



AAD Safety Standard

Fatigue Management

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1 Purpose

The purpose of this document is to define the Australian Antarctic Division's requirements pertaining to the management of workplace fatigue.

This document is, in general, based on the guidance provided by Safe Work Australia, in their publication entitled Guide For Managing The Risk of Fatigue At Work - November 2013 and supplemented by the [Australian Maritime Safety Authority's Fatigue Guidelines](#).

2 Scope

This standard applies to all Australian Antarctic Division's employees and contractors¹, all persons working in Australian Antarctic Division workplaces, and all participants in the Australian Antarctic Program including those working at sea² (collectively referred to as our people').

This standard will apply in all circumstances except where a stricter or more demanding standard is prescribed by legislation, codes of practice, and or rules specified by regulatory authorities. As examples, all civil aviation fatigue management matters will be subject to rules defined by the Australian Civil Aviation Safety Authority or equivalent, and all fatigue management matters related to seafarers (i.e. a ship's crew) will be subject to rules defined by the Australian Maritime Safety Authority.

Nothing in this standard shall be taken to have precedence over existing employment terms and conditions. In circumstances where there is a lack of clarity as to AAD's fatigue management requirements, those concerned should contact the AAD WHS Manager.

3 Definitions

Call Outs	Call outs are defined as all circumstances wherein an individual is required to attend the workplace, or is required to be immediately available to work on demand, outside of an individual's normal working day (ie the person is 'on-call').
Extended Hours	Extended Hours are hours worked in excess of a 12-hour work day, or 54 hours in any 7-day period.
Safety Critical Work	Safety Critical Work is defined as those tasks for which there is a materially elevated risk of death or serious injury in the event of human error, poor judgment or an individual's slower reaction times as a consequence of fatigue. This specifically includes but is limited to the following activities: <ul style="list-style-type: none">• vehicle operation• diving• working at heights• lone or isolated work• water craft operation• aviation operations

¹ This standard applies to all contractors working for the AAD except where the Contractor has its own arrangements that are approved by AAD.

² This standard does not apply to seafarers (i.e. a ship's crew). Ship's crew shall adhere to fatigue management rules defined defined by the Australian Maritime Safety Authority.

Rostered Work	Rostered Work is defined as work <u>routinely</u> completed between 1800 hours and 0630 hours, weekends, on public holidays, or work requiring Split Shifts.
Split Shift	A split shift is a work schedule wherein a person's work day is split into two parts separated by a non-work period of two or more hours. For example, a person is required to work 4 hours, have 3 hours off and return for a further 4 works work. A Split Shift is still considered one shift.
Supervisor	For the purpose of this Standard a Supervisor is any person managing or directing the work of another person irrespective of their title.

4 Background

4.1 What is fatigue?

Fatigue is more than feeling tired. In a work context, fatigue is a state of mental and or physical exhaustion which reduces a person's ability to perform work safely and effectively. It can occur because of prolonged mental or physical activity, sleep loss and or disruption of the internal body clock. Fatigue can be caused by factors which may be work related, non-work related or a combination of both and can accumulate over time.

4.2 Why is fatigue a problem?

When people are fatigued, they are more likely to exercise poor judgement and have slower reaction times to changing circumstances. For example, after 17 to 19 hours without sleep, the average person's performance on a range of tests is equivalent or worse than having a Breath Alcohol Concentration of 0.05. In particular, response speeds are typically 50% slower and accuracy measures are significantly poorer.

4.3 Who has health and safety duties in relation to managing the risks of fatigue?

Each of us has a responsibility to manage our personal level of fatigue such that we are both productive and safe in the workplace. The Australian Antarctic Division as an organisation, and managers and supervisors have a duty to ensure our people are not unduly exposed to health and safety risks arising from fatigue. These duties are addressed in more detail in [Appendix 1](#).

To reiterate: If you are fatigued and this poses a threat to your welfare or that of others, you must report the matter to your supervisor.

5 How are the risks of fatigue managed in AAD workplaces?

5.1 Overview

Measures to manage the risks associated with fatigue will vary from one workplace to the next, depending on the nature of the work, environmental conditions and individual factors.

The risks associated with fatigue can be managed by following a systematic and consultative process which involves:

- identifying the factors which may cause fatigue in the workplace
- assessing the risks of harm from fatigue

- controlling risks by implementing the most effective control measures reasonably practicable in the circumstances, and
- reviewing control measures to ensure they are working as planned.

The Australian Antarctic Division's specific requirements are as follows:

5.2 Training

AAD will develop and maintain Fatigue Management Training materials specific to its operations.

All those working for the AAD or participating in the AAP must complete Fatigue Management Training.

5.3 Self-Assessment for Fatigue

Workers are in the best position to recognise if they are too fatigued to perform their job safely. A **AAD Fatigue Self-Assessment Questionnaire** is available on Blizz Line. Additionally, AAD will from time to time recommend the use of selected Fatigue Self-Assessment Apps for mobile devices (refer to the AAD WHS Team).

