

VOLUME 3 GENERAL TECHNICAL ADMINISTRATION
CHAPTER 51 PART 133 EXTERNAL-LOAD OPERATIONS

Section 1 Introduction to Part 133 Related Tasks

3-4081 EXTERNAL-LOAD OPERATIONS. See the following documents for guidelines for certification and surveillance of Title 14 of the Code of Federal Regulations (14 CFR) part 133:

- Volume 2, Chapter 7, Section 1;
- Volume 3, Chapter 51, Sections 2–6;
- Volume 5, Chapter 10, Section 1; and
- Volume 6, Surveillance, Chapter 5, Sections 1–3.

3-4082 WEB-BASED OPERATIONS SAFETY SYSTEM (WebOPSS)

AUTHORIZATIONS. This guidance change requires aviation safety inspectors (ASI) to use WebOPSS to issue authorizations to rotorcraft external-load operators. ASIs may comply with this requirement immediately or may elect to issue the authorizations the next time an operator renews his or her certificate. All part 133 operators must have all required and applicable optional authorization paragraphs documented in WebOPSS within 25 months of the date of this change.

NOTE: Authorizations issued to part 133 operators are *not* subject to 14 CFR part 119 requirements and therefore are *not* referred to as “operations specifications.”

3-4083 PART 133 HIGHLIGHTS.

- A. Civil Operators.** All civil rotorcraft external-load operators must have certification.
- B. Restricted Category Rotorcraft.** Part 133 permits external-load operations with restricted category rotorcraft except over certain areas.
- C. Certificate Expiration.** Certificates issued under part 133 are valid for a period of 24 calendar-months per part 133, § 133.13.
- D. Congested Area Operations.** Operators must have an approved Congested Area Plan (CAP) before operating over congested areas.
- E. Instrument Flight Rules (IFR) Operations.** The Administrator must specifically approve IFR external-load operations per § 133.33(f). List IFR authorizations in WebOPSS.
- F. Operations Flight Characteristic Demonstration.** New operators need not comply with the requirements for an operational flight characteristic demonstration if the manufacturer already performed a demonstration. The Rotorcraft Flight Manual (RFM) for each rotorcraft contains this information.

3-4084 CLASSES OF AUTHORIZATION.

A. Class A External Loads. Class A is a non-jettisonable external load that cannot move freely and does not extend below the landing gear. An example of a Class A operation is the carriage of supplies in an approved cargo rack, bin, or fixture affixed to the exterior of the rotorcraft. A cargo rack certification may or may not include a cargo envelope. The Federal Aviation Administration (FAA)-approved Rotorcraft Flight Manual Supplement (RFMS) required for the cargo rack installation specifies the approved configuration. If the cargo carried is within the envelope specified in the RFMS, the rotorcraft operator may operate in accordance with 14 CFR part 91 or 135. Rotorcraft operators must conduct flight operations in accordance with part 133 when the cargo rack certification does not include a cargo envelope or the cargo carried exceeds the specified envelope.

B. Class B External Loads. Class B is a jettisonable external load, carried above or below the skids, that a cargo hook or winch lifts free of land and/or water. An example of a Class B operation is the placement of an air conditioning unit on the roof of a tall building.

C. Class C External Loads. Class C is a jettisonable external load where a portion of the load remains in contact with land or water. Examples of Class C operations are wire stringing, dragging a long pole, or towing a boat or barge.

D. Class D External Loads. Class D is an external load other than Class A, B, or C and approved on an individual basis through the issuance of a WebOPSS authorization (paragraph A044). Class D allows the external carriage of a person other than a crewmember or a person who is essential to and directly connected with the external load operation, in an FAA-approved personnel lifting device with a transport Category A multiengine helicopter.

3-4085 OPERATING RULES.

A. Rotorcraft-Load Combination Flight Manual (RLCFM). Conduct rotorcraft external load operations in accordance with the RLCFM prescribed in § 133.47. The rotorcraft operation must comply with § 133.45; the operating certificate authorizes the rotorcraft and rotorcraft-load combination.

B. Carriage of Persons. Part 133 does not provide for “passenger-carrying” operations, but does provide for the “carriage of persons” in accordance with § 133.35. If conducting passenger-carrying operations, the operation must comply with part 91 or 135. No Class A, B, or C external-load operator may allow passenger carrying during external-load operations unless the person carried is a flightcrew member, is a flightcrew member trainee, performs an essential function in connection with the external-load operation, or is necessary to accomplish the work activity directly associated with the external-load operation. An operator with Class D external-load approval may receive authorization to transport persons externally who are other than a crewmember or not directly associated with the external-load operation.

1) The carriage of snow skis as a Class A external-load when skiers are onboard the rotorcraft is clearly a passenger-carrying operation that is not permitted under the provisions of § 133.35. Carrying passenger baggage in a Class A external-load attaching means (such as racks

on top of fixed floats) with passengers aboard is another example of an operation not permitted by § 133.35.

