

Curriculum Vitae

# Julian Carter

BEng (Hons) CEng FICE

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**Profile:- Fellow of the Institution of Civil Engineers UK**

My skill set and experience includes the high-level influencing of critical national infrastructure, UK Motorways and Highways, Nuclear Licensee organisations, expert application of Nuclear Engineering as a Specialist Inspector for the Office of Nuclear Regulation, ONR, Nuclear Engineering of New and legacy structures, Disaster Management and Emergency Planning, Forensic Engineering, Civil and Structural design, and Emergency Preparedness Engineering. This also includes the provision of expert witness services.

As a Director of CERAD Ltd, one of my major projects was the development and remediation of a 25 year old abandoned development to create a city centre X-Ray facility in Barnsley West Yorkshire. During this time my Clients also included the development of brownfield sites.

My teamwork and people management roles have empowered others to achieve their potential whilst allowing me to develop a unique skill set, adding broad value to Client organisations. I have detailed working knowledge of the UK-BWR, EPR and AP1000 technology, and also ‘other’ proposed civilian reactor systems. I was seconded in 2010/2011 to France working within EDF Energy, CNEPE, Tours, where my role was that of Principal Engineer, working in the International Nuclear New Build team as Tier 1 Client for the Pressurised Water Reactor, EPR; Hinckley and Sizewell.

My role within Horizon Nuclear Power was that of Head of Civil Engineering where I integrated within the Hitachi, HGNE ABWR Team becoming known and trusted by the Hitachi Directors. More recently I have engaged in both the Design and Regulation (ONR UK) of New-build, Legacy structures and defence Nuclear Civil Engineering for Rolls Royce Marine Power Operations, RRM POL. In RRM POL, I provide positive influence expert advice on sensitive projects at executive level and below. This has involved me developing and delivering management systems and Regulatory understanding.

My influence on Engineering and Safety Case Teams, delivers a firm understanding of Safety Case complexity and its suitable and sufficient technical delivery based on my knowledge of the UK Safety Assessment Principles and Technical Assessment Guides. I have applied Expert forensic skills to projects where my findings have demanded a complete change of approach to Structural Design and Assessment.

At the highest level including Expert Witness services, I have proven my ability to work with discretion and confidentiality when dealing with sensitive information and technical challenges. My international experience has been at ministerial level in a variety of countries. I have embraced multi-disciplines and operational environments in the discharge of engineering and disaster recovery operations; this demonstrates my networking and influencing skills.

The breadth and depth of my experience to date, has equipped and prepared me to be the ‘Controlling Mind’ on complex projects. This now includes the provision of GDA Chapter 16 advice to CGN in China; October 2017 for the HRP-1000 build at Bradwell UK.

More recently I have been involved in SME business development and integration. I also undertake independent Expert Witness Consultancy.

In January 2019, I returned to EAT Ltd to develop the business.

I am a rounded professional, “a safe pair of hands”<sup>1</sup>



**Julian Julian Carter is a Fellow of the  
Institution of Civil Engineers**

**NB:** *(during the period of 1998 through to 2007 'employment' is a blend of Staff positions in parallel whilst operating a Consulting practice. This period therefore provides experience within the accomplishments and key competencies considered with those from the key employment posts)*

