Status update on TAIC safety recommendations

Report from the transport sector on activity for 1 July 2022 to 30 June 2023

The Ministry of Transport, the Civil Aviation Authority, Maritime NZ and the rail sector supply the information for this report.

TAIC collates the information into a single document, but does not validate, analyse, or alter the contents in any way.

Summary

Purpose

This report is an update from the Ministry of Transport (MoT), the Civil Aviation Authority (CAA), the rail sector, and Maritime New Zealand (MNZ) on the status of recommendations issued to them by the Transport Accident Investigation Commission (TAIC). Note that TAIC's recommendations are not mandatory.

The report informs you about:

- the numbers of recommendations issued over the reporting period and indicates whether they were
 - accepted (wholly or in part)
 - are under consideration
 - were rejected and will not appear in future reports
- a status report on
 - the decisions about recommendations that were previously reported as under consideration
 - the progress in implementing accepted recommendations.

Information sources

The information contained in this report is supplied by:

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

TAIC has collated the information into this document, but has not validated, analysed, or altered the contents in any way.

Ministry of Transport

Recommendations issued over the period 01-Jul-22 to 30-Jun-23

Number issued: 3

Inquiry	Number	Issued	Recommendation	Response
Aviation				
AO-2022-001	001/23	30-Mar-23	The Commission recommended that the Secretary of Transport review and revise Civil Aviation Rule Part 91 to mandate the wearing of pilot restraint harnesses during critical phases of commercial balloon flights.	Under Consideration
Rail				
None				
Maritime	1	1		1
MO-2021-204	003/23	25-Jan-23	The Commission recommended that the Ministry of Transport undertake research to determine the merits of a regulatory system for the recreational maritime sector, in line with overseas best practice, and how such a system may incorporate licensing, registration and boat design standards to improve the safety of New Zealand's recreational maritime sector.	Accepted
MO-2021-204	002/23	25-Jan-23	The Commission recommended that the Ministry of Transport revisit its decision with respect to recommendation 004/11 and take steps to mitigate the increase in the risk of competence-based accidents in the recreational maritime transport sector.	Rejected

AO-2022-001 (001/23)

The Commission recommended that the Secretary of Transport review and revise Civil Aviation Rule Part 91 to mandate the wearing of pilot restraint harnesses during critical phases of commercial balloon flights.

Update

The recommendation is currently under consideration by the Ministry of Transport.

The Ministry of Transport believes that adequate steps are already in place to address the Commission's recommendations. The Civil Aviation Authority (CAA) has agreed to monitor voluntary compliance for a period of time and use that information to form an evidenced view on whether the residual risk alluded to in paragraph 5.11 of the Commission's draft report continues to exist. If it does, then an amendment to Civil Aviation Rules might be justified. Given the small size of the commercial balloon operation sector in New Zealand

(four operators), the mitigations already in place, and competing priorities, the recommended revision is unlikely to be prioritised in the near-medium term, unless the risk outlook for the commercial balloon operation sector changes significantly to the detriment of safety.

MO-2021-204 (003/23)

On 25 January 2023 the Commission recommended that the Ministry of Transport undertake research to determine the merits of a regulatory system for the recreational maritime sector, in line with overseas best practice, and how such a system may incorporate licensing, registration and boat design standards to improve the safety of New Zealand's recreational maritime sector. (003/23)

Update

The Ministry of Transport has accepted this recommendation.

The Ministry of Transport will continue to monitor the evidence on this issue, including evidence from other jurisdictions. We are open to reconsidering our position on skipper licensing if new evidence suggests that it would make a material difference to recreational boating safety. Currently, a literature review is being conducted to analyse the success of both recreational boat registration and skipper licencing legislation that the United States of America, Canada, Australia, and the United Kingdom have implemented.

MO-2021-204 (002/23)

On 25 January 2023 the Commission recommended that the Ministry of Transport revisit its decision with respect to recommendation 004/11 and take steps to mitigate the increase in the risk of competence-based accidents in the recreational maritime transport sector. (002/23)

Update

The Ministry of Transport has rejected this recommendation.

The Ministry of Transport considers that safety education campaigns, rather than skipper licensing, are the most appropriate way to share maritime knowledge with recreational boat users.

Update on recommendations previously reported as being implemented or under consideration

Number reported on: 3

Number implemented: 3

Inquiry	Number	Issued	Status at 30-Jun-22	Status at 30-Jun-23		
Aviation	Aviation					
AO-2015-005	028/17	28-Sep-17	Being implemented	Being implemented		
AO-2015-002	014/16	27-Jul-16	Being implemented	Implemented		
AO-2012-001	012/13	11-Oct-13	Being implemented	Being implemented		
Rail						
None						
Maritime						
None						

AO-2015-005 (028/17)

On 28 September 2017, the Commission recommended that the Secretary for Transport update and restructure CAR Part 171 to include the wider scope of technology, software and navigation aids that are normal for a modern air navigation service and to make provision for the rule to cater for future changes in technology.

Update

This recommendation is being implemented. CAA has begun work on the air navigation rules to ensure they are fit for purpose. This includes exploration of how New Zealand can have a more performance-based and risk-based approach within the regulatory framework.

AO-2015-002 (014/16)

On 27 July 2016 the Commission recommended to the Secretary for Transport that he promote, through the appropriate ICAO forum, the need for cockpit video recorders and/or other forms of data capture in the cockpits of certain classes of helicopter to address this safety issue.

