

CHAPTER 97. CONDUCT INITIAL CERTIFICATION/RENEWAL OF A PART 133 OPERATOR

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODE: 1202

3. OBJECTIVE. The objective of this task is to determine an applicant's ability to conduct operations under Title 14 of the Code of Federal Regulations (14 CFR) part 133. Successful completion of this task results in issuance of a part 133 operating certificate, operations specifications (OpSpecs) if appropriate, or the denial of a certificate.

5. GENERAL BACKGROUND. This chapter gives guidelines for certification and renewal of rotorcraft external-load operators. Part 133 prescribes rules governing the operation of rotorcraft (specifically helicopters) in operations involving loads that are carried outside the aircraft fuselage.

A. Authority. Amendments to the original part 133 greatly increase the scope of activity permitted under the regulations. For the sake of clarity, the new regulations are outlined below and will be developed in-depth at appropriate points in this chapter.

B. Certification Process. The certification process consists of five phases: Preapplication, Formal Application, Document Compliance, Demonstration and Inspection, and Certification. The complexity of the certification process is determined by the applicant's proposed operation. (See volume 1, chapter 4.)

C. Eligibility. During initial contact with an applicant who is seeking an external-load operating certificate, it must be determined if the proposed operation is applicable to part 133. In making this determination, the following eligibility requirements must be met.

(1) For a minimum of 6 months, the applicant must have the exclusive use of at least one aircraft that is properly certificated and equipped and meets all airworthiness requirements for the appropriate class of rotorcraft external-load operations. An aircraft of foreign registry cannot be used in part 133 operations; the external-load operating certificate is considered an airworthiness certificate (§ 133.51), and cannot be issued to an aircraft with other than U.S. registry.

However, foreign registered aircraft may be used in part 133 operations provided they are being operated under the provisions of the North American Free Trade Agreement.

(2) The applicant must have the services of a chief pilot who holds at least a commercial pilot certificate with a rotorcraft category, helicopter class and, if appropriate, a type rating.

D. Flight Standards District Office (FSDO) Working File. This file will form the basis for the eventual operator file if certification is successful, or will provide information justifying denial of the certificate. It is important that this file is kept up to date with any forms, correspondence, etc., to and from the applicant.

E. Recordkeeping. The operator is required to maintain records for the inspector's use to determine compliance with the regulations. The operator is required to maintain training and currency records for the pilots and the chief pilot of an operation. For further details, see volume 2, chapters 100 and 101.

7. PREAPPLICATION PHASE. In the case of rotorcraft external-load operations, the inspector has some discretion in deciding whether to hold a preapplication meeting. Because very long distances between the operation site and the FSDO occur frequently, the inspector may decide to brief an applicant by phone call and/or correspondence. See volume 1, chapter 4 and volume 2, chapter 97, section 2 for guidance and procedures for the preapplication meeting.

9. FORMAL APPLICATION PHASE. A formal application meeting is generally held after the application package is received and informally reviewed. If the application needs revision, the inspector should be prepared to discuss in detail all items that need correction or revision.

11. DOCUMENT COMPLIANCE PHASE.

A. Document Review. In addition to the application, the specific documents that must be submitted during the document compliance phase for a part 133 certification include:

- (1) the rotorcraft lease, if appropriate;
- (2) two copies of the Rotorcraft Load Combination Flight Manual;
- (3) evidence that the chief pilot meets the requirements of § 133.21;
- (4) evidence that pilots meet instrument qualifications and currency for instrument flight rules (IFR) operations, if IFR operations are proposed;
- (5) the proposed OpSpecs, if applicable; and
- (6) the Class D training programs, including initial and recurrent training, if applicable.

B. Establish Exclusive Use of at Least One Rotorcraft. A permanent registration certificate (not a temporary certificate) or information from the aircraft registration data bank is acceptable as proof of ownership for the purpose of § 133.19. An agreement is required when the certificate holder does not own at least one rotorcraft that is certificated for external-load operations. Occasionally, the person who owns the aircraft also owns the corporation that is applying for the operating certificate. In such cases, the applicant and the person owning the aircraft are not considered the same entity. Therefore, an agreement is necessary.

(1) Any lease agreement furnished must identify the rotorcraft by type, registration number, and manufacturer's identification number.

(2) The wording of the agreement must show that the certificate holder has sole possession, control, and use of the aircraft for flight. Further, the agreement must indicate the person or entity who is responsible for ensuring that necessary maintenance is scheduled and performed.

(3) The agreement must provide for at least 6 consecutive months of exclusive use with no escape clause. There is no requirement that the lease have 6 months remaining at the time of certificate issuance or renewal.

(4) If unable to determine exclusive use of the rotorcraft, the inspector obtains a copy of the lease and sends it to the appropriate Associate Chief Council through the regional Flight Standards division for evaluation. The inspector should indicate in the cover letter to the region that the lease should be evaluated for compliance with part 133.

C. Rotorcraft Load Combination Flight Manual. The applicant is required to prepare a manual that describes characteristics of the rotorcraft used so the maximum safety of working conditions during an external-load operation can be achieved. The requirements prescribed in part 133 and subparts G in both 14 CFR parts 27 and 29 are described in volume 2, chapter 98.

D. Testing and Currency Requirements. If the applicant cannot produce evidence that all pilots meet the appropriate regulatory requirements, knowledge and skill tests should be conducted during the demonstration and inspection phase. The chief pilot may test other pilots once the chief pilot meets the requirements of § 133.21. Logbook entries, including those showing external-load operating experience, and previous letters of endorsement are acceptable forms of evidence to indicate compliance with §§ 133.21, 133.23, and 133.37 and 14 CFR part 61, § 61.57(e).

