



## ARRON MARK JACKAMAN

**Associate  
Metallurgist  
(NDT specialist)**

Brookes Bell  
9th Floor  
Walker House  
Exchange Flags  
Liverpool  
L2 3YL

Telephone +44 151 236 0083  
E-Mail [arron.jackaman@brookesbell.com](mailto:arron.jackaman@brookesbell.com)

**Nationality  
Mobile**

British  
+44 7771665734

Arron Jackaman is an Inspection Engineer and time served Industrial Electrician who has worked in the Heavy Industry Sector for 16 years, specialising in Marine, Offshore and Land-based Heavy Plant Installations along with Asset Integrity Management. He has been with Brookes Bell since 2016.

### **Non-destructive Engineering – Testing & Evaluation:**

He is certified by the British Institute of Mechanical Engineers in Phased Array Ultrasonic Testing, Time of Flight Diffraction Testing and Eddy Current Array Testing of castings, forgings, welded and tubular products.

He has extensive experience in both Ultrasonic and Electromagnetic Test Methods such as Pulse Echo Ultrasonics, Condition Monitoring, Tangential Eddy Current Array, Magnetic Flux Leakage Inspection, Alternating Current Field Measurement, Infrared Thermography, Time of Flight Determination of 3D elastic materials and 3D metrology grade laser mapping techniques.

Arron has spent many years offering expert advice and technical support working on and offshore serving the marine, oil and gas and renewables industries, he has worked on outage campaigns and shutdowns across South East Asia, Europe, Western Africa the Middle East and South America.

His portfolio includes working on new build installation projects and full refurbishments carrying out site audits, materials surveying and testing and QA/QC roles. He has performed many detailed forged component investigations, carried out welded metallic structure analysis of Oil and Chemical Products Tankers, Bulk Carriers up to Capesize, Container ships up to 18,000 TEU, semi-submersible drilling rigs, fixed offshore installations, superyachts up to 110M. He is experienced with NDT systems, including the Eddyfi Ectane 2, GE Topaz, Olympus Omniscan MX1 and MX2, Silverwings Scorpion and RMS Automated Corrosion Monitoring System.

Arron possesses an in-depth knowledge of both surface and sub surface inspection and analysis methods, is fluent in offshore safety procedures and holds current BOSIET, EBS and MIST certification.

### **Electrical Engineering Work:**

A time-served industrial electrician, he has studied electrical engineering up to the level of undergraduate and holds a current ticket in Electrotechnical Installation. Arron's undergraduate work at the University of Northampton has covered electrical engineering, electrostatics, electromagnetism and complex electronic circuitry.

His career thus far has involved undertaking work in the UK, Europe and the Middle East focusing extensively on power stations, petrochemical plants and national grid transmission sites. He continues to practice electrical engineering techniques and carries out forensic investigation in this area for Brookes Bell. Arron's electrical engineering work has focused on ELV, LV and MV systems, Instrumentation and controls (primarily 240, 415, 600, 6.6kV and 11kV) and associated earthing arrangements (TN, TT and IT).

### **Professional Qualifications:**

PCN Level III Procedural and Technique Design and Development  
PCN Level III Ultrasonic Testing – Welds, Castings, Forgings  
PCN Phased Array Advanced Ultrasonic Inspection (PAUT) Level II  
PCN Advanced Ultrasonic Testing Time of Flight Diffraction (ToFD) Level II  
PCN Eddy Current Tube Inspection (Eddy Current Array/ECA)  
PCN Ultrasonics Level II (3.1, 3.2 Plate/Pipe Welds)  
PCN Magnetic Particle Inspection Level II - Welds, Castings, Forgings  
Rapid Motion Scanning Corrosion Mapping  
(RMS) Flange Face Phased Array Weld Inspection  
CCNSG (SCATS) Health and Safety  
Offshore Survival BOSIET, FOET and MIST  
EBS Breathing Apparatus Training  
Contractors Safety Passport  
Confined Spaces Certificate

**Academic Qualifications:**

FdSc Non-destructive Engineering  
 Diploma in Construction and the Built Environment  
 2330 Certificate in Electro Technical Engineering  
 BS 7671 17th Edition IEE Wiring Regulations (Industrial Plant)  
 2391 Certificate in Electrical Engineering Testing & Inspection

