



**BELIZE DEPARTMENT OF CIVIL AVIATION**

---

**OPERATIONAL DIRECTIVE: ROTORCRAFT EXTERNAL LOAD  
OPERATIONS**

**OD No: OD-BDCA-01-2024**

**Subject:** Rotorcraft External Load Operations

**Date:** 01 April 2024

**Initiated by:** Flight Standards Unit

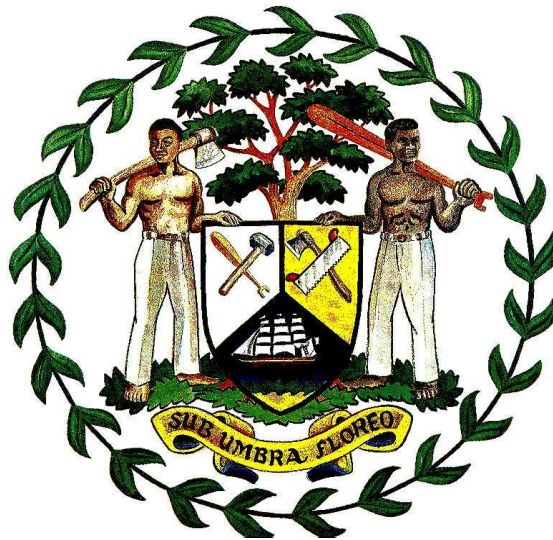
**Record of Revision:** Issue 1, Rev 00

---

1. The purpose of this Operational Directive is to establish rules that are in addition to and exemptions from BCAR 137 Part III:
  - a. The certification process and airworthiness requirements applicable to operators with interest in applying for a rotorcraft external load operating certificate.
  - b. The operating rules and personnel requirements governing the conduct of rotorcraft external load operations in Belize.
2. This Operational Directive is issued under the authority of the Belize Civil Aviation Act, Cap 239, and Belize Civil Aviation Aeronautical Information Circular, AIC C005-24, as applicable.
3. This Operational Directive applies to all BCAR 137, Part III Operating Certificate holders and applicants interested in obtaining authorization to conduct External Load Operations in Belize.
4. This Operational Directive can be downloaded from the BDCA website or can be requested from the BDCA technical librarian at [info@civilaviation.gov.bz](mailto:info@civilaviation.gov.bz)
5. The effective date of this Operational Directive is 01 April 2024.
6. Approval

  
**Nigel Carter**  
Director  
Belize Department of Civil Aviation

# **BELIZE DEPARTMENT OF CIVIL AVIATION**



## **OPERATIONAL DIRECTIVE HELICOPTER EXTERNAL LOAD OPERATIONS OD-133**

Issue: 01  
Revision: 00  
Date: 01/04/2024



Issue and Revision System

## **ISSUE AND REVISION SYSTEM**

**REVISION TO THIS OPERATIONAL DIRECTIVE WILL BE INDICATED BY A VERTICAL BAR ON THE LEFT SIDE, IN FRONT OF THE LINE, SECTION, OR FIGURE THAT HAS BEEN AFFECTED. AN ISSUE WILL BE THE REPLACEMENT OF THE COMPLETE DOCUMENT.**

**REVISIONS MUST BE RECORD, OF REVISIONS TABLE OF THIS DOCUMENT INDICATING THE RESPECTIVE NUMBER, DATE IT WAS ENTERED AND SIGNED BY THE PERSON ENTERNG THE REVISION.**





**BELIZE DEPARTMENT OF CIVIL AVIATION**

**OD-133**

---

*Intentionally Left Blank*



**BELIZE DEPARTMENT OF CIVIL AVIATION**

**SECTION -1**

**OD-133**

**Preamble**

This operational directive prescribes the rules, that are in addition to, and exceptions from, the general operating and flight rules in BCAR 02 and BCAR 137, PART III as applicable, for operators intending to perform a rotorcraft external load operation. This operational directive includes provisions for the specific authority of the Belize Department of Civil Aviation Inspectorate, expands on the certification process for External Load Operators and establishes training, knowledge and skill requirements for the operator. Operators seeking to conduct External Load Operations shall be certified in accordance with BCAR 137 Part III and this Operational Directive, until the establishment and publication of Belize Civil Aviation Regulation, BCAR 133 for Helicopter External Load Operations.