E. OpSpecs. For Class D and/or IFR authorizations only, OpSpecs are issued to outline the operations that a certificate holder is allowed to conduct, to supplement the operating rules, and to contain limitations that are not specifically covered in the regulations. Inspectors must carefully evaluate OpSpecs to ensure that they are not used as a regulatory device.

F. Class D Training Program. It states in § 133.37(b) that operators may not use crewmembers or other operations personnel for a Class D external-load operation unless they have successfully completed either an approved initial or recurrent training program. The training program must be submitted for Federal Aviation Administration (FAA) approval when an applicant is initially certificated for Class D or when adding Class D authorization. A person who has performed a Class D operations external-load operation within the past 12 calendar months does not need to undergo recurrent training. Although possibly self-trained, the chief pilot for Class D operations must have completed the training program for initial certification.

G. Airworthiness. Airworthiness inspectors must examine the following documents:

- (1) the rotorcraft maintenance records;
- (2) the data indicating FAA approval of the attaching means;
- (3) the airworthiness and registration certificates;
- (4) the approved rotorcraft flight manual; and
- (5) the engineering approval of the personnel lifting device (Class D only).

13. DEMONSTRATION AND INSPECTION PHASE.

A. Knowledge and Skill Test. The chief pilot designated by the applicant must pass a knowledge and skill test administered by the FAA inspector. The test must cover the subjects prescribed in § 133.23. A detailed description of the chief pilot tests are found in volume 2, chapter 100. Subsequent knowledge and skill tests administered to other pilots employed by the operator are usually given by the chief pilot but may be given by an FAA inspector.

B. Operational Flight Check. If the external-load operator has not transported a similar load on some previous occasion, § 133.33 operating rules require the operator to demonstrate by an operational flight check the ability to transport an external-load in a safe manner. The term "differs substantially from any... previously carried" is to be defined by the inspector, using the examples provided as a guide. These flight tests are conducted while the inspector observes from the ground.

(1) An example of Class B loads, carried below the skids, that do not differ substantially from each other would be an air conditioner and electrical transformers. These loads are not considered substantially different because both are nonaerodynamic.

(2) An example of two loads that differ substantially would be an air conditioner and a large pane of glass. These loads are substantially different because the pane of glass can be aerodynamic under certain conditions. The inspector should follow §§ 133.41(c)(1) through (6) to the extent deemed appropriate and necessary for a particular load combination.

C. Single Pilot Operation From the Left Pilot Station. Most rotorcraft are certified to be flown from the right pilot station seat. As some operators prefer to fly from the left pilot station during external-load operations, they have modified their aircraft to permit such

operation. Regardless of the pilot station location, the pilot must have an adequate field of view and access to the controls and cockpit displays required for safe operation, including the execution of emergency procedures. For a pilot to conduct single pilot operations from the left seat of a rotorcraft certified for right seat operation, the aircraft must be modified to provide a pilot in the left seat access to all necessary controls and displays, which include the load release mechanisms. FAA approval of these modifications may be obtained from an Aircraft Certification Office (ACO) through the Supplemental Type Certificate process, or from a FSDO through the field approval process. Either process requires both an FAA evaluation of the modified rotorcraft and ACO approval of the Flight Manual Supplement.

15. CERTIFICATION PHASE.

A. Airworthiness Certification. Upon fulfillment of all requirements of part 133, an applicant is eligible for a rotorcraft external-load operator certificate. This certificate becomes a current and valid airworthiness certificate for each normal or transport category rotorcraft listed in a letter accompanying the certificate. Including incidental operations, this applies only when the rotorcraft is operated under part 133. The Rotorcraft External-Load Operating Certificate and List of Approved Rotorcraft must be carried aboard the rotorcraft.

B. Restricted Category Rotorcraft. Rotorcraft that are certificated in the restricted category for the special purpose of external-load operations under 14 CFR part 21, § 21.25(b)(7), are issued restricted category airworthiness certificates for the purpose of conducting external-load operations. Therefore, these aircraft do not need to be listed on the List of Approved Rotorcraft that accompanies the Rotorcraft External-Load Operator Certificate. The Restricted Category Airworthiness Certificate must be carried aboard the restricted category rotorcraft.

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SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites. This task requires knowledge of part 133 regulatory requirements and FAA policies, qualification as an aviation safety inspector (operations), and experience as a rotorcraft external-load pilot.

B. Coordination. This task requires coordination with the airworthiness unit and with the National Safety Data Branch, AVN-120.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References.

- 14 CFR parts 1, 27 (subpart G), 29 (subpart G), 61, 91, and 133
- Advisory Circular (AC) 133-1, Rotorcraft External-Load Operations in Accordance with FAR Part 133
- PTRS Procedures Manual (PPM)

B. Forms.

- FAA Form 1360-33, Record of Visit, Conference, or Telephone Call
- FAA Form 8400-8, Operations Specifications (for IFR and Class D only) (figure 97-3)
- FAA Form 8430-21, Operating Certificate (figure 97-13)
- FAA Form 8710-4, Rotorcraft External-Load Operator Certificate Application (figure 97-2)

C. Job Aids.

- Part 133 Certification Flow Chart (figure 97-17)
- Part 133 Certification Job Aid (figure 97-4)
- Sample letters and figures

5. PREAPPLICATION PHASE PROCEDURES.

A. Initial Inquiry. Upon initial inquiry from an applicant, ask for the location of the principal base of operation. If the principal base of operation is in the jurisdiction of another FSDO, provide the applicant with the location and telephone number of that office. However, continue to give the applicant the information needed to begin certification.

B. Applicant Resources. Make sure the applicant is aware of the certification and operating requirements of part 133. If the applicant requests, provide copies of part 133 and AC 133-1. If there are any questions, explain:

- (1) the general applicability and definition of terms;
- (2) the certification requirements;
- (3) the operating rules; and
- (4) part 133 required records and reports.

