

ISSUE 8 | 2022

INSIGHT

Catch up with the team and more:

- **Project Case Studies**
- **Framework News**
- **Team Interviews**
- **Industry Insights**



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INTERNATIONAL WOMEN'S DAY 2022: #BREAKTHEBIAS

Across our three brands, equality continues to be important to us when considering aspects of the business such as recruitment, training and career progression, in order to create an inclusive, empowering environment for all.

The world recently celebrated International Women's Day (IWD) 2022 and it's theme; #BreaktheBias.

The IWD campaign focused on the idea that whether deliberate or unconscious, bias makes it difficult for women to move ahead. Individually, we're all responsible for our own thoughts and actions – all day, every day, and together we can break the bias in our communities and workplaces.

Some of the team got involved with this year's selfie cards as we work together to #BreaktheBias.

We also caught up with Becky Hicks who works within our HR team, to find out more about why we support #BreaktheBias and how a diverse workforce drives a better working world: "International Women's Day is a global day celebrating the achievements of women across all industries and in all environments, as well as calling out bias and inequality.

"Gender equality, and celebration across all diversities is essential for economies and communities to thrive, as well as businesses. In engineering industries it is clear that stereotypes are being challenged and a diverse representation of women is more evident, which is something we work hard to champion as a business.

"Across our three brands, equality continues to be important to us when considering aspects of the business such as recruitment, training and career progression, in order to eliminate unconscious bias and create an inclusive, empowering environment for all.

"Within STEM industries in particular there is a preconception that it is a 'man's world' and the statistics

support this with only 14.5% of all engineers in the UK being women. We believe education is so important to ensure that young women feel inspired to use their creativity and knowledge to build a career within STEM and is one of several reasons why we were recently involved in an all-female mentoring programme 'Go Beyond' with the University of Salford and have presented workshops at local all-girls schools to showcase varying career paths for women in typically male-dominated industries.

"With an above average 18% of our workforce being women, equality and diversity are an everyday learning activity and days like International Women's Day only reinforce our commitment to this, raising awareness for an important cause."

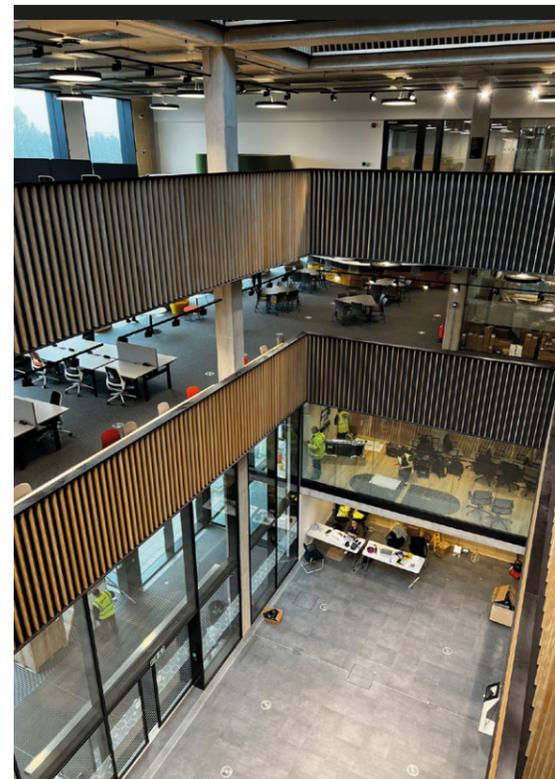
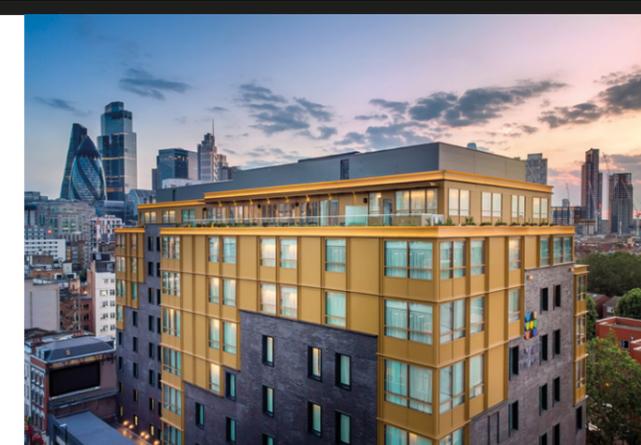
Executive Director, Chris Burke, added: "As part of the wider Morson Group we have already taken huge steps to influence positive behaviour and reduce bias, with compulsory Equality & Diversity training for all employees and carrying out awareness events throughout the year. That said, there is still a continuing need worldwide for more progressive mind-sets and inclusive behaviours, which we hope to be able to continue to support through our internal programmes such as apprenticeship schemes, graduate training, professional development reviews, flexible working and other internal initiatives."