***Intentionally Left Blank***



**BELIZE DEPARTMENT OF CIVIL AVIATION  
EXTERNAL LOAD OPERATIONS**

**SECTION -1**

**OD-133**

**TABLE OF CONTENTS**

<b>Issue and Revision System .....</b>	<b>1</b>
<b>Record of Revisions.....</b>	<b>1</b>
<b>Preamble           1</b>	
<b>TABLE OF CONTENTS.....</b>	<b>2</b>
<b>SUBPART A    GENERAL PROVISIONS .....</b>	<b>4</b>
OD-133.001    Applicability .....	4
OD-133.005    External Load Combinations, Designations and Related Concepts.....	4
OD-133.010    Inspection Authority .....	4
OD-133.015    Exemptions .....	4
<b>SUBPART B    CERTIFICATION REQUIREMENTS .....</b>	<b>6</b>
OD-133.020    Certification Process .....	6
OD-133.025    Validity of Certificate .....	6
OD-133.030    Application for Issuance or Renewal .....	6
OD-133.035    Availability of Certificate.....	6
<b>SUBPART C    AIRWORTHINESS REQUIREMENTS .....</b>	<b>7</b>
OD-133.040    Operating Limitations .....	7
OD-133.045    Airworthiness Certification .....	7
<b>SUBPART D    OPERATING PROCEDURES .....</b>	<b>8</b>
OD-133.050    Congested Area Operations .....	8
OD-133.055    Human External Cargo (HEC) .....	8
OD-133.060    Night operations.....	9
OD-133.065    Third Party Risk .....	9
OD-133.070    Emergency during Operations .....	10
<b>SUBPART E    TRAINING.....</b>	<b>11</b>
OD-133.075    Knowledge and Skill.....	11
<b>APPENDICES   12</b>	
APPENDIX 1 to OD 133.075 Sample Letter of Nomination for Designation of a Chief Pilot .....	12
APPENDIX 1 to OD 133.020 Sample Application Form for Rotorcraft External Load Operations ...	13





**BELIZE DEPARTMENT OF CIVIL AVIATION  
EXTERNAL LOAD OPERATIONS**

**SECTION -1**

**OD-133**

---

*Intentionally Left Blank*



**BELIZE DEPARTMENT OF CIVIL AVIATION  
EXTERNAL LOAD OPERATIONS**

**SUBPART A GENERAL PROVISIONS**

**OD-133.001 Applicability**

- (a) This OD-133 prescribes:
- (1) Additional certification process and airworthiness requirements applicable to operators with interest in applying for a rotorcraft external load operating certificate
  - (2) Additional operating rules and personnel requirements governing the conduct of rotorcraft external load operations in Belize.

**OD-133.005 External Load Combinations, Designations and Related Concepts.**

- (a) Rotorcraft Load Combinations, designations and related concepts are determined as follows:
- (1) **Class A.** The external load cannot move freely, cannot be jettisoned, and does not extend below the landing gear. An example of a Class A load is the carriage of items in an approved cargo rack, bin, or fixture attached to the exterior of the aircraft.
  - (2) **Class B.** The external load is jettisonable, carried above or below the skids, and lifted free of land or water during the rotorcraft operation. An air conditioner unit being lifted onto the roof of a tall building is an example of a Class B load.
  - (3) **Class C.** The external load is jettisonable and remains in contact with land or water during the rotorcraft operation. Wire stringing, dragging a long pole, and boat towing are some examples of Class C loads.
  - (4) **Class D.** The external load is other than Class A, B, or C and shall be approved on an individual basis through the issuance of Letter of Authorization.
  - (5) **External Load.** A load that is carried, or extends, outside the aircraft fuselage.
  - (6) **Human External Cargo (HEC).** A person(s) that at some point in the operation is carried external to the rotorcraft.
  - (7) **Non-Human External Cargo.** Any external cargo operation that does not at any time involve a person(s) carried external to the rotorcraft.

**OD-133.010 Inspection Authority**

- (a) The operator shall ensure that any Inspector authorized by the BDCA is allowed, at any time, to inspect any helicopter operated in accordance with an OC issued by the BDCA under BCAR 137 Part III, taking into account that the pilot in command can refuse, if in his opinion, the overall safety of the operation could be jeopardized by doing so. In the event that the operator or pilot in command denies access to an inspector authorized by the BDCA, they shall submit a report to the BDCA within a period of 48 hours, justifying and indicating the details of the decision. The BDCA will evaluate this report and, if deemed necessary, will initiate an administrative investigation in order to determine the existence of a possible fault.