C. Other Regulations. Advise the applicant that he/she is responsible for complying with other federal, state, and/or local regulations.

D. Special Considerations for Part 133. Discuss the following special considerations of part 133:

- (1) the classes of operation sought;
- (2) the requirements for IFR operations, including OpSpecs;
- (3) the qualifications and experience required for chief pilot;
- (4) the requirement for a Rotorcraft Load Combination Flight Manual; and
- (5) the requirement for OpSpecs and a training program if a Class D or IFR authorization is sought.

E. Letter of Intent. Based on the size and scope of the operation, determine if a letter of intent (figure 97-1) is required. If no letter of intent is required, give the applicant three copies of FAA Form 8710-4 (two for the application; one for a "working copy").

F. PTRS. Open PTRS file.

G. FSDO Review of Letter of Intent. Within the timeframe of the FSDO guidelines, review the letter of intent for completeness, accuracy, and acceptability.

(1) The letter of intent should contain the following:

- (a) the specific classes for which the operator is applying;
- (b) the company legal name including any doing business as (d/b/a), the principal operation base address, the mailing address, and phone numbers (the

use of a post office box number as the only address of the principal base of operations is not acceptable unless it reflects the actual, physical location of the base);

(c) the type, make, model, and quantity of rotorcraft to be operated;

(d) the estimated date when operations will begin;

(e) the names and addresses of any management personnel and/or chief pilot; and

(f) three, 3-letter designators, in order of applicant's preference.

(2) Determine if the applicant meets the basic requirements for certification. If the applicant does not satisfy the basic requirements, discuss those specific areas that must be complied with before certification can begin.

H. Application.

(1) If the review of the letter of intent indicates that the applicant meets the basic requirements for a part 133 operation, give the applicant three copies of FAA Form 8710-4 (figure 97-2) and samples of the following materials, which are to be submitted with the application package:

(a) a copy of FAA Form 8400-8 (figure 97-3) and a sample of part 133 OpSpecs if applying for a Class D or an IFR authorization;

(b) a copy of the certification job aid (figure 97-4);

(c) a sample letter nominating a chief pilot (figure 97-5);

(d) a sample Rotorcraft Load Combination Flight Manual (figure 98-1); and

(e) a sample schedule of events (figure 97-6).

(2) Discuss how to complete the forms.

(3) Advise the applicant to submit the forms in duplicate with original signatures.

(4) Explain the certification process, including the requirements for each phase.

I. Preapplication Meeting.

(1) Determine if a preapplication meeting is necessary based on the following considerations about the applicant:

(a) previous experience in part 133 external-load operations;

(b) the size, scope, and safety features of the operation;

(c) the area of operation;

(d) whether a Class D or an IFR authorization is sought; and

(e) the applicant's ability to comply with the requirements.

(2) If a preapplication meeting is not necessary, schedule a date and time for a formal application meeting.

(3) If a preapplication meeting is necessary, schedule a date and time. At the preapplication meeting discuss the following:

(a) the area of operation (local or across FSDO boundaries), including the location of principal base of operation, and the location of any probable satellite bases;

(b) the type of class loads the operator is seeking;

(c) the operator's previous experience with part 133 operations;

(d) the category and class of rotorcraft the operator will use;

(e) the qualifications and experience of the proposed chief pilot;

(f) the applicability of parts 91 and 133;

(g) AC 133-1, Rotorcraft External-Load Operations in Accordance with FAR Part 133;

(h) any previous or pending enforcement action on the operator;

(i) the purpose of the part 133 certification job aid and schedule of events;

(j) any questions about the contents or requirements of the Rotorcraft Load Combination Flight Manual; and

(k) the requirements for developing a training program for Class D operations.

(l) Discuss certification process in detail, including the requirements for:

- the formal application phase;
- the document compliance phase;
- the demonstration and inspection phase; and
- the certification phase.

J. FSDO Records. If not already accomplished, complete FAA Form 1360-33, Record of Visit, Conference or Telephone Call, and document all preapplication actions to date on FAA Form 8000-36 and future actions planned.

K. Establish a FSDO Working File. Include any correspondence, copies of documents, or forms developed before, during and after certification.

L. Other FSDO Actions. In order to determine the applicant's and the pilots' enforcement history, follow office procedures to contact the Enforcement Information Subsystem (EIS) in Oklahoma City.

(1) If a certificate action indicates that the applicant cannot be certificated while an order is in effect, inform the applicant in writing (figure 97-7) that the applicant is not eligible for certification until the enforcement action is fulfilled.

(2) If a certificate action is in effect for the chief pilot designee, inform the applicant in writing (figure 97-8) that the pilot is not eligible to be chief pilot until the enforcement action is fulfilled. Continue with the certification process only when another chief pilot designee has been indicated clear through EIS.

(3) If a certificate action is in effect for any of the other pilots (other than chief pilot) employed by the applicant, continue with the certification process. Inform the applicant that the pilot in question will not be eligible to conduct external-load operations until the terms of the enforcement action have been satisfied.

(4) Place the EIS output in the working file.

M. Terminating the Preapplication Phase. Begin the formal application phase with the receipt of the application package.

7. FORMAL APPLICATION PROCEDURES.

Review the application package and determine whether it is of sufficient quality to proceed with certification within the time frame of FSDO guidelines.

A. Application Review. Review FAA Form 8710-4 and the other documents in the package to determine whether they are of sufficient quality to continue with certification. Examine the documents in-depth during the document compliance phase. (An example of a properly completed application is shown in figure 97-2.)

B. Application not Accurate or Complete. If the application package is not complete or accurate, notify the applicant in writing (figure 97-9) of the changes needed before certification can continue.