Update

This recommendation has been implemented. New Zealand submitted <u>a paper</u> to International Civil Aviation Organization (ICAO) on cockpit video recorders which was tabled at the 41st Assembly in September/October 2022.

AO-2012-001 (012/13)

The Commission recommends that the Secretary for Transport complete, as a matter of priority, all necessary work that will support the introduction of appropriate legislation or rules that will:

- prescribe allowable maximum levels for alcohol
- prohibit persons from operating an aircraft, vessel or rail vehicle if they are impaired by drugs
- require operators to implement drug and alcohol detection and deterrence regimes, including random testing
- prescribe post-occurrence testing requirements for drugs and alcohol.

This legislation or these rules should apply:

- across the aviation, maritime and rail transport modes
- to persons operating an aircraft or a marine craft for recreational purposes.

Update

This recommendation is being implemented. The Civil Aviation Act 2023 includes provisions for the management of drug and alcohol in commercial aviation. The Civil Aviation Authority is working to put in place rules to give effect to this. The new regime should be effective from 5 April 2025.

Civil Aviation Authority

Recommendations issued over the period 01-Jul-22 to 30-Jun-23

Number issued: 7

Inquiry	Number	Issued	Recommendation	Response
AO-2019-005	021/22	7-Mar-23	The Commission recommended that the Civil Aviation Authority of New Zealand address the growing gap between New Zealand's minimum performance requirements and technical standards for NVIS and helicopter air ambulance operations and current international best practices.	Under consideration
AO-2019-005	022/22	22-Feb-23	Crew resource management competency is not yet an effective safety measure for helicopters operating under CAR Part 135. On 22 February 2023 the Commission recommended that the Civil Aviation Authority of New Zealand address this safety issue.	Under consideration
AO-2019-006	016/22	1-Sep-22	Ensure that managers and users of aerodromes, in particular for unattended aerodromes, understand and fulfil their responsibilities for ensuring safe operations. This includes: a. Facilitating a coordinated approach with WorkSafe New Zealand, LGNZ and NZ Airports Association, among others, b. Providing training and support to aerodrome operational and management personnel, and c. Identifying and encouraging aerodrome user group's contributions towards aerodrome safety.	Accepted and implemented
AO-2019-006	014/22	1-Sep-22	Improve the effectiveness of 'see and avoid' as a way to avoid mid-air collisions through the promotion of the skills required, including the need to actively listen to radio calls.	Accepted and implemented
AO-2019-006	012/22	1-Sep-22	Use the lessons from this report to educate pilots on some of the common factors in mid- air collisions, and in particular the requirement to know and apply CARs and to address any non-compliance, as appropriate.	Accepted and implemented
AO-2019-006	015/22	1-Sep-22	Encourage the reporting of safety-related incidents or concerns, especially at unattended aerodromes.	Accepted and implemented
AO-2019-006	013/22	1-Sep-22	Promote ongoing understanding of 'simultaneous operations', including a published definition and how the practice relates to parallel runway operations at unattended aerodromes.	Accepted

Report AO-2019-005, recommendation:

021/22 (Under consideration) The Commission recommended that the Civil Aviation Authority of New Zealand address the growing gap between New Zealand's minimum performance requirements and technical standards for NVIS and helicopter air ambulance operations and current international best practices.

The Authority's rule development work, (the Transport Rules Programme) AC91-13 (Night Vision Imaging Systems - Helicopter) is being redrafted to align the Advisory Circular (AC) with new technology and International Civil Aviation Organization (ICAO) Standards.

Also, the Authority will, through its monitoring and inspection function, continue to both promote international best practice and assess operators' ability to identify and appropriately manage the risk of using NVIS against best practice.

Report AO-2019-005, recommendation:

022/22 (Under consideration) Crew resource management competency is not yet an effective safety measure for helicopters operating under CAR Part 135. On 22 February 2023 the Commission recommended that the Civil Aviation Authority of New Zealand address this safety issue.

To ensure that any other gaps that the Authority should resolve in relation to the two above recommendations, the Authority will commence a gap analysis to identify if any further work is appropriate in the areas of crew competency and performance/standards in the helicopter air ambulance space to support giving effect to recommendations 021/22 and 022/22.

Report AO-2019-006, recommendation:

016/22 (Accepted and implemented) Ensure that managers and users of aerodromes, in particular for unattended aerodromes, understand and fulfil their responsibilities for ensuring safe operations. This includes:

- a. Facilitating a coordinated approach with WorkSafe New Zealand, LGNZ and NZ Airports Association, among others,
- b. Providing training and support to aerodrome operational and management personnel, and
- c. Identifying and encouraging aerodrome user group's contributions towards aerodrome safety.

We are currently mostly engaged with the Local Authority Property Association (LAPA). We attend meetings and will be presenting at their conference. LAPA have been much easier to engage with, and it meets the intent of what we are trying to achieve from an aviation safety perspective as it is the Property Managers within Councils. The CAA is not limited to just engaging with LAPA or LGNZ but any other organisation as the need dictates.

The 'Work Together, Stay Apart' intervention is generating a Good Aviation Practice (GAP) booklet for managers of uncontrolled aerodromes. It also includes broad engagement with users of uncertificated aerodromes.