NOTE: However, if using approved cargo racks (Supplemental Type Certificate (STC) or other approval), then the operator could conduct the operation under part 91 or 135, which both allow for carrying passengers.

2) The carriage of a sensor package as a Class B external-load when technicians are onboard the rotorcraft is clearly a carriage of persons operation that is permitted under the provisions of § 133.35. This applies if they are operating the equipment en route, assisting with placing the equipment upon arrival, or operating the equipment after positioning.

3) Under § 133.35, an operator with a Class B approval is authorized to externally carry a crewmember, or a person essential to the external-load operation, with a single-engine or multi-engine rotorcraft, in accordance with applicable operating limitations. If RFM or RFMS operating limitations, markings, or placards contain language prohibiting use for Human External Cargo (HEC), operators of civil rotorcraft must comply with those limitations in accordance with 14 CFR § 91.9(a) (e.g., an RFMS limitation such as, “the cargo hook is approved for non-human cargo, class B rotorcraft load combinations only”). The RFM or RFMS may also include additional limitations indicating certification for HEC such as, “the external load system meets the 14 CFR part 27 certification requirements for Human External Cargo (HEC).” The operator may carry the persons in the following examples as a Class B external load, which must be jettisonable.

- a) Power line patrol/maintenance personnel.
- b) Rescue personnel who are performing emergency medical and rescue services.

4) A Class D rotorcraft load combination is the only external-load class that permits the carriage of persons other than crewmembers or persons essential and directly connected with the external-load operation (refer to § 133.1(d)). Examples of persons who would have to be carried as a Class D external-load are harbor pilots who are being transported from the land to a ship, or ship-to-ship, in a personnel lifting device; or a person being rescued using a personnel lifting device. Conduct a Class D external-load operation only in accordance with the following:

a) The rotorcraft used must be type certificated (TC) in accordance with transport Category A requirements for its operating weight. It must provide hover capability with one engine inoperative at that operating weight and altitude when carrying a Class D load.

b) The rotorcraft must be equipped for direct radio intercommunication among required crewmembers.

c) The personnel lifting device must be FAA-approved and have an emergency release that requires two distinct actions to achieve release (e.g., a hoist must have a cable cutter with one guarded switch that requires the pilot to raise the guard before activating the switch. The guard must prevent the pilot from activating the switch inadvertently).

5) The test for determining whether it is appropriate to externally carry a person as a Class B versus a Class D external-load combination is considering the standard industry practices for the work activity carried out. If the person performs an essential function in connection with the external-load operation, or is necessary to accomplish the work activity directly associated with that external-load operation, the operator is authorized to transport the person as a Class B external-load combination. If the person does not perform an essential function in connection with the external-load operation, or is not necessary to accomplish the work activity directly associated with that external-load operation, then the operator is required to transport the person as a Class D external-load combination (refer to § 133.35(a)(3) or (4)).

Regardless of the operational load class, in accordance with 14 CFR § 91.9(a), operators of civil rotorcraft must comply with operating limitations specified in the RFM or RFMS, markings, and placards, including those applicable to HEC.

6) In an emergency involving the safety of persons or property, the certificate holder may deviate from the rules of part 133 to the extent required to meet that emergency. The test to determine whether a deviation is necessary is the availability of alternate means of resolving the situation.

a) Rescue of property must be clearly in the public interest in order to warrant deviation from the operating rules and related requirements.

b) Under the emergency operating authority (§ 133.31(b)), the FAA may request a complete report for each deviation from part 133. This may be necessary to determine whether there has been a violation of the rule and to ensure that the operator has not misused the authority granted by the provisions of § 133.31(a) to use an emergency situation to circumvent the rules. The report should give a thorough, detailed account of the operation, a description of the act of deviation, and a justification for the deviation. File the report within 10 days of the request by the Administrator.

3-4086 FOREIGN-REGISTERED ROTORCRAFT.

A. Canadian-Registered Rotorcraft. U.S. operators may add Canadian-registered rotorcraft to a Rotorcraft External-load Operating Certificate in accordance with the following conditions:

1) Operators and new applicants for a part 133 Rotorcraft External-load Operator Certificate must have and maintain the exclusive use of at least one rotorcraft that is U.S.-registered and meets the requirements of § 133.19.

2) Any Canadian-registered rotorcraft added to a part 133 Rotorcraft External-load Operating Certificate and used in part 133 operations must:

a) Be TC'd under part 27 or 29, the regulations preceding those parts, or 14 CFR part 21, § 21.25.

b) Hold a U.S. TC in the normal or restricted category.

- c) Meet the original type design or properly altered condition.
- d) Have records showing maintenance in accordance with the manufacturer's instructions for continued airworthiness (ICA) and the regulations of the country of registry.
- e) Undergo an airworthiness inspection prior to addition to a part 133 certificate.