C. Need for Formal Application Meeting. Determine if the optional formal application meeting is necessary.

(1) If a formal application meeting is not necessary, schedule the certification inspection of the principal base of operations. With the applicant participating, review the procedures required during the demonstration and inspection phase.

(2) If a formal application meeting is necessary, schedule a date and time.

D. Formal Application Meeting.

(1) Discuss the acceptability of the application package.

(2) Review the proposed schedule of events, and make any necessary adjustments.

(3) Review the specific requirements appropriate to each class of authorization.

(4) Discuss the requirements for the Rotorcraft Load Combination Flight Manual.

(5) Review the requirements for the Class D training program.

(6) Discuss the preparation of OpSpecs for Class D and/or IFR.

(7) Discuss the rotorcraft ownership or lease agreement.

(8) Review the applicant's previous experience in external-load operations.

(9) Review the experience and qualifications of the designated chief pilot.

(10) Discuss any discrepancies in the application package and the proper corrective actions.

E. Coordinate with Airworthiness Unit.

(1) Notify airworthiness that a maintenance inspector must review the maintenance records during this phase.

(2) During the demonstration and inspection phase, coordinate with the airworthiness unit when inspecting the installation and operation of the external-load attaching means.

(3) Notify the airworthiness unit that the personnel lifting device for Class D operations must be approved during the demonstration and inspection phase.

F. Terminating the Formal Application Phase. Accept the formal application package in writing (figure 97-10). Begin the document compliance phase by conducting an in-depth review of all required documents.

9. DOCUMENT COMPLIANCE PROCEDURES.

After accepting the application package, evaluate the information in the following documents.

A. The Application Form (FAA Form 8710-4).

(1) In Block 1, the applicant indicates one of the following three choices:

(a) Original Issuance if the application is for initial certification;

(b) Amendment if the application is for a change to an existing certificate; or

(c) Renewal if the application is for renewal of an existing certificate.

(2) In Block 1, the applicant also indicates the certificate number if the application is for amendment or renewal. The applicant must also indicate the load classes sought. "Class D" may be typed into the appropriate block.

(3) In Block 2, the applicant indicates the name (including d/b/a's), mailing address, and telephone number of the operator.

(4) In Block 3, the applicant indicates the address and telephone number of the principal base of operations. Check to ensure that the applicant has not used a post office box number for the principal base's address.

(5) In Block 4, the applicant indicates the name of the designated chief pilot and that pilot's airman certificate grade and number.

(6) In Block 5, the applicant indicates all rotorcraft to be used by registration number, make and model, and load class. The applicant must also indicate whether the attaching device for each rotorcraft has been previously approved. The applicant may use the Remarks column to indicate the rotorcraft to be used in Class D or IFR operations.

(7) At the bottom of the form, the applicant must date and sign the application. The person signing the application must also include their title (for example, Director of Operations, President.)

(8) The reverse of the form is for later FAA use.

B. Rotorcraft Lease.

(1) Review the rotorcraft lease for the following:

- (a) the name of owners;
- (b) the name of certificate holder/applicant;
- (c) the identification and type of aircraft;

(d) the duration of lease;

(e) an indication of sole possession, control, and use for flight, including an agreement for performance of required maintenance;

(f) the signatures of the owners and certificate holder or applicant; and

(g) the dates of the signatures.

(2) Determine whether the operator has the exclusive use of at least one rotorcraft for a minimum of 6 consecutive months.

C. Rotorcraft Load Combination Flight Manual. See volume 2, chapter 98.

D. Letter of Designation of Chief Pilot. Verify that the chief pilot has been nominated, and has accepted the designation, then verify that both the operator and chief pilot have signed the letter.

E. Qualifications of Chief Pilot. Determine if the chief pilot designee meets the requirements of § 133.21, has passed the knowledge and skill test for external-load operations, has previous experience in external-load operations, and has a satisfactory safety record. If it is necessary to administer a knowledge and skill test for the chief pilot, conduct it during the demonstration and inspection phase.

F. OpSpecs. See volume 2, chapter 99. (Class D or IFR authorizations only)

G. Rotorcraft and Equipment Maintenance Records. (Airworthiness)

H. Training Program. Examine Class D training programs for the following elements.

(1) For pilot crewmembers, initial and recurrent ground training should include the following:

(a) reviewing contents of the OpSpecs;

(b) calculating weight and balance, including longitudinal and lateral weight and balance;

(c) determining single engine hovering out-of-ground effect performance considering weight and density altitude;

(d) reviewing normal and emergency communications procedures, including hand signals;

(e) reviewing crew coordination procedures;

(f) reviewing preflight procedures for all equipment;

(g) reviewing congested area plan requirements;

(h) briefing all persons involved with the external-load operation;

(i) using approved personnel lifting devices;

(j) operating the winch, including weight, longitudinal and lateral center of gravity (CG), and operational limitations; preflight; and normal and emergency procedures;

(k) avoiding collisions and obstacles;

(l) reviewing other information necessary to ensure pilot competence. For example, for each aircraft make and model used, examine the training program for information about the following:

- the major aircraft systems;
- the limitations of the aircraft make and model;
- the performance characteristics;
- the fuel consumption;
- the approved aircraft flight manual, approved Rotorcraft Load Combination Flight Manual, and approved supplements;
- the procedures for normal and emergency situations;
- explanations of the causes of loss of tail rotor effectiveness and procedures to recover; and
- the avoidance of potentially hazardous meteorological conditions.