The CAA continue to attend uncertificated aerodrome user groups across the country.

Masterton Aerodrome has mapped out a pathway to be certificated no later than July 2025.

Also, we regularly attend NZ Airport's conferences and have presented at the Small Aerodromes Subgroup regarding the management of Aerodromes.

The responsibility for safety is shared amongst all aviation stakeholders. Guidance on how an Aerodrome can discharge its obligations to manage aerodrome airspace safety is set out in the following documents which have been published on the Authority website:

- a. A Model for the Management of Aerodrome Airspace Risk AMBIJI Report
- b. Guidance Material for land use at or near aerodromes
- c. Advisory Circular AC 139-17 Aerodrome User Groups

The advice given to the small aerodrome community is that these documents provide guidance to enable an aerodrome to fulfil the requirement to take all reasonable and practicable steps in the interests of safety. Particularly AC 139-17, in creating an aerodrome user group forum and discussing the suggested agenda items for the purposes of improving safety, is consistent with the intent of the Health and Safety at Work Act 2015. The Authority regularly attends the NZ Airports conference Small Aerodromes Working Group. We interact, engage, and intervene at non-certificated aerodromes where there is the greatest risk.

In relation to c., we have done this in the past, are currently doing this, and will continue to do this in the future taking a risk-based approach.

Report AO-2019-006, recommendation:

014/22 (Accepted and implemented) Improve the effectiveness of 'see and avoid' as a way to avoid mid-air collisions through the promotion of the skills required, including the need to actively listen to radio calls.

The Authority continues to promote the ongoing education of good see and avoid practices. In December 2020 the Authority released the new Human Factors page on the Civil Aviation Authority and Aviation Security website. The aim of the webpage is to support awareness and basic understanding of Human Factors, across the New Zealand Aviation Industry.

Report AO-2019-006, recommendation:

012/22 (Accepted and implemented) Use the lessons from this report to educate pilots on some of the common factors in mid-air collisions, and in particular the requirement to know and apply CARs and to address any non-compliance, as appropriate.

As part of the fixed wing flight training safety strategy, the Authority has produced a new educational Good Aviation Practice video on the Standard Overhead Join. This video was originally designed as a teaching aid for Instructors, however, is beneficial to all the General Aviation community to reset the standard of expectations associated with conducting a standard overhead join.

Throughout February and March 2022, the Authority released the Standard Overhead Join video throughout a series of online sessions. 24 sessions were held during this period with at least 750 people attending and over 2000 'hits' on social media.

Report AO-2019-006, recommendation:

015/22 (Accepted and implemented) Encourage the reporting of safety-related incidents or concerns, especially at unattended aerodromes.

Reporting of safety-related incidents or concerns is a legislative requirement under Rule Part 12, participants are obligated to report such incidents. Any participants worried about such information being used by the Authority to take enforcement action should not be alarmed. To build trust with participants, we prefer not to take enforcement action against those who fully report details of incidents and accidents, although we will consider doing so in circumstances in which reporting is patently incomplete or reveals reckless or repeated unsafe behaviour. Also, Rule part 12.63 specifically addresses the issue of non-prosecution due to statutory reporting.

Report AO-2019-006, recommendation:

013/22 (Accepted) Promote ongoing understanding of 'simultaneous operations', including a published definition and how the practice relates to parallel runway operations at unattended aerodromes.

The Authority has raised an Issue Assessment to examine potential issues arising from this mid-air collision as they relate to simultaneous runway operations. This assessment will consider whether there are any regulatory or guidance issues with the status quo and make recommendations for how they might be resolved. This work is currently in progress and has proved to be rather problematic. Mainly because the problem has been poorly defined, there is a lack of clear agreement of what 'Simultaneous Runway Operation' means and the desired outcome is not clear. Currently, the Issue Assessment has not yet been tabled at an Issue Assessment panel meeting but might make the November panel meeting. We will keep the Commission informed of the outcome of this process.

Update on recommendations previously reported as being implemented or under consideration

Number reported on: 2

Number implemented: 2

Inquiry	Number	Issued	Status at 30-Jun-22	Status at 30-Jun-23
AO-2014-006	008/17	23-Feb-17	Being implemented	No further action
AO-2018-005	005/21	27-May-21	Under consideration	No further action

Report AO-2014-006, recommendation:

008/17 (No further action) – 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.

As previously reported, the Authority issued a Notice of Requirement and updated AC61-10 to address some of the findings illustrated in the above recommendation.

The Authority continues to be in contact with relevant Federal Aviation Authority (FAA) individuals in case the FAA position on R44 and R66 changes.

Report AO-2018-005, recommendation:

005/21 (No further action) – On 27 May 2021 the Commission recommended that the Director of Civil Aviation promote educational awareness of the benefit of aircraft pilots and occupants wearing appropriate helmets, and conduct risk assessments to determine when practicable and when operational conditions indicate a potential benefit.

As previously reported, the Authority believes that Civil Aviation Part 100 *Safety Management* and the Health and Safety at Work Act 2015 already sufficiently require operators to consider their risks and whether the use of personal protective equipment (including a flight helmet) is appropriate for use during operations. We consider these existing legal obligations satisfy the recommendation as we understand it.

