

Title	Pilot a helicopter during winching operations		
Level	5	Credits	?

Comment [SH1]: How many credits? How long does it take someone to become competent to carry out this task?

Purpose	People credited with this unit standard are, for helicopter winching operations, able to: plan, conduct pre-flight briefings, operate the helicopter, manage abnormal and emergency situations, and conduct post-flight briefings.
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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.

Explanatory notes

- 1 The flight covered by this unit standard must be demonstrated in accordance with the Civil Aviation Rules Part 91 and other relevant rules, published by the Civil Aviation Authority of New Zealand (CAA), PO Box 31441, Lower Hutt 5040, and their subsequent amendments.
- 2 Definitions, abbreviations, and acronyms used in this unit standard are to be found in:
 - a Civil Aviation Rules Part 1 published by the Civil Aviation Authority of New Zealand, PO Box 31441, Lower Hutt 5040, or on the CAA website at <http://www.caa.govt.nz>; and
 - b *Aeronautical Information Publication (AIP)* published by Aeronautical Information Management, PO Box 294, Wellington 6140.
- 3 All references to the CAA refer specifically to the Civil Aviation Authority of New Zealand.
- 4 Industry standards and recommended practices are those set in place by the CAA.
- 5 Industry texts may include but are not limited to – helicopter flight manuals, CAA Rules, CAA Advisory Circulars, New Zealand Defence Force (NZDF) Policy, operator exposition.
- 6 Tasks may be undertaken in Day VFR and Night VFR. Night VFR environment may include unaided and aided utilising night vision devices.
- 7 Emergency procedures may be real or simulated.

Comment [SH2]: Should this say **must**, which will require a pilot to be able to carry out the winching operations in both day and night VFR?

Outcomes and evidence requirements

Outcome 1

Plan helicopter winching operations.

Evidence requirements

- 1.1 Tasking requirements are identified in accordance with industry texts and standards.
- 1.2 Crew and equipment required to ensure safe achievement of task are determined in accordance with industry texts and standards.
- 1.3 Helicopter performance data is interpreted and calculated to ensure suitability of aircraft for operations in accordance with industry texts and standards.
- 1.4 Outbound and return flight routes are planned in accordance with industry texts and standards.
- 1.5 Operations at winch site including any factors that may adversely affect lift are planned in accordance with industry texts and standards.

Range may include but is not limited to – obstructions, terrain, structures, other aircraft, loose objects, birds, engine salt ingestion, trees, dust.
- 1.6 Security and care of passengers and/or equipment to be winched on board is planned in accordance with industry texts and standards.

Outcome 2

Conduct pre-flight briefings for winching operations.

Evidence requirements

- 2.1 Requirements of the winch operation are explained and confirmed in accordance with industry texts and standards.
- 2.2 Location, terrain features (sea state if applicable) and forecast weather conditions are obtained and confirmed in accordance with industry texts and standards.
- 2.3 Winch and role equipment is checked in accordance with industry texts and standards.
- 2.4 Pilot and crew responsibilities and communication procedures are explained and confirmed in accordance with industry texts and standards.
- 2.5 Mode of lift is explained in accordance with industry texts and standards.

Range may include but is not limited to – single strop lift, double lift, net deployment.

- 2.6 Arrangements for care and security of passengers and/or equipment to be winched are explained in accordance with industry texts and standards.
- 2.7 Winch emergency procedures are explained in accordance with industry texts and standards.

Outcome 3

Operate the helicopter during winching operations.

Evidence requirements

- 3.1 Adequacy of hover power margin and control limits to perform winching operations is checked and maintained in accordance with industry texts and standards.
- 3.2 Site inspection, approach and hover heading are determined in accordance with operational requirements and with industry texts and standards.
- 3.3 Descent and approach is controlled to terminate over winch site in accordance with industry texts and standards.
- Range land, water.
- 3.4 Control is applied to helicopter to maintain position over winch site in accordance with industry texts and standards.
- 3.5 Winch limitations are observed in accordance with industry texts and standards.
- 3.6 Cable fouling is avoided in accordance with industry texts and standards.
- 3.7 Power is applied to lift external load in accordance with industry texts and standards.
- 3.8 Safety and security of passengers and/or cargo is managed in accordance with industry texts and standards.

Outcome 4

Manage abnormal and emergency situations during winching operations.

Evidence requirements

- 4.1 Helicopter, passengers and load are controlled in accordance with industry texts and standards.
- 4.2 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 5

Conduct post-flight briefings for winching operations.

Evidence requirements

- 5.1 Operating procedures and outcomes of the flight are reviewed and analysed in accordance with industry texts and standards.
- 5.2 Effectiveness, efficiency and performance of equipment is analysed and reported in accordance with industry texts and standards.

Planned review date	31 December 2019
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1		N/A

Accreditation and Moderation Action Plan (AMAP) reference	0169
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This AMAP 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, or an inter-institutional body with delegated authority for quality assurance, 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.

Consent requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP 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 the ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.