(2) For pilots, initial flight training while carrying ballast to simulate persons on the personnel lifting devices should include the following:

(a) computing weight and balance, including longitudinal and lateral CG calculations and performance planning;

(b) executing takeoffs and landings;

(c) maintaining directional control while hovering;

(d) accelerating from a hover;

(e) executing approaches to landing or work areas;

(f) operating the winch, if so equipped;

(g) using safety devices that prevent inadvertent release of the load;

(h) releasing the load in an emergency;

(i) single engine hovering and maneuvering for landing; and

(j) avoiding collisions and obstacles.

(3) For flight crewmembers (for example, winch operators) initial ground training should include the following:

(a) reviewing normal and emergency communications procedures, including hand signals;

(b) operating the winch, including weight and operational limitations, preflight, and normal and emergency procedures;

(c) the appropriate portions of the Rotorcraft Load Combination Flight Manual;

(d) reviewing crew coordination procedures;

(e) taking a preflight of lifting equipment;

(f) using the approved personnel lifting devices;

(g) using personal safety equipment, such as harnesses, clothing, gloves, etc.;

(h) recognizing the onset of hazardous load oscillations;

(i) recognizing other dangerous situations; and

(j) avoiding collisions and obstacles.

(4) For flight crewmembers (for example, winch operators), initial flight training while carrying a simulated load (ballast) should include the following:

(a) operating the winch, if so equipped;

(b) communicating among crewmembers, including hand signals as well as normal and emergency communications procedures;

(c) using safety devices that prevent inadvertent release of the load;

(d) releasing the load in an emergency;

(e) using the approved personnel lifting device;

(f) using personal safety equipment, such as harnesses, clothing, gloves;

(g) stabilizing oscillating winch loads; and

(h) avoiding collisions and obstacles.

(5) For ground crew personnel, initial ground and flight training while carrying a simulated load should include:

- (a) reviewing normal and emergency communications procedures, including hand signals;
- (b) reviewing crew coordination procedures;
- (c) making a preflight of the lifting equipment;
- (d) using the approved personnel lifting device;
- (e) operating the winch, including limitations and normal and emergency procedures;
- (f) the appropriate portions of the Rotorcraft Load Combination Flight Manual;
- (g) recognizing dangerous situations;
- (h) recognizing the onset of hazardous oscillation of the load; and
- (i) using personal safety equipment, such as helmets, gloves, and goggles.

I. Unsatisfactory Items. If there are any unsatisfactory items, advise the applicant in writing that the items must be corrected (figure 97-11).

(1) Minor corrections may be made in the office without returning the entire package. For substantial corrections, place a reasonable time limit on when the corrections should be completed.

(2) Place a copy of the letter in the file.

J. Terminating the Document Compliance Phase. When all documents are satisfactory, conclude the document compliance phase. Proceed with the demonstration and inspection phase.

11. DEMONSTRATION AND INSPECTION PROCEDURES.

A. Conduct Knowledge and Skill Tests. See volume 2, chapter 100.

B. Conduct Rotorcraft and Equipment Inspection (Airworthiness).

C. Conduct Operational Flight Checks (if required).

(1) Have the operator determine if the weight of the rotorcraft-load combination and the location of its CG are within approved limits, the external-load is

securely fastened, and whether the external-load interferes with devices provided for its emergency release.

(2) Observe an initial lift-off to verify that controllability is satisfactory.

(3) Have the pilot execute a 360 degree pedal turn (to the right or left, as appropriate) to verify that directional control is satisfactory while the rotorcraft is hovering.

(4) Verify that no attitude is encountered in forward flight in which the rotorcraft is uncontrollable or hazardous aerodynamic turbulence occurs. Check that hazardous oscillations of the external-load do not occur. This may be verified by other ground personnel for the inspector.

(5) Have the pilot increase forward speed to determine if directional stability is maintained as both the aircraft and external-load accelerate.

(6) If appropriate, have the pilot maintain horizontal flight at the maximum speed for which authorization is requested; observe whether load oscillations occur that would interfere with aircraft stability.

(7) For Classes B, C, and D, observe normal operation of the lifting device during flight or hovering to ensure that it does not interfere with flight control.

(8) Have the pilot maneuver the external-load into its release position and execute the release for appropriate load classes. Note any difficulties or discrepancies in the proper positioning of the load and the aircraft exit from the site.

(9) Make notes during and immediately after the operational flight check for later placement in the office file and to refer to before debriefing the applicant.

D. Conduct a Base Inspection. See volume 2, chapter 101.

E. Results of Inspections and Testing.

(1) If any demonstrations are unsatisfactory, advise the applicant in writing (figure 97-12) of areas that need corrective action. Reschedule the inspections or tests, as appropriate.

(2) If all demonstrations are satisfactory, proceed with certification.

F. Terminating the Demonstration and Inspection Phase. When all demonstrations and inspections are complete and satisfactory, proceed with the certification phase.

13. CERTIFICATION PROCEDURES. When all certification requirements have been met, call AVN-120 for a certificate number. Complete inspection reports

and job aids. Have the administrative staff prepare the operating certificate.

A. Prepare and Issue the Operating Certificate. Use FAA Form 8430-21 for an operating certificate (figure 97-13). The following information must be typed on the certificate.

(1) Enter the full legal name of the company below the words, "This certifies that." Show other names (such as d/b/a's) on the certificate. If necessary, list them on a separate, attached letter (figure 97-14).

(2) Enter the address of the principal base of operations below the full legal name. Do not use a post office box address unless it also reflects the physical location of the principal base of operations.

(3) Do not modify the preprinted certification statement of authority. Complete the statement by typing "ROTORCRAFT EXTERNAL-LOAD OPERATIONS" in the space provided.

(4) Directly adjacent to the words, ". . . regulations, and standards," indicate all load classes for which the operator is authorized. If Class D or IFR operations are authorized, type in the phrase, "and the terms, conditions, and limitations contained in the approved OpSpecs. Class [all loads the operator is approved for] loads are authorized." Type in the phrase "Valid only for the rotorcraft on the attached list."