**OD-133.015 Exemptions**



**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

- (a) The Department of Civil Aviation may exceptionally and temporarily grant an exemption from the provisions of BCAR 137 Part III when satisfied that there is a need and subject to compliance with any supplementary condition the Department of Civil Aviation considers necessary in order to ensure an acceptable level of safety in the particular case.
- (b) The operator must sufficiently justify the exemption request being granted and submit this to the BDCA, in accordance with BDCA procedures.



**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

**SUBPART B CERTIFICATION REQUIREMENTS**

**OD-133.020 Certification Process**

(See Appendix 1 to OD 133.020)

- (a) The certification process is designed to ensure the operator meets the requirements for certification under BCAR 137 Part III. The certification process is established in BCAR 119, Chapter 2 and if satisfactorily completed, the certification process shall result in the issuance of a Rotorcraft External-Load Operating Certificate and corresponding operations authorization.

**OD-133.025 Validity of Certificate**

- (a) At the discretion of the Director, an operator who is able to satisfactorily meet all the certification requirements for the Operating Certificate, may be granted an exemption to BCAR 137 Part III, (27) and be issued a certificate with a validity period of 24 months from the date of issue.
- (b) Unless sooner surrendered, suspended, or revoked, the certificate shall remain valid for 24 months after the date of issue on the condition that upon the 12<sup>th</sup> month of validity, the operator demonstrates to the director, continued compliance with the requirements established in BCAR 137 Part III (24), (26), (32), and (34).

**OD-133.030 Application for Issuance or Renewal**

- (a) Application for the issuance or renewal of an operator certificate under BCAR 137 Part III shall be made on **BDCA form 1010**. The completed application must be submitted 30 days prior to intended operation or expiration of the certificate.

**OD-133.035 Availability of Certificate**

- (a) Each holder of a rotorcraft external-load operator certificate shall keep that certificate and operations specifications at the home base of operations and shall make it available for inspection by the BDCA upon request.



**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

**SUBPART C AIRWORTHINESS REQUIREMENTS**

**OD-133.040 Operating Limitations**

- (a) In addition to the operating limitations set forth in the approved Rotorcraft Flight Manual, and to any other limitations the BDCA may prescribe, the operator shall establish at least the following limitations and establish them in the Rotorcraft-Load Combination Flight Manual for rotorcraft-load combination operations:
  - (1) The rotorcraft-load combination may be operated only within the weight and center of gravity limitations established in accordance with BCAR 137 Part III (34).
  - (2) The rotorcraft-load combination may not be operated with an external load weight exceeding that used in showing compliance with BCAR 137 Part III (33) and (34).
  - (3) The rotorcraft-load combination may not be operated at airspeeds greater than those established in accordance with BCAR 137 Part III (33).

**OD-133.045 Airworthiness Certification**

- (a) A valid airworthiness certificate for each rotorcraft type listed shall be carried on board the rotorcraft when being used in operations conducted under BCAR 137 Part III.
- (b) The operator shall ensure that the rotorcraft, to include cargo hook or similar devices, are maintained in accordance with the established Operator Maintenance Manual.
- (c) The operator shall ensure each person certifying a release to service is properly trained and qualified to do so.
- (d) The operator shall ensure that the external load equipment is visually inspected, for signs of distress, within the preceding 50 hours time in service .
- (e) The operator may maintain external load equipment in accordance with the mandatory replacement times, inspection intervals and related procedures specified in the manufacturer's maintenance manual or instructions for continued airworthiness or a maintenance programme approved under BCAR 43.



**BELIZE DEPARTMENT OF CIVIL AVIATION  
EXTERNAL LOAD OPERATIONS**

**SUBPART D OPERATING PROCEDURES**

**OD-133.050 Congested Area Operations**

- (a) The holder of a rotorcraft external load operator certificate may conduct external load operations over congested areas only if:
  - (1) the operator develops a plan including risk assessment and mitigation procedures for each complete operation, to ensure that reasonable measures are taken to conduct the operation without creating a hazard to any person or property on the surface,
  - (2) the operator coordinates this plan with the BDCA for the area in which the operation will be conducted, to include details for avoiding obstructions in flight and actions to be taken in the event of a serious malfunction of the rotorcraft.
  - (3) the operator obtains approval for the operation from the Director of Civil Aviation.
- (b) The plan must include an agreement with the appropriate local officials that will exclude unauthorized persons from the area in which the operation will be conducted, coordination with air traffic control, if necessary, and a detailed chart depicting the flight routes and altitudes.

