

<b>Title</b>	<b>Repair helicopter composite rotor blades</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	People credited with this unit standard are able to: prepare to repair helicopter composite rotor blades; locate defects in composite rotor blades; repair composite rotor blades; test and adjust composite rotor blades; and complete finishing activities related to the repair task of composite rotor blades.
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<b>Classification</b>	Aeronautical Engineering > Helicopter Repair and Overhaul
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 All tasks must be carried out in accordance with enterprise procedures.
- 2 Definitions  
*Composite rotor blades* will be those constructed primarily from a laminate of woven or wound reinforcing fibres within a resin matrix material. The rotor blades may contain metallic components.  
*Enterprise procedures* – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 3 Repair activities are those usually carried out in a specialist bay or workshop.

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### Outcomes and performance criteria

#### Outcome 1

Prepare to repair helicopter composite rotor blades.

#### Performance criteria

- 1.1 Task is determined by reviewing documentation.  
Range confirm fault, repair, modify.
- 1.2 Rotor blade identification is confirmed with documentation.

1.3 Work area is prepared, and resources obtained and checked for serviceability or status.

Range may include but is not limited to – publications, materials, tools, equipment, safety equipment, environmental conditions established.

1.4 Rotor blade is prepared for repair.

Range clean, inspect, assess economics of carrying out repair.

1.5 Next task is determined and documented.

Range locate defects, repair, test, adjust, complete the task.

## Outcome 2

Locate defects in composite rotor blades.

### Performance criteria

2.1 Defects are located using troubleshooting techniques and inspection procedures appropriate to the defect indications.

2.2 Defects found during troubleshooting are reported and documented.

## Outcome 3

Repair composite rotor blades.

### Performance criteria

3.1 Rotor blade is disassembled.

Range clean, label, preserve, segregate.

3.2 Defects found during disassembly are reported and recorded.

3.3 Rectification action is determined and documented.

Range repair, replace, modify, adjust, scrap; confirmation of action to be taken obtained from supervisor, action to be taken recorded.

3.4 Spare parts are procured and verified as authentic and serviceable.

Range identify, inspect.

3.5 Defects are rectified.

Range repair, replace, modify, adjust.

3.6 Rotor blade is assembled.

3.7 Inspections are obtained.

Range independent, duplicate, progressive.

#### **Outcome 4**

Test and adjust composite rotor blades.

#### **Performance criteria**

4.1 Rotor blade is prepared for testing.

4.2 Rotor blade is tested and adjusted.

Range troubleshoot, functionally test, static balance, adjust, document adjustments and performance.

4.3 Inspections are obtained.

Range independent, duplicate, progressive.

#### **Outcome 5**

Complete finishing activities related to the repair task of composite rotor blades.

#### **Performance criteria**

5.1 Rotor blade is prepared for use, storage, or transit.

Range locking, inhibiting, blanking, packing.

5.2 Completion activities specific to the task and work area are carried out.

Range may include but is not limited to – tool control, cleanliness, tidiness, return of publications, preparation for next activity, return of helicopter and systems to normal.

5.3 Resources are checked for serviceability and returned to service or storage.

Range tools, equipment, safety equipment.

5.4 Leftover parts and materials are disposed of.

Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.

5.5 Documentation is completed.

<b>Planned review date</b>	31 December 2024
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 June 1995	31 December 2016
Revision	2	7 August 1997	31 December 2016
Revision	3	8 May 2001	31 December 2016
Review	4	20 June 2006	31 December 2016
Review	5	18 June 2014	31 December 2021
Review	6	26 March 2020	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0028
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Comments on this unit standard

Please contact ServiceIQ [qualifications@serviceiq.org.nz](mailto:qualifications@serviceiq.org.nz) if you wish to suggest changes to the content of this unit standard.