

# InterAction of Bath Ltd

Human Performance Engineering



Ergonomics Society  
Registered Consultancy

42 Milsom St, Bath, BA1 1DY  
Tel +44 (0)1225 482882  
www.interactionofbath.com  
info@ergonomics.uk.net

HUMAN FACTORS  
ERGONOMICS  
HUMAN FACTORS INTEGRATION  
SAFETY CASE MANAGEMENT  
HUMAN RELIABILITY ASSESSMENT  
USABILITY ENHANCEMENT  
WORKSTATION DESIGN  
WORKSPACE DESIGN  
MANUAL HANDLING ASSESSMENT  
USER-INTERFACE DESIGN  
CONTROL ROOM DESIGN



## What is Human Factors?

Human Factors, also known as Ergonomics, User Centred Design or Human Performance Engineering, describes a technical and analytical approach to harmonising people, equipment and the work environment.

Human Factors offers:

- More efficient working practices
- Safer systems and equipment
- Healthier environments
- Fewer musculoskeletal injuries
- Improved staff morale

## Safety cases

Safety cases are often a requirement of contract in engineering projects, requiring close adherence to specified standards. We can provide a full complement of services, including:

- Preliminary Hazard Analysis
- System Hazard Analysis
- Occupational Health and Safety Analysis
- Safety case development
- Compliance with Defence Standard 00-56
- Hazard log management with *HARMS*, *Cassandra* or our own in-house software, *InterRisk*

## Manual handling

The Manual Handling Operations Regulations place duties on employers within all industries. We can deliver:

- Clear and concise reports with practical recommendations for complying with the Regulations
- Training in safe lifting techniques
- Rapid and accurate assessment of manual handling tasks using our interactive software package *SafeLift*, which is designed around the Regulations

## Workstation and workspace design

We can advise on the design of workstations and workspaces to ensure maximum efficiency and employee well-being. We offer the following services:

- Link analysis to optimise the ease of movement of material and personnel
- Postural analysis to ensure correct equipment design
- Design according to relevant civilian and military standards, including ISO9241 for display screens
- Scale and full-size mock-ups
- User trials



## Usability and human-computer interfaces

The usability of interfaces is essential for user satisfaction. And it can be critical for safety and efficiency. Over twenty years, we have developed expertise in the evaluation of interfaces at all stages in the project cycle, from inception to final product, and across a diversity of applications.

We make practical and pragmatic recommendations which take account of the users' characteristics, the tools available and the environment of use.



## Human reliability assessment

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

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

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

