



SYDNEY TRAMWAY MUSEUM

FATIGUE MANAGEMENT PROCEDURE

~~APRIL 2008~~ MARCH 2009

Fatigue Management Procedure

1. Purpose

To explain the process of reviewing STM's operations with regard to managing fatigue of the STM staff.

2. Scope

This plan applies across all of the STM's operations.

3. Responsibilities.

The Rail Safety Manager and the Operations Manager will review the STM operations on an annual basis.

STM personnel are responsible for notifying the OIC if they are fatigued.

4. References

Attendance Sheets (STM6070 & STM 6071)

Fatigue Policy (STM6039)

Operation Branch Attendance Sheet (STM6070)

ITSRR Guidelines Relating to the Management of Fatigue – 1st June 2004

National Transport Commission: Fatigue Management for Rail Safety Workers – Draft Guidelines
March 2007

Unionsafe Drug and Alcohol Policy, Information Sheets 6 and 6A.

5. Definitions

OIC – Officer in Charge

STM - Sydney Tramway Museum, a trading name of South Pacific Electric Railway Co-Operative Society Limited.

6. Actions

6.1 Traffic Staff

Staff make known to the Roster Clerk what dates they are available for a four (4) month period. Variations to that roster are made by arrangements with the Roster Clerk, the OIC for the day and other members of the Traffic staff.

The STM normal Traffic operating days are Wednesdays (6 hours) and Sundays (9 hours). During school holidays the Museum operates 7 days per week with the Christmas holidays operating for the last 3 weeks and the other holidays being 2 weeks each. The hours of the week day operations are 6 hours and the weekends being 9 hours. As these staff are volunteers, the length of the lunch break varies but is usually 30 minutes or more.

SYDNEY TRAMWAY MUSEUM

If, for any reason, the operation of a Traffic day (i.e. Special days) is more than 9-10 hours, a second shift is rostered so that the Traffic staff are not working for more than 9-10 hours.

During Traffic operations members work in the carrying out duties with other members of the Traffic staff and are observed by those other members and the OIC during the course of the day.

6.2 Other Staff

With regard to the other staff (i.e. the Workshop and Infrastructure staff), a normal day's work is 8 hours or less and normally on Wednesdays and Sundays. These staff also stop for morning tea, lunch and afternoon tea. As these staff are volunteers, the lengths of the breaks varies but are at least 15 minutes for morning and afternoon tea and 30 to 45 minutes for lunch. Some staff may work on other days if required for special occasions (e.g. the arrival of a tram to the site). The duration for these days is usually for a few hours, depending on the particular assignment.

6.3 Review of Operations

It is planned that the Rail Safety Manager and the Operations Manager will review of our operations on an annual basis to see if there may be an issue with the hours of operation with regard to fatigue of the STM staff. This review will look at the past twelve months of operation and the proposed schedule for the new year. The review will take place in January each year.

Also on Special days the Operations Manager and the Roster Clerk will review the operations to ensure that no one works excessive hours and that the Fatigue Policy is adhered to.

On school holidays, where the museum operates 7 days per week, the Operations Manager and the Roster Clerk will review the roster to ensure that no one is rostered to work more than 12 out of 14 consecutive operating days.

The OIC's and other Traffic staff are advised of the need to have breaks for fatigue management purposes, including, where necessary, modifications to tram services or rotation of duties and other needs to monitor their fatigue levels and that of other Traffic staff.

6.4 Certification of Fitness

The individual Traffic staff member certifies his/her fitness for duty when signing the Attendance Sheet.

The OIC observes and certifies the apparent fitness for duty, of all Traffic staff, on the Attendance Sheet.

6.5 Causes of Fatigue

When working at irregular times, one needs to balance many factors and activities to optimize ones performance and well-being. How long one can work and how much fatigue is accumulated depend on factors such as time of day, the type of work involved, your age, weather conditions, and prior sleep deprivation.

