



Belize Department of Civil Aviation

ADVISORY CIRCULAR

Subject: Rotorcraft External Load Operations

DATE: 01 April, 2024

AC No: BDCA-OPS-002-2024

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 rotorcraft external load operations under Belize Civil Aviation Regulations, BCAR 137, Part III.

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 a rotorcraft external load operating certificate.

3. Applicability

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

4. Related Belize Civil Aviation Regulations

4.1 Belize Civil Aviation Regulation, BCAR 137 Part III – Helicopter External Load Operations

5. Approval:



Nigel Carter
Director
Belize Department 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 III.

6.2 There are five phases in the certification process.

- (i) Preapplication (combined with Formal Application Phase in most instances),
- (ii) Formal Application,
- (iii) Document Compliance,
- (iv) Demonstration and Inspection, and
- (v) Certification.

6.3 Certification Process

(a) Preapplication and Application

- (i) To commence an application for a BCAR 137 Part III Operating Certificate, the applicant must contact the Flight Standards Unit (FSU). The FSU will provide the applicant with the appropriate information and references necessary to begin the certification process.
- (ii) The FSU will outline the Certification requirements, operational requirements, recordkeeping requirements and any other requirements to comply with BDCA regulations.
- (iii) The FSU will also inquire about special considerations such as load class sought, Instrument Flight Rules (IFR) requirements, qualifications and experience of the chief pilot, rotorcraft load combination flight manual, training program and hazardous materials training if applicable.
- (iv) The BDCA shall provide the applicant with the following materials:
 - (A) BDCA Form 2010
 - (B) A sample letter of nomination for designation of a Chief Pilot
 - (C) A sample rotorcraft load combination flight manual
- (v) The FSU will discuss how to complete the forms and advise the applicant to submit the forms in original form.
- (vi) The following factors will be used to determine if additional items need to be discussed with the applicant:
 - (A) Previous experience in external load operations
 - (B) Size, scope, and safety aspects of the operation
 - (C) Area of operation
 - (D) Class D or IFR operations if requested
 - (E) Ability to comply with certification requirements.
- (vii) The FSU will also discuss the following with the applicant:
 - (A) The time to complete each phase
 - (B) Area of operations
 - (C) Load class authorization the operator is seeking
 - (D) Operator previous experience with external load operations
 - (E) Qualifications and experience of the proposed Chief Pilot
 - (F) Any previous or pending enforcement action against the applicant or pilot
 - (G) Contents of the rotorcraft load combination flight manual
 - (H) Requirements for developing a training program for class D operations
- (viii) If the application package is not complete, the FSU will notify the applicant in writing of the changes needed before certification can continue.
- (ix) After the application review process is completed, an application meeting will be scheduled to discuss a schedule for certification and any necessary adjustments.

(b) Document Compliance

BDCA Form 2010:

- (i) The applicant indicates 'initial' if the application is for initial certification, 'renewal' if the application is renewal of an existing certificate, or 'amendment' if the application is for a change to an existing certificate.
- (ii) The applicant indicates the load class(es) for which authorization is sought for.
- (iii) the applicant indicates the name (including DBAs), of the operator.
- (iv) The applicant indicates airman certification number (license number), if applicable
- (v) the applicant indicates airman contact information.
- (vi) The applicant indicates airman mailing address
- (vii) the applicant indicates the address of the principal or local base of operations of the operator.
- (viii) the applicant indicates the name of the Chief Pilot or designee and that pilot's Airman Certificate grade (e.g., private, commercial, and airline transport pilot (ATP)) and certificate number (license number).
- (ix) The applicant indicates if the Chief Pilot has met the knowledge and skill requirements established by the BDCA.
- (x) the applicant indicates all rotorcraft to be used by registration number, make, and model. The applicant also indicates the requested load classes and whether the attaching device for each rotorcraft has been previously approved by the BDCA. The applicant may use the remarks column to indicate which rotorcraft will be used in IFR operations.
- (xi) At the bottom of the form, the applicant or authorized officer includes his or her title (e.g., Director of Operations or President) and dates and signs the application
- (xii) The reverse side of the form is completed by the BDCA during the Certification Process.

Rotorcraft Lease. Provide the following information regarding the rotorcraft lease:

- (i) Name(s) of owner(s);
- (ii) Name of certificate holder/applicant;
- (iii) Identification and type of rotorcraft;
- (iv) Duration of lease (6 month minimum);
- (v) Indication of sole possession, control, and use for flight, including an agreement for performance of required maintenance; and
- (vi) Signatures of the owners and certificate holder or applicant, to include dates.

Rotorcraft Load Combination Flight Manual

- (i) The RLCFM is a required document that provides the information necessary for the safe carriage of external loads.
- (ii) BCAR 137 Part III (36) requires the operator to develop an RLCFM as part of the application package for certification of rotorcraft external-load operations. BCAR 137 Part III (36) requires the RLCFM to include the operating limitations, procedures, performance, and other information established under BCAR 137 Part III (36). This includes the information established during operational flight checks performed under BCAR 137 Part III (33).
- (iii) The RLCFM must cover each class of external-load operation conducted with a specific rotorcraft. The operator shall prepare an RLCFM for each rotorcraft, even if some makes and models are similar. The manufacturer's calculation of performance data and operating limitations may be unique for each rotorcraft. The Director of Civil Aviation may approve a combined RLCFM for those rotorcrafts which have comparable handling, performance and other characteristics.

