# **Status of TAIC open recommendations**

Half-yearly report

For the six months ended 30 June 2020

# **Summary**

#### **Purpose**

This report updates the status of recommendations the Transport Accident Investigation Commission (TAIC) has issued across the aviation, rail, and maritime transport modes.

The information given is for recommendations that were open at 30 June 2020.

#### **Contents**

The information and data in the report focus mainly on the recommendations issued to the modal regulators, who are reporting progress against implementation as a matter of good practice. The Commission has no mandate to compel recipients of its recommendations to provide such information.

TAIC has compiled the report using information and data supplied by:

- the Civil Aviation Authority (CAA)
- Maritime New Zealand (MNZ)
- those in the rail sector with assigned recommendations:
  - Waka Kotahi New Zealand Transport Agency (NZTA)
  - KiwiRail
  - Transdev Auckland
  - the Ministry of Transport (MoT)
  - the National Rail System Standards Executive (NRSS-E)
  - Local Government NZ.

Numbers of open recommendations issued to the Ministry of Transport (MoT), State Owned Enterprises (SOEs), other government organisations (such as local government), and non-government organisations are also shown in the aviation and maritime sector reports.

#### **Explanatory notes**

Explanatory notes are on the back page.

# **Summary data**

The table below shows summary data for recommendations TAIC has issued to the CAA, MNZ and the Rail Sector. It shows:

- recommendations issued and closed from 1 January 2020 to 30 June 2020 (left)
- the number open at 30 June 2020 (centre)
- the estimated time to closure for open recommendations (right).

	iss	ommendationsued & close 20 to 30-Ja	d	Number	Estimated time to closure						
	Issued	Closed	Closed YTD*	open at 30-Jan-20	Submitted for closure	Within 12 months	1 to 5 years	More than 5 years	Not accepted/ no further action		
CAA	1	0	5	49	43	3	2		1		
MNZ	1	5	13	31		12	19				
Rail total	1	0	4†	28	11	7	9	1			
Waka Kotahi NZTA				14	7	5	1‡	1			
KiwiRail	1		3	10	4		6				
МоТ				2		1	1				
NRSS-E				1		1					
Local Govt NZ				1			1				
Transdev			1†	0							

<sup>\*</sup>For financial year ended 30 June

<sup>†</sup> In the previous report one closed recommendation to Transdev was incorrectly counted as open

*<sup>‡</sup> Time to closure TBC* 

# **Aviation open TAIC recommendations at 30 June 2020**

#### **Summary of open recommendations**

The table shows the numbers of open recommendations by recipient in the aviation sector. The numbers for the CAA are also shown by area of activity.

		I	Issued to non- government organisations						
Number of open recommendations	Total	CAA	MoT	Airways	MetService	Other govt org	Est. closure within 12 months (CAA)	Not accepted (CAA)	Total
Total	55	49	3	1	0	2	46	1	16
Operations		1					0	0	
Airworthiness		2					1	0	
Aerodromes		1					1	0	
Air Traffic Control		1					1	0	
Licensing		1					0	1	
Submitted for closure		43					43	0	

#### Status for CAA recommendations

#### **Operations**

Recommendation to extend the limitations and requirements of FAA AD 95-26-04 (US Federal Aviation Authority airworthiness directive) to R44 and R66 helicopters in New Zealand, and to all pilots of Robinson helicopters in New Zealand regardless of their experience.

The Robinson Helicopter Company (RHC) made a submission to the US Federal Aviation Authority (FAA) in February 2019 to amend the Rotorcraft Flight Manual (RFM) <sup>1</sup> of the R22,

<sup>&</sup>lt;sup>1</sup> A pilot handbook that sets out operating procedures, including operating limitations required by regulation or for the safe operation of the aircraft.

R44 and R66 and to incorporate changes to SFAR-73<sup>2</sup>. This would reflect the recent "flapping angle" study undertaken by RHC and the FAA helicopter directorate on the R44 and R66. Included in the issues looked at was the need (or not) for further restrictions on the R44 and R66 RFM. Inclusion of AD 95-26-04 to extend to the R44 and R66 was not considered necessary. Whilst CAA has this information largely due to a working relationship with the original equipment manufacturer (OEM) there is nothing formalised other than the following summary. RHC (as OEM) has made a formal submission to the FAA who have agreed to amend SFAR-73 in a number of areas. However, as this is a rule development issue the matter was referred to Congress. The current administration has a policy in place for very little new rule development issues but will consider via a case to case basis as a matter of urgency. This amendment is not considered a priority or urgent by Congress and as at August 2020 nil action taken. RHC have agreed to keep us advised.

At this point, CAA has no evidential basis to deviate from the FAA position to extend the AD to the R44 and R66. CAA continues to take its lead from the lead regulator (FAA) and OEM (RHC).

