



Certificate of Training

This is to certify that:

Jonathan Payne

.....

attended an ESC 2 day training course:

“Overview of IEC 61508 Edition 2 and IEC 61511: Functional safety of electrical, electronic, & programmable electronic safety-related systems”.

held at Marathon House, Aberdeen on 22 / 23 June 2011

Topics covered

Fundamentals of functional safety

- What is functional safety?
- IEC 61508 family of standards
- Technology/devices applications
- Strategy to achieve functional safety
- Safety functions
- Safe & Dangerous failures
- Safety Integrity Levels
- Target failure measures
- Modes of operation
- Overall Design Strategy
- Allocation of safety functions
- Compliance model

Framework for the design requirements

- Hardware & Systematic Safety Integrity
- Systematic Capability
- Safe Failure Fraction
- Hardware Fault Tolerance
- Framework for the Design requirements
 - ✓ Hardware & Systematic Safety Integrity
 - ✓ Systematic Capability
- Safety Manual

SIL determination

- Quantitative & qualitative approaches

Functional safety assurance measures

- Functional Safety Assessment
- Functional Safety Audits
- Verification and validation

Management of functional safety

- Objectives & key requirements
- Responsibilities (organisational & personal)
- Procedures to be developed
- Competence of responsible persons

K. Simpson

Managing Director: ESC Ltd
Member: IEC Maintenance Team 61508: IEC61511
(Certificate A120_CT_007)