www.internationalwomensday.com

"With an above average 18% of our workforce being women, equality and diversity are an everyday learning activity for us and days like International Women's Day only reinforce our commitment to this, raising awareness for an important cause."



06—
CASE STUDY:
HYATT PLACE
LONDON CITY
EAST



10—
CASE STUDY:
CATALYST
BUILDING,
STAFFORDSHIRE
UNIVERSITY

18—
RICHARD
SARGENT
PROMOTED TO
PROGRAMME
DIRECTOR FOR
NUCLEAR
NEW BUILD



CASE STUDY:

HYATT PLACE LONDON CITY EAST

Waldeck were commissioned to help Hyatt go big with green credentials at their new East London hotel. The hotel features 280 guest rooms, including upper floor rooms with private terraces with stunning views overlooking the city and towards Canary Wharf & The O2.

PROJECT OVERVIEW

Our client, Norstead, commissioned Waldeck to provide digitally focussed Mechanical and Electrical (M&E) design consultancy services for Hyatt's new eco-leading BREEAM excellent hotel.

Hyatt Place London City East is situated close to London's financial district at Black Lion House on Whitechapel Road in Aldgate. The hotel features a ninth-floor lounge and terrace, with views across the capital, plus a flexible meeting room concept, further lobby area, inner courtyard, gym and a grab-and-go food market.

RESPONSE TO REQUIREMENTS

Waldeck assisted our client and many other stakeholders involved in the project with achieving the target of receiving BREEAM 'Excellent' by creating an efficient building which includes the use of water saving, energy saving, and power re-generating technologies, to name but a few.

Delivering best value for our client, Waldeck utilised our Building Information Modelling (BIM) expertise and ensuring a deep understanding of the hotel operator's long-term operational requirements for their assets.

