

1.0 Purpose

This Fatigue Management Plan is developed for Bombardier operating employees in GO Transit service in accordance with the requirements of the Work/Rest Rules for Rail Operating Employees, Section 6, and incorporates the guidance provided in the RAC Work/Rest Rules Interpretation Document dated June 29, 2005.

The goal of this plan is to minimize the employee fatigue and improve the overall task performance safety in accordance with Transport Canada rules and guidelines as well as the industry's best practices. The Plan should also aid employees in achieving a better quality of life by improving their work/rest balance.

The plan sets out the general framework within which Bombardier will address issues relating to employee fatigue in the workplace in the following areas:

- Roles and Responsibilities
- Application
- Employee Work Scheduling Practices
- Education and Training
- Alertness Strategies
- Rest Environment
- Work Environment
- Unusual Operating Conditions
- Specific Fatigue Management Plans
- Emergency Response
- Evaluation of the Plan

2.0 Work/Rest Rules

The Work/Rest Rules for Rail Operating Employees are intended to cover those employees physically involved in the operation or switching of trains, engines and equipment, in any class of service. Employee classifications that fall within the scope of these rules at Bombardier are:

- Commuter Train Operator (Locomotive Engineer, Conductor)

Any other person who performs the duties of an operating employee is deemed to be an operating employee while they are performing such duties. This includes Company Officers. Bombardier will review any potential situation with respect to work rest rules and fatigue management with the Union and Management for a clear policy in this regard, particularly in cases of emergency. Bombardier is a scheduled operation with assigned jobs, AM/PM window spareboards and scheduled days off.

As per section of the 5 and 6 of the Work Rest Rules for the Railway Operating Employees:

- The maximum continuous on-duty time for a single tour of duty is 12 hours
- The maximum combined on-duty time for more than one tour of duty, operating in any class of service, cannot exceed 18 hours between 'resets'
- The maximum combined duty time for a 7 day period cannot be more than 64 hours

The Rules outline that a specific fatigue management plan must be in place to address fatigue of operating employees in the following circumstances:

- Where continuous on-duty hours exceed 12 hours
- Where there are more than 64 hours on-duty in a 7 day period; and
- Unusual operating conditions

Bombardier Transportation has embedded the Work Rest Rules for Rail Operating Employees, as approved by Transport Canada order TC-O-0-50 and which was effective June 29, 2005 into their crew calling system which has been developed by JADE. The system will flag an operating employee who would be in violation of the rules if a call were given, or an employee who is going to be in violation on the next trip.

3.0 Risk Factors

After thoroughly examining the employee scheduling practices, the following risk factors have been identified as likely to increase operator impairment as a result of fatigue:

- 3.1 Working between hours of 0000 and 0600
- 3.2 Obtaining less than six hours of continuous sleep in a 24 hour period
- 3.3 Break times that do not permit reasonable recuperative times (<8hours)
- 3.4 Continuous work for over 5 hours without at least a 30 minute break

4.0 Mitigation Strategies

The risk factors identified in the previous section will be offset by the following countermeasures:

4.1 Education and Training

Bombardier recognizes that workplace fatigue can be minimized and one's quality of life can be positively impacted by promoting awareness of the physiological and psychological effects of fatigue and the personal counter-measures each individual can take in their daily lives. Bombardier will make such information available to employees through means such as educational workshops, informational aids and links to current information in the scientific community, such as the National Sleep Foundation.

Bombardier Transportation, provided training to all Commuter Train Operators on Lifestyle Management and Crew Resource Management to deal with fatigue management. The training is a standard railway course delivered to most freight railways where there are no fixed schedules and hours of work. This training addressed work rest issues such as cab awareness, proper rest, sleep management, diet, social and family strategies. In addition to the standard railway course, Bombardier Transportation will conduct annual educational sessions on:

- Effects of shift work on human body with various strategies to mitigate these effects
- Proper nutrition and lifestyle choices

As well as staff working from/at the crew facility will be:

- Educated in the importance of restorative sleep for operating employees to ensure minimum noise levels in and about sleeping quarters

4.2 Scheduling Practices

The Company and Union recognize the positive benefits that can be achieved through the introduction of various work/rest scheduling methods, such as work/rest schedules for regular employees, and assigned rest days for spareboards. Bombardier has also invested in a crew calling scheduling system to support these initiatives and track hours of service. The following practices are maintained through Bombardier's scheduling system to further minimize effects of fatigue on the workforce:

- Employees work a set schedule with assigned consecutive days off
- Spareboard employees have calling windows when they can be contacted:
 - The AM spareboard has a calling window between 00:00 and 12:00 where the employee can be called for any job as long as it begins before 12:00

