



Belize Department of Civil Aviation

ADVISORY CIRCULAR

Subject: Agricultural Aircraft Operations

DATE: 01 May 2024

AC No: BDCA-OPS-003-2024

Initiated by: Flight Standards Unit

Revision: Original

1. Introduction

1.1 This Advisory Circular (AC) describes the certification process in accordance with BCAR 119 and acceptable means, but not the only means, by which an operator may apply for and obtain an Operating Certificate to conduct agricultural aircraft operations under Belize Civil Aviation Regulations, BCAR 137 Part II. This AC also applies to the use of Unmanned Aircraft (UAS) for the conduct of agricultural aircraft operations.

2. Purpose

2.1 The purpose of this AC is to provide sufficient information that may assist the operator in completing the application and certification process for an agricultural aircraft operating certificate to become a BDCA certificated agricultural aircraft operator.

3. Applicability

3.1 This AC is applicable to all operators seeking a BCAR 137 Part II Operating Certificate.

4. Related Belize Civil Aviation Regulations

- 4.1 Belize Civil Aviation Regulation, BCAR 137 Part II – Agricultural Aircraft Operations
- 4.2 Belize Civil Aviation Regulation, BCAR 119 – Air Operator Certificates, Operating Certificates and Operations Authorizations

5. Approval


Nigel Carter
Director of Civil Aviation

6. Application Process

6.1 The certification process is designed to ensure the operator meets the requirements for certification under BCAR 137 Part II. The application and certification process provides the BDCA with sufficient evidence that the operator is fully qualified, and the aircraft and type of operations can be conducted in a safe manner; and that the applicant meets all the rules and regulations governing the operation of agricultural aircraft by a private or commercial operator. The certification process for either private or commercial, whether manned or unmanned aircraft are used, is identical.

6.2 There are five phases in the certification process.

- (1) Preapplication,
- (2) Formal Application,
- (3) Document Compliance,
- (4) Demonstration and Inspection, and
- (5) Certification.

6.3 Certification Process

(a) Preapplication Meeting

- (1) The preapplication meeting is an informal meeting to provide applicants with an overview of the certification process, introduce the applicant to the certification project manager and identify the necessary resources to assist them in becoming certificated.
- (2) If an applicant is familiar with all of the requirements of the certification process and the required documentation, they may not need a preapplication meeting (e.g., if they have previous experience as a BCAR 137 operator). In such cases, the BDCA may eliminate the Preapplication Phase and the applicant proceeds to the Formal Application Phase.
- (3) During the meeting, the BDCA will request the following information:
 - (i) Area of operation.
 - (ii) Location of home base of operations.
 - (iii) Location of probable satellite sites.
 - (iv) Type of operation, private or commercial.
 - (v) Economic poisons or other dispensing material.
 - (vi) Operating as individual, Company, or partnership.
 - (vii) Previous experience with BCAR 137 operations.
 - (viii) Category and class of aircraft (helicopter, airplane, or Unmanned Aircraft Systems (UAS)).
 - (ix) Qualifications and experience of chief supervisor/pilot.
 - (x) Disclosure of any previous or pending enforcement action pertaining to the applicant, management personnel, or chief supervisor.
 - (xi) Any other documents required to support request for certification*
**Note: The applicant is responsible for identifying applicability and compliance requirements with any other national law or regulation regarding aerial applications and dispensing*
- (4) Before the conclusion of the meeting, the certification project manager will explain the following:
 - (i) The general applicability and definition of BCAR 137, Part II
 - (ii) The certification process and requirements
 - (iii) The operating rules
 - (iv) The records and reports required under BCAR 137, Part II; and
 - (v) Identify any need for exemptions
- (5) The certification project manager shall provide the applicant with the following materials:
 - (i) Agriculture Aircraft Operations Application Form

- (ii) A sample letter of nomination for designation of a Chief Pilot/Supervisor
- (iii) A sample operations manual (UAS operators only)
- (iv) A copy of application for exemption if required.

(b) Formal Application

- (1) This phase begins when the applicant submits their formal application package.
- (2) The certification team will review the application and supporting documents, within 30 days of receiving it.
- (3) Applicants are notified, in writing, whether the formal application is accepted or rejected. If the application is inaccurate or not completed properly, the certification project manager returns the application to them with a letter outlining the items that are unsatisfactory. Applicants must take the appropriate action to correct the items before the certification process can continue.
- (4) The Formal Application Phase ends upon the certificate project manager acceptance of the application, and the Document Compliance Phase begins.

