

Curriculum Vitae: Eur Ing Thomas Sproston MEng (Hons) PGCert CEng MIMechE

Positions held on behalf of U10Eng.:

Product Safety Engineer for BAE Systems on behalf of Outsource UK Ltd.
(October 2013 - Present)

Accountable to the Team Leader. Responsible for assessing system design concepts for single points of failure and general resistance to foreseeable multiple failure trains in support of overall design of complex Naval Submarine product. Provides structure to complex safety claims and produces the beginnings of safety arguments for complex, interdependent systems. Provides advice to system designers on how to increase robustness where weaknesses are identified.

Key Skills Gained

Naval and UK Defence Regulation
IEC61508 – Functional Safety
Programme Management
Document Review and Acceptance

Key Tools Used

Hazard Identification
Hazard Assessment
Integrity Requirements – Categorisation / Classification (SIL Determination)
Safety Functional Requirements
Qualitative Design Assessment
Bowtie Analysis
Fault Schedule

Note, Thomas held this post from May 2013 to September on behalf of Kingsley Hamilton Management. The contract was transferred to U10Eng. in October 2013.

September 2012 to May 2013 – Bombardier Transportation UK Ltd. (through Kingsley Hamilton Management Ltd.)

Product Safety and Reliability Engineer

Accountable to the Team Leader. Responsible for monitoring product safety and reliability performance and proactive performance management for a product being entered into revenue service. Mainstay of work involves reliability modelling, root cause analysis and supplier interfacing. Safety support as independent reviewer of first line RCA documentation.

Key Skills Gained

Rail Systems Regulation
Interface Management
Supplier Management

Key Tools Used

Statistical Modelling
Root Cause Analysis – 8D, 5 Whys, Ishikawa
Fault Tree Analysis
Qualitative Design Review
Reliability Testing
FMECA
FRACAS
Modification Design and Approval

Registered Office: Unit 42 Westley Grange, West Avenue, Wigston, Leicestershire, LE18 2FB
Registered in England and Wales,
Company Registration Number – 08510318; VAT Registration Number – 172 0476 21

Directors: T Sproston

t: 0116 319 0970; e: u10eng@u10eng.co.uk; w: <http://www.u10eng.co.uk>

September 2007 to September 2012 – Rolls Royce plc.

Nuclear Safety Engineer

Accountable to the Team Leader and Programme Manager. Responsible for scoping, delivery and execution of product safety assessments and production of associated documentation on a product in revenue service.

Key Skills Gained

Nuclear and UK Defence Regulation
Hazard Identification
Hazard Assessment
Document Production
Project Planning
Team Leadership - Technical
Process Improvement
Deterministic Safety

Key Tools Used

ALARP / SFAIRP
Bowtie Analysis
Safety Functional Requirements Derivation
Categorisation / Classification
Fault Schedule
Hazard Log

Controls Development Engineer

Accountable to the Development Programme Manager as the sole representative for Control Systems. Responsible for specification of engine build and strip standards, management of relevant experiments, physical logistics and management of test arisings for hardware within responsibility. On call as the only postholder.

Key Skills Gained

Programme Management
Project Planning - Engine Build, Strip / Rework and Experiments
Team Leadership - Influence
Interface Management
Material Planning
Time Management – “Drop Everything for test issues”

Key Tools Used

Rolls-Royce Proprietary Operating Procedures
Bespoke Computer Software – VRS and Mainframe
“Hands, Feet and Development Team Bicycle”

Controls Safety / Reliability Engineer

Accountable to the Chief of Safety / Reliability. Responsible for development and deployment of novel methods for gaining and maintaining product reliability on a new product development project. Also provide advice to in-service product teams as required in either Safety / Reliability capacity.

Key Skills Gained

Aeroengine Certification
Qualitative Reliability Methods
Quantitative Reliability Assessment
Method Development
Reliability Testing – ALT and HAT
Reliability Cases (Buildup of Claim)
Support to Engineering Teams and External Suppliers
Reliability Improvement
Method Subject Matter Expert

Key Tools Used

Design FMEA
Reliability Block Diagrams
Fault Tree Analysis / Event Tree Analysis
Highly Accelerated Testing
Reliability Declarations – Unit and Systems
Weibull Analysis
Test, Analyse and Fix
Design Review – Single Point Failures

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2006 to 2007 – Intec PC Ltd. (Multiple temporary contracts)

Technician

Accountable to the Managing Director. Responsible for production of the company's intrinsically safe PC line, the ExPC. Post involves building electrical subsystems from components, assembly of PCs and Intrinsically safe units from subsystems and pass-off testing.

Academic

2010 – Liverpool John Moores University : Postgraduate Certificate in Risk and Safety Management

2003 to 2007 – Lancaster University : Master of Mechanical Engineering

Professional

2012 – Engineering Council UK (through IMechE : Chartered Engineer

2012 – FEANI : European Engineer

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