(5) Include the expiration date, which is the last day of the 24th calendar month after the date of issue.

(6) Enter the certificate number (see volume 2, chapter 203).

(7) Enter the date all requirements for certification are met. State the reissue date, if appropriate.

(8) Type the four character alphanumeric designator and the city and state of the certificate holding district office into the space provided (for example, WP03, San Francisco, CA).

(9) Enter the full title of the person signing the certificate. Enter the acronym of the region and the FSDO acronym and number (for example, Manager, AWP-FSDO-03).

(10) Submit the certificate for the FSDO manager to sign.

B. List of Authorized Rotorcraft. Prepare a list of authorized rotorcraft (figure 97-15) and attach to the operating certificate. A change in the list of authorized rotorcraft will not require a reissue of the operating certificate unless there is a change in authorized operating classes caused by addition or deletion of a particular rotorcraft to the list.

C. Application Completion. On the reverse side of FAA Form 8710-4, complete the inspection report.

(1) Approve each suitable rotorcraft by the following:

- (a) the make and model;
- (b) the registration number;
- (c) the approval date;
- (d) the load class (A, B, C, or D);
- (e) the weight authorization;
- (f) any limitations and remarks; and
- (g) the inspector's signature.

(2) Include any pertinent remarks.

(3) Indicate how the chief pilot met the knowledge and skill requirements (i.e., actual test or previous logbook endorsement). In addition:

- (a) indicate the chief pilot's name;
- (b) indicate the load classes the chief pilot is authorized for (type in Class D, if appropriate); and
- (c) indicate the date the chief pilot met the knowledge and skill requirements.

(4) Sign the application or have it signed by the inspector who tested or verified the chief pilot's experiences.

(5) Indicate the authorized load classes (type in Class D, if appropriate).

(6) Include the certificate number after obtaining it from AVN-120.

(7) Indicate the date the certificate was issued.

(8) Enter the FSDO acronym.

(9) Have the certification project manager approve and sign the application.

D. Certificate Denial. If certification requirements are still not met, issue a letter of denial (figure 97-16). Indicate disapproval on FAA Form 8710-4, make any necessary comments, and have the FSDO manager sign and date the application.

E. Certification File. Upon issuance of a certificate, assemble a file that contains the following:

- (1) a copy of the letter of intent, if applicable;
- (2) a copy of the application;
- (3) a copy of the certification job aid;
- (4) the schedule of events;

(5) a copy of the operating certificate and approved list of rotorcraft;

(6) a copy of the Rotorcraft Load Combination Flight Manual;

(7) a copy of the letter designating chief pilot;

(8) a summary of any difficulty encountered during certification and its resolution;

(9) the approved copies of the OpSpecs and of the training program for Class D; and

(10) a copy of the approved OpSpecs for IFR.

F. Vital Information Subsystem. Enter all appropriate information in the Vital Information Subsystem Air Operator Basic File and Air Operator Aircraft Auxiliary File (see volume 2, chapter 205).

G. FSDO Working File. Establish an official FSDO working file on the operator, which consists of:

(1) the EIS/Accident Incident Data Subsystem profile on the applicant and personnel, including a negative report, if applicable;

(2) the surveillance reports;

(3) all general correspondence relevant to the operator;

(4) a copy of the knowledge, skills, and ability test or results, as appropriate;

(5) current working documents;

(6) approved congested area plan (current); and

(7) amendment and revision authorization letter.

H. PTRS. Make final PTRS work entry for this task.

15. TASK OUTCOMES. Completion of this task results in one or more of the following.

A. Issuance of OpSpecs authorizing operations under part 133.

B. Issuance of an operating certificate for Class D and/or IFR operations, if appropriate.

C. Written notification to the applicant denying the application, with indication of the return of all original documents to the applicant.

D. A letter to the applicant confirming termination of the certification process per the applicant's request.

17. FUTURE ACTIVITIES.

A. Possible review of a congested area plan.

B. Surveillance scheduled and conducted according to national guidelines and as congested area plans are received.

C. Renewal conducted every 24 calendar months.

D. Possible amendment of the certificate at request of the operator.

**FIGURE 97-1
SAMPLE LETTER OF INTENT**

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

October 13, 1996

Federal Aviation Administration
Flight Standards District Office 67
3420 Norman Berry Dr.
Atlanta, GA 30354

Dear Inspectors:

This notifies you of our intent to become a rotorcraft external-load operator under Title 14 of the Code of Federal Regulations (14 CFR), part 133.

We plan to commence operation on April 10, 1997, and will be ready for certification inspection of our facility and equipment by March 15. Our application is for Class B, C, and D loads and IFR operations using one Bell 47, one Bell 206, and two Boeing-Vertol BV-234 helicopters.

Our principal operation base is located at 585 Westview Lane, Pine Tree, GA 31087. Our business phone number is (404) 555-1212. Mr. Brian Morgan is our chief pilot and may be reached at the above address.

Enclosed are three copies of FAA Form 8710-4. Our requested 3-letter certificate designators are RWI, RPT and RGA, in that order of preference.