- The PM spareboard has a calling window between 12:00 and 00:00 where the employee can be called for any job as long as it begins before 00:00

4.3 Alertness Strategies

There is a number of different ways of helping employees keep awake and alert during their shift. In safety-critical jobs alertness is key. Most of these strategies focus on preventing onset of fatigue during the time that employees are working by ensuring adequate rest was obtained prior to the beginning of the shift:

4.3.1 Napping

The functional, physiological, and recuperative benefits of naps have been recognized by employers and medical community alike and more systematically and scientifically confirmed for decades. The National Sleep Foundation identifies the benefits of napping as follows <http://ccn.aacnjournals.org/content/28/6/12.full> - ref-26:

- Restores alertness, directly following the nap and usually for some hours later
- Enhances performance
- Reduces mistakes and accidents
- Affords relaxation and rejuvenation

Napping during the split break during a shift would be beneficial to maintain alertness during the working hours.

4.3.2 Surveys

Conducting surveys to identify the needs of the employees is beneficial to employee engagement. Surveys allow the management team maintain active communication with the workforce and identify new strategies that could be implemented in order to better the overall lifestyle of the Bombardier Transportation employees. Employee surveys regarding the Fatigue Management Plan would also aid in:

- Uncovering Problems
- Noticing Trends
- Valuing Employee Satisfaction
- Identifying ideas for implementation

4.3.3 White Noise Machines and Blackout Blinds

When employees choose to have a nap during their split shift break it is important that they get a good rest and are able to fall asleep quickly. There are several different strategies to allow that to happen: white noise machines and blackout blinds.

- White Noise Machine

White noise machine works by combining all frequencies of sound and playing them at the same time. White noise machines draw out sounds from the outside environment and suppress noise so that a person can sleep without being bothered and waken up by external disturbances.

- Blackout blinds

Working a shift job forces human body to function outside if it natural circadian rhythm. No matter how long a person works at night, when they are greeted by the morning sunlight a signal is sent to their brain saying it is time to wake up. Therefore it is important to use blackout blinds in the sleeping facilities to block out any sunlight which would let workers get a good rest.

4.4 Rest Environments

Bombardier Transportation recognizes that a quality rest environment is an important aspect in ensuring proper restorative sleep is obtained and as such, is an effective fatigue counter-measure.

In order to ensure that fatigue will not be a problem, GO Transit provides rooms at the crew facility for those positions on split shifts that are required to be on duty very early in the morning at remote outpost locations. These rules are pursuant to Section 20 (1) of the Railway safety Act and RAC Circular 14, which will be applied in whole.

GO Transit provides and maintains rest facilities for operating crews at 123 Judson, and Bombardier has also resourced a third-party commercial hotel establishment for the balance of crews who cannot be accommodated at the Crew Centre.

5.0 Unusual Operating Conditions

The Work/Rest rules recognize that there will be times when emergency conditions require employees to be on-duty beyond the maximum duty times. Bombardier recognizes the importance of managing fatigue during emergencies and other service disruptions.

In the event of emergency situations that require employees to remain on-duty in excess of the maximum duty times of 12 hours for a single tour of duty or 18 hours for more than one tour of duty between resets on-duty, as well, if a maximum combined duty for a 7 day period is more than 64 hours, Bombardier will ensure that on-duty time is kept to the absolute minimum. When possible and it is evident that a tour of duty will exceed one of the above factors, a relief crew will be dispatched to relieve the crew on duty.

- **When continuous on-duty hours exceed 12 hours.** In the event this was to occur, Bombardier will follow the Mandatory Time Off Duty requirements under the Work Rest Rules.
- **When on-duty time falls under the 18 hour criteria.** In the event this was to occur, Bombardier will follow the Mandatory Time Off Duty requirements under the Work Rest Rules.
- **When there are more than 64 hours on-duty in a 7 day period.** Operating employees will not be called when they have reached their 64 hours in a 7 day period. The employee's clock will be required to have 24 hours to reset prior to the employee being available for work.
- **Emergency situations.** In the event this was to occur, Bombardier will attempt to relieve the crew as quickly as possible and follow the Mandatory Time Off Duty requirements under the Work Rest Rules.

In accordance with the Work/Rest Rules for Rail Operating Employees, Section 7, subsection 7.3, and RAC Work/Rest Rules Interpretation Document dated June 29, 2005., Bombardier shall file a report with the office of the Director General - Rail Safety, Transport Canada, as soon as possible, but not later than 48 hours following, any time an operating employee is on-duty in excess of either the 12 hours single tour maximum or 18 hour combined tour maximum under an emergency situation. Such report will note the reason(s) that excess emergency service was required, in accordance with the definition of Emergencies, as provided at Subsection 4, Definitions, of the Work/Rest Rules. Responsibility for filing such report will be by the Manager, Regulatory Affairs for the General Manager, Operations.