Letter of Designation of Chief Pilot

- (i) Upon issuance and acceptance of the Letter of Designation, both the operator and Chief Pilot will sign the letter.
- (ii) The Chief Pilot nominee must meet the requirements of BCAR 137 Part III (24) and have passed the knowledge and skill test for external-load operations. The inspector may base the determination that the candidate's knowledge and skill are adequate on the Chief Pilot's previous experience and safety record in rotorcraft external-load operations.

Rotorcraft and Equipment Maintenance Records

- (i) Airworthiness safety inspectors (AIR) will inspect the following records:
- (ii) Rotorcraft maintenance records;
- (iii) Records showing BDCA approval of the attaching means;
- (iv) Airworthiness and registration certificates;
- (v) Approved RFM; and
- (vi) For Class D authorizations, records showing engineering approval of the personnel lifting device.

(c) Demonstration and Inspection

Knowledge and Skill Tests

- (i) A knowledge and skills test will be administered unless the Chief Pilot has previously passed the knowledge and skill test. The tests must have been for the same class of external load and for the same make and model of rotorcraft. The Knowledge and Skill Test may be waived if the Director of Civil Aviation determines that the applicant's previous experience satisfies the requirements of BCAR 137 Part III (24).

Operational Flight Checks

- (i) The flight check shall be conducted while the BDCA Inspector observes from the ground, unless the Inspector determines observation from aboard the rotorcraft is absolutely necessary.
 - (A) The pilot must ensure the gross weight and CG location of the rotorcraft-load combination (RLC) is within approved limits. They should also verify the external load is securely fastened and does not interfere with devices provided for its emergency release.
 - (B) The pilot will make an initial lift-off to verify that controllability is satisfactory.
 - (C) The pilot will 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.
 - (D) The pilot should accelerate into forward flight to verify that no attitude (whether of the rotorcraft or the external load) is encountered in forward flight in which the rotorcraft is uncontrollable or which is otherwise hazardous.
 - (E) In forward flight, check for hazardous oscillations of the external load, but if the external load is not visible to the pilot, other crewmembers or ground personnel may make this check and signal the pilot.
 - (F) Increase the forward airspeed and determine an operational airspeed at which no hazardous oscillation or hazardous aerodynamic turbulence is encountered.

Results of Inspection and Testing

- (i) The operator will be advised in writing of any unsatisfactory test or inspections. The unsatisfactory test or inspections should be rescheduled and repeated until satisfactory

results are achieved.

(d) Certification

- (i) When all certification requirements have been met, the BDCA shall issue an operating Certificate (OC) indicating privileges and limitations of the certificate in the form of operations specifications. The Operating Certificate expires on the last day of the 12th calendar-month (BCAR 137 Part III (27)) after the date of issue, but may be extended to 24 months in accordance with OD 133.025
- (ii) If certification requirements are not met, the FSU will notify the applicant in writing and provide specific reasons for the denial and cite BCAR sections where possible.

7. Rotorcraft External Load Application Form Template



**BELIZE DEPARTMENT OF CIVIL AVIATION
APPLICATION FORM FOR ROTORCRAFT EXTERNAL LOAD OPERATIONS**

Application Information

1. Type of Request			2. External Load Class						
<input type="checkbox"/> Initial <input checked="" type="checkbox"/> Renewal <input type="checkbox"/> Amendment:			<input checked="" type="checkbox"/> Class A <input checked="" type="checkbox"/> Class B		<input type="checkbox"/> Class C <input type="checkbox"/> Class D				
Certificate Number: BCAR 137 Part III - 999									
3. Name of Applicant (First, Middle, Last)			4. License Number		5. Cell #				
Mark Anthony Logan BZ Helicopters International DBA BZ Heli			P-0123		555-6678				
6. Residential Address			7. Principal Base of Operations						
101 Crescent Avenue, Belize City 501-555-6284			Hector Silva Airstrip Belmopan, Cayo 555-3974						
8. Name of Chief Pilot and Assistant Chief Pilot			9. Chief Pilot Met Knowledge and Skill Requirements?						
Miles Smith Commercial Helicopter P-055			Yes						
10. Rotorcraft To be Used									
Registration Number	Type		Load Class (Mark X)				Attachment Device Approved?		Remarks
	Make	Model	A	B	C	D	Yes	No	
V3-FHU	Bell	407	X	X			X		
V3-FHI	Bell	206	X	X				X	
<i>I certify that all statements and answers provided by me on this application form are complete and true to the best of my knowledge and I agree that they are considered as part of the basis for issuance of any BDCA Certification to me.</i>									
Date:			Name						
<div style="border: 1px solid black; width: 150px; height: 20px; margin: 0 auto;"></div> <i>Signature of the Person Submitting this Form</i>			<div style="border: 1px solid black; width: 150px; height: 20px; margin: 0 auto;"></div> <i>Name of the Person Submitting this Form (print)</i>						



**BELIZE DEPARTMENT OF CIVIL AVIATION
APPLICATION FORM FOR ROTORCRAFT EXTERNAL LOAD OPERATIONS**

Official Use Only

Inspector Report						
Rotorcraft		Registration Number	Approval Date	Class	Weight Authorized	Limitations and Remarks
Make	Model					
Remarks						
Applicant Certification						
Approval Status:	<input type="checkbox"/> Class A <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Class D <input type="checkbox"/> Not Approved <i>Applicant is qualified to conduct external load operations in the above indicated</i>					
Operations Officer:			Signature:			
Chief Operations Officer:			Signature:			