Rail sector

Recommendations issued over the period 01-Jul-22 to 30-Jun-23

Number issued: 5

Inquiry	Number	Issued	Recommendation	Response
To Waka Kota	hi NZTA			
None				
To KiwiRail			1	
RO-2021-105	005/23	26-Apr-23	The Commission recommended that KiwiRail install a more effective engineering solution to prevent rail movements entering the Picton rail linkspan without authorisation.	Accepted
RO-2021-105	004/23	26-Apr-23	The Commission recommended that KiwiRail ensure that safe working procedures are in place to manage site- specific risks associated with staff undertaking shunting activities.	Accepted
RO-2021-102	019/22	7-Dec-22	On 7 December 2022 the Commission recommended that KiwiRail review its permit-to-enter process to ensure that any associated costs and requirements are not prohibitive to the completion of safety-critical work, and that the charging of fees for permits to enter is in accordance with the Railways Act 2005.	Under consideration
RO-2021-102	018/22	7-Dec-22	On 7 December 2022 the Commission recommended that KiwiRail review its permit-to-enter process by working with road-controlling authorities, and those requiring permits to enter, to ensure that provision is made for the practicable requirements of non-static or short-term work at multiple locations within the rail corridor.	Accepted and Implemented
RO-2021-103	020/22	16-Nov-22	On 16 November 2022 the Commission recommended that KiwiRail provide guidance to staff responding to the severance of inter-carriage jumper cables during the parting of passenger trains, to ensure any damage to safety-critical trainline circuits is considered, and any necessary safety action is taken before moving the train.	Accepted

Picton rail linkspan

Shunting practises: In addition to the response of 22 February 2023, a KiwiRail Industrial Council (KIC) Safer Shunting working group has been set up which meets regularly. The purpose of this group is to ensure that KiwiRail:

• Improves the shunting safety outcomes within KiwiRail using people v plant principles

• Works collaboratively with our union partners using High Performance High Engagement (HPHE) principles

• To develop a future state shunting strategy that is aligned to current and new assets and the RNIP funding model

• Understand the risks associated with shunting and manage these risks, so far is reasonably practicable

(RO 2021-105, 04/23)

Linkspan derailers: As part of the IREX project, a preferred option has been identified for a series of automatic derailers that will be interlocked with the linkspan structure. Anticipated timeline for completion is end of 2024. (RO 2021-105, 05/23)

Permits to enter rail corridor

Further discussions are underway between TAIC and KiwiRail to understand the permit to enter process and associated costs. KiwiRail's initial response is that the process and cost is based on expected hours of work required for KiwiRail staff to provide protection and monitoring, and cost is not associated with the permitting process. (RO 2021-102, 019/22 and 018/22)

Parting of carriages

KiwiRail agrees with the intent of this recommendation and will take the following actions to address this:

• Introduce a procedure for testing of all trainlined systems after re-coupling vehicles that have parted in service and before the vehicles are moved. Systems include Public Address, Train Management System, Park Brake, Door Circuit.

• Update manuals and procedures with this requirement and to make staff aware of the potential for damage to jumper cables to cause faults in trainlined systems. Documents include TARPS and Rail Operating Code Supplements for the affected vehicle classes.

• Include the above in operational and maintenance staff training for existing and new vehicle classes.

The indicative timeframe for implementation of the above is end of 2023. (RO 2021-103, 020/22)

Update on recommendations previously reported as being implemented or under consideration

Number reported on: 15

Number implemented: 3

Inquiry	Number	Issued	Recipient	Status at 30-Jun-22	Status at 30-Jun-23
RO-2020-101	012/21	21 8-Dec-21	KiwiRail	Accepted	Accepted
KO-2020-101	012/21	8-Dec-21	WK NZTA	Accepted	Accepted
RO-2020-101	011/21	8-Dec-21	KiwiRail	Accepted	Accepted and implemented
RO-2020-104	009/21	8-Dec-21	KiwiRail	Accepted	Accepted
RO-2020-103	008/21	24-Nov-21	WK NZTA	Under consideration	Accepted
RO-2019-108	007/21	27-Oct-21	Secretary for		Accepted and
			Local		implemented
			Government		
RO-2019-108	006/21	27-Oct-21	WK NZTA	Accepted	Accepted and
					implemented
RO-2019-104	009/20	24-Sep-20	KiwiRail	Being implemented	Being implemented
RO-2019-103	003/20	6-Apr-20	KiwiRail	Being implemented	Being implemented
RO-2017-101	019/18	23-Aug-18	KiwiRail	Being implemented	Being implemented
RO-2016-101	034/17	15-Dec-17	KiwiRail	Being implemented	Being implemented
RO-2016-101	033/17	15-Dec-17	KiwiRail	Being implemented	Being implemented
RO-2014-105	017/17	26-Jun-17	KiwiRail	Being implemented	Being implemented
RO-2015-102	004/17	24-Feb-17	NRSS-E	Being implemented	Being implemented
RO-2012-104	011/15	26-Aug-15	KiwiRail	Being implemented	Rejected
RO-2011-104	031/11	16-Dec-11	WK NZTA	Being implemented	Accepted

Level crossings

Waka Kotahi and KiwiRail continue to work on assessing level crossings and providing advice to Road Controlling Authorities for funding and forward planning considerations. This will help to determine the most appropriate safety considerations to be implemented. This includes level crossings where short stacking has been identified. Two high profile locations are currently in consultation phases for level crossing improvements (Wairarapa and Auckland). (RO-2020-101, 012/21, RO-2020-103, 008/21 and RO-2011-104, 031/11)

