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OIA-2023-4853

12 December 2023



Dear [REDACTED]

I refer to your email of 3 November 2023 requesting, under the Official Information Act 1982 (OIA), a copy of the safety assessment referenced at paragraph 180(c) in the Court of Inquiry into the death of Lance Corporal Nicholas Kahotea.

A copy of the Ardmore Military Training Area (AMTA) method of entry (MOE) house height safety assessment is enclosed.

You have the right, under section 28(3) of the OIA, to ask an Ombudsman to review this response to your request. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

Please note that responses to official information requests are proactively released where possible. This response to your request will be published shortly on the NZDF website, with your personal information removed.

Yours sincerely

**AJ WOODS**

Air Commodore

Chief of Staff HQNZDF

**Enclosure:**

1. AMTA MOE House Height Safety Assessment

## AMTA MOE HOUSE HEIGHT SAFETY ASSESSMENT

### References:

- A. Recommendation 180 (c) related to 2019513 Army 354 Death of a Serviceman at Ardmore
- B. Health and Safety at Work Act 2015
- C. Health and Safety in Employment Regulations 1995 (Regulation 21)
- D. Schedule 1 The building code – Clause F4 Safety from falling
- E. DFO (A) Vol 7, BK 3, Chap 6
- F. Best practice guidelines for working at height in New Zealand

### Purpose

1. The purpose of this height safety assessment is to ascertain whether further safety measures could be installed to mitigate an unintended fall from height; notably from the second storey rooftop.
2. HSW Act 2015 - 37 Duty of PCBU who manages or controls a workplace. A PCBU who manages or controls a workplace must ensure, so far as reasonably practicable, that the workplace, the means of entering and exiting the workplace, and anything arising from the workplace are without risks to the health and safety of any person.
3. HSW Regulations – 5 Duty to identify hazards. A PCBU, in managing risks to health and safety, must identify hazards that could give rise to reasonably foreseeable risks to health and safety.
4. HSE Regulation 21 – Heights of more than 3 metres. Every employer must, so far as reasonably practicable, ensure, in relation to every workplace under the control of the employer, that, where an employee may fall 3 metres:
  - a. Means are provided to prevent the employee from falling; and
  - b. Any means so provided are suitable for the purpose for which they are to be used.
5. HSW Regulation 25 – Managing risks associated with falling objects. A PCBU must manage risks to health and safety associated with a falling object if the object is reasonably likely to fall on and injure a person.

### Definitions

6. Definitions of frequently used terms used in height safety management are listed below.

Term	Definition
Hierarchy of controls	(Health and Safety at Work Regulations 2016) 1. All practicable steps shall be taken to eliminate the hazard. 2. If it is not practicable to eliminate the hazard, then the hazard shall be minimised.
Height	Means the greatest distance from which a person or article may fall before coming to rest.

Term	Definition
Guardrail	A rail or barrier secured to standards or upright members, at a height above the work platform of 900mm (minimum) to 1100mm (maximum) and erected along the exposed sides and ends of working platforms to prevent persons from falling. It includes a lower rail that is fixed to standards midway between the guardrail and the platform. A guardrail may or may not include a kick board, dependant on whether the area is used as a work platform or an access platform.
Barrier to restrict access	A physical or visual barrier is a rope, tape or another visual prompt suspended at height to act as a boundary around a work area to prevent access to a hazard. It should be at least two metres away from a height hazard and the roof slope is less than 25 degrees.
Work at height	Working at a place, above or below ground level, where a person could be injured if they fell from that place – that is, falling from one level to another. Access and egress, except by a staircase in a permanent workplace to, or within a place of work can also be work at height.  Work at height does not include a fall at the same level (for example, falling or slipping at ground or floor level).



	MINOR	MODERATE	MAJOR	EXTREME
ALMOST CERTAIN	Medium	High	Very High	Very High
LIKELY	Low	High	Very High	Very High
POSSIBLE	Low	Medium	High	Very High
UNLIKELY	Low	Medium	Medium	High
RARE	Low	Low	Medium	High

LOW Tolerable	MEDIUM Generally Tolerable	HIGH Generally Intolerable	VERY HIGH Intolerable
Manage by routine procedures. Review controls already in place at least annually, or if significant change occurs.	Report through command chain. Additional treatment may be required where practicable. Review at least 6 monthly or if significant change occurs	Report through command chain. Further treatment required to be identified as a matter of priority. Review at least quarterly or if significant change occurs	STOP. Report immediately through command chain. Further treatment required as a matter of priority. Review monthly or if significant change occurs.