**Key Employment 1990-Present**

<b>Jan 2020 to Present</b>	<b>Director; By Julian Ltd (change from EAT Ltd); Consulting Engineer and Expert Witness.</b>
<b>May 2021 to Aug 2021</b>	<b>Critical Tripartite Review of Degree Apprentice progress and development for Leeds Beckett University</b>
<b>May 2019 to Jan 2020</b>	<b>Parliamentary Candidate Nottingham North; UK General Election 2019.</b>
<b>Jan 2019 to Oct 2019</b>	<b>Director; EAT Ltd; Consulting Engineer and Expert Witness.</b>
<b>August 2018-Dec 2018</b>	<b>Interim Head of Civil Engineering; Thomason Consulting Engineers.</b> I manage a team of Civil Engineers in Leeds, London and Guildford. I mentor the team, provide Expert Witness support and work to fully integrate the Civil Engineering function across the business; Flood Risk Assessment, Drainage design and Pre-Planning advice and support.
<b>March 2018-July</b>	<b>Principal Engineer; Hill Cannon Harrogate;</b> Developing the business management and improving management systems. Developing designs for multi-storey car parks and hotel developments in Manchester and the UK
<b>Sept 2017 – present</b>	<b>Director of EAT Ltd; providing independent Consultancy Services.</b> Provision of Expert safety advice to CGN China; for GDA UK HPR1000.
<b>April 2015-August 2017</b>	<b>Rolls Royce; Submarines Head of Infrastructure Design Authority;</b> delivering Technical and Regulatory Assurance across the RRMPOLE business at executive level and below. I acted as the Intelligent Customer controlling mind for all Civil, structural and Architectural requirements. My role was instrumental in the creation and implementation of a new Business Management System for Infrastructure and the implementation of transformational change in the development of Design Authority Capability within the RRMPOLE Business as a Programme Manager and SME. I influenced Safety Case including ONR interface communication.
<b>April 2014 -March 2015</b>	<b>Office for Nuclear Regulation, ONR, Specialist Inspector, Civil Engineering,</b> New build reactor programme and Defence programme. Operating independently with respect to legal aspects such as REPPPIR, IRRS, Health and Safety at Work Act, including The Energy Act and other Regulations and statutes. The development of the Westinghouse AP1000 Moreside site was an interesting remediation project.
<b>August 2011- Feb 2014</b>	<b>Hitachi/ Horizon Nuclear Power; Head Civil Engineering</b> Dedicated Civil Engineering expert within Horizon's Engineering Directorate. I worked intimately with Hitachi Directorship/Engineers/Vendors and Regulator to develop quality assurance requirements for GDA compliance. I undertook business visits to Japan; chairing meetings between Hitachi and the UK Regulators, ONR; the meetings involved key Hitachi companies involved in the nuclear supply chain. I held seminars in Japan to assist Hitachi in understanding the UK Regulatory system. I have also directly influenced the delivery of quality management for all civil engineering tasks in the nuclear island with a Technical Governance Project management focus. In 2011 I attended an Outage inspection ISAR2; Germany. I have gained technical working knowledge and experience of UK-BWR, AP-1000 and UK-EPR with the need to have gone beyond GDA. The total project value is in the order of £30bn
<b>April 2010-July 2011</b>	<b>EDF Energy /AMEC Principal Engineer Nuclear New Build.</b> Seconded to Tours, France with <b>EDF.</b> Tier 1 Design support for Civil works for Sizewell and Hinckley New Nuclear Build; cooling water systems; feasibility and design studies for tunnelling works. Within <b>EDF International</b> EPR Team; requirements for Civil/Structural design, beyond the French ETC-C Code.

- Sept 2008- Jan 2010** **UKAEA Ltd.** Discipline Lead Civil and Structural Engineering.  
I directly Led and Managed all technical and professional aspects of Civil and Structural Engineering through the group in both UK and Europe (Lithuania; Ignalina NPP) with support from my Director. I directed the remediation of brownfield sites for new development. I directly led the technical challenge of the decommissioning of Winscale Pile 1. The project had involved the sensitive Reactor Building Decommissioning that had caught fire in 1957. I also directly undertook the design of Near Surface Repositories for nuclear waste at the Ignalina NPP in Lithuania. Engineering Lead at Trawsfynydd NPP, Wales, UK; I worked closely with the safety case authors. It was also my duty for the Management of UKAEA Group staff. The value of Pile 1 Decommissioning was in the order of £25M.
- Aug 2007- Feb 2008** **E+PC, Engineering and Projects Company; South Africa;** I managed the Civil and Structural engineering group for the company under the supervision of the Engineering Manager; My cross-discipline leadership and management included; Mining/Petrochem/Power. I also provided Emergency 'fly-in' Forensic Expert Assessments in South Africa and Malawi. I was typically tasked with the Control of Technical Governance, personnel management, resource allocation, trouble shooting and interfacing with other disciplines. Projects included Langer Heinrich, Kayelekera for Anglo-American and Paladin Energy. I operated at executive level and with the Government of Malawi.
- Mar 2005 – July 2007** **Teesside University;** Senior Lecturer; Civil Engineering and Disaster management; Years I/II/III/IV supported. I developed a Degree Course; Emergency and Forensic Engineering; a course designed to enable Engineering focussed post-accident investigation reports.
- Jul 1998 to Feb 2007** **CERAD Ltd;** Director  
(accompanying information should be read to understand the multiple activities that I undertook during this time; **independent accomplishments**)
- Feb 1996 to Jun1998** **Babtie Group, WAKEFIELD, Engineer**  
I had direct responsibility for the Design of complex composite structures. I designed marine structures and marine fenders for vessel impact to the requirements of BS6349, The Design of Marine Structures. I maintained the controlling mind on new and innovative solutions such as a complex challenge for a new foundation design. Work also involved the management and delivery of the design and Assessment of road and Rail bridges.

