Professional CV	**FRASER BARBER**
Key Qualifications:	MEng in Aeronautical & Aerospace Engineering (First-Class Honours), University of Leeds, 2020.
Key Experience:	Experience in high temperature assessments of structural steels, component life assessments (CLAs), hanger survey audits, UK procurement processes and tender document preparation (as both a supplier and a buyer).
	Experienced in the use of Microsoft Office, SolidWorks, ABAQUS CAE, Ansys Fluent, MATLAB, task management and quality assurance.
Achievements	Awarded the IMechE Undergraduate Scholarship.
	Achieved a place on the Dean's List (top 5% of students) for 2015/16 and 2016/17.
Suitably Qualified Experience Personnel (SQEP) Qualifications are	
	Role code 0: Classical Strength of Materials
	Role code 14: Pipework Support Survey

Engineer April 2022 – Present
Graduate Engineer September 2020 – April 2022
Engineering Analysis Services Limited (EASL), Altrincham

- Fatigue endurance and FE analysis of the studs within the liner and pre-stressed concrete pressure vessel (PCPV) at Hartlepool and Heysham 1. Re-assessments were completed to re-confirm the life assessment reference component (LARC) set and re-calculate the projected fatigue damage for the CLA procedure.
- R5 Volume 2/3 high temperature creep/fatigue crack initiation assessment of the secondary retention loops at Heysham 2 and Torness. Assessment included FE modelling and determining if cyclic loading will affect the creep strain accumulation of a component through its service life. Resulted in the evaluation of the creep-fatigue damage of the component for future CLA reviews.
- Created an R3 impact assessment spreadsheet to assess the impact of pipe whip and jet effects of pipework onto steam generators within a safety case analysis assessment for Hinkley Point C.
- Completed numerous pipework movement monitoring reports and conducted on-site audits of pipe system supports for various UK nuclear power stations.
- Continual development in FEA software to assist with structural analysis assessments.
- Continuous training and development based on EDF Energy's SQEP modules.

Procurement Engineer / Co-ordinator (Embedded Role) April 2022 – October 2022
UK Atomic Energy Authority (UKAEA), Culham

- Worked in the Electron Bernstein Wave (EBW) heating and current drive system project team on the MAST-U Enhancements (MAST-UE) programme.
- Drafted and co-ordinated the review and release of technical specifications and other tender documents for various work package procurements.
- Engaged with multiple stakeholders, such as EBW work package managers, UKAEA procurement managers and technical review panels, to prepare and deliver tender packs to the supply chain.
- Conducted pre-tender market engagement with suppliers and managed mid-tender supplier clarifications.
- Co-ordinated the workflow of multiplate work packages to meet MAST-UE operational campaign windows and reported to the EBW Lead Engineer and MAST-UE Program Manager.

Business Development Executive (BDE) October 2021 - Present
EASL, Altrincham

- Reviewing bid-portals for promising leads, notifying BD Manager and chairing weekly BD meetings.
- Managing the Customer Relationship Management (CRM) tool Active Campaign, including updating various leads through the lifecycle of emerging bid to contract award/rejection, a responsibility to ensure lead owners update notes & actions, assigning logins to new AC users & training new users.
- Assisting in preparation of tender response documents and co-ordination of multiple stakeholder involvement for offer generation.
- Attending supplier events and conferences to network with suppliers/buyers, identify new sector opportunities and promote EASL's capabilities.
- Responding to enquiries to provide buyers with suitable information and then either follow-up or hand on depending on perceived lifetime value and risk.
- Assisting in generating the company financial 3-year plan through liaising with multiple contract Single Points of Contact (SPoCs), analysing historical bid success rates and assessing new market opportunities.

Industrial Placement Year 2017 - 2018
Atkins: Aerospace, Defence, Security & Technology (ADS&T), Bristol

- Drafted safety engineering reports for equipment on submarines, including assessing the safety level of diesel engines and electronic control equipment.
- Strengthened skills in report writing, critical analysis and communication with subject matter experts.
- Completed project management tasks including assessing the cost and risk associated with a large client project, organisation of project staff workload and project planning of delivery dates.
- Awarded the ADS&T Recognition award twice during the placement and nominated at the 2018 ADS&T Annual Awards for "Outstanding Contribution".

Research Projects:

BEng Dissertation - CFD Evaluation of Aerofoil Ice Accretion on Aerodynamic Characteristics and Performance of Lightweight UAVs

- Utilised the CFD package ANSYS Fluent to vary the levels of ice accretion on the NACA4412 aerofoil to investigate the subsequent adverse impact on lift and drag.
- Calculated aerodynamic performance parameters of power required and range, based on the ice accretion CFD results, to provide contextualised findings in the field of lightweight UAVs.

Helicopter Horizontal Stabiliser FEA Study

- Developed numerous models of a horizontal stabiliser using different element types, to determine their strengths, limitations and overall fitness for purpose via stress analysis.