**OD-133.055 Human External Cargo (HEC)**

- (a) Each pilot-in-command performing an operation involving the suspension of a person beneath a helicopter shall ensure that—
  - (1) the helicopter is not operated at a weight in excess of 90 percent of its OGE hover weight; and
  - (2) the distance the person is carried is the minimum distance necessary to achieve the objective of the operation; and
  - (3) the equipment on which the person is suspended is capable of release from the helicopter by the crew, and that the release system is so arranged that two separate actions must be taken to effect release; and
  - (4) the equipment on which the person is suspended is such that the possibility of inadvertent release is eliminated; and
  - (5) the helicopter is operated in a safe manoeuvring area that has—
    - (i) a diameter not less than twice the overall length of the helicopter; and
    - (ii) no obstructions within one metre vertically below the lowest fixed part of the helicopter; and
    - (iii) a clear zone for winching, rappelling, or human sling loads.
- (b) Each pilot-in-command of a helicopter shall ensure that, where a person is raised or lowered by winch beneath the helicopter—
  - (1) the person to be lowered is attached to the cable before being released from the seat harness; and
  - (2) the person who has been raised is secured by means of a safety strap or seat belt before being released from the cable; and



**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

- (3) unless the person is unconscious or unable to understand, that person has been briefed, by a crew member of the helicopter, on normal and emergency procedures appropriate to the operation.
  
- (c) Each pilot-in-command of a helicopter shall ensure that, when an injured person is carried beneath the helicopter in a harness or stretcher—
  - (1) the distance the person is carried is the minimum distance necessary—
    - (i) to transfer the person to a more suitable means of transport; or
    - (ii) to safely land and transfer the suspended person inside the helicopter; and
  - (2) unless the person is unconscious or unable to understand, that person has been briefed, by a crew member of the helicopter, on normal and emergency procedures appropriate to the operation.
  
- (d) Each pilot-in-command of a helicopter shall ensure that, when a rappelling operation is performed, the person to be rappelled—
  - (1) has successfully completed a course of training appropriate to the rappelling operation being conducted; and
  - (2) has been adequately briefed by a crew member on normal and emergency procedures appropriate to the operation; and
  - (3) is attached to the rope before being released from the seat harness.

**OD-133.060 Night operations**

- (a) A pilot-in-command shall not perform a helicopter external load operation at night.

**OD-133.065 Third Party Risk**

- (a) A pilot in command shall not carry a load suspended beneath a rotorcraft:
  - (1) In such a manner that may cause danger to any person or to property unless the written consent has been obtained from such person.
  - (2) Over any open-air assembly of people.
  
- (b) Except as provided in (c), a pilot in command of a helicopter engaged in an external load operation that is hovering shall ensure that no person is in the area in which the helicopter is hovering unless the person's presence is essential to the operation and they have been briefed, as appropriate, on—
  - (1) normal external load procedures; and
  - (2) the procedures to be followed by all personnel in the event of an emergency; and
  - (3) the nature of the load and any special handling requirements; and
  - (4) the lifting capability of the helicopter; and
  - (5) hand or radio signals appropriate to the operation.
  
- (c) Compliance with (b) is not required in the case where assistance is being delivered to injured persons on the ground.



**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

**OD-133.070 Emergency during Operations**

- (a) In an emergency involving the safety of persons or property, the certificate holder may deviate from the rules of BCAR 137 Part III to the extent required to meet that emergency.
- (b) Each person who, under the authority of this article, deviates from a rule of BCAR 137 Part III shall notify the BDCA within 10 days after the deviation. Upon the request of the BDCA, that person shall provide a complete report of the aircraft operation involved, including a description of the deviation and reasons for it.