**(Early Career development 1990 to 1996)**

- Sept. 1994 to Feb. 1996** **Frank Graham Consultants, Engineer;** WAKEFIELD; Use of LUSAS II Interactive Finite Element package. Steel and concrete Bridge Assessments. Post-Merrison Box girder assessment involving the critical Assessment of complex composite sections related to box girder open-box sections and closed-box sections and the correct detailing requirements to prevent premature failures.
- Nov. 1993 to Sept. 1994** **Gibson Brothers, Senior Site Engineer CONTRACTORS;** NORTHERN IRELAND, Site Engineer Newry Bypass. A contract involving the ripping/drilling and blasting of 750,000 cubic metres of rock re-utilized as acceptable material on the Contract.
- Sept. to Oct. 1993** **Hwange, Zimbabwe, Town Engineer,**  
Voluntary Service Overseas, VSO
- June 1990 to Aug. 1993** **Pell Frischmann, Graduate Engineer WAKEFIELD**

**Independent accomplishments :-**

Working as a Consultant to the Highways Agency I provided Technical Governance to over £900M of the A1-M1 upgrade works. This involved the management of Structures Option reports and the formulation of Assurance reviews of 'Approvals In Principal, AIP' documents for all Structures; both road and Rail. The following descriptions therefore relate to work that has been managed by myself as Company Director. In this respect I have managed the work and have been the controlling mind for its delivery. With a maximum value of approximately £3M, projects were delivered by myself, or, on larger projects I engaged the services of others, enabling them to work with me. I also provide the Controlling mind in complex engineering projects that are delivered in a Formally Regulated environment. My accountability as a Consultant to UK clients has been for the Technical delivery of road and rail infrastructure, design and Assessment.

**Emergency Engineering** ; I have noted relevant key Emergency Preparedness and response activities relating to my emergency work, both UK and Internationally.

UK, Zimbabwe, Algeria, Kenya, Bosnia, Iraq, Sri Lanka, Malawi, Kenya and South Africa.

- I am currently a member of the UK Stabilisation Unit as a Civilian Expert for disaster response and recovery; this is a partnership of the UK Foreign Office, the MOD and the Department for International Development. In addition to this, I have spent a short period in the Territorial Army Royal Engineers that gave me great knowledge and understanding of military response and structures. The Stabilisation Unit organisation exists to provide the UK Government with a civilian humanitarian perspective in its joint services response to facilitating disaster recovery.
- After the events of 9/11 I worked directly with the UK Fire Service, Office of the Deputy Prime Minister, to develop a response organisation to support the UK fire service to respond to terrorist events; ODPM Neil Newbery.
- I have worked in key coordinator roles in disaster management and recovery for the United Nations and also as a Civilian Military liaison officer.
- I have provided the UNHCR with senior project coordination; this has involved the development 'from scratch' of regional disaster response plans where I coordinated input from governmental organisations, international non-governmental organisations and local government.
- I have taught and trained at numerous disaster management and response events including use of the Fire Service Training college at Moreton In Marsh as well as delivering my own training courses.
- Whilst a Senior Lecturer, I was trusted by the Cumbrian police to use 'public space' in the delivery of specific security disaster training for my undergraduates.
- I lectured Disaster Management at Teesside University at Degree level, a key accomplishment being the development of a new degree course; "Emergency and Forensic Engineering".
- I am currently an external examiner for Coventry University where I assist the Disaster Management course.
- I have delivered disaster recovery papers at an engineering conference in Tanzania 2006.
- Teams I have managed have varied from 1 to 15 people in the delivery of emergency solutions of an engineering nature. Projects have varied in value to a maximum of £3M. Military liaison in Bosnia with UNHCR and UN.
- One of my greatest international challenges was to deliver training courses in emergency management and planning to non-English speakers whilst in Algeria in 1998.
- Knowledge of UK legislation such as REPPPIR, Radiological Emergency Preparedness Public Information Regulations and UK Civil Contingencies Act.

