CIVIL AERONAUTICS BOARD

WASHINGTON, D. C.

Civil Air Regulations

PART 54—PARACHUTE LOFT CERTIFICATES AND RATINGS

Effective: Jan. 21, 1943

UNITED STATES OF AMERICA
CIVIL AERONAUTICS BOARD
WASHINGTON, D. C.

Civil Air Regulations Amendment 54-0
Effective: Jan. 21, 1943
Adopted: Jan. 21, 1943

"PART 54—PARACHUTE LOFT CERTIFICATES AND RATINGS

Ratings:
54.1 Parachute loft ratings.

Parachute Loft Certificate Requirements:
54.2 Certificate requirements.
54.20 Personnel.
54.21 Facilities and equipment.

Issuance and Duration:
54.3 Application.
54.30 Duration.
54.31 Application to amend.

Regulations and Limitations:
54.4 General.
54.400 Display.
54.401 Transfer.
54.402 Surrender.
54.403 Inspection.
54.404 Revocation.
54.41 Records.
54.410 Parachute Loft Rating Record.
54.411 Recording major repair and alteration operations.
54.42 Maintenance, personnel, facilities, equipment, and material.
54.43 Airworthiness requirements for maintenance, repairs, and alterations.
54.430 Quality of maintenance, repairs, and alterations.
54.431 Materials.
54.432 Reporting defects or unairworthy conditions.
54.433 Agencies authorized to perform maintenance, repairs, alterations, and inspections.
54.434 Drop testing of parachutes.

Definitions:
54.5 General.
54.50 Parachute.
54.500 Canopy.
54.501 Harness.
54.502 Container.
54.503 Accessory.
54.51 Manufacturer.
54.52 Routine maintenance.
54.53 Repairs.
54.530 Minor repairs.
54.531 Major repairs.
54.54 Alterations.

Definitions—Continued
54.540 Minor alterations.
54.541 Major alterations.
54.55 Overhaul.

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.

PARACHUTE LOFT CERTIFICATE 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:

54.20 Personnel. Applicant shall have adequate personnel certificated in accordance with the provisions of Part 25 of the Civil Air Regulations and qualified to perform or supervise the type of work involved; and

54.21 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.

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

54.31 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.

REGULATIONS AND LIMITATIONS

54.4 General.

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

54.401 Transfer. A parachute loft certificate may not be transferred.

54.402 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.

54.403 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.

54.404 Revocation. No person whose parachute loft certificate has been revoked shall apply for or be issued a parachute loft certificate or any rating for a period of one year after the revocation of such certificate except as the order of revocation may otherwise provide.

54.41 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.

54.410 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.

54.411 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.

54.42 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.

54.43 Airworthiness requirements for maintenance, repairs, and alterations.

54.430 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.

54.431 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.

54.432 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.

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

(1) A certificated parachute technician of appropriate grade and ratings (See Part 25 for service limitations of certificated parachute technicians); or

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

(3) The manufacturer of the parachute or part thereof; or

(4) 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.*

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

54.434 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:

54.4340 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.

54.4341 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.

54.4342 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.

54.4343 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

54.5 General.

54.50 Parachute. A unit comprised of a canopy, harness, container, and accessories, so arranged in combination as to allow instantaneous release of a folded canopy by means of mechanical control or manually operated release device, such combination to be approved by the Administrator.

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

54.501 Harness. That part of a parachute combination designed to enfold or carry the body or object and to serve as an attachment between the canopy and its intended cargo.

54.502 Container. That part of a parachute combination designed to hold or contain a folded canopy.

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

54.51 Manufacturer. (1) The holder of a type certificate for the manufacture of a canopy, harness, container, or accessory or any combination thereof or of the current rights under licensing arrangements to the benefits of such type certificate; or

(2) The maker of a part or accessory of a certificated parachute: *Provided,* That such maker shall have in his employ a properly certificated parachute technician in direct charge of maintenance, repair, or alteration operations.

54.52 Routine maintenance. An operation limited to the packing of parachutes and the replacement of small standard parts not involving complex assembly operations.

54.53 Repairs.

54.530 Minor repairs. Elementary repair operations executed in accordance with standard practices and not within the definition of major repairs.

54.531 Major repairs. Complex repair operations of vital importance to the airworthiness of a parachute.

54.54 Alterations. Any appreciable change in the design or an exchange of parts in a parachute canopy, harness, container, accessory, or any combination thereof.

54.540 Minor alterations. (a) An alteration having no appreciable effect on the structural, functional, or other characteristic, affecting the airworthiness of a

parachute canopy, harness, container, accessory, or combination thereof, individually or as a unit;

(b) An alteration for which specific plans and instructions have been approved by the Administrator and which can be executed by minor elementary operations.

54.541 Major alterations. All alterations not within the definition of minor alterations.

54.55 Overhaul. Maintenance, inspection, repairs, and alterations performed in accordance with manuals and specifications, and approved by the Administrator."

By the Civil Aeronautics Board:

/S/ Darwin Charles Brown

DARWIN CHARLES BROWN
Secretary

(S E A L)