he finds necessary for the expeditious conduct of such operations. The Chief, Forest Service, shall notify the Administrator of any deviation which he has authorized and the reasons therefor in accordance with a procedure established by the Administrator.

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