Sincerely,

Stephen Burkholder
Chairman

**FIGURE 97-3
FAA FORM 8400-8, OPERATIONS SPECIFICATIONS**

 US Department of Transportation Federal Aviation Administration	Operations Specifications	Form Approved OMB No. 2120-0028

FAA Form 8400-8A (9-89)

**FIGURE 97-4
PART 133 CERTIFICATION JOB AID**

14 CFR PART 133 INITIAL CERTIFICATION		NAME OF APPLICANT				
CERTIFICATION TEAM DESIGNATED		REMARKS:				
Name	Specialty					
_____	_____					
(Certification Project Manager)	_____					
_____	_____	Inspector's Initials	Date	S	U	N/A
_____	_____					
1. Initial contact with _____						
2. Applicant given copy of Advisory Circular (AC) 133-1						
3. Applicant advised how to obtain pertinent regulations						
4. Letter of Intent submitted						
5. Letter of Intent reviewed and accepted						
6. Preapplication Meeting						
7. Formal Application Package received and accepted						
8. Formal Application Meeting						
9. Formal Application Package reviewed in depth						
a. FAA Form 8710-4						
b. Schedule of events						
c. Rotorcraft-Load Combination Flight Manual (RLCFM)						
d. Class D training program						
e. Operations specifications (OpSpecs)						

**FIGURE 97-4—Continued
PART 133 CERTIFICATION JOB AID**

14 CFR PART 133 INITIAL CERTIFICATION	NAME OF APPLICANT				
REMARKS:	Inspector's Initials	Date	S	U	N/A
	f. Rotorcraft ownership/lease				
g. Experience/qualifications of chief pilot & other pilots					
10. Aircraft					
a. Equipped for A loads					
b. Equipped for Class B/C loads					
c. Equipped for Class D loads					
• Personal lifting device					
d. Section 133.39(a) placard					
e. Section 133.49(b) marking adjacent to load carrying device					
• States maximum load					
• Matches RLCFM					
f. Inspections					
• Installation & function load carrying/attach device					
• Maintenance records					
g. Minimum Equipment List (MEL) for multiengine aircraft					

**FIGURE 97-4—Continued
PART 133 CERTIFICATION JOB AID**

14 CFR PART 133 INITIAL CERTIFICATION	NAME OF APPLICANT				
REMARKS:	Inspector's Initials	Date	S	U	N/A
	11. Class D Authorization				
a. OpSpecs					
b. Use of FAA-approved PLD					
c. Use of grd. flt. crew comm. equipment					
d. Communications equipment inspected by Avionics					
e. Initial/Recurrent training programs					
12. IFR Authorization					
a. OpSpecs					
b. At least one pilot current & qualified for IFR flt. in helicopters					
c. At least one rotorcraft certificated for IFR flight					
13. Pilots					
a. Chief pilot appropriately qualified					
b. All pilots passed knowledge test					
c. All pilots passed skill test					
14. Applicant understanding of section 133.45 Operating Limit					

**FIGURE 97-4—Continued
PART 133 CERTIFICATION JOB AID**

14 CFR PART 133 INITIAL CERTIFICATION	NAME OF APPLICANT				
REMARKS:					
	Inspector's Initials	Date	S	U	N/A
a. Passenger carrying during external-load operations					
b. Weight & balance limits					
c. Operating airspeed limits					
d. Restricted category rotorcraft over densely populated areas, congested areas, near busy airports where passenger carrying operations are conducted					
15. Certificate number obtained from AFS-620					
16. External-load Operator Certificate Prepared/ Issued					
17. Certification report & district office file prepared					
18. Surveillance plan established					
ADDITIONAL REMARKS:					

FIGURE 97-5
LETTER OF NOMINATION FOR DESIGNATION AS A CHIEF PILOT

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

October 13, 1996

Federal Aviation Administration
Flight Standards District Office 67
3420 Norman Berry Dr.
Atlanta, GA 30354

Dear Inspectors:

I am writing to inform you that, as part of our application for an external-load operating certificate, I wish to designate the following person as chief pilot, with your approval:

Elizabeth Sheley

Ms. Sheley has accumulated over 2000 hours as pilot-in-command (PIC) of rotorcraft and most recently was employed as an external-load pilot for the Public Utilities Commission. In this capacity, she flew Bell 206 and Sikorsky S-65 series helicopters. Ms. Sheley completed the state and FAA knowledge and skill tests on June 9, 1995. All records of experience and training are available for your review.

Sincerely,

Stephen Burkholder
Chairman

I accept this nomination for designation as chief pilot.

[signature]

[type name of chief pilot]

**FIGURE 97-6
SAMPLE SCHEDULE OF EVENTS**

14 CFR PART 133 SCHEDULE OF EVENTS					
NAME OF OPERATOR	NAMES OF MANAGEMENT PERSONNEL				
	Names		Titles		
ADDRESS	_____		_____		
	(Certification Project Manager)				
	_____	_____	_____	_____	_____
	Inspector's Initials	Date	S	U	N/A
PRE-APPLICATION					
Letter of Intent					
FORMAL APPLICATION					
Schedule of Events					
Application (FAA Form 8710-4)					
DOCUMENT COMPLIANCE PHASE					
Applicant (FAA Form 8710-4)					
Rotorcraft-Load Combination Flight Manual (RLCFM)					
Letter of Designation of Chief Pilot					
Qualifications of Chief Pilot					
Operations Specifications (OpSpecs) (Class D & IFR Authorizations Only)					
Rotorcraft & Equipment Maintenance Records					
Class D Training Programs					
DEMONSTRATION AND INSPECTION					
Knowledge and Skill Test					
Rotorcraft & Equipment Inspection (Airworthiness)					
Operational Flight Checks (if required)					
Base Inspection					
REMARKS:					

FIGURE 97-7
LETTER INDICATING APPLICANT NOT ELIGIBLE FOR CERTIFICATION BECAUSE OF
PENDING ENFORCEMENT ACTION

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

This letter is to inform you that you are ineligible for certification as a rotorcraft external-load operator.

During precertification review of enforcement history, it was determined that [*type of enforcement action and justification for discontinuing certification process*].

If you have any questions concerning this matter or desire to reapply once the enforcement sanction has been fulfilled, please contact this office at [*telephone number*].