B. North American Free Trade Agreement (NAFTA). Certain Specialty Air Services (SAS) authorized by NAFTA require use of rotorcraft external loads. NAFTA operators do not require part 133 certification because they hold equivalent authorization from their respective NAFTA Civil Aviation Authority (CAA). However, the rotorcraft authorized by a NAFTA Certificate of Authority (COA) must have an original FAA or Transport Canada Civil Aviation (TCCA) civil TC. Ex-military aircraft that have restricted-category certification based on military experience only are not eligible. For more information, see Volume 12, Chapter 1, Section 4.

3-4087 RENEWAL, AMENDMENT, CANCELLATION. A rotorcraft external-load operator certificate expires at the end of the 24th month after the month it was issued or renewed (§ 133.13). In the event the operator's certificate was lost or destroyed, the operator may get a replacement upon written request to the certificate-holding district office (CHDO). The duplicate certificate is a copy of the currently effective certificate and is marked "duplicate" with the date of reissuance.

A. Renewal. The applicant must send FAA Form 8710-4, Rotorcraft External-load Operator Certificate Application, to the CHDO to apply for renewal of a rotorcraft external-load operator certificate. The certificate holder should apply for renewal at least 30 days before expiration of the certificate.

1) Process an application for renewal of a certificate in the same manner as for original issuance.

2) Compare the renewal application with the expiring certificate. If no substantial changes are noted and the operator has a good record of compliance, the responsible inspector may issue a new certificate without conducting a comprehensive inspection.

B. Amendment. The CHDO generally processes amendments to a part 133 operator's certificate. The FAA may also amend an operator's certificate, in the interest of safety in air commerce, as the result of actions taken under Title 49 of the United States Code (49 U.S.C.) § 44709, and 14 CFR part 13.

1) Examples of amendments or approval of operator amendments:

- WebOPSS authorizations: additional authorization, no longer qualified for authorization.
- RLCFM: a change in procedures, add a class of operation.
- Certificate: add or delete class authorization, a change to the rotorcraft list attached to the certification, a change of name (not ownership).

- Training program: a change in equipment (winch, rotorcraft, or other lifting device) or type of operations, including change in type of winch.

2) An operator desiring to amend a rotorcraft external-load certificate must apply using the appropriate section of FAA Form 8710-4.

3) The inspector determines if the amendment requires any additional inspections and/or tests.

4) External-load operators seldom confine their operations to one geographic area. To prevent imposing undue hardship on industry, a local Flight Standards District Office (FSDO) that does not hold the certificate may approve additional authorizations. However, the local FSDO must coordinate this activity with the CHDO.

a) Preferably, the local FSDO will contact the CHDO to have the authorization entered into WebOPSS. The local FSDO can then print and have the operator sign the authorization. Forward the original authorization and supporting documentation to the CHDO.

b) Alternatively, the local FSDO may issue (after coordination with the CHDO) the operator a letter of authorization (LOA), valid for 60 days, stating the operator met the requirements for the particular authorization sought. The operator must carry the LOA or a facsimile aboard the rotorcraft, along with a copy of the original external-load certificate and the list of authorized rotorcraft. The local FSDO forwards a copy of the LOA, the completed original FAA Form 8710-4, and any other supporting documentation to the CHDO. Amend the certificate or WebOPSS authorizations to include the additional authorization. Send the amendments to the operator within 60 days.

5) To add or delete a rotorcraft from the list of approved rotorcraft, the operator should fill out the appropriate section on FAA Form 8710-4. The authorization must reflect the addition or deletion of a rotorcraft.

a) The assigned inspector must perform all necessary inspections prior to adding a rotorcraft.

b) The FSDO issues a new list of approved rotorcraft. A new certificate is not required.

6) If the application, additional documents, and demonstrations indicate compliance with the appropriate regulations, issue an amended certificate and/or list of approved rotorcraft.

C. Cancellation. The Administrator may amend, suspend, or revoke an external-load operator's certificate under 49 U.S.C. § 44709 and 14 CFR part 13.

1) An inspector may amend, suspend, or revoke the certificate for the same reasons that would have been cause for denying application of the original certificate (refer to the current edition of FAA Order 2150.3, FAA Compliance and Enforcement Program). The requirements for continuing to hold a certificate are never less than the requirements for original certification.

Use discretion. For example, an operator may have only one rotorcraft. If that rotorcraft is temporarily out of service for maintenance or replacement, etc., that may not be grounds for revoking the certificate because they do not have “the exclusive use of at least one rotorcraft.”

2) An operator may voluntarily elect to discontinue operations. The operator must voluntarily surrender the operating certificate by correspondence which should state that the operator understands that he or she will have to meet all initial certification requirements in order to reapply. In any case, if the operator does not resume operations within 2 years, the operator must surrender the operating certificate to the CHDO (§ 133.27(c)).

RESERVED. Paragraphs 3-4088 through 3-4105.