

Position Description

Position: Senior Human Factors Specialists

Location: Safety and Environment

Date: September 2007

PURPOSE

Senior Human Factors Specialists are subject matter experts with a leadership role in the development and delivery of human factors activities for the Corporation. More specifically, Senior Human Factors Specialists:

- Provide specialist capability for the consideration of human performance and limitations within assigned projects.
- Promote the application of relevant human factors research within assigned projects and assists project management to identify opportunities for the application of such research.
- Support the implementation and application of the Just Culture.
- Conduct task analysis.
- Provide specialist input into training programs and competency standards, design of equipment and development of operational procedures.

The availability of professional human factors capability to RailCorp projects is designed to promote informed risk based decision making and the achievement of improved safety outcomes through the creation of an enhanced understanding of human performance, limitations and improved safety culture.

OPERATING ENVIRONMENT

Senior Human Factors Specialists are integral members of the Safety Risk Division; established for the purpose of providing professional 'system safety' capability to support of the Corporation's operations and projects. More generally, the role of the Safety Risk Division includes:

- The promotion of risk based decision making.
- The provision of internal consulting services (support, facilitation and advice)
- Provision of professional system safety capability to capital projects
- Ongoing development of the organisations integrated, risk based Safety Management System.

The Safety Risk Division is part of the Safety and Environment Group.

Senior Human Factors Specialists provide a conduit between the wider professional, specialist resources of the Safety Risk Division and projects through which safety, risk, human factors, OHS and Rail safety regulation knowledge can be transferred and leveraged.

The position provides the opportunity to positively influence the safety performance of the organisation and to promote achievement of the Corporation's objective of providing the highest possible standards of safety management for staff and all users of the NSW rail system.

REPORTING RELATIONSHIPS

Senior Human Factors Specialists have dual reporting lines. On professional and administrative matters, specialists report to the Principal Human Factors Adviser and on project specific matters, specialists report to the project management.

The Principal Human Factors Adviser reports to the General Manager Safety Risk.

KEY CONTACTS

Internal

- Principal Human Factors Adviser.
- Project Directors / Project Managers.
- Safety Risk Division team members.
- Project team members.
- Australian Rail Training (ART) personnel.
- Safety, operational and project management personnel.

External

- Independent Transport Safety and Reliability Regulator (ITSRR).
- Rail industry unions.
- Other rail operators.

CHALLENGES

Major challenges faced by the position are:

- Providing subject matter expertise for the application of human factors within the training, operational and project management environments.
- Developing organisational knowledge of human factors within the training, operational and project management environment
- Building sound relationships with training, operational and project management to ensure that they have the knowledge, understanding, capacity and support necessary to apply the appropriate human factor provisions of the Safety Management System

- Providing specialist human factors capability in the development of human factors related training programs / material and the subsequent delivery of such training.
- Developing organisational knowledge of the application of human factors in investigation of incidents and participating in key investigations.

SAFETY ACCOUNTABILITIES

- Refer to SMS-SR-04-0055- Accountabilities, Authorities and Accountabilities

FUNCTIONAL ACCOUNTABILITIES

- Provide specialist capability for the consideration of human performance and limitations within assigned projects
 - ❖ the purpose of which is to support project management in the making of risk based decisions and the achievement of improved safety outcomes for RailCorp
- Promote the application of relevant human factors research within assigned projects and assists project management to identify opportunities for the application of such research.
 - ❖ the purpose of which is to leverage the benefit of relevant research work for the benefit of the project and the achievement of improved safety outcomes for RailCorp
- Conduct human factors analysis activities required by the project in accordance with RailCorp methodology. Such activities may include but not limited to, task analysis, training needs analysis, equipment design guidance, procedure development and human error analysis.
 - ❖ the purpose of which is to provide an improved understanding of related needs that can be leveraged to achieved improved levels of human performance
- Prepare and / or review specialist human factors reports such as Human Factors Integration Plans that are applicable to assigned projects
 - ❖ the purpose of which is to demonstrate that effective consideration / application of relevant human factor performance issues within the project has been undertaken and to achieve compliance with the relevant provisions of the Safety Management System
- Provide specialist human factors consulting services to operational and project management personnel,
 - ❖ the purpose of which is to support and enable the achievement of effective risk based decision making and the delivery of sound business outcomes.
- Conduct Independent Verification of human factor reports / assessments that identify significant safety concerns,
 - ❖ the purpose of which is assure the consistent application of the relevant provisions of the RailCorp Safety Management System, to verify the suitability of the methodology used and establish the validity of the conclusions and recommendations made.

- Provide guided learning, mentoring and peer support to operational and project personnel in relation to human factors.
 - ❖ the purpose of which is to progressively develop the human factors knowledge and competencies of this key management group personnel, thereby enabling improved risk based decision making.

SELECTION CRITERIA

- Graduate qualifications in a relevant discipline.
- More than 5 years demonstrated professional experience and diverse knowledge of human factors gained at a senior level within or as a consultant to, an organisation operating in a complex, high reliability environment.
- Demonstrated ability in the preparation of human factors assessment reports and the application of human factors tools and methodologies within a training, operational or project environment.
- Demonstrated ability to provide effective facilitation and representation of human factors at hazard / risk workshops.
- Demonstrated capability for the application of human factors research in a complex, high reliability organisation.
- Demonstrated ability to transfer human factors knowledge to operational and / or project management personnel and to provide effective training, coaching and mentoring to such personnel.
- Strong, communication, consultation and facilitation skills.

Desirable

- Post Graduate qualifications (Masters, PhD) in a relevant discipline or in Applied Psychology.
- Experience in the rail environment and related technologies such as Automatic Train Protection systems, rolling stock design etc.
- Demonstrated experience in the conduct of (risk based) training needs analysis.
- Knowledge of and / or and experience in the development and delivery of Crew Resource Management, Threat and Error Management and / or Behavioural Marker programs.
- Demonstrated understanding of system safety, operational risk and safety change management.
- Membership of relevant professional association(s).