

Our defence clients

We work with national and international companies across a range of industries, but our particular focus is defence. Our defence clients include:

- ▶ Aerosystems International
- ▶ Aspire Consulting Ltd
- ▶ Atomic Weapons Establishment
- ▶ BAE Systems
- ▶ Babcock Nuclear Systems
- ▶ BMT Group
- ▶ Devonport Royal Dockyard Ltd
- ▶ EDS Ltd
- ▶ Matra BAE Dynamics
- ▶ Ricardo Vehicle Engineering
- ▶ Serco Group
- ▶ Saab Bofors Dynamics
- ▶ THALES Communications Ltd
- ▶ Vickers Defence Systems
- ▶ VT Group

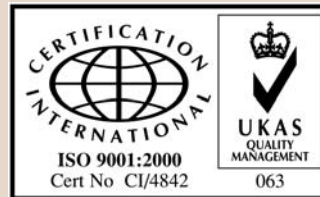
Our commitment

- ▶ To provide cost-effective recommendations for improving productivity, safety and well being
- ▶ To present our findings in clear and jargon-free reports accessible to all readers
- ▶ To use our in-house software for rapid and accurate solutions
- ▶ To improve continually the quality of our services



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Ergonomics Society
Registered Consultancy

InterAction *of Bath Ltd*

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Safety Case Development

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Why do safety?

Safe organisations, systems and products save lives and avoid injuries.

- ▶ Safety makes good financial sense
- ▶ Safety is a legal responsibility of the employer
- ▶ Safety cases are often required by procurement standards and procedures

Safety case development

Defence procurement contracts often include the development of a safety case to demonstrate adherence to specified safety standards. We can provide a full complement of services, including:

- ▶ Preliminary Hazard Analysis
- ▶ HAZOPS
- ▶ Occupational Health and Safety Analysis
- ▶ Environmental Impact Analysis
- ▶ Safety case reporting in accordance with ASEMS, POSMS and POEMS
- ▶ Compliance with Defence Standard 00-56
- ▶ Hazard log management with HARMS, Cassandra or our own in-house software

InterRisk

Safety-related standards

The format of safety case reports and hazard logs is often mandated by particular industry standards. For example, in the defence sector, safety cases must usually accord with Def Stan 00-56 and JSP520. The nuclear and rail sectors have their own standards..

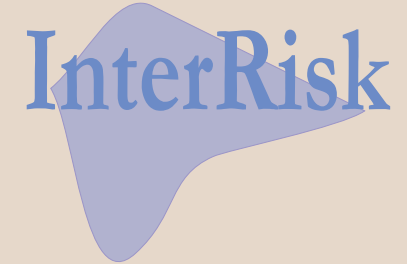
At *InterAction of Bath*, we are familiar with the governing standards across the major industry sectors and this guarantees the efficiency and accuracy of our work.

Human reliability assessment

HRA is a structured approach to identifying potential human error and taking measures to prevent costly or injurious events.

We offer the following services, based on the use of proven tools to identify, quantify and mitigate potential errors:

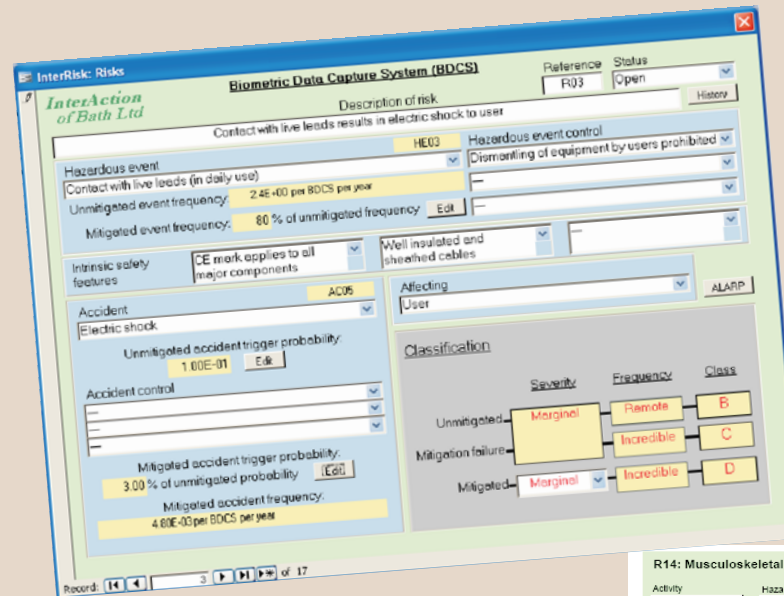
- ▶ Hierarchical task analysis using our unique tool *InterWork™*
- ▶ Development of fault trees and event trees
- ▶ Systematic identification of potential errors and violations
- ▶ Quantification of error probability
- ▶ Analysis of error reducing mechanisms



InterRisk

One of the most important parts of a safety case is the Hazard Log. This contains the data on which the arguments in the Safety Case are based. We have developed a tool called *InterRisk* for storing details of hazards, accidents, controls and so on. It is suitable for developing small safety cases and its high usability means that very little user training is required.

- ▶ It is based on Microsoft Access database technology
- ▶ Data are entered through forms (such as the Risk form shown here)
- ▶ Three risk classes are automatically calculated for each risk
- ▶ It meets the requirements of Def Stan 00-56
- ▶ It offers high usability and flexibility
- ▶ Data entry logs provide full traceability



InterRisk data reports

The safety data can be presented in a large variety of ways. The 'Accident model' report (shown on the right) illustrates the entire fault sequence from Activity to Accident.

InterRisk also includes reports showing:

- ▶ Risks
- ▶ Hazardous Events
- ▶ Risks (with ALARP statement)
- ▶ Accidents by category
- ▶ Mitigated risks
- ▶ ...and so on