If at any time whilst at work, or immediately prior to work, an employee self-assesses and concludes that they are so fatigued so as to be unfit for work, they are obliged to report their concern to their Supervisor. In such circumstances, the Supervisor must ensure that the worker is stood down until such time as they are fit for work (see Section 6).

Note: If you have had less than 5 hours of 'adequate quality sleep' in the last 24 hours, you are not fit for duty. What constitutes adequate quality sleep will vary between individuals and we look to our people to exercise judgement in this matter.

5.4 Hours of Work

Normal full-time hours of work are 7.5 to 9.5 hours per day between 0700 hours and 1900 hours, Monday to Friday, local time.

Work routinely completed between 1800 hours and 0630 hours (local time), on weekends or public holidays, or requiring the regular completion of Split Shifts (section 5.7), will be deemed for the purpose of this standard to be 'Rostered Work'.

Work durations exceeding 12 hours in any 24-hour period, and 54 hours in any 7-day period shall be deemed Extended Hours.

5.5 Roster Design

All Rostered Work must be subject to an approved Roster. The design of a roster must

- a) be informed by a documented risk assessment (Section 8), or
- b) developed in accordance with an approved ADD Standard Operating Procedure³

that addresses fatigue risks and controls relevant to, inter alia, the hours of work, the nature of the work and the circumstances in which the work and rest occurs. AAD shall adhere to guidance on Roster Design as provided by Safe Work Australia, in their publication entitled [Guide for managing](#)

³ An SOP that specifically addresses fatigue management related to a specific activity or body of work must be derived from a documented fatigue risk assessment (section 8).

[the risk of fatigue at work, November 2013](#) and supplemented by the [Australian Maritime Safety Authority's Fatigue Guidelines](#) .

Note: No roster shall require individuals to regularly work more than 12-hour days nor ever exceed the maximum permissible work hours as set out in Section 5.11. Rosters must include scheduled Rostered Days Off⁴.

Rosters for rostered work may only be implemented subject to approval by a Station Leader, Voyage Leader, Section Head or more senior member of AAD staff.

Where practicable, rosters will be made available to rostered persons no less than ten working days in advance of the first rostered work period.

5.6 Extended Hours

No person will be permitted to work more than a 12-hour work day, or 54 hours in any 7-day period, in the absence of a documented risk assessment (Section 8) approved by their Supervisor, or as addressed in an approved ADD Standard Operating Procedure that addresses fatigue risks and controls relevant to, inter alia, the hours of work. No person shall ever exceed the maximum permissible work hours as set out in Section 5.11.

5.7 Split Shifts or Call Outs

Employees working a Split Shift or completing Call Outs (ie being 'on-call'⁵) must not work more than 12 hours in any 24-hour period in the absence of a documented risk assessment (Section 8) approved by their Supervisor. No person shall ever exceed the maximum permissible work hours as set out in Section 5.11.

The minimum break following a split shift or call-out must be not less than 10 hours except where:

- a documented risk assessment (Section 8) has been completed and the fatigue risk posed by a shorter break is actively managed, or
- an approved ADD Standard Operating Procedure exists that specifically addresses fatigue management related to the specific Split Shift or Call Out arrangements.

5.8 Scheduling of Safety Critical Work

When undertaking Safety Critical Work outside of normal working hours particular consideration needs to be given to the potential risks arising as a consequence of worker fatigue. No one shall undertake Safety Critical Tasks when they are fatigued.

5.9 Rest Breaks

Having breaks, eating and drinking water during a shift is critical to managing fatigue. The number and duration of rest breaks both within and between shifts must be planned with regard to, among other factors, the nature of the work and the environmental settings in which the work is completed. The minimum rest breaks are set out in Section 5.11.

⁴ For example: Stations typically have a "No operations Sunday". Refer to AAD OPERATIONS MANUAL, Volume 1: Station and field, Chapter 3: Station operations 2021–2022. This should be considered when developing ship and station rosters for resupply.

5.10 Travel and Recovery Time

Risk assessments associated with both Roster Design and Extended Hours must consider travel time and mode of travel (where relevant) as both may have a significant impact on the quality of rest periods prior to and between shifts and or rostered periods of work. Specific consideration must be given to the fatigue related to extended flights (eg as a consequence of jet lag), rough sea conditions, or field operations (eg sleeping in a tent) that impact on rest quality.

5.11 Maximum permissible work hours and minimum periods of rest

Except in circumstances where there is an immediate threat to life, the following maximum permissible hours of work must never be exceeded nor lesser rest periods be taken.

