

Title	Operate a helicopter with a fire bucket		
Level	5	Credits	4

Purpose	People credited with this unit standard are able, in a safe, effective and efficient aerial operations context, for helicopter fire bucket operations, to demonstrate: knowledge of CAA Rules Part 133; flight planning; safe fire bucket filling; safe helicopter flight; safe helicopter management in normal and abnormal situations.
----------------	--

Classification	Aviation > Aircraft Operation
-----------------------	-------------------------------

Available grade	Achieved
------------------------	----------

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 and 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 intended to provide pilots with basic aircraft operational skills when flying with a fire bucket. All flights covered by this unit standard will be carried out under the supervision of a qualified flight instructor. The pilot will not be competent for flying on actual fire fighting operations until meeting the further requirements for training and experience as defined in *Air operations: information and checklist*. Wellington: National Rural Fire Authority, 2004, and the AIRCARE™ *Code of Practice for Aircraft Operations - Fire Fighting*, National Rural Fire Authority. Until meeting the requirements to be a “lead” pilot, pilots may work on fire fighting operations under direct supervision of an “unrestricted” or a “lead” pilot.

- 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 target location for delivery of the load, requiring filling a fire bucket from a specified source.
 - 8 For the purpose of this unit standard emergency situations may be simulated.
-

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of CAA Rules Part 133 for helicopter fire bucket operations.

Evidence requirements

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

Outcome 2

Demonstrate flight preparation for helicopter fire bucket operations.

Evidence requirements

- 2.1 Essential performance and limitations data are derived and calculated in accordance with industry texts and standards.
- 2.2 The operability of the fire bucket determined and any defects fixed.
Range includes but is not limited – valves.

Outcome 3

Demonstrate safe helicopter fire bucket filling.

Range safety measures may include but are not limited to – lookout, awareness of hazards, positional awareness, vertical reference.

Evidence requirements

3.1 The fire bucket is safely filled to appropriate level in accordance with industry texts and standards.

Range factors determining appropriate filling level include but are not limited to – helicopter power, density altitude, wind velocity.

Outcome 4

Demonstrate safe helicopter flight for fire bucket operations.

Range safety measures may include but are not limited to – lookout, awareness of hazards, positional awareness, vertical reference.

Evidence requirements

4.1 Helicopter is operated and manoeuvred safely in accordance with the situation of the scenario and in accordance with industry texts and standards.

4.2 Approach route to filling site is selected and followed in accordance with industry texts and standards.

4.3 Departure route from filling site is selected and followed in accordance with industry texts and standards.

4.4 Load is released within the target area in accordance with industry texts and standards.

Outcome 5

Demonstrate safe helicopter management in normal and abnormal situations for fire bucket operations.

Range safety measures may include but are not limited to – lookout, awareness of hazards, positional awareness, vertical reference.

Evidence requirements

5.1 Control of the helicopter is maintained in accordance with industry texts and standards.

5.2 Abnormal or emergency situations are identified and safely managed in accordance with industry texts and standards.

Planned review date	31 December 2021
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 October 2012	31 December 2018
Review	2	20 October 2016	N/A

Consent and Moderation Requirements (CMR) reference	0169
--	------

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.