**Professional Status and Membership of Professional Bodies:**

Member of The British Institute of Non-Destructive Testing

**Employment History:**

2019 - present	Associate & NDT Consultant, Brookes Bell
2016 - 2018	Staff Surveyor & NDT Consultant, Brookes Bell
2014 - 2016	AJ Oilfield Inspection Services
2012 - 2014	Oceaneering International Inc
2009 - 2011	Electrical Inspection & Testing Contractors
2008 - 2009	GP Electrical
2004 - 2008	R.W. Jones Electrical Engineering

**Nature of Work Recently Undertaken:**

Projects performing advanced inspection methods:  
 Time of Flight Diffraction (TOFD), Phased Array (PAUT), Eddy Current Array (ECA) and conventional methods UT, MT, PT, ECT to carry out Inspection of Welds, Castings and Forgings. These comprise several hull, machinery and plant construction projects, dispute resolutions, marine casualties and failure investigations.

Work including electrical engineering, notable projects listed below:

- Sulphur damage assessment and structural steel renewal of holds on large cargo vessels.
- Electrical investigation and root cause failure analysis of LV systems as part of the fire investigation of the Supramax cargo ship of coast of Canary islands, resulting in total loss of the ship and \$90 M self-sustaining NPK fertiliser cargo.
- Chemical product tanker inspection of 316SS holds to evaluate and resolve grain structure damage and corrosion on a microscopic level.
- Solenoid valve failure, electrical fault root cause assessment concerning fire, flooding and total loss of bulk carrier off coast of Oman.
- Failure investigation into the cracking due to cyclic fatigue of 590 locations in the transverse web frame of 250,000DWT VLOC.

- Quality review and repair monitoring of plate material with inherent cracks propagating throughout 90,000 DWT Bulk Carrier (New-build project).
- NDT inspection of aluminium keel with lead ballasting on 80m superyacht.
- Full quality review and forensic investigation into fatigue cracking of welds in 91m.
- Superyacht bulwark shell plating and stiffeners.
- Eddy current testing and material evaluation of tubular products inside heat exchangers and HVAC chillers in multiple locations including FPSO systems in Nigeria and offshore HVDC converter platforms on German windfarms.
- Full audit, site examination and assessment of welding procedures, non-destructive testing plan, technical procedures for the building of two container ships at the Hanjin Shipyard in the Philippines.

Providing specialist inspection services for Axess Norway, Apave International, Lloyds Register, Perenco and Teekay Petrojal in the North Sea, Norwegian Sea, Irish Sea, Gulf of Guinea and South Atlantic Ocean sectors.

- Carrying out Phased Array and TOFD UT specialist inspections of welded metallic structures.
- TOFD critical root erosion/corrosion surveys of flow lines and well bay lines on offshore North Sea EnQuest assets.
- PAUT critical corrosion analysis and continued monitoring of 1800 welds, including FFS calculation referrals on gas trains and associated flow lines and compressors on the Piranema Spirit asset, offshore Brazil, on behalf of BP Petrobras and Teekay Petrojal.
- Phased Array weld inspection, pre and post heat treatment inspection and analysis, MUT weld inspection and MPI of structural braces as part of internal and external structural analysis on full refurbishment of semi-submersible Byford Dolphin Drilling platform at Harland & Wolff Shipyard, Belfast.
- Hydroform Phased Array corrosion mapping (CM) and manual ultrasonic inspection of vessels and crude oil pipe lines for EnQuest including Northern Producer asset.
- Hydroform Phased Array CM and ultrasonic inspection of pressure vessels on the ENI operated Douglas platform in the Liverpool Bay area.
- TOFD Critical root erosion and Phased Array corrosion monitoring and analysis of Flow Lines on the BP Magnus Platform over a prolonged period based in the North Sea.

Inspection engineer with the Specialist Inspection Services Department, carrying out MPI, UT, Time of Flight Diffraction and Phased Array surveys and running projects offshore and overseas, including being stationed on the following assets:

- BP in Baku Azerbaijan, Sangachal Terminal and a number of offshore BP platforms in the Caspian Sea, UT and PAUT weld inspection on pipelines, RMS corrosion mapping on vessels and pipes, Analysing data, failure analysis reporting.
- BP Hannibal Gas Plant, Tunisia, Sahara performing Flange faced PAUT, Nozzle & Node inspections, conventional UT and ET weld inspections.
- TATA Steel, Port Talbot, performing conventional non-destructive testing and on-site periodic maintenance inspections UT/MPI/PT on vessels including circumferential and girth butt-welds.
- Offshore on several Humberside and North Sea assets carrying out a range of inspections methods involving critical sizing assessment and asset integrity issues.