

T6A Symposium 2024 Guidance in Functional Safety Compliance

Milner York Hotel • York • UK • Wednesday the 20th of November

Our T6A Symposium will be held at *The Milner York* Hotel (formerly *The Principal York*), Station Road, York YO24 1AA (in the United Kingdom) on Wednesday the 20th of November 2024 (proceed to the *Oak Room*).

We wish our T6A Symposium to be both a member and an open mechanism for functional safety information sharing and networking. Please do join us (please inform us if you now cannot). Our T6A Symposium is primarily for the benefit of members, but we have also made it open to other functional safety practitioners.

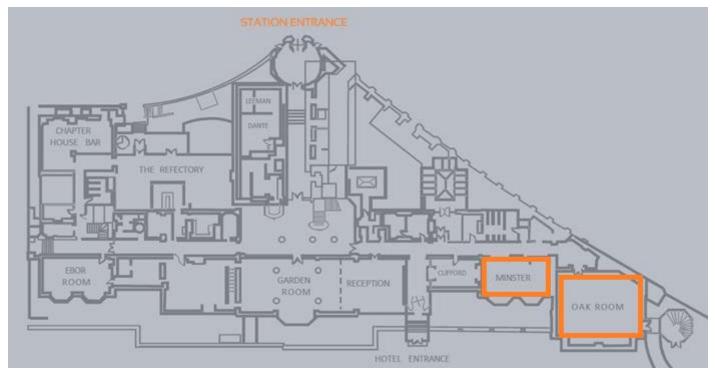
Please bring this PDF document along as your guide! To support you through the day, we have added an acronym list at the back of the document to aid understanding for some of the presentation / workshop material.

Getting There / Staying There:

Web: <u>www.61508.org</u> / Email: <u>info@61508.org</u>

The Milner York Hotel (formerly The Principal York) is right next to York Railway Station which is on the East Coast Mainline. You can walk out of the station and right up the steps into the hotel. This makes rail travel very easy for the symposium. Rail travel is our recommended means of transport for both environmental and ease of use reasons.

If you do want to travel by car to our T6A Symposium, *The Milner York Hotel* does have some limited chargeable car parking (the costs for car parking are NOT included in the event). Please remember to register your car registration at hotel reception. Alternative chargeable car parks are scattered around York Railway Station including York Commuter Parking (long stay) on the other side of the rail lines. *The Milner York Hotel* can be easily accessed by crossing the bridge inside the railway station (access through station).



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T6A Symposium Outline Agenda:

Slot	Start Time	Paper Stream (Oak Room)	Workshop Stream (Minster Room)	Finish Time
			•	11111311 1111110
	08:30	*** Symposium Registration Desk Opens ***		N/A
1	09:30	Slot 1: Welcome Chair of <i>The 61508 Association</i> (T6A)		09:40 (10)
2	09:40	Slot 2: Todd-Parry Keynote: How Funct	tional Safety has and is impacting the	10:00 (20)
		modern world Colin Easton – ProSalus Safety Consultants		
3	10:00	Slot 3: T6A and TCSA History and Princ		10:20 (20)
	10.00	Peter Brown – Lloyd's Register / Andrew Derbyshire		10.50 (20)
4	10:20	Slot 4: The Importance of Functional So Andrew Derbyshire – ERM / Paul Reeve – SILMETRI		10:50 (30)
-	10:50	Comfort Break & Networking (Oak Roo	om)	11:20 (30)
5	11:20	Slot A-5: Digitalise Functional Safety,	Slot B-5: Functional Safety and the	11:50 (30)
		Reduce the Burden	Importance of Competence	
		Ian Dolan & Chris Parr – Sella Controls	Damian Marsden – ERM	
6	11:55	Slot A-6: Concerning Assumptions for	Slot B-6: CASS 61508 & 62061	12:25 (30)
		Cyber Security and Functional Safety	Workshop	
		Paulo Oliveira – Dekra	Peter Brown – Lloyd's Register	
-	12:25	Lunch Break & Networking (Restaurant		13:25 (60)
7	13:25	Slot A-7: Functional Safety and	Slot B-7: CASS 61511 Workshop	13:55 (30)
		Artificial Intelligence (AI)	Andrew Derbyshire – ERM	
		Chris Hume – UKAEA RACE Jon Wiggins – 1981 Consultants	Deepti Chauhan – Sensia	
8	14:00	Slot A-8: <i>Black Box Testing for</i>		14:30 (30)
	14.00	Functional Safety		14.50 (50)
		Dr. Silke Kuball – EDF Energy		
9	14:35	Slot A-9: Machinery Functional	Slot B-9: Functional Safety Tool	15:05 (30)
		Safety with IEC 62061 and ISO 13849	Qualification	(,
		Paul Reeve – SILMETRIC	Hassan El Sayed – UL Solutions	
-	15:05	Short Comfort Break (Oak Room)		15:25 (20)
10	15:25	Slot A-10: The Importance of Alarms	Slot B-10: SIL Calculations and use of	15:55 (30)
		for Functional Safety	IEC 61508 Part 6	
		Karl Ainscough-Gates – Fichtner Consulting	Ian Dolan – Sella Controls	
11	16:00	Slot A-11: Functional Safety and	Slot B-11: Discussion on Difference	16:30 (30)
		Communication Links	Between ISO 26262 and IEC 61508	
	16.20	Peter Brown – Lloyd's Register	David Ward – HORIBA MIRA	47.20 (60)
-	16:30	Close / Informal Post Symposium Questi	on / Discussion	17:30 (60)

The above agenda is subject to change, at any time, by *The 61508 Association*. Please see our website for the latest agenda. NOTE: All combined sessions are held in the "Oak Room", or Paper Stream, location.

