RIMKUS



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Background

John is a Chartered Engineer and leading expert in forensic and accident investigations across the global telecommunications, power, and energy sectors, including generation, storage, and distribution. Renowned for his specialist knowledge in fire investigations, engineering failures, and personal injury analysis, John has consistently delivered critical forensic analyses to uncover root causes of failures spanning energy, infrastructure, workplace accidents, and digital technology. He is an expert in wind, hydro, solar, battery storage, and nuclear power generation incidents, providing comprehensive assessments of complex engineering challenges.

John has produced numerous CPR-compliant reports and presented expert evidence in high-profile legal proceedings, including the Royal Courts of Justice, Scottish Sheriff Courts, Fatal Accident Inquiries, and the Institute of Civil Engineering Arbitration. His experience extends to managing full project lifecycles, tower climbing, rescue operations, RF awareness, and the safe use of Mobile Elevating Work Platforms (MEWPs). GWO-certified and WINDA-registered for onshore and offshore wind turbine access, John is uniquely equipped to handle the demands of tall structure investigations.

With a background in electrical and electronic engineering, John is recognised as a Chartered Engineer by the UK Engineering Council and European Engineer by FEANI.

Education and Certifications

- **Electrical and Electronic Engineering, BEng (Hons):** University of Paisley (1997)
- **Chartered Engineer,** Engineering Council, UK (2005)
- **European Engineer Federation** (FEANI)

Professional Memberships

- **Member:** Institute of Engineering and Technology
- **Member:** Institution of Fire Engineers
- **Member:** International Association of Arson Investigators

Continuing Education

- **Bond Solon Courtroom Skills Training** (2013)
- **Bond Solon Cross-Examination Day Training** (2013)
- **DeHaan Fire and Explosion Investigation Course** (Sep 2013)
- **Fire Science & Fire Investigation:** The University of Edinburgh (Apr 2013)
- **Fire and Arson Investigation Training (Practical):** GATR Ltd (Mar 2013)
- **Power Systems Engineering:** EA Technology (Mar 2013)
- **IPAF Operators Certificate** (Static and Mobile Boom)
- **Tower Climbing, Rescue, and RF Awareness Course** (Passed - NARC August 2014)
- **Global Wind Organisation –** On-shore wind turbine access, basic modules (Passed NRS December 2019)

Geographies

- **Global (UK based)**

Sectors

- **Energy**
- **Infrastructure**
- **Workplace Accident Investigation**
- **Buildings**
- **Transportation**
- **Industrial and Manufacturing**
- **Electrical and C&I Engineering (General)**
- **Digital and Technology**

Expert Witness Experience

Energy

Renewables

Fire in a 2MW Wind Turbine, Poland
A fire occurred in the nacelle of the 2MW wind turbine. Instructed on behalf of the insurer of the windfarm and provided advice on the root cause of the incident.

Damage to Switchgear on a Solar Farm, United Kingdom
The installation contractor attributed the failure of a termination on a lightning strike. Examined the retained connector, procured a lightning strike report, and provided advice on the root cause of the incident.

Fire in a Domestic Photovoltaic Installation, United Kingdom
A fire occurred in a large domestic property that involved the photovoltaic installation. Instructed on behalf of the insurer of the system supplier and worked alongside other insurers appointed forensic investigators. Provided advice on the root cause of the incident.

Fire in a 2MW Wind Turbine, United Kingdom
Following routine maintenance, a fire occurred in the nacelle of the 2MW wind turbine. Instructed on behalf of the insurer of the windfarm and worked alongside other insurers appointed forensic investigators. Provided advice on the root cause of the incident.

Damage to a 6MW Run-of-River Hydro Scheme, United Kingdom
Following multiple failures of the lower bearing of the Archimedes auger, which drove the 6 MW generator, tasked with providing advice on the root cause of the incident.

Damage to a 3MW Hydro Scheme, United Kingdom
Following multiple failures of the 3 MW generator, caused by silting following localised flooding of the feed river. Provided advice on the root cause of the incident.

Failure of an Anaerobic Digestion Tank, United Kingdom
Following the over-pumping of product into the tank, the structure was compromised. Provided advice on the root cause of the incident and advised the insurer on potential improvements to the control system.

Fires in commercial and Domestic Biomass Boilers, United Kingdom
Multiple cases of fires and failures in commercial and residential biomass boilers.