CONSEQUENCE/IMPACT			
MINOR	MODERATE	MAJOR	EXTREME
May be "Notifiable Events" IAW HSW Act 2015			
<ul style="list-style-type: none"> <li>- First aid injury.</li> <li>- Minimal lost time, less than one week</li> <li>- Temporary partial disability</li> <li>- No long term effects</li> </ul>	<ul style="list-style-type: none"> <li>- Medical treatment</li> <li>- Immediate hospital admission or within 48 hrs.</li> <li>- Serious lacerations or injuries</li> <li>- Recovery period 1 week or more</li> </ul>	<ul style="list-style-type: none"> <li>- Fatality</li> <li>- Permanent injury or illness (e.g. Amputation, limb movement, sight, hearing etc)</li> <li>- Spinal injury</li> <li>- Skin separation</li> <li>- Life changing injuries</li> </ul>	<ul style="list-style-type: none"> <li>- Multiple fatalities</li> <li>- Multiple serious injuries</li> <li>- Multiple permanent total disability</li> <li>- Long term effects</li> <li>- Affects the organisation</li> </ul>
<b>Investigation:</b> <ul style="list-style-type: none"> <li>- Over watch by risk owner</li> <li>- Unit H&amp;S</li> </ul>	<b>Investigation:</b> <ul style="list-style-type: none"> <li>-Unit H&amp;S</li> <li>-Possible COI.</li> <li>-Possibly the Regulator</li> </ul>	<b>Investigation:</b> <ul style="list-style-type: none"> <li>- COI</li> <li>- Regulator</li> </ul>	<b>Investigation:</b> <ul style="list-style-type: none"> <li>- COI</li> <li>- Regulator</li> </ul>

LIKELIHOOD/PROBABILITY				
RARE	UNLIKELY	POSSIBLE	LIKELY	ALMOST CERTAIN
Remote chance of occurrence during activity/process. Remote history of occurrence.	Could occur at some time, but is <b>improbable</b> during the activity. Little history.	Could occur at some time during the activity. Some history of occurrence.	Common occurrence during the activity. History of frequent occurrence.	Is expected to occur during the activity. History of regular occurrence.

**Risk assessment**

7. The following risk assessment was carried out on the roof areas of the MOE House IOT ascertain whether further controls could be put in place to mitigate an unintended fall from height.

8. Two key areas were identified as high risk of fall once current controls are removed to allow for training to commence. These areas are:

- a. All unprotected edges around roof areas once guardrails are removed, and
- b. Unprotected cavities through the roof once hatches are removed.

Area of MOE House	Activity	Identified height hazard	Raw risk	Controls/Resp	Residual risk
First and second story roof tops.	Fast roping and rappelling onto roof tops from Rotary asset	Fall from height off unprotected roof edge or through roof cavities where current engineering controls are removed	High	Removable guardrails and roof hatches to remain in place while performing fast roping and rappelling drills.  Visually inspected by RCO/SO prior to the commencement of training RCO/AMSO/URSO AM Dispatcher/URS Ref AMTA RSO	Medium
Second story roof top.	Preparation for Fast roping (Body belay or from an anchor point) onto first story roof or rappelling onto first story roof or ground.	Fall from height by safety personnel while removing temporary guardrails or roof hatches.  Fall by operator while approaching the edge to fast rope or rappel	High	Limit removal of guardrails to those essential for the task. Personnel removing guardrails must be secured to a safety line at all times. Unprotected areas and 'actions on' to be covered in safety brief. Safe staging areas away from the edge identified for troops waiting.  Paragraph added to the AMTA RSO's detailing safety requirements for removing guardrails and roof hatches. To include the person/s removing guardrails or roof hatches must be attached to a safety line at all times.  For rappelling, operators to be attached to rope well back from the edge. For fast roping, operators to have a hand hold on rope and use taught techniques to approach the edge. Lesson plans to reflect procedures around safety requirements while approaching unprotected edges URSO/URS  Review of procedures and lesson plans to be conducted this year as part of the ASTR project (Brake)	Medium

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Second story roof top.	Fast roping through roof hatch	Fall through unprotected cavity.	Med/High	Control troop movement around cavity. Ropers to use correct techniques to approach and secure onto rope. URSO/URS	<b>Medium</b>
First and second story roof area.	Bump, Hover jumping	Falling off unprotected edges	Very High	If practical, hover jump inside of guarding, if not practical only essential sections of guardrails removed. Dispatcher to ensure area is clear and safe to jump prior to "GO" command. Temporary safety catch nets to be considered if future Bump training is to be conducted. AMSO, Dispatcher, HCM/Aircrew	<b>Medium</b>
All height areas	All activities	Falling objects	Medium	Clear exclusion zones marked below. Safety brief to include controls around falling objects. Helmet area if having to enter exclusion zones. Items secured at top. AMSO/URSO, URS	<b>Low</b>