In addition to the above;

- Independent Technical Expert providing Generic Design Assessment support to UK New Nuclear designs.
- Independent Technical Expert managing supply Consultants; total value of the works was in the order £900M (2002 to 2006); Technical Governance for a structures; this comprised the description and management of the Technical Deliverables
- Expert Witness Consultancy.
- Consultant Project Manager ; Motorway Bent repair Contract on ‘M6 Box’ Birmingham. R121; £45M.
- Design of X-Ray test facility; 250MV linear accelerator
  - I provided independent responsibility for the refurbishment, design and site supervision of a facility to X-Ray test castings for the oil and gas industry. Project value approximately £3M in the town centre of Barnsley, Yorkshire.
- Design of wind turbine test facility test rig and foundations.
  - I engaged directly with the Client, for the development and design of a test rig for wind turbine blades with a length up to 45 metres. Detailed finite analysis was required and I selected and supervised the delivery of the design.
- Expert Technical Consultancy support
- Forensic Structural appraisal
  - I delivered assessments in Malawi for ageing Bailey Bridges on the National Highway Network for the developer of a Uranium mine, Kayalakera.. I managed the work and led a team of 10 engineers. Training and knowledge was imparted by me in the understanding of historical Bailey Bridges and enhanced my abilities to work directly with National Governments, further enhancing my International portfolio.
- Bearing design; design of bearings for EKSPAN Ltd.
- Temporary works designs; Refurbishment of buildings under live-load situations.
- Structural steelwork; Design of portal frame structures. Retro fitting of corroded portal frame structures.
- Foundation design and construction supervision; piled and combined foundations.
- Structural surveys and reports; Defect surveys; Blast Design and Assessment.
- Senior Lecturer:- Disaster Management and Civil Engineering
- Power-Gen Nottingham; Assessment and design of power station key infrastructure.

### **Key Accomplishments**

- 2018 Paper : Project Lifetime Planning. Technical Innovations in Nuclear Civil Engineering, TINCE Paris September 2019
- 2017 Fellow of the Institute of Highway Engineers, FIHE, and member of the national Academic Standards Panel, ASP ( not used)
- 2017 University South Wales UK; External Validation of MSC course.
- 2013 FICE, Fellow of the Institution of Civil Engineers UK
- 2012 External Examiner, Coventry University, School of Disaster Management.
- 2010 Member of Stabilisation Unit, Deployable Civilian Expert, DCE
- 2010 Independent Member British Expertise
- 2007 Appointed Chief Executive Officer; Register of Engineers for Disaster Relief Southern Africa; REDR SA
- 2006 Paper “The Civil Engineer is the unheralded doctor of preventative medicine”, Institution of Engineers Tanzania, Arusha.
- 2005 Member of the Association for Consultancy and Engineering
- 2000 Member of The British Consultants Bureau (now British Expertise)
- 1998 ICE James Rennie Medal nominée.
- 1998 Chartered Engineer and Member of The Institution of Civil Engineers, UK.
- 1998 Affiliate member of the Institution of Occupational Safety and Health
- 1996 Member of the Concrete Society
- 1991 Member of the Register Of Engineers for Disaster Relief, REDR UK
- 1990 BEng (Hons) Civil Engineering

**ADDITIONAL INFORMATION**

Full 'clean' car licence  
Full 'clean' motorcycle licence  
Permitted to work in the UK  
Security Cleared; SC (lapsed Oct 2019)

October 2021; A Co-Opted Scrutiny Office for Wakefield Metropolitan District Council.

**PUBLICATIONS**

- 2018, "Project Lifetime Planning", : TINCE, Paris
- 2006 "The Civil Engineer is the unheralded doctor of preventative medicine"; Tanzania.

**CPD**

- As a member of BNI I use the online resources consistently to develop my business management; 4 hours a week typically.
- As a mentor coordinator within my Business group I regularly deliver training events.
- Learning new soft ware for structural analysis; GRAITEC

**PERSONAL**

My career to date has been fantastically engaging and challenging. Thriving on opportunity and creating it where possible; I am always looking for the win/win possibilities that will maximise the outcome for all parties. I currently also provide independent training services to Non-Governmental Organisations such as The Register of Engineers for Disaster Relief, REDR, and Engineers Without Borders, EWB and also support STEM activities and Ambassador learning systems as an Ambassador. I also provide Disaster Management training courses that support the learning needs of graduates as well as more experienced engineers working in the disaster and emergency response sectors. I also support the community as a Rotarian and through membership of other social organisations. I am proud to have been a Senior Lecturer under the age of forty and to have subsequently achieved the professional status of a Fellow of The Institution of Civil Engineers UK.

I continue to challenge myself and inspire others.

Julian Carter; January 2023

Ref

1; ( John Martin; Director UKAEA Ltd; 2009 Review)

References are available upon request

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