Power Generation / Distribution and Control

Damage to a 1MW Generator, United Kingdom
The generator protection air circuit breaker tripped causing the scheme to shut down pending a reset. The breaker was reset, and the machine set to start up. The generator synchronised without issue and continued to increase generation. When generation reached 130kW a fault occurred, the generator immediately shut down automatically. During the fault, an arc flash ejected from the terminal box causing the cover to deform. Provided advice on the root cause of the incident.

Damage to a Transformer, United Kingdom
The 10 MVA transformer failed, resulting in a site-wide power outage. The cause was identified as an oil leak in the step-down transformer. Provided advice on the root cause of the incident.

Damage to a Transformer, United Kingdom/Germany
The 10 MVA transformer failed during commissioning. The transformer was shipped from site to the manufacturer for de-tanking. The cause was identified as oil contamination. Provided advice on the root cause of the incident.

Fire and Explosion in a Nuclear Power Station, United Arab Emirates
A fire and explosion occurred during the construction of one of the reactors. Instructed on behalf of a government agency to provide advice on the root cause of the incident.

Infrastructure

Damage to Radome, United Kingdom
During construction, the glass-reinforced plastic radome was damaged by high winds. Examined the retained components and provided technical advice to the insurer.

Contract Dispute – Institute of Civil Engineering Arbitration, United Kingdom
During the construction of a replacement bridge, the proposed slewing of copper and optic fibre telecommunication cables into new ductwork was found to not be a feasible solution. Instructed on behalf of the contractor to provide advice on the proposals as agreed at project conception.

Electrical Engineering, United Kingdom
Expert Witness appointed in underground cable strikes (telecommunication and electrical).

Workplace Accident Investigation

Fatal Accident, Fall from Roofing Ladder, United Kingdom
During renovation works, an employee was carrying out appointed tasks when he fell from the roofing ladder. Instructed to review the available documentation and produce a court-compliant report on behalf of the claimant's family as part of the Civil Claim against the employer.

Personal Injury, Collapsing Mobile Elevated Work Platform, United Kingdom
During the operation of the spider-style cherry picker, it destabilised and collapsed. Instructed to review the available documentation and produce a court-compliant report on behalf of the defender as part of the Civil Claim against the plant hire company.

Personal Injury, High Voltage Cable Strike by Mobile Elevated Work Platform, United Kingdom
During routine fault finding on overhead telecommunication cables, the operative in the basket of the cherry picker came into contact with 11KV overhead power lines and sustained severe injuries. Instructed to review the available documentation and produce a court-compliant report on behalf of the claimant as part of the Civil Claim against the employer.

Personal Injury, Fall from Telecommunications Mast, United Kingdom
During a routine inspection of telecommunications equipment on a 45-metre mast, one of the riggers fell. Instructed to review the available documentation and produce a court-compliant report on behalf of the claimant as part of the Civil Claim against the employer.

Buildings

Fire in a Hotel, United Kingdom
During major multimillion-pound renovation works of a prestigious hotel in Knightsbridge, London, a fire occurred. The fire involved the living wall that clad the courtyard within the hotel. Instructed to provide privileged advice to the solicitor appointed on behalf of the insurer and worked alongside the insurers' appointed forensic investigator.

Fire in a Residential Care Home, United Kingdom
During maintenance works, a fire occurred in the roof structure, necessitating the evacuation of the residents. Provided advice on the cause of the incident and reviewed the scope of works and method statements provided by the roofing contractor.

Accidental Activation of Smoke Ventilation System, United Kingdom
During routine functionality testing of the automatic smoke ventilation system, a malfunction resulted in the single-use roof materials covering the main atrium roof to be opened, causing disruption to the operation of the hospital. Instructed on behalf of the company's liability insurer that supplied, installed, and maintained the system to provide advice on the cause of the incident and propose remedial works to prevent the incident from occurring in the future.

Commercial and Residential Building Fires, United Kingdom
Multiple cases of accidental and deliberate fires and explosions in commercial and residential properties.

Transportation

Failure of Road Tanker, United Kingdom
Following a 5-hour road journey, a leak of hazardous materials from the road tanker occurred, causing contamination of the drainage system at the company's yard where the leak was first identified. Instructed on behalf of the company's liability insurer to provide advice on the cause of the incident.

Fire on Vessel, Latvia
During the voyage from Kaliningrad to Latvia, a fire occurred on the bridge of the vessel. Instructed on behalf of the cargo insurer to provide advice on the root cause of the incident.