Level Crossings (SFAIRP): In conjunction with the National Rail Industry Advisory Forum (NRIAF), KR formed part of the work stream which developed official SFAIRP guidance. This is now approved by NRIAF and hosted on the Waka Kotahi website. This will be referenced in an update to the current SHE risk management standard. (RO-2020-101, 011/21)

Safe Working Irregularity: The strategy is to deliver a Business Case for to be funded and delivered in the 2025 – 2027 funding period. We will have completed implementation of the new Train Control system by 2025. (RO-2020-104, 009/21 and RO-2019-104, 009/20)

Signalling Safety: No change. This is still work in progress. 6 monthly updates are provided to Waka Kotahi, these are presented by KiwiRail & TransDev and will include Greater Wellington Regional Council. (RO-2016-101, 034/17 and 033/17)

Fatigue Management: Fatigue management project is still progressing. Full implementation will take some time to complete. Updates are to be provided to TAIC via the regular meetings with KR. (RO-2017-101, 019/18 and RO-2014-105, 017/17)

Cyclic Track Conditions: Further development of EM80 (track evaluation car) is required for recording of additional cyclic parameters and amendments to current thresholds. New standards will need to be developed following this. Expected completed June 2024. A new track evaluation car is also expected to be in service in 2027. (RO-2019-103, 003/20)

Traffic Management Plans: The implementation of the New Zealand Guide to Temporary Traffic Management is underway. This has changed from prescriptive rules to a risk management approach, as such Waka Kotahi will not be auditing traffic management plans. (RO-2019-108, 006/21 and 007/21)

Medical Information for safety critical roles: Already rejected by MoT in last year's report (see RO-2012-104, 008/15). In brief, comments from last year were "To require health professionals to inform a patient's employer of any concerns they have regarding their fitness of duty would have significant implications for health privacy, as set out in the Health Information Privacy Code 2020." and "The National Rail System Standard 3 (the NRSS 3) (2017) details the relationships and responsibilities between rail safety workers, their employers and medical professionals, and the information flow between these parties." (RO-2012-104, 011/15)

Fire Standards: No comment available from NRSS-E. Will be passed onto NRIAF for consideration. (RO-2015-102, 004/17)

Maritime NZ

Recommendations issued over the period 01-Jul-22 to 30-Jun-23

Number issued: 3

Number Implemented: 2

Inquiry	Number	Issued	Recommendation	Response
MO-2023-201	008/23	30-Apr-23	On 30 April 2023, the Commission recommended that Maritime New Zealand require KiwiRail to provide evidence to Maritime New Zealand's satisfaction that safety-critical rubber expansion joints onboard all vessels within KiwiRail's Interislander fleet are fit for purpose taking into account the manufacturer's guidance, namely: -they should be no older than eight months from the date of manufacture when installed -they are inspected annually including visual, tactile and hardness measurements -regardless of inspection findings, safety- critical REJs should be replaced after five years.	Accepted and implemented
MO-2023-201	009/23	30-Apr-23	On 30 April 2023, the Commission recommended that Maritime New Zealand alert all vessel operators using rubber expansion joints within a vessel's safety- critical system to the importance of taking into account the date of manufacture, in addition to the time in service, in their maintenance schedules to ensure they are fit for purpose.	Accepted and being implemented
MO-2021-205	007/23	22-Mar-23	The Commission recommended that Maritime New Zealand develop and disseminate clear guidance to highlight the inherent risks associated with the telescopic accommodation ladders	Accepted and implemented

MO-2021-205 007/23 *On 22 March 2023 the Commission recommended that Maritime New Zealand develop and disseminate clear guidance to highlight the inherent risks associated with the telescopic accommodation ladders*

• Maritime New Zealand has implemented this recommendation.

In July 2023 a safety update was published highlighting the inherent risks associated with deploying, retrieving and stowing telescopic accommodation ladders.

MO-2023-201 008/23 On 30 April 2023, the Commission recommended that Maritime New Zealand require KiwiRail to provide evidence to Maritime New Zealand's satisfaction that safety-critical rubber expansion joints on board all vessels within KiwiRail's Interislander fleet are fit for purpose taking into account the manufacturer's guidance, namely:

- they should be no older than eight months from the date of manufacture when installed

- they are inspected annually including visual, tactile and hardness measurements
- regardless of inspection findings, safety-critical REJs should be replaced after five years.
 - Maritime New Zealand has implemented this recommendation. It also notes that this is ongoing.

Following on from the MNZ audit & other interactions with the company post the events of 28/Jan/23 involving the Kaitaki, KiwiRail has issued Fleet Memo 522 – Cooling System Resilience (for all ships) dated 10/Feb/2023 which includes information on inspection and replacement of all rubber expansion joints in the HT/LT engine cooling water system of all ships in the fleet, and also includes information indicating that the date of manufacture and storage period of spares will be accounted for in the replacement schedule.

It has been confirmed that the Kaitaki is compliant with the requirements of Fleet Memo 522. Compliance with the memo by other ships will be verified at the annual ISM DOC verification audit scheduled for Apr-May 2023 and at future ship visits.

