Title	**Track and dynamically balance helicopter tail rotors**		
Level	**4**	**Credits**	**8**

Purpose	People credited with this unit standard are able to: prepare to track and dynamically balance helicopter tail rotors; establish tail rotors vibration levels; restore airworthiness of tail rotors; and complete finishing activities related to the tracking and balancing task of helicopter tail rotors.

Classification	Aeronautical Engineering > Helicopter Maintenance

Available grade	Achieved

Guidance Information

1 All tasks must be carried out in accordance with enterprise procedures.

2 Definition
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 The scope of the system that this standard relates to is described in ATA iSpec 2200, chapter 64.

Outcomes and performance criteria

Outcome 1

Prepare to track and dynamically balance helicopter tail rotors.

Performance criteria

1.1 Task is determined by reviewing maintenance documentation.

1.2 Resources are obtained and checked for serviceability or status.

Range may include but is not limited to – publications, tools, equipment, safety equipment, tracking and balancing charts, pilot for flight tasks.

1.3 Helicopter registration and rotor to be tracked and balanced are matched with documentation.

1.4 Helicopter is prepared for the application of power and rotor operation.

Range clearances, isolation tags, warning signs.

1.5 Tracking and balancing equipment is installed ready for rotor operation.

Outcome 2

Establish tail rotors vibration levels.

Performance criteria

2.1 System serviceability is determined.

2.2 Vibration levels of rotor are determined.

2.3 Cause of excessive vibration is determined using troubleshooting techniques.

Range out of track, out of balance, unserviceable parts.

2.4 Defects are reported and documented.

Outcome 3

Restore airworthiness of tail rotors.

Performance criteria

3.1 Methods of rectifying defects are determined.

Range adjust or replace parts.

3.2 Defects are rectified.

Range adjust or replace parts.

3.3 Rotors are tested to verify serviceability.

Range ground run, flight test.

3.4 Inspections are obtained.

Outcome 4

Complete finishing activities related to the tracking and balancing task of helicopter tail rotors.

Performance criteria

4.1 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 aircraft and systems to normal.

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

Range tools, equipment, safety equipment.

4.3 Documentation is completed.

Planned review date	31 December 2027

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 April 2006	31 December 2016
Review	5	18 June 2014	31 December 2021
Review	6	26 March 2020	N/A
Rollover and Revision	7	27 June 2024	N/A

Consent and Moderation Requirements (CMR) reference	0028

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact Ringa Hora Services Workforce Development Council qualifications@ringahora.nz if you wish to suggest changes to the content of this unit standard.