Location	Time	Work	Rest breaks
At the below location	Within a period of work with duration of:	No person shall work more than:	And the person must have a <u>minimum</u> rest period of at least:
All locations	5 1/2 hours	5 hours	30 minutes continuous rest time
All locations	12 hours	11 hours	60 minutes rest time in blocks of no less than 15 continuous minutes
All locations	17 hours	15 1/2 hours	90 minutes rest time in blocks of no less than 15 continuous minutes.
Land	24 hours	17 hours	7 hours. The minimum hours of rest may be divided into 2 periods, of which 1 period must be at least 6 hours.
At sea*	24 hours	14 hours	10 hours. The minimum hours of rest may be divided into 2 periods, of which 1 period must be at least 6 hours. The interval between consecutive periods of rest must not exceed 14 hours.
Land	48 hours	30 hours	18 hours of which 12 hours must be slept
Land	7 days	84 hours	84 hours
At sea*	7 days	91 hours	77 hours
Land	14 days	168 hours	168 hours over the 14 days followed by a minimum 24-hour continuous break on day 15
At sea*	21 days	273 hours	231 hours over the 21 days followed by a minimum 24-hour continuous break on day 22
Land	28 days	324 hours	348 hours (inclusive of one 24-hour continuous break on day 15) followed by a minimum of one 48-hour continuous break commencing on day 29

*only applicable when a vessel is underway. When the vessel is in port or at anchor, the 'Land' arrangements shall apply.

6 Stand-Down⁶ related to fatigue

A Supervisor can stand-down anyone of their direct reports (with pay), including contractors if they believe that the individual is not fit for work.

⁶ For the avoidance of doubt this Standard anticipates Stand Down with pay.

In circumstances where a Supervisor stands down an employee due to fatigue, they have an obligation to ensure that:

- a. the individual is safely delivered to their place of rest, and
- b. there is mutual agreement as to when the individual will return to work having consideration to the rest periods specified in this standard.

7 Leave

Fatigue is often cumulative. It is expected that all individuals take their allocated Recuperative Leave, Rostered Days Off and Annual Leave as defined in their employment agreement.

Note: Subject to consultation with the responsible manager, it is expected that Supervisors provide 'recuperative leave' or 'time off in lieu' to people whom have worked more hours than that defined by their approved rosters or whom are frequently working Extended Hours. Whilst the specifics of such leave may or may not be addressed in an individual's employment terms and conditions, AAD expects that sensible discretion is applied by supervisors and managers so as to ensure the safety and wellbeing of all working or partnering with the AAD or AAP.

The AAD Executive shall complete an Annual Review of employee leave balances for the purpose of understanding the WHS and wellbeing risks posed by individuals accumulating large leave balances.

8 Fatigue Risk Assessment

Supervisors must conduct a Fatigue Risk Assessment as required by this standard or in such other circumstances as they think reasonable.

The **AAD Work-related Fatigue Risk Assessment & Control Plan** template is available on Blizz Line.

9 Reporting Fatigue

Workers are required to report instances of work-related fatigue as soon as practicable to their Supervisor. Supervisors have a duty to report work-related fatigue in circumstances where excessive work hours or work without breaks is the key contributing factor.

Records of work-related fatigue should be captured in SIRUS either as a hazard or incident. For advice, contact the AAD WHS Team.

All incidents (including near miss events) that result from fatigue, or where fatigue is a credible contributing factor, must be reported as soon as practicable.

10 Facilities

In circumstances or workplaces where individuals are required to complete Shift Work or Split Shifts, the AAD will provide suitable facilities to enable those individuals affected by fatigue to eat, rest and sleep as applicable.

Appendix 1: Who has health and safety duties in relation to managing the risks of fatigue?

Everyone in the workplace has a work health and safety duty under the *Work, Health and Safety Act 2011 (WHS Act)* to ensure fatigue does not create a risk to health and safety at work.

Table 1. Health and safety duties in relation to managing the risks of fatigue

Who	Duties
<p>AAD (section 19 WHS Act)</p>	<p>Has the primary duty to ensure, so far as is reasonably practicable, workers and other persons are not exposed to health and safety risks arising from the business or undertaking. This includes ensuring, so far as is reasonably practicable:</p> <ul style="list-style-type: none"> • provision and maintenance of a work environment without risks to health and safety • provision and maintenance of safe systems of work, and • monitoring the health of workers and the conditions at the workplace for the purpose of preventing illness or injury of workers arising from the conduct of the business or undertaking. <p>AAD’s duty is not removed by a worker’s preference for certain shift patterns for social reasons, their willingness to work extra hours or to come to work when fatigued. The AAD is required to adopt risk management strategies to manage the risks of fatigue in these circumstances.</p>
<p>Managers and Supervisors (section 27 WHS Act)</p>	<p>Supervisors must exercise due diligence in ensuring they and the AAD complies with its work health and safety duties in general, and specifically those related to fatigue management as defined in this standard. This includes taking reasonable steps to ensure that AAD uses appropriate resources and processes to manage the risks associated with fatigue.</p> <p>Supervisors are responsible for the preparation and execution of <u><i>AAD Work-related Fatigue Risk Assessment & Control Plans</i></u> as required by this standard.</p>
<p>AAD’s people</p>	<p>AAD’s people must take reasonable care for their own health and safety and must not adversely affect the health and safety of other persons. AAD’s people are expected to monitor their own levels of fatigue. In the event that a person is concerned about their level of fatigue, they must report their concern to their Supervisor.</p> <p>AAD’s people must comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to fatigue at the workplace – including this standard.</p> <p>No one shall undertake Safety Critical Tasks when they are fatigued.</p>

Appendix 2: Fatigue Management Quick Reference Guide