MO-2023-201 009/23 On 30 April 2023, the Commission recommended that Maritime New Zealand alert all vessel operators using rubber expansion joints within a vessel's safety-critical system to the importance of taking into account the date of manufacture, in addition to the time in service, in their maintenance schedules to ensure they are fit for purpose.

• Maritime New Zealand is in the process of implementing this recommendation.

A safety update is being developed and will be published by the end of September 2023.

Update on recommendations previously reported as being implemented or under consideration

Number active over period: 14

Number implemented: 5

Inquiry	Number	Issued	Status at 30-Jun-22	Status at 30-Jun-23
MO-2021-202	009/22	25-May-22	Accepted	Implemented
MO-2021-201	008/22	27-Apr-22	Accepted	Implemented
MO-2020-201	003/21	27-May-21	Being implemented	Implemented
MO-2019-204	013/20	18-Nov-20	Being implemented	Being implemented
MO-2019-202	001/20	21-Feb-20	Being implemented	Implemented
MO-2018-202	008/19	26-Sep-19	Being implemented	Being implemented
MO-2018-202	009/19	26-Sep-19	Being implemented	Being implemented
MO-2017-203	030/18	22-Nov-18	Being implemented	Being implemented
MO-2016-206	013/18	23-May-18	Being implemented	Being Implemented
MO-2016-206	014/18	23-May-18	Being implemented	Being Implemented
MO-2009-204	016/11	25-May-11	Being implemented	Implemented
MO-2007-206	001/08	20-Mar-08	Being implemented	Being Implemented
MO-2003-201	033/03	29-Aug-03	Being implemented	Being implemented
MO-2003-201	025/03	22-Jul-03	Being implemented	Being implemented

MO-2021-202 009/22 On 25 May 2022, the Commission recommended that Maritime New Zealand ensure that as soon as reasonably practicable the owner of Amaltal Enterprise install a new system that complies with current maritime rules and put in place additional measures to manage the risk created by the limitations of the current fire-extinguishing system until such time as the new system is installed.

• Maritime NZ has implemented this recommendation

Talley's installed a new Novec fire suppression on the Amaltal Enterprise. System commissioning and signoff was by Nelson Fire protection on the 8th Feb 2023. Maritime New Zealand did not consider that any compliance action was necessary before the system was replaced.

A MOSS intermediate survey was completed on the Amaltal Enterprise on the 27 April 2023. This survey covers firefighting equipment and life saving devices. The survey confirms that the new fire system complies with current maritime rules.

In the longer term, Maritime NZ will continue to review the regulatory settings for firefighting systems as part of the 40 Series project. This work includes consideration of appropriate performance and installation standards, how to regulate older systems, and which ships should be required to have on-board fire-fighting systems. We believe that this work will help ensure that the rules are clear and fit-for-purpose, reducing the risk of similar issues arising in the future.

MO-2021-201 008/22 On 27 April 2022, Commission recommended to the Director of MNZ that they engage with operators working under Maritime Rules Part 82 to identify jet boat systems which carry the risk of single point failure that would result in a total loss of control of the jet boat, and discuss possible measures that could be taken to reduce the risk to passengers and crew to as low as reasonably practicable.

• Maritime NZ has implemented this recommendation. It also notes that this is ongoing.

After engagement with jet boat operators working under Maritime Rules Part 82, Maritime New Zealand have implemented annual Safety System audits, and are now conducting Section 54 inspections of all commercial jet boat vessels working under Maritime Rules Part 82.

In 2021, the responsibility for auditing operator SOPs was transferred to MNZ staff, with third party delegated persons inspection part 82 vessels and assessing driver training and issuing jet boat driver licences. The policies and processes for the delegated persons are still being finalised. Having MNZ staff responsible for auditing all operator SOPs allows for certainty that audits are of high quality, and provides strong oversight of the operators as well as the performance of any delegated persons. Maritime New Zealand Part 82 Audit Checklist is indepth and covers the adequacy of driver competency and maintenance programmes.

Maritime New Zealand have conducted training with Maritime Officer Jet boat auditors and delegated persons to formalise processes for both parties to ensure consistency across New Zealand.

There is planned ongoing engagement with these operators, including presentations at New Zealand Jet Boating Association Annual National Conferences.

MO-2020-201 003/21 On 27 May 2021 the Commission recommended that Maritime New Zealand, when assessing or auditing operator safety systems for fishing vessels, review the adequacy of watchkeeping training programmes for upskilling unqualified deckhands to a level that meets good industry practice and complies with the requirements of Maritime Rules Part 31.

• Maritime New Zealand has implemented this recommendation.

Guidance was released in April 2023 on watchkeeping and fatigue on Maritime New Zealand's web site. This guidance was part of a wider body of work ensuring a strategic regulatory approach to enforcing lookout and watchkeeping requirements on commercial vessels.

Maritime Officers have been focusing on watchkeeping arrangements during audits, and MNZ communications through industry conferences has emphasised the importance of robust watchkeeping practices.

Audit Report Checklists cover, capture and record non-conformities in regards to how personnel resources are being appropriately managed. This includes safe crewing levels for each vessel, managing fatigue and management of drug and alcohol policy etc. MR 31, MR 19.61(a) and Appendix 1.3 and 1.4.1.1(d).

MO-2019-204 013/20 On 18 November 2020 the Commission recommended that Maritime New Zealand ensure that future Maritime Rules require appropriate stability, buoyancy, and survivability assessments with respect to a vessel's area of operation, and that information is made available for all domestic commercial passenger vessels.