#### Licensing

Recommendation to include the knowledge and training requirements of Special Federal Aviation Regulation No. 73 (SFAR-73), or an equivalent requirement, as a prerequisite for the issue of a Robinson R66 type rating.

See above regarding RHC submission to FAA in February 2019.

RHC have agreed to keep us advised and we continue to monitor.

#### **Airworthiness**

Recommendation to amend policies and procedures for issuing certificates of airworthiness for imported second-hand aircraft.

The CAA is now in the final stages of amending its policies and procedures with a target completion of November 2020. The CAA expects that this recommendation can be considered addressed after that work is complete.

Recommendation to promote, through the appropriate ICAO forum, of the need for cockpit video recorders and/or other forms of data capture in the cockpits of certain classes of helicopter.

This recommendation was accepted, subject to a cost-benefit analysis. CAA has considered some of the potential wider benefits of helicopter flight data monitoring and has carried out an internal Investment Logic Mapping (ILM) workshop to help inform future policy interventions.

<sup>&</sup>lt;sup>2</sup> Special Federal Aviation Regulation No. 73, which sets out the required levels of training and experience for R22 and R44 pilots.

A sector reference group has been formed through the Helicopter Association to aid engagement with stakeholders. An initial workshop with a group of operators was held in late July 2019, and there were further discussions with the reference group in August 2019. These discussions were centred around the potential benefits and barriers associated with the widespread implementation of helicopter cockpit cameras. Some valuable feedback was received at these sessions, and this will inform the development of an appropriate regulatory intervention.

It was initially intended that this work would be completed in the second quarter of 2020. However, given the impact of COVID-19 on the sector, and noting that the implementation of cockpit recording would require significant investment by operators, the priority of this project was re-considered and a decision made to delay the project until end-July 2020. CAA is undertaking a reassessment of the project to determine if now is the appropriate time to engage industry.

#### Aerodromes

Recommendation to review of operations at aerodromes around New Zealand that have opposing circuits, to assess and minimise the potential for a mid-air collision.

This recommendation has been open for 11 years. Over that time CAA has continued to monitor the safety performance of aerodromes and respond to identified safety risks, including engagements from aviation safety advisors as required. There is no additional work planned to specifically focus on this issue. CAA will submit evidence to TAIC for closure of this recommendation.

#### Air traffic control

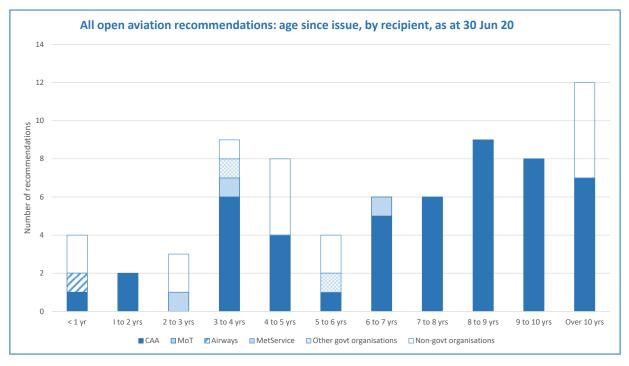
Recommendation to raise public awareness of the visual flight rules (VFR)<sup>3</sup> traffic around the Hamilton area and work with aerodrome safety groups to resolve congestion hazards and traffic flow routes into and out of the zone.

Engagement with the user group is ongoing. CAA identified that rather than a Good Aviation Practice booklet (with a print of 2000) better coverage of this issue could be achieved via the CAA Flagship publication 'Vector' (15,500 copies and also available online). Accordingly, this was profiled in the Autumn 2020 (February) edition. CAA will submit evidence to TAIC for closure of this recommendation.

<sup>&</sup>lt;sup>3</sup> The rules under which a pilot operates an aircraft using only visual reference (that is, without navigational aids).

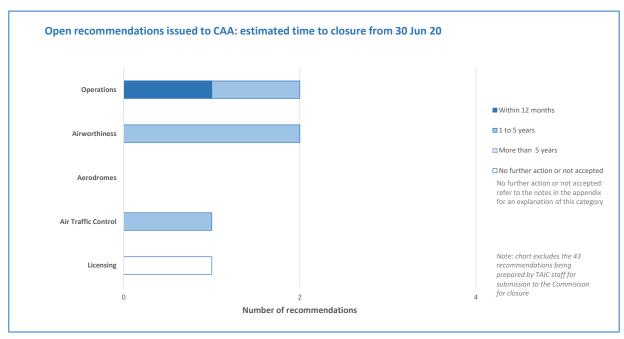
# Age of open recommendations

The graph below shows the age of all open recommendations by recipient in the aviation sector.



# Estimated time to closure for recommendations issued to CAA

The graph below shows the estimated time to closure for the recommendations issued to CAA.



