

Title	Demonstrate advanced (long-line) sling-load helicopter operations using vertical reference procedures		
Level	5	Credits	8

Purpose	People credited with this unit standard are able to demonstrate, for sling-load operations: knowledge of CAA Rules Part 133; planning; preparation and rigging of sling load; pre-flight briefing; helicopter operation; management of normal and abnormal situations; post flight activities.
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Classification	Aviation > Aircraft Operation
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Available grade	Achieved
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Entry information	
Critical health and safety prerequisites	Industry requirements are that the candidate must meet the eligibility requirements of the Civil Aviation Act 1990 and the Civil Aviation Rules Part 61 for a commercial pilot licence (helicopter).
Recommended skills and knowledge	Unit 26200, <i>Demonstrate flying skills for the carriage of sling loads for a commercial pilot licence (helicopter)</i> , or demonstrate equivalent knowledge and skills.

Explanatory notes

- 1 The flying covered by this unit standard must be demonstrated in accordance with the Civil Aviation Rules Parts 91 & 133 and other relevant rules, published by the Civil Aviation Authority of New Zealand (CAA), PO Box 3555, Wellington 6140, available at <http://www.caa.govt.nz/rules/rules.htm>, and their subsequent amendments.
- 2 This unit standard is aligned with the relevant parts of the prescribed syllabi of the CAA for a commercial pilot licence (helicopter).
- 3 Definitions, abbreviations, and acronyms used in this unit standard are to be found in:
 - a *Civil Aviation Rules Part 1* on the CAA website at <https://www.caa.govt.nz>, and
 - b *Aeronautical Information Publication (AIP)* published by Aeronautical Information Management (AIM), PO Box 294, Wellington 6140 or on the AIM website at <http://www.aip.net.nz>.

- 4 All references to the CAA refer specifically to the Civil Aviation Authority of New Zealand.
 - 5 Industry standards and recommended practices are those set in place by the CAA.
 - 6 Industry texts may include but are not limited to – aircraft flight manuals, CAA Rules, CAA Advisory Circulars, CAA Flight Test Standards Guides, operator exposition.
 - 7 For the purpose of this unit standard the trainee will be given a specified load to transport to a specified location to be placed in a specified position, using a long-line a minimum of 100 feet (30.5m) long.
 - 8 For the purpose of this unit standard *emergency situations* may be simulated.
 - 9 Definition
Sling-load refers to a load carried by helicopter outside its fuselage. These are normally carried by slings, which are suspended below the helicopter.
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Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of CAA Rules Part 133 for sling-load operations.

Evidence requirements

- 1.1 CAA Rules Part 133 is explained in accordance with industry texts and standards.

Outcome 2

Demonstrate planning for sling-load operations.

Evidence requirements

- 2.1 External load procedure, equipment and personnel required for the task are determined in accordance with industry texts and standards.
- 2.2 Helicopter performance data is interpreted and calculated in accordance with industry texts and standards.
- 2.3 Flight routes are planned in accordance with industry texts and standards.
Range outward, during task, return.

Outcome 3

Demonstrate preparation and rigging of sling load.

Evidence requirements

- 3.1 Job requirements are identified in accordance with industry texts and standards.

3.2 Load is secured in accordance with industry texts and standards.

Outcome 4

Demonstrate pre-flight briefing for sling-load operations.

Evidence requirements

- 4.1 The requirements of the load-carrying task are explained to support crew and their understanding confirmed in accordance with industry texts and standards.
- 4.2 Communication procedures are explained to support crew in accordance with industry texts and standards.
- 4.3 Hook-up person is identified and hook-up procedures are specified in accordance with industry texts and standards.
- 4.4 In-flight procedures are explained to support crew in accordance with industry texts and standards.
- Range departure, transit, approach, termination, load release.
- 4.5 Emergency procedures are explained to support crew and their understanding confirmed in accordance with industry texts and standards.
- 4.6 Pilot vertical reference (long line) procedure is explained in accordance with industry texts and standards.

Outcome 5

Demonstrate helicopter operation during sling-load operations.

Range includes but is not limited to – vertical reference procedures.

Evidence requirements

- 5.1 Stable hover over the load during hook-up/delivery is demonstrated in accordance with industry texts and standards.
- Range includes but is not limited to – calculation of density altitude.
- 5.2 External load is lifted and transported to the specified location and placed in the specified position.
- 5.3 Load is monitored during flight, and appropriate action is taken to ensure load security and stability in accordance with industry texts and standards.
- 5.4 Excessive load swing during flight is avoided in accordance with industry texts and standards.

Outcome 6

Demonstrate management of normal and abnormal situations during sling-load operations.

Evidence requirements

- 6.1 Control of the helicopter is maintained in accordance with industry texts and standards.
- 6.2 Abnormal or emergency situations are identified and managed in accordance with industry texts and standards.
- Range may include but is not limited to – direction change, speed change, wind effect, jettisoning load.

Outcome 7

Demonstrate post-flight activities for sling-load operations.

Evidence requirements

- 7.1 Operating procedures and outcomes of the load lifting flight are reviewed and analysed in accordance with industry texts and standards.
- 7.2 Inspection, servicing and stowage of equipment are completed in accordance with industry texts and standards.

Planned review date	31 December 2021
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	15 March 2012	31 December 2018
Review	2	20 October 2016	N/A

Consent and Moderation Requirements (CMR) reference	0169
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.