• Maritime NZ are in the process of implementing this recommendation.

This issue has now been incorporated into draft stability rules. This work is part of a wider reform of Maritime Rules Part 40. The 40 Series Reform is a long-term, collaborative project that intends to ensure that the rules for design, construction and equipment for domestic (non-SOLAS) ships are fit for purpose. Plans for public consultation on these rules are still being confirmed, but formal public consultation is expected to commence in early - mid 2024, following approval by the Minister of Transport.

MO-2019-202 001/20 On 21 February 2020, the Commission recommended that the Director of Maritime New Zealand continue to develop its fatal accident database to improve the quality of the data so that the maritime sector is better able to understand the risks of alcohol and drug use in recreational boating accidents.

• Maritime NZ has implemented this recommendation.

Maritime New Zealand has made significant improvements to the Maritime Fatal Events Database (MFED) and internal processes to ensure the quality, completeness and accuracy of alcohol and drug related information is robust and fit for purpose. Internal processes have been established to capture and record all relevant information relating to a recreational boating fatality including post mortem information on the identification of alcohol and drugs which is recorded against each accident. This ensures we can better understand the risks of alcohol and drug use in recreational boating accidents. For example, the *Recreational Boating Fatal Accident 2015-2020* report on the Maritime NZ website <u>here</u>, included a summary of fatal accidents during this period where alcohol and drugs were a factor.

MO-2018-202 008/19 *On 26 September 2019 the Commission recommended to the Director of Maritime New Zealand that they take any measures available to them to make post-2004 fishing vessels comply with as many of the design, construction and equipment standards prescribed in the current Rule 40D as are reasonable and practicable.*

• Maritime NZ are in the process of implementing this recommendation.

This issue has now been incorporated into draft Fire Protection rules. This work is part of a wider reform of Maritime Rules Part 40. The 40 Series Reform is a long-term, collaborative project that intends to ensure that the rules for design, construction and equipment for domestic (non-SOLAS) ships are fit for purpose. Proposals include the requirement for high risk ships to have structural fire protection installed to limit the spread of fire, in addition to requirements for fire detection and alarm systems and fixed fire suppression systems. Plans for public consultation on these rules are still being confirmed, but formal public consultation is expected to commence in early - mid 2024, following approval by the Minister of Transport.

MO-2018-202 009/19 On 26 September 2019 the Commission recommended to the Director of Maritime New Zealand that they work with the Ministry of Transport to amend Rule 40D to put appropriate measures in place to ensure that aging fishing vessels are not permitted to remain in the system indefinitely without being required to meet contemporary safety standards.

• Maritime NZ are in the process of implementing this recommendation.

This issue has now been incorporated into draft Fire Protection rules. This work is part of a broader reform of the design, construction and equipment rules for ships. Proposals include the requirement for high risk ships to have structural fire protection installed to limit the spread of fire, in addition to requirements for fire detection and alarm systems and fixed fire suppression systems. The proposal is that existing vessels would need to be upgraded within 5 or 10 years of implementation of the new rules. Plans for public consultation on these rules are still being confirmed, but formal public consultation is expected to commence in early - mid 2024, following approval by the Minister of Transport.

MO-2017-203 030/18 On 22 November 2018 the Commission recommended that the Director of Maritime New Zealand raise through the appropriate International Maritime Organization safety committee for its consideration, the implications for maritime safety of not having adequate minimum standards for the inspection, testing and rejection of pressure vessels that are part of a stored energy system.

• Maritime NZ are in the process of implementing this recommendation.

In progressing the recommendation it has become apparent that there is a gap in the current SOLAS requirements, in that the requirements do not treat the lifeboat system as a whole. The International Maritime Organization safety committee has called for proposals to address this gap. MNZ are working with international stakeholders to propose a new item which will be considered in Nov 2024 at the earliest.

MO-2016-206 013/18 The Commission is of the view that for commercial operations in exposed open waters, particularly when vessels are approved to operate out of bar harbours, the minimum requirement should be a type 401 lifejacket, and it should be required to have a crotch strap fitted. For the same reasons, Maritime New Zealand should place some emphasis in its safety campaigns on recommending that recreational users adopt a similar standard when intending to cross bar harbours or venture into exposed coastal waters.

On 23 May 2018, the Commission recommended that the Director of Maritime New Zealand review the current requirements for the carriage of lifejackets on commercial restricted-limit vessels, and use an appropriate mechanism to ensure that the required lifejackets are of an appropriate type for the type and place of operation.

• Maritime NZ are in the process of implementing this recommendation.

This issue is being incorporated into a wider reform of Maritime Rules Part 40. The 40 Series Reform is a long-term, collaborative project that intends to ensure that the rules for design, construction and equipment for domestic (non-SOLAS) ships are fit for purpose. A new Life Saving Appliances rule has been drafted ready for formal public consultation, which is expected to commence in early - mid 2024, following approval by the Minister of Transport.

MO-2016-206 014/18 On 23 May 2018, the Commission recommended that the Director of Maritime New Zealand use an appropriate mechanism to make it mandatory for crotch straps to be fitted to lifejackets required on board commercial vessels that operate out of bar harbours and off exposed coastlines.