Fire on Vessel, Netherlands
A fire occurred in the hold of the vehicle transporter whilst in transit in the North Sea. As part of the team, instructed to provide advice on the root cause of the incident on behalf of the insurer of several high-value vehicles on board.

Industrial and Manufacturing

Failure of Oil Cooler, United Kingdom
Following maintenance to the cooling system, a leak of oil from the combined heat and power plant into the production line water supply occurred, causing contamination of the food product and production line. Instructed on behalf of the company's liability insurer that supplied, installed, and maintained the cooler to provide advice on the cause of the incident and propose remedial works to prevent the incident from reoccurring.

Fire at a Distribution Centre, United Kingdom
During operations, a fire occurred on one of the stock collection robots mounted on the hive. Instructed to provide privileged advice to the solicitor appointed on behalf of the stock insurer.

Production Line Fires, United Kingdom
Involved in multiple cases of fires and explosions as a result of production line faults or external factors such as power supply variations and lightning strikes.

Production Line Failures, United Kingdom
Involved in multiple cases of electrical and control system failures as a result of component failures, or external factors such as power supply variations and lightning strikes.

Electrical and C&I Engineering (General)

Failure of Camera Gimbal, United Kingdom
The car-mounted movie camera gimbal was not functioning as designed and the designer/manufacturer was not engaging with the insured. Attended site, and following fault finding, managed to return full functionality to the gimbal resulting in the insurance claim being withdrawn.

Fatal Fire Allegedly Caused by Faulty Powered Wheelchair, United Kingdom
A powered wheelchair in the area of origin was identified as a possible source of ignition. Instructed to review the available documentation, examine the remains of the wheelchair, and produce a court-compliant report on behalf of the defender as part of the Fatal Accident Inquiry.

Damage to Electrical Equipment in a Conference Centre, United Kingdom
Following an alleged 'power surge', was instructed to examine the damaged equipment and review the available documentation. The cause was identified as a failed neutral connection on the three-phase supply to the building. Provided advice on the root cause of the incident.

Damage to Electrical Equipment in a Military Training Facility, United Kingdom
Following an alleged 'power surge' during a generator switchover, was instructed to examine damaged equipment and review the available documentation. The cause was identified as an incorrectly connected three-phase supply which was connected to several of the affected buildings. Instructed on behalf of the electrical contractor to provide advice on the root cause of the incident.

Project Experience

Digital and Technology

Rollout of Mobile Pilot Network, United Kingdom
Project managed the deployment and integration of new technology base station equipment in a pilot network on behalf of a mobile network operator.

Rollout of Fire Service Resilience Project, United Kingdom
Project managed the deployment and integration of mobilisation radios in every fire station and fire service vehicle in the country on behalf of the Scottish Government.

Mobile Network Operation and Maintenance, United Kingdom
As the commercial manager and then operations manager, was responsible for managing the multi-disciplinary field-based teams carrying out planned and reactive maintenance of the United Kingdom's tetra network.

Network planning and Rollout, United Kingdom
As a network planning engineer, project managed the identification, design, integration, and optimisation of over 1,000 2G, 3G, and 4G mobile telecommunication sites. This included managing capacity and network transmission.

Professional Experience

- **Rimkus (Formerly Capital Consulting International, CCi)** **2025 – Present**
  - Director
- **EFI Global UK, Sedgwick International UK** **2018 – 2025**
  - Director/Technical Lead Electrical and Fire Investigation (2020-2025)
  - Senior Investigator (2018-2020)
- **Hawkins & Associates Limited** **2012 – 2018**
  - Associate

Publications

- **"A Case Study into a Forensic Investigator's Involvement in Personal Injury Claims"**. The Insurance and Actuarial Society of Glasgow (2018) (United Kingdom).
- Contributor to the **"UK heat concerns weigh heavily on farmers"** blog (2022) (United Kingdom).
- **"Striking it lucky. Managing renewable energy supply fire risk is one consideration, but what about the insurance risk?"**, article in Stronger, The Alarm Journal (2022) (United Kingdom).
- Contributor to the **"Wind power installations: implications for the claims industry"** blog (2022) (United Kingdom/United States).
- Contributor to the **"Severe European winter could cause a rise in property claims"** blog (2022) (United Kingdom).
- Contributor to the **"Electric weather poses a significant threat to electrical systems and infrastructure"** commentary paper (2024) (United Kingdom/United States).