

**"To err is human; to blame it on the other guy is even more human".**

**- B. Goddard**

Regardless of industry type or sector, accident statistics appear to be dominated by the contribution of human error. This is hardly surprising since humans are involved in the design, construction, maintenance, operation and management of complex socio-technical systems across any safety critical industry such as aviation, surface transportation, mining, construction, oil and gas, power and water utilities, essential and emergency services and healthcare service delivery.



While human error is a normal part of our human makeup, the consequences of errors in any industry can be disastrous and the subject of public outrage, exhaustive inquiries and drawn out legal action. The cost of human error in the workplace is also considerable:

- BP estimated that the Deepwater Horizon oil spill resulted in costs that exceeded USD \$40 billion.
- According to the International Air Transport Association (IATA), airports have estimated that ramp accidents cost over USD \$10 billion each year.
- The Flight Safety Foundation report that over 38,000 commercial aircraft land in an unstable condition every year, causing potential maintenance and inspection delays.
- In healthcare the direct medical costs of preventable clinical incidents arising from human error, have been estimated at \$2 billion each year in Australia.

This highly practical 5-day human factors and error management program will equip participants with a sound understanding of contemporary human factors issues facing any safety critical industry. Whether you are a safety manager, accident investigator or CEO, our program will provide you with an opportunity to understand the cause and consequences of human error and assist you with identifying practical strategies to design error tolerant solutions. Several practical case studies presented throughout will reinforce generic human factors issues and management solutions across various industries. A comprehensive suite of practical tools, templates and resources are provided to take back and apply in your own workplace.

#### **WHAT YOU WILL LEARN?**

Upon completion of this course, you will be able to:

- Understand the evolution of human factors, its current scope and how it may contribute to addressing future challenges in the modern workplace.

- Understand the relationship between human factors and human reliability.
- Understand human error within the context of workplace event investigations.
- Address human performance limitations that may impact effective decision making and increase the probability of error occurrence.
- Understand the impact of design on human performance and the pros and cons of automation and advanced technology.
- Identify social and cultural influences that may shape human performance, including the practical application of a fair and just culture approach to consequence management.
- Adopt a proactive human factors analysis approach to identify the triggers that may lead to a potential workplace accident and fix conditions before they cause problems.
- Incorporate practical proactive error management strategies within the workplace.

#### **WHAT IS COVERED?**

- Workshop Introduction & Overview:
  - Course overview, key terms and definitions
  - Benefits of effective human factors management
- Human Factors: Past, Present and Future:
  - Human factors vs. human error
  - The human factors contribution to workplace accidents
  - The origins of human factors
  - Human factors programs today and the future
  - Evidence for the success of human factors
- Understanding Human Error:
  - Principles of Human Error
  - Unintended and intended actions
  - The role of violations
  - Do errors "cause" accidents?
  - Error and violation producing conditions
  - Human compensatory ability
  - A human factors framework



- Human Performance Capabilities & Limitations:
  - Characteristics of human performance
  - Effects of Stress
  - Fatigue Management
  - Situational Awareness
  - Decision Making
  - Managing human performance
- Human Factors & Systems Safety:
  - A human factors approach to event investigation
  - The Reason Model of Organisational Accidents
  - Developing error tolerance

- Design and Automation:
  - Evolution of advanced technology and design
  - Automation - positives and negatives
  - Human-centered design principles
- Social and Group Influences on performance:
  - Social influences - group pressure and conformity
  - Barriers to effective communication
  - Strategies to improve team performance
- Error Management:
  - Managing unintended actions (slips & lapses)
  - Managing intended actions (mistakes & violations)
  - Error management strategies
- Culture & Safety Management
  - National, Organisational and Professional cultures
  - Essential ingredients of safety culture
  - Fair and Just culture
  - Safety culture maturity
- Health, Well-Being and Support Programs
  - Physical and Mental Fitness to Work
  - Personal, Organisational and Industry wide strategies to support safety critical workers
- Major Course Exercise
  - A practical approach to proactive human factors identification and management

## WHO SHOULD ATTEND?

This training program is designed for those individuals seeking a comprehensive understanding of applied human factors with the provision of practical, hands on proven tools and strategies. Expected participants include:

- Executives and Senior Managers
- Team leaders and supervisors
- Human Resource Managers
- Environmental managers
- WHS and injury management personnel
- Safety Investigators/Auditors
- Safety Regulators
- Quality, risk, compliance and assurance managers

## TESTIMONIALS

*"Following the course, I have a better understanding of how human error can be managed in the workplace".*  
Safety Manager, Sandvik Mining, Stockholm

*"Good use of real and thought-provoking case studies by the instructor".*  
Assistance Vice President, SBS Transit Rail, Singapore

## FEE

USD\$2,050 p/p (AUS/NZ); USD\$2,300 p/p (Singapore, UAE & UK)

## DISCOUNT

- Group Discount – Three or more participants registered for the same course, from the same organisation and billing source:
  - Three to six: 10%; Seven or more: 20%

## CLIENT FOCUSED PROGRAMS

Contact us at [www.globalsafetytrainers.com](http://www.globalsafetytrainers.com) or send an email to [admin@gstrainers.com](mailto:admin@gstrainers.com) if you would like more information on how this program can be tailored to your specific organisation or industry requirements.

## DURATION

5 days

## COURSE LOCATIONS

Auckland, Dubai, London, Perth & Singapore

## LEARNING ACTIVITIES

- Interactive presentations
- Team Based Case Study work
- Provision of USB drive with comprehensive human factors, tools, resources, templates and checklists that can be applied back in the workplace

## COURSE FACILITATORS



**Brent Hayward** is the Managing Director of Dédale Asia Pacific. He is a professionally qualified and Registered Psychologist, with more than 35 years' experience in the provision of services and advice to management within the Aviation industry. Previous employers include the RAAF Psychology Service, Australian Airlines and Qantas Airways.

Brent has developed and delivered specialist training in aviation psychology, human factors, CRM, and aviation safety Investigation methods for a range of organisations in Australia, Africa, Asia, Europe, the Middle East, the Pacific, & North and South America. This has included human factors and safety investigation training seminars and workshops conducted on behalf of the European Association for Aviation Psychology, EUROCONTROL and for the Singapore Aviation Academy. He has had considerable experience in the Investigation of human factors aspects of both military and civil aircraft accidents and incidents. Brent also has applied human factors and safety management experience within a variety of other industries such as rail, energy and healthcare.



**Dr Graham Edkins** is a qualified Organisational Psychologist and internationally regarded human factors and safety management systems expert with broad experience as a transport safety regulator, group safety manager and independent investigator. As a former Air Safety Investigator (Human Performance) with the Australian Transport Safety Bureau (ATSB),

Manager Human Factors for Qantas Airways, Executive Director of Public Transport Safety Victoria and Group General Manager of the Civil Aviation Safety Authority (CASA), he brings a wealth of experience and detailed knowledge of contemporary safety regulation, major event investigation and human error management practices. Dr Edkins is regularly retained as an independent safety investigator and human factors expert witness for various civil and criminal matters and provides ongoing safety and human error management coaching services to several company boards and executives. He has successfully designed and delivered customised human factors and error management training programs globally to a variety of industries, organisations and cultures.