• Maritime NZ are in the process of implementing this recommendation.

This issue is being incorporated into a wider reform of the design, construction and equipment Maritime Rules for ships. A new Life Saving Appliances rule has been drafted ready for formal public consultation, which is expected to commence in early - mid 2024, following approval by the Minister of Transport.

The life jacket proposal would require life jackets to comply with the minimum requirements outlined in one of a number of standards, including NZS 5823-2005. NZS 5823-2005 recommends that manufacturers fit crotch strap attachment points for life jackets used for open water and inshore areas to ensure that crotch straps are able to be fitted.

MO-2009-204 016/11 It is a safety issue that there appears to be a disparity between the operating limits and designation of the Coastguard vessels and the types of extra curricular work the vessels are engaged in and the qualification requirements of the skippers of Coastguard vessels.

It is recommended that the Director of Maritime New Zealand considers some means of aligning the qualifications of Coastguard certificated skippers with the qualifications structure of Maritime New Zealand to ensure that the Coastguard certification better serves the needs of its skippers with respect to operating limits, designation of vessels and anticipated work to be undertaken.

• Maritime NZ has implemented this recommendation

The introduction of SeaCert (Seafearer Certification) and Rule Part 35 (Approval of Training for Purposes of Part 32, Assessments and Examinations, and Industry Specific Certificates) has made it clear that ISC (Industry Specific Certificates) skippers can only operate out to 12nm offshore, if it is a Search and Rescue mission and they have permission from either the Rescue Coordination Centre or the Police.

Maritime have worked with Coastguard to simplify processes to meet requirements and there is now a permanent agreed procedure for Coastguard to request permission 24/7 from Police and/or Rescue coordination centre via Maritime to exceed the 12nm limit.

MO-2007-206 001/08 Take the steps necessary to ensure that all dumb barges with no persons on board that are used commercially for the carriage of cargo are brought within the framework of the maritime rules with regard to the issuance of load lines and the provision of stability information.

• Maritime NZ are in the process of implementing this recommendation

Maritime NZ (MNZ) communicated with TAIC in regards to closure of this recommendation in 2017 noting that Section 3 of MR Part 46 (Surveys, Certification and Maintenance) applies to every NZ barge of 24 metres or more in length that carries, for hire and reward, any cargo, wastes, dredgings or other materials. Barges of less than 24 metres in length that do not carry

people on board during the course of a voyage are not covered by Parts 46 or 47. However, the barge stability guidelines do apply. Further, as these vessels can only ever operate in a towed context, there are MOSS obligations on the operator of the towing vessel, which ergo apply to the barge when being towed. Following a 2017 investigation of vessels that are excluded from MOSS, MNZ decided to remove these barges' exclusion from MOSS on the above basis and make it clear in Part 19 that where such barges are used in a maritime transport operation they must comply with stability guidelines and any other vessel related requirements, including those related to load lines and stability. This issue is under active consideration as part of the 40 series rule set review.

MO-2003-201 033/03 When conducting any review of Maritime Rule 40A, [Design, Construction and Equipment - Passenger Ships Solas] undertake a cost benefit analysis to consider any existing restricted limit passenger ships with totally enclosed engine spaces to be fitted with a fire detection system and a remotely operated fire extinguishing system in the engine space (s).

Where a cost benefit is demonstrated as positive, consider drafting an amendment to Maritime Rule 40A for the Minister's consideration.

Any amendment of the rule to be phased so that existing passenger vessels above 15 m, or carrying more than 36 passengers to be fitted with this equipment first

• Maritime NZ are in the process of implementing this recommendation

These issues have been incorporated into draft Fire Protection rules. This work is part of a broader reform of the design, construction and equipment rules for ships. The proposal is that existing vessels would need to be upgraded within 5 years of implementation of the new rules. A new Fire Protection rule has been drafted ready for formal public consultation, which is expected to commence in early - mid 2024, following approval by the Minister of Transport.

MO-2003-201 025/03 Draft an amendment to Maritime Rule 40A [Design, Construction and Equipment - Passenger Ships Solas] for the Minister's consideration, that new restricted limit passenger ships with enclosed engine room spaces should be fitted with a fire detection system and a fixed fire extinguishing system in the engine spaces.

• Maritime NZ are in the process of implementing this recommendation

These issues have been incorporated into draft Fire Protection rules. This work is part of a broader reform of the design, construction and equipment rules for ships. Proposals include the requirement to have fire detection and alarm systems and fixed fire suppression systems. Plans for public consultation on these rules are still being confirmed. We anticipate formal public to commence in early - mid 2024, following approval by the Minister of Transport.

Appendix: Definitions

Response to issued recs	Definition	Further reporting required?
Accepted and implemented	The recommendation was accepted (wholly or in part) and has been implemented	No
Accepted	The recommendation was accepted (wholly or in part) and is being, or will be, implemented	Yes
Under consideration	The recommendation was neither accepted nor rejected. Further consideration is required	Yes
Rejected	The recommendation will not be implemented	No

Status of active recs	Definition	Further reporting required?
Implemented	The recommendation was implemented over the reporting period	No
Being implemented	The recommendation is in the process of implementation	Yes
Under consideration	The recommendation remains under consideration	Yes
No further action	The recommendation has been implemented in part, but no further action will be taken	No
Rejected	The recommendation was under consideration and it has been decided not to implement it	No