# Rail open TAIC recommendations at 30 June 2020

### **Summary of open recommendations**

The table shows the numbers of open recommendations by recipient in the rail sector.

			Issued to non- government organisations							
Number of open recommendation	Total	Waka Kotahi NZTA	KiwiRail	MoT	NRSS-E	Local Govt. NZ	Transdev Auckland	Est. closure within 12 months	Not accepted	Total
Total	28	14	10	2	1	1	0	7	Nil	Nil
Level Crossings	8	6	1			1				
National Rail Systems Standards	6	3	1	1	1					
Impairment - drugs/ alcohol/health/fatigue	5		4	1						
Fire protection	3	3								
Training/Change Management	2	1	1							
Maintenance System Deficiency	2	1	1							
Signalling safety	2		2							

# Status of recommendations assigned to Waka Kotahi

**Level crossings**: Work continues on specific level crossing safety improvements along or near the State Highway corridor, under Waka Kotahi's Safe Network Programme. Details of stage 1 of this work can be found here <a href="https://www.nzta.govt.nz/safety/our-vision-of-a-safe-road-system/safe-network-programme/level-crossing-safety-upgrades/">https://www.nzta.govt.nz/safety/our-vision-of-a-safe-road-system/safe-network-programme/level-crossing-safety-upgrades/</a>. Options for potential stage 2 of this programme are currently being discussed between Waka Kotahi and KiwiRail as part of the next NLTP.

**Other open recommendations**: Work has completed on seven recommendations, and documentation to support closure has been submitted to the Commission. A further two will be submitted for closure soon.

The remaining recommendations assigned to Waka Kotahi require work to be completed by KiwiRail. Waka Kotahi continues to monitor the progress of these recommendations and is satisfied that the required work is on track.

#### Status of recommendations assigned to KiwiRail

**Medical information for safety critical roles**: Legislation changes are required to allow the disclosure of personal medical record information to ensure the safe management of personnel in safety critical roles. The Ministry of Transport has been approached to assist (see Ministry of Transport update below).

**Fatigue Management**: A comprehensive fatigue management project is underway with a staged approach across KiwiRail. While this is progressing well, the full implementation will take a year or so to be fully imbedded into the system.

**Signalling Safety**: Presentations on current and future state was given to the Commission in April 2019. Awaiting feedback from TAIC.

#### Status of recommendation assigned to the Ministry of Transport

The Ministry of Transport is working with Waka Kotahi and KiwiRail to address this recommendation. The relationship between the health professional and the worker/patient is governed by the ethics of the relevant health professional and by privacy laws. This relationship differs from the usual doctor-patient relationship because of the involvement of a third party – the rail transport operator or employer.

The Ministry notes that NRSS/3 Standard for Health Assessment of Rail Safety Workers was updated in 2017 and clearly details the relationships and responsibilities between rail safety workers, their employers and medical professionals, and the information flow between these parties. Rail safety workers also have a duty of care to themselves and others. NRSS/3 also has clear guidance on Triggered Health Assessments, which overlay the scheduled periodic assessments and enable early intervention, appropriate management and timely monitoring of health problems that are likely to affect safety. The Ministry will provide a decision on this recommendation in the next six months.

#### Status of recommendation assigned to Local Government NZ

This will be incorporated into the road/rail interface workstream.

#### Status of recommendation assigned to the NRSS-Executive

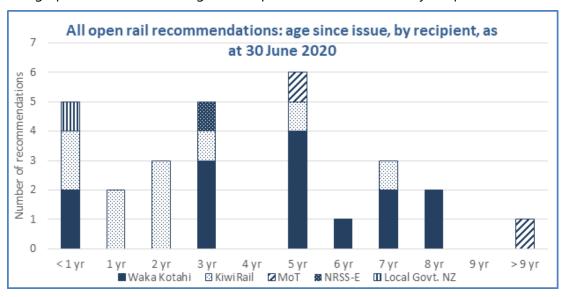
The NRSS documents and their applicability are going through review via the National Rail Industry Forum (NRIAF), which is an initiative of Waka Kotahi to engage the rail industry in setting and maintaining standards and rules around safe working systems.

KiwiRail is working on the NRSS/6 Standard on Engineering Interoperability that will likely migrate to a network standard. Fire requirements will be covered in the NRSS/6 Standard

update that is progressing, and any operational requirements arising from the last point will be covered in KiwiRail's tunnel safety plans.

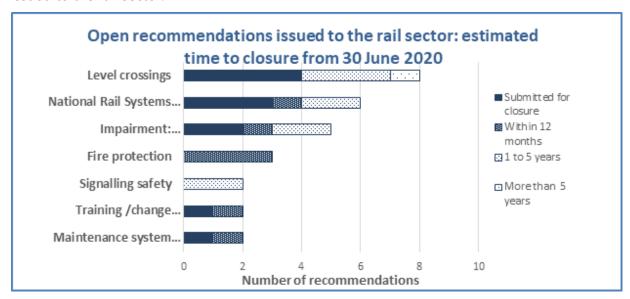
### Age of open recommendations

The graph below shows the age of all open recommendations by recipient in the rail sector.