You can divide factors influencing fatigue into three categories:

- a) Work factors
 - i. Irregular schedules (variable time of day);
 - ii. Long periods of duty;
 - iii. On-call work;
 - iv. Crew proficiency;

SYDNEY TRAMWAY MUSEUM

- v. Workload, especially if very high or low;
 - vi. Secondary employment (e.g. paid employment before or after working at STM); and
 - vii. Travelling time to and from STM.
- b) Environmental factors
- i. Weather conditions and temperature;
 - ii. Lighting;
 - iii. Noise level; and
 - iv. Time of day.
- c) Personal factors
- i. Biological rhythms, especially for shift workers;
 - ii. Quantity and quality of sleep;
 - iii. Physical fitness and health including temporary illness, longer term sleep disorders or insomnia or the affects of medication;
 - iv. Age;
 - v. Family obligations; and
 - vi. Social and leisure activities.

6.6 Signs of Fatigue

The impact of fatigue factors can vary from person to person.

Most people who are fatigued do not realize how tired and impaired they are. We often disregard the warning signs of fatigue. The following list may help to realize when one is drowsy. If you experience one major indicator or three of the other indicators, getting more sleep should be a priority.

Major indicators of severe fatigue

- Eyes go out of focus or close for a moment
- Slowed, slurred speech
- Blurred vision, seeing mirages ahead
- Wandering and disconnected thoughts
- Constant yawning
- Head nodding
- Forgetting to communicate with crew
- Incorrect reading of equipment
- Giving wrong commands

Other indicators of severe fatigue

- Heavy and burning eyes
- Headaches, stomach aches
- Drowsiness
- Inattention to minor, but potentially important details
- Reduced morale and motivation
- Degraded mental abilities (including memory, decision-making, and perception)
- Increased distractibility and irritability
- Reluctance to initiate tasks and take command
- Reduced sense of humour
- Tendency to exaggerate
- Tendency to take unnecessary risks
- Degraded sense of balance

6.7 Affects of Fatigue

A person experiencing fatigue may be impaired over a range of skills and capacities which are essential to the safe performance of rail safety work. These impairments may diminish any or all of the following:

- Attention;
- Memory;
- Alertness;
- Reaction time;
- Problem solving ability;
- Mood; Attitude; and
- Physiological effects.

A person who is fatigued could have the same reflex response rate as a person who is intoxicated.

6.8 Responsibilities

Members have a duty to report for duty rested and fit for allocated duties.

In certifying fitness for duty on the Operation Branch Attendance Sheet (STM6070) a member is taken to be asserting that he/she is sufficiently rested and fit for duty in addition to other factors (e.g. health or intoxication, which might affect his/her fitness).

A simple self assessment tool is for the member to consider whether he/she has a minimum of 6 hours sleep in the 24 hours or 14 hours sleep in the 48 hours prior to the commencement of duties at STM.

So similarly a member's shift (i.e. from the time the member wakes up until the expected end of shift) should not exceed the amount of sleep obtained in the last 48 hours.

While working at STM, members are required to continually monitor the affects of fatigue and where these are evident, to be counter measured by consultation with their supervisor or where necessary, cease duties for the day.

Counter measures may include:

- Breaks;
- Caffeine; or
- Rotation of tasks or a nap.

Fatigue management is not an individual duty alone. All rail safety workers have an obligation to report signs or affects of fatigue in themselves or in others to their supervisor and to take appropriate action to ensure safety. Supervisors have a particular duty to monitor fatigue issues and to take account of reports or observations of fatigue in a "just culture"¹ environment so as to avoid unacceptable risks to safety.

6.9 Monitoring

This program will be monitored by STM through published rosters, compilations of hours worked by members, various Attendance Sheets (STM6070 & STM6071) and by consideration of incident reports identifying fatigue as a possible contributing factor.

▪ ¹ A just culture

- errors must be understood but wilful violations cannot be tolerated
- the workforce knows and agrees on what is acceptable and unacceptable