A further process will be established for the review of emergency situations at the local Health & Safety Committee level when deemed warranted, with opportunities for improved handling identified and communicated through the Health & Safety network as a best practice. Procedures will be developed to elevate issues to the General Manager, Operations for review and resolution where appropriate.

6.0 Roles and Responsibilities

The following parties have important roles and responsibilities in ensuring the success of the Fatigue Management Plan at Bombardier:

6.1 Senior Responsibilities

To lead the development and implementation of the Fatigue Management Plan. To ensure the ongoing focus and support of their organizations and resolve any problem areas in the implementation and sustainability of the process.

6.2 Management Responsibilities

Manager, Train Operations or Supervisors, will be required to govern their working hours accordingly and will, upon request of a Transport Canada Railway Inspector or Company Officer, provide a written record detailing all on-duty time performed in the 24 hour period immediately prior to the performance of such operating duties.

6.3 General Chairperson Responsibilities

Assist the Fatigue Management Planning process by working closely with Management and Human Resources to facilitate agreements or processes as required, and to provide insight into labour related issues.

6.4 Regulatory Affairs Responsibilities

Coordinate education and training programs, monitor and measure workplace safety, evaluate impact of policies and procedures on the working environment, coordinate risk assessments for operating changes pursuant to Safety Management System Regulations and work with Transport Canada and Union Leaders to provide further input and insight into the Circular's recommended practices and procedures.

6.5 Supervisor Responsibilities

Support the implementation and sustainability of the Fatigue Management Plan and make recommendations for continuous improvement.

6.6 Employee Responsibilities

Where a Company Officer, is deemed to be an operating employee, the on-duty times of the Company Officer, in the immediate preceding 24 hour period shall be taken into account in calculating maximum available on-duty times and mandatory off-duty times under the Work/Rest Rules.

To manage their rest within the time frames provided by the Work/Rest Rules in a way that will enable them to report for duty in a rested condition.

6.7 Fatigue Management Committee

The Fatigue Management Committee will be comprised of both company and union appointed representatives and will meet at least annually. The Committee will meet to review the Fatigue Management Plan and bring it in accordance with all the relevant rules, regulations and Guidelines as well as make improvements based on the ongoing risk assessments and employee feedback.

6.8 Union Responsibilities

Union must strive to be active participants in fatigue management forums covering the transportation sector, through involvement in such groups as the North American Rail Alertness Partnership (NARAP), AAR Work/Rest Committee and the RAC. Through these associations, railway companies, train service suppliers and their unions are able to keep current on scientific findings, research results and best practices in the area of fatigue management.

6.9 External Groups Responsibilities

The Employee Assistance Program (EAP) will continue to provide employees access to relevant counseling services, such as sleep and stress related issues.

7.0 Long Term Commitments

Maintaining a safe and reliable transit system is Bombardier's number one priority. Ontario families, businesses and the economy rely on the efficiency, dependability and environmental sustainability of the train service. However, the safety and well being of Bombardier employees is a cornerstone of the entire operation. Bombardier pledges to maintain a system that won't threaten the health of current and future employees and will strive for continuous improvement of the scheduling, working hours and a work/life balance to further help our employees overcome effects of fatigue. This section of the plan represents a long-term plan for the Operations Business Unit and outlines the long term goals that will be a part of continuous improvement to our system. As the GO transit system grows, more jobs are going to be added. In accordance with the GO Transit's 5 year plan, Bombardiers together with the Union are going to actively work towards:

- Reducing the number of hours in long haul assignments
- Reducing the number of split shift assignments
- Allowing all crews to report to the outposts to reduce amount of hours spent away from home
- Making available a drop box for employees who have questions regarding the Work/Rest Rules. Employees will be encouraged to submit their questions and will be connected with a Work/Rest Rules expert who will address these questions.

8.0 Evaluation

Bombardier Transportation constantly strives for continuous improvement. As a part of this initiative, an annual review will be conducted to evaluate the performance of this Fatigue Management Plan. The following criteria will be used to evaluate the Plan:

- Reduction in the number of hours in long haul assignments
- Reduction in the number of split shift assignments
- Number of workshops/educational sessions provided

9.0 Revisions and Recordkeeping

A review of the Work/Rest Rules will be incorporated into the rules mentoring process. Authority for the application of this Plan resides with the office of the General Manager, Operations, Bombardier. Further development, implementation and modification to this Plan will be accomplished in consultation with the Teamsters Canada Rail Conference Union or their delegates, in recognition of labor and management's joint responsibilities for establishing and maintaining working conditions that foster employee alertness.