**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

**SUBPART E TRAINING**

**OD-133.075 Knowledge and Skill**

- (a) Except as provided in paragraph (d) of this article, the operator, or the chief pilot designated, must demonstrate to the BDCA satisfactory knowledge and skill regarding rotorcraft external-load operations as set forth in paragraphs (b) and (c) of this section.
- (b) The test of knowledge (which may be oral or written, at the option of the applicant) covers the following subjects:
- (1) Steps to be taken before starting operations, including a survey of the flight area.
  - (2) Proper method of loading, rigging, or attaching the external load.
  - (3) Performance capabilities, under approved operating procedures and limitations, of the rotorcraft to be used.
  - (4) Proper instructions of flight crew and ground workers.
  - (5) Appropriate rotorcraft-load combination flight manual.
- (c) The test of skill requires appropriate manoeuvres for each class requested. The appropriate manoeuvres for each load class must be demonstrated in the rotorcraft prescribed in BCAR 137 Part III (26) and must be demonstrated at the aircraft's maximum certified take-off weight, or the maximum weight established for the class of external load, whichever is greater. The pilot must perform the following manoeuvres:
- (1) Take-offs and landings.
  - (2) Demonstration of directional control while hovering.
  - (3) Acceleration from a hover.
  - (4) Flight at operational airspeeds.
  - (5) Approaches to landing or working area.
  - (6) Manoeuvring the external load into the release position.
  - (7) Demonstration of winch operation, if a winch is installed to hoist the external load.
- (d) Compliance with paragraphs (b) and (c) of this article need not be shown if the BDCA finds, on the basis of the applicant's (or his designated chief pilot's) previous experience and safety record in rotorcraft external-load operations, that his knowledge and skill are adequate.

---

**Nigel Carter**  
Director  
Belize Department of Civil Aviation



**BELIZE DEPARTMENT OF CIVIL AVIATION  
EXTERNAL LOAD OPERATIONS**

**APPENDICES**

**APPENDIX 1 to OD 133.075 Sample Letter of Nomination for Designation of a Chief Pilot**

[Operator's name]  
[Operator's address]

[Date]

Director of Civil Aviation  
BDCA Address

Dear Director:

I am writing to inform you that, as part of our application for a Rotorcraft External-Load Operating Certificate, I wish to designate the following person as Chief Pilot, with your approval:  
[Name, license type and number]

[Name] has accumulated over [XXXX] hours as pilot in command (PIC) of rotorcraft. [Name] has completed the require knowledge and skill tests on [date]. All records of experience and training are available for the inspector's review.

Sincerely,  
[Signature of operator]  
[Name]  
[Title]

I accept this nomination for designation as Chief Pilot.

[Signature of Chief Pilot]  
[Name of Chief Pilot]



**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

**APPENDIX 1 to OD 133.020 Sample Application Form for Rotorcraft External Load Operations**

**Application Information**

<b>1. Type of Request</b>				<b>2. External Load Class</b>					
<input type="checkbox"/> Initial		<input type="checkbox"/> Renewal		<input type="checkbox"/> Amendment:		<input type="checkbox"/> Class A <input type="checkbox"/> Class B		<input type="checkbox"/> Class C <input type="checkbox"/> Class D	
<b>Certificate Number:</b> BCAR 137 Part III –									
<b>3. Name of Applicant</b> ( <i>First, Middle, Last</i> )					<b>4. License Number</b>		<b>5. Cell #</b>		
<b>6. Residential Address</b>					<b>7. Principal Base of Operations</b>				
<b>8. Name of Chief Pilot and Assistant Chief Pilot</b>					<b>9. Chief Pilot Met Knowledge and Skill Requirements?</b>				
<b>10. Rotorcraft To be Used</b>									
Registration Number	Type		Load Class (Mark X)				Attachment Device BDCA Approved?		Remarks
	Make	Model	A	B	C	D	Yes	No	
<p><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></p>									
Date:		Name of the Person Submitting this Form (print)			Signature of the Person Submitting this Form			Title	



**BELIZE DEPARTMENT OF CIVIL AVIATION  
ROTORCRAFT EXTERNAL LOAD OPERATIONS**

**Official Use Only**

Inspector Report						
Rotorcraft		Registration Number	Approval Date	Class	Weight Authorized	Limitations and Remarks
Make	Model					
<b>Remarks</b>						
<b>Applicant Certification</b>						
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: _____						



**BELIZE DEPARTMENT OF CIVIL AVIATION  
EXTERNAL LOAD OPERATIONS**

**SECTION -1**

**OD-133**

---

*Intentionally Left Blank*

**- END -**