



FERGUS MCCULLOCH CEng MIMechE

Mechanical Engineer	Brookes Bell Safety at Sea 2nd Floor 280 St. Vincent Street Glasgow G2 5RL
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Nationality	British
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An experienced and qualified Chartered Engineer specialising in safety, reliability and risk management with 15 years of Engineering Consultancy experience in the marine, renewables, nuclear, submarines, offshore and rail sectors. Skills include: HAZID/HAZOP planning and chair, quantitative and qualitative risk assessment, safety management systems and safety cases, leadership and project management, business generation.

EDUCATION AND QUALIFICATIONS

1990 - 1994 BEng (Hons) Mechanical Engineering. IMechE prize for outstanding project work.
University of Aberdeen

1996 to 1997 Postgraduate Diploma in Safety Engineering and Risk Management, full-time course funded through EPSRC grant.
University of Aberdeen

Chartered Engineer and Member of the Institution of Mechanical Engineers

EXPERIENCE

November 2010 – Present

**Brookes Bell Safety at Sea Limited
Mechanical Engineer**

Safety management systems for innovative designs
Safe Manning studies
Safe Return to Port Assessment
Risk modeling and design optimization.
HAZID and HAZOP design, planning and facilitation.
Emergency shutdown systems requirements specification.
ALARP justification and optioneering.
Escape and evacuation analysis.

Subject areas:

Polar operations, offshore substation platforms, cruise vessels, marine evacuation systems, ro-pax ferries, man overboard systems, special purpose ships.

October 2008 – February 2010

**McCulloch Risk Services Limited
Director**

Consultancy company set-up, management and administration.
Safety-critical corrective actions development.
HAZID planning and facilitation.
Independent safety review.

Subject areas:

Light rail systems, nuclear power stations, J-lay vessel

December 2000 – October 2008

**Frazer-Nash Consultancy Limited
Senior Consultant and Team Leader**

Management and leadership, including business and recruitment strategy, team development, marketing and project management.
Safety case documentation author. Reliability assessment for prototype testing.
Safety case management.

Subject areas:

Nuclear submarines, marine propulsion systems, wave-powered energy converters, nuclear power stations.

- 2000 to 2005** **Consultant**
- Project management, independent safety auditing, reliability management, safety certification management, risk modeling, root cause failure analysis, ALARP optioneering, fire and evacuation modeling, FMECA.
- Subject areas:
Rolling stock design, new build, refurbishment and modification; nuclear submarines, nuclear power stations, marine gas turbines.
- September 1999 –** **Alstom Transport Limited, Birmingham, UK**
December 2000 **Project Reliability Engineer**
- Development and introduction of a Failure reporting and Corrective Action System (FRACAS) for a new fleet of high speed tilting trains.
Management of reliability prediction for a new fleet of high speed tilting trains.
Managed Client interfaces to advice and lead their reliability analysis.
Advised system designers and suppliers on reliability and maintainability best practice, including attendance at supplier factory tests.
- February 1997 –** **Halliburton Brown and Root**
August 1997 **Project Safety Engineer**
- Graduate development position including safety work on various projects. Responsibilities included managing hazard-log close-outs, HAZOP secretary, participation in HAZAN and HAZID exercises.
- June 1996 -** **Schlumberger Wireline and Testing**
February 1997 **Health, Safety and Environment Co-ordinator**
- Industrial placement on Safety Engineering and risk Management Diploma course, then continued as staff member. Updating safety and Quality management systems on three sites to prepare for ISRS and IQRS audits. Promoting awareness of safety in the workforce, focusing on the reporting of “near miss” incidents. Providing work instructions for safe systems of work.