# **Estimated time to completion for recommendations**

The graph below shows the estimated time for implementation of the recommendations issued to the rail sector.



# Maritime open TAIC recommendations at 30 June 2020

### **Summary of open recommendations**

The table shows the numbers of open recommendations by recipient in the maritime sector. The numbers for MNZ are also shown by area of activity.

		Issued to non- government organisations							
Number of open recommendations	Total	MNZ	MoT	KiwiRail	MetService	Other govt org	Est. closure within 12 months (MNZ)	Not accepted (MNZ)	Total
Total	59	31	2	2	0	24	12	Nil	34
Training or Education		7					3		
Maritime Rules		10					3		
Safety Management Systems		5					4		
Administrative		4							
Aids to Navigation		2							
Compliance		3					2		

#### **Status for MNZ recommendations**

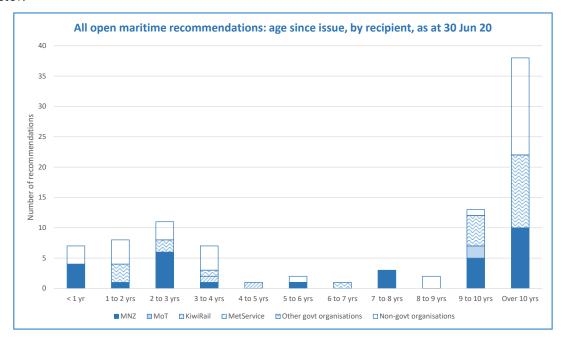
As at 30 June 2020, 31 TAIC recommendations issued to MNZ were open.

One new recommendation was received and five recommendations were closed during this period.

Maritime NZ continues to work in close cooperation with TAIC to ensure safety issues are addressed and recommendations are closed.

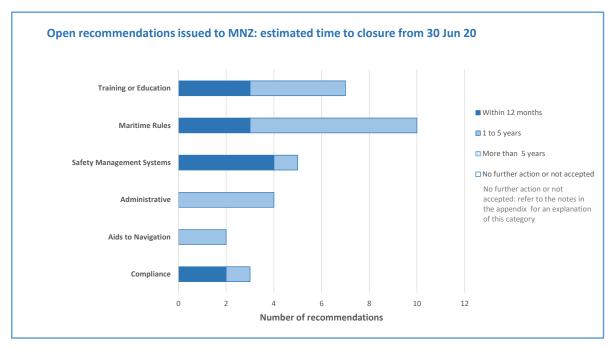
# Age of open recommendations

The graph below shows the age of all open recommendations by recipient in the maritime sector.



### Estimated time to closure for recommendations issued to MNZ

The graph below shows the estimated time to closure for the recommendations issued to MNZ.



# **Appendix: explanatory notes**

#### **Definitions**

Government organisation

For the purposes of this report, a government organisation is a New Zealand regulator, SOE, or a commercial enterprise with more than 50% government ownership.

Not accepted

The recipient has not accepted the recommendation. For example, it might consider the recommendation is not relevant or not applicable. The Commission classifies such recommendations as 'open' or 'open, no acceptable action'.

No further action

The recipient has accepted the recommendation, and considers it has taken sufficient action to meet the intent of the recommendation; but the Commission does not agree that the intent has been fully met. The Commission classifies such recommendations as 'open' or 'open, no acceptable action'.

Classification of recommendations

The Commission classifies recommendations as follows:

- Open: the recipient has accepted the recommendation, but has not yet submitted a request to close it.
- Open, no acceptable action: the recipient has not accepted the recommendation, or considers it has taken sufficient action (see 'no further action' above).
- Withdrawn/cancelled: the recommendation has been withdrawn in light of further information from the recipient.
- Closed superseded: the recommendation no longer applies because of changes in circumstances, for example, advances in technology, vehicle model no longer in use, or the recipient is no longer operating.

### **Timeframes for implementation**

The time in which a recommendation can be implemented can vary considerably. Some recommendations can be implemented quickly because the action to meet its intent is specific and clearly identifiable, and relatively straightforward. Other recommendations may require considerable analysis and consultation to determine the best options, or they may depend on action by third parties. Recommendations requiring legislative change may take several years to implement.

#### **Historic recommendations**

In the rail sector, Waka Kotahi and TAIC have a well-established process for monitoring recommendations. The CAA and MNZ are now meeting regularly with TAIC to close 'historic' recommendations. In the past, a lack of formalised monitoring processes resulted in some recommendations remaining open even though actions have been taken (or circumstances have changed) such that the regulators consider the intent of the recommendations has been met.