Sincerely,

[*FSDO manager's signature*]

FIGURE 97-8
LETTER INDICATING CHIEF PILOT DESIGNEE NOT ELIGIBLE BECAUSE OF PENDING ENFORCEMENT ACTION

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

This letter is to inform you that your nominee for chief pilot, Ms. Elizabeth Sheley, is not eligible for the position. During precertification review, it was determined that enforcement action is in effect against Ms. Sheley's airman certificate.

If you have any questions concerning this matter or desire to submit another nominee for chief pilot, please contact this office at [*telephone number*].

Sincerely,

[*FSDO manager's signature*]

FIGURE 97-9
LETTER REJECTING APPLICATION PACKAGE

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

This letter is to inform you that the application package submitted to become a rotorcraft external-load operator is not acceptable. The following is a list of discrepancies noted:

- *List the specific items found in each document.*
- *List any items or documents that are missing.*

All items in the application package are returned with this letter. Additionally, blank forms [*application, etc.*] are also enclosed if you intend to submit a corrected application package. If you intend to terminate the certification process or if you have any questions, please contact this office at [*telephone number*].

Sincerely,

[*FSDO manager's signature*]

FIGURE 97-10
LETTER ACCEPTING FORMAL APPLICATION PACKAGE

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

This letter is to inform you that your application for a rotorcraft external-load operating certificate has been accepted for review.

The next step in the certification process is to review the following:

- *List the documents, as appropriate to the applicant.*
 - Application Form 8710-4, Application for Rotorcraft External-Load Operating Certificate
 - Lease Agreements
 - Rotorcraft-Load Combination Flight Manual
 - Letter of Designation of Chief Pilot
 - Qualifications of Chief Pilot
 - Operations Specifications (OpSpecs)
 - Rotorcraft and Equipment Maintenance Records
 - Training Programs

You will be notified of the results of this review and any further actions required.

Sincerely,

█ [*CPM's signature*]

FIGURE 97-11
LETTER EXPLAINING DOCUMENT DEFICIENCIES

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

During the document compliance phase of certification, the following items were found deficient and are being returned for correction:

- *List the specific items and discrepancy, for example:*
 1. FAA Form 8710-4, Application for Rotorcraft External-Load Operating Certificate, should indicate the registration numbers of the aircraft to be used.
 2. The Class D training program does not include any training on appropriate hand signals to be used by ground personnel in the event of radio communication failure.

If you have any questions concerning this matter, please contact this office at [*telephone number*].

Sincerely,

[*principal operations inspector's (POI) signature*]

FIGURE 97-12
LETTER EXPLAINING INSPECTION DEFICIENCIES

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

During the [*type of inspection, i.e. rotorcraft equipment, operational flight check, base inspection*] the following deficiencies were noted:

- *List specific deficiencies.*

It will be necessary to correct these items before the certification process can continue. You should inform this office when you anticipate completing these corrections so that the schedule of events for certification may be adjusted.

Sincerely,

[*CPM's signature*]

FIGURE 97-13
FAA FORM 8430-21, OPERATING CERTIFICATE



US Department
of Transportation
Federal Aviation
Administration

Operating Certificate

This certifies that

MID-CONTINENTAL HELICOPTER, INC.
d/b/a
Verti-Flite
1234 Avalon Avenue
San Francisco, CA 95123

has met the requirements of the Federal Aviation Act of 1958, as amended, and the rules, regulations, and standards prescribed therein, for the issuance of this certificate and is authorized to operate as an Air Operator and conduct

Rotorcraft External-Load Operations

in accordance with said Act and the rules, regulations, and standards; and the terms, conditions, and limitations contained in the approved operations specifications. Classes A, B, C, and D loads are authorized.

This certificate is not transferable and, unless canceled, suspended, superseded, surrendered or revoked, shall continue in effect until March 31, 1997.

By Direction of the Administrator

Certificate number: RWI-L-001-A

Effective Date: March 10, 1995

Issued at: WP03, San Francisco, CA

Stephen J. Stultz
(Signature)
Manager, AWP-FSDO-03
(Title)

**FIGURE 97-14
LETTER LISTING D/B/A'S**

Rotor Whirl, Incorporated
858 Westview Lane
Pine Tree, GA 31087

[*date*]

Federal Aviation Administration
Flight Standards District Office 67
3420 Norman Berry Dr.
Atlanta, GA 30354

Dear Inspectors:

The following corporate names (d/b/a) may be associated with external-load operations authorized upon certification of Rotor Whirl, Incorporated:

Burkholder & Associates
59206 Mill Run Rd.
Bowie, MD 20716

Sincerely,

Stephen Burkholder

FIGURE 97-15
LIST OF AUTHORIZED ROTORCRAFT

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

This letter authorizes the following rotorcraft to be operated in accordance with Title 14 of the Code of Federal Regulations (14 CFR), part 133, and the provisions and limitations of the attached operating certificate:

- *List each helicopter by make, N-number and external-load class, for example:*

Bell 206	N1478A	Class A,B
Bell 222	N1479A	Class B, C & D

Sincerely,

[*POI's signature*]

FIGURE 97-16
LETTER DENYING CERTIFICATION

FAA Letterhead

[*date*]

Rotor Whirl, Incorporated
585 Westview Lane
Pine Tree, GA 31087

Dear Mr. Burkholder:

This letter is to inform you that your applicant for an external-load operating certificate is denied.

The reasons for denial are as follows:

- *List specific reasons in detail.*
- *Cite 14 CFR sections where possible.*

If you have any questions concerning the above, please contact this office at [*telephone number*].

Sincerely,

[*FSDO manager's signature*]

FIGURE 97-17
PART 133 CERTIFICATION PROCESS FLOW CHART