(c) Document Compliance

- (1) The Document Compliance phase consists of an in-depth review of all documents the applicant submits. The certification project manager will review the application and supporting documents to determine compliance with BCAR 137 Part II, including:
 - (i) Chief supervisor/pilot qualifications for commercial agricultural operators (BCAR 137 Part II, 14);
 - (ii) Qualifications and currency requirements for pilots (Proof of training/experience) to conduct agricultural aircraft operations (BCAR 137 Part II, 5);
 - (iii) Copy of the aircraft registration certificate and copy of the airworthiness certificate (BCAR 137 Part II, 7);
 - (iv) An appropriate minimum equipment list (MEL) for the aircraft being used, if applicable;
 - (v) Aircraft maintenance documents;
 - (vi) UAS operational documents, if applicable (Operations Manual, Maintenance Procedures etc);
and
 - (vii) UAS registration number (BDCA issued number) and serial number of the unmanned aircraft (UA).
- (2) If applicants apply for a Private Agricultural Aircraft Operator Certificate, they may only conduct operations over property they own or lease, or have ownership or other legal interest in the crops located on the property. Applicants must provide the BDCA with proof of a bona fide property interest. This requires applicants to provide a deed or agricultural use lease for the property where operators will perform aerial dispensing.
- (3) If any item required for the Document Compliance Phase is unsatisfactory, the certification project manager will advise the applicant that they must correct it before the certification process continues. The certification project manager will provide the applicant with a letter that outlines the items found unsatisfactory. After addressing the unsatisfactory items, the applicant should resubmit the documents for another review by the team. When the team determines that all documents are satisfactory, the certification project manager terminates the Document Compliance Phase. The certification project manager schedules a time to conduct the Demonstration and Inspection Phase.

(d) Demonstration and Inspection

- (1) The Demonstration and Inspection Phase is an inspection of the applicant's facilities and aircraft. During this phase, applicants show that they can conduct operations under BCAR 137 Part II to the highest degree of safety. The certification project manager will inspect the home base of operations for compliance with the applicable operating procedures. The size and complexity of the operation

- will determine the extent of the inspection required at the base.
- (2) Unless otherwise exempted, applicants must present at least one certificated and Airworthy aircraft that is equipped for agricultural operation. An Airworthiness inspector will verify that the aircraft is properly certificated and Airworthy, the inspection status is current, and is in a condition for safe operation.
 - (3) This phase examines the following areas:
 - (i) Recordkeeping system (for commercial operators).
 - (ii) The method for informing personnel of their duties and responsibilities.
 - (iii) Aircraft.
 - (iv) Facilities (if applicable).
 - (v) The applicant's knowledge and skills.
 - (4) A private agricultural aircraft operator is not required to comply with BCAR 137 Part II (19) (recordkeeping requirements), but a commercial agricultural aircraft operator must maintain a current recordkeeping system at their home base of operations. They must keep these records for at least 12 months and make them available for inspection upon request from the BDCA. Because BCAR 137 Part II (19) is not specific in the type of recordkeeping system, operators must determine how they intend to comply with the recordkeeping requirements.
 - (5) Private and commercial operators must ensure that each person used in an agricultural aircraft operation is informed of their duties and responsibilities for the operation. A private or commercial agricultural aircraft operator is not required to have an operations manual (however, UAS operators are required to prepare an operations manual); but are required to develop safe operating procedures (SOPs) that all personnel can easily understand.
 - (6) For both private and commercial agricultural aircraft operators, the Airworthiness inspector will inspect the aircraft, aircraft records, and dispensing equipment.
 - (7) The BDCA will conduct a knowledge and skill test during the applicant's initial BCAR 137 Part II certification. This requirement applies to applicants who seek either a Private or Commercial Operating Certificate.
 - (i) The pilot must have adequate knowledge of operating limitations for the aircraft (contained in the Aircraft Flight Manual (AFM) or the pilot's operating handbook (POH)). Weight and Balance (W&B) information will receive special emphasis. The applicant and the pilot must also be knowledgeable of the aircraft's performance capability.
 - (ii) Applicants and the pilot must also be knowledgeable of UAS-specific performance capability (if operating a UAS).
 - (iii) For the skill test, the aircraft's tanks or hoppers must be loaded with any suitable material (e.g., water or sand, etc), Load to the maximum certificated takeoff weight..

Results of Inspection and Testing

- (8)
 - (i) If either the knowledge test or skill test results are unsatisfactory, the certification project manager notifies the pilot and applicant in writing of the disposition of the test. The pilot and/or applicant must schedule another appointment with the BDCA to retake the test.
 - (ii) Applicants may not progress through the certification process before satisfactorily completing the tasks of the Demonstration and Inspection Phase. The certification Project manager terminates the Demonstration and Inspection Phase only upon the applicant's successful completion of the required tasks.

(e) Certification

- (i) When all certification requirements have been met, applicants receive the appropriate

Agricultural Aircraft Operator Certificate (private or commercial).

- (ii) If certification requirements are not met, the BDCA will notify the applicant in writing and provide specific reasons for the denial and cite BCAR sections where possible. During any phase, the BDCA can terminate the certification process if an applicant does not adequately correct a discrepancy noted by the certification team.

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