We are looking forward to meeting you (latest agenda is here)! https://61508.org/t6a-symposium/

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Symposium Acronyms:

Al	Artificial Intelligence
AHWG	Ad-hoc Working Group
AP	Application Program
API	Application Programming Interface
APL	Advanced Physical Layer
ASi	Actuator Sensor interface
BS	British Standard
BSI	British Standards Institution
CASS	Conformity Assessment for Safety-related Systems
CCF	Common Cause Failure
CM	Configuration Management
CMS	Competence Management System
COMAH	Control of Major Accident Hazard Regulations
CRC	Cyclic Redundancy Check
CSMA/CA	Carrier Sense Multiple Access with Collision Avoidance
CSMA/CD	Carrier Sense Multiple Access with Collision Detection
CySec	Cyber Security
DC	Diagnostic Coverage
DTI	Department of Trade and Industry (was Department for Business, Energy & Industrial Strategy)
EFT	Enhanced Functional Testing
EMI	Electro Magnetic Interference
EN	European Norm (Europäische Norm / European Standard)
EPC	Engineering, Procurement, and Construction
EUC	Equipment Under Control
EWS	Engineering Workstation
E/E/PE	Electrical, Electronic and Programmable Electronic
FMEA	Failure Mode and Effect Analysis
FMEDA	Failure Mode, Effect and Diagnostic Analysis
FS	Functional Safety
FSA	Functional Safety Assessment
FSM	Functional Safety Assessment Functional Safety Management
FVL	Full Variability Language (FVL)
HART	
	Highway Addressable Remote Transducer (protocol) Hazard and Operability Study
HAZOP	Human Machine Interface
HMI	
HR	Highly Recommended
HSE	Health and Safety Executive (UK)
HSEQ	Health, Safety, Environmental, and Quality
HW (or H/W)	Hardware
H&RA	Hazard & Risk Analysis
1/0	Input / Output
ICT	Information and Communications Technology
IP	Internet Protocol
IT	Information Technology
LAN	Local Area Network
LOPA	Layer of Protection Analysis
LVL	Limited Variability Language (Software)
L&D	Learning & Development
KPI	Key Performance Indicator
NASA	National Aeronautics and Space Administration
MTTF	Mean Time to Fail
OEM	Original Equipment Manufacturer

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* *	Symposium Agenda & Guide		
OLE	Object Linking and Embedding		
OPC	OLE for Process Control		
OT	Operational Technology		
PDU	Protocol Data Unit		
PFD	Probability of Dangerous Failure on Demand		
PFH	Probability of Failure per Hour (average)		
PIU	Proven in Use		
PL	Performance Level (see ISO 13849)		
PLC	Programmable Logic Controller		
PoDL	Power over Dataline		
PoE	Power over Ethernet		
PTC	Proof Test Coverage		
PUWER	Provision and Use of Work Equipment Regulations (UK)		
QMS	Quality Management System		
RFSA	Registered Functional Safety Assessor		
ROC	Rate of Change		
RTE	Real-time Ethernet		
SAT	Site Acceptance Test		
SCADA	Supervisory Control and Data Acquisition		
SCR	Safety Case Regulations (UK)		
SCS	Safety-related Control System (see IEC 62061)		
SDS	Safety Design Specification		
SF	Safety Function		
SFF	Safe Failure Fraction		
SIF	Safety Instrumented Function		
SIL	Safety Integrity Level		
SIS	Safety Instrumented Function		
SLS	Safely Limited Speed (see IEC 61800-5-2)		
SPE	Single Pair Ethernet		
SPLC	Safety PLC		
SRP/CS	Safety Related Part of the Control System (see ISO 13849)		
SRS	Safety Requirement Specification		
SSRS	Software Safety Requirement Specification		
SQEP	Suitably Qualified and Experienced Personnel		
ST	Statistical Testing		
STO	Safe Torque Off (see IEC 61800-5-2)		
SW (or S/W)	Software		
T6A	The 61508 Association		
TCL	Tool Confidence Level (see ISO 26262-8)		
TCP	Transmission Control Protocol		
TCSA	The CASS Scheme Association		
TD	Tool confidence level if tool error can be detected or prevented (see ISO 26262-8)		
TI	Tool Impact (see ISO 26262-8)		
TOE	Target of Evaluation (CASS)		
TSN	Time Sensitive Networking		
T&M	Techniques & Measures (see IEC 61508-2 and IEC 61508-3)		
UCI	Uncertainty Confidence Indicator		
UDP	User Datagram Protocol		
UKAS	United Kingdom Accreditation Service		
WED	Work Equipment Directive (EU)		
WLAN	Wireless LAN		
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