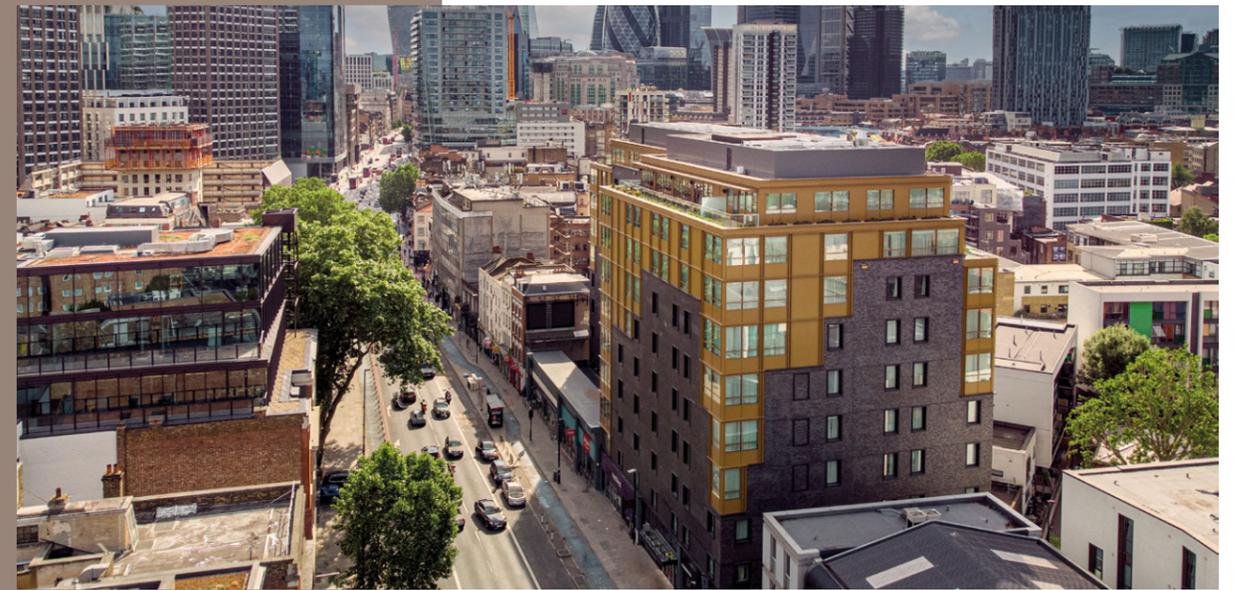
ADDING VALUE

The design proposal for Hyatt Place at Black Lion House was supported by a robust energy strategy which demonstrates a firm commitment to the London Plan and London Borough of Tower Hamlets policies whilst refurbishing existing building stock and contributing to lowering the borough's carbon emissions from existing buildings.

The energy strategy has followed the energy hierarchy and has set out the CO2 emissions savings for both new build extension and refurbished floors and ultimately achieved significant whole site CO2 reductions at each stage of the energy hierarchy: **Be lean, Be clean, Be green.**

The development targeted demand reduction measures, giving priority to the optimisation of the building fabric in order to reduce the need for both heating and cooling. The design was focused on achieving a low-energy building rather than relying on carbon offsetting technologies, committing to the priorities set in the London Plan, Tower Hamlets Managing Development Document and Local Plan Core Strategy.

Other demand reduction measures include the specification of highly efficient lighting systems and mechanical ventilation with heat recovery.





Due to the high demand for hot water related to hotel use, the implementation of two micro Combined Heat and Power (CHP) units working with a thermal store has been maximised for this development. The rest of the hot water and LTHW demand is supported by an ultra-low NOx gas modular boiler.

The renewable obligation has been met by air handling units using the highly efficient HVRF heat pump technology. Likewise, each bedroom is air conditioned with HVRF technology in order to deliver optimum comfort and efficiency using an innovative combination of unique 2-pipe refrigeration and water. This system provides a complete modern comfort cooling / heating solution for this 21st century hotel.

This hotel development demonstrates a major commitment to reducing CO2 emissions, whilst deploying contemporary technology which is efficient as well as having a renewable contribution. This approximately results in an overall 47.5% site-wide reduction in carbon dioxide emissions. Following this strategy, the development achieves the necessary energy credits required to achieve a BREEAM Excellent environmental accreditation.

Waldeck's Project Lead, Luke Mitchell, shared: Luke Mitchell – Mechanical Building Services Engineer
It was great to have had the opportunity to have a final visit on-site last week at a project which we first engaged with one of our major clients – Norstead M&E back in 2018.

A personal highlight for me throughout the duration of the project has been working with the fantastic team at Norstead. Working closely with them to meet the end client's expectations as well as solving design and buildability challenges along the way.

To find out more about Waldeck's project capabilities please don't hesitate to get in touch with Luke and the team by calling 08450 990285.

CASE STUDY:

CATALYST BUILDING, STAFFORDSHIRE UNIVERSITY

Back in 2020, Waldeck were appointed by Imtech Engineering Services, who were selected by VINCI UK to support them with a £43million design and build project for Staffordshire University's new Catalyst building – a flagship regional hub for apprenticeships and digital skills.

The Catalyst building has been designed to support students to study flexible degrees that meet their needs and those of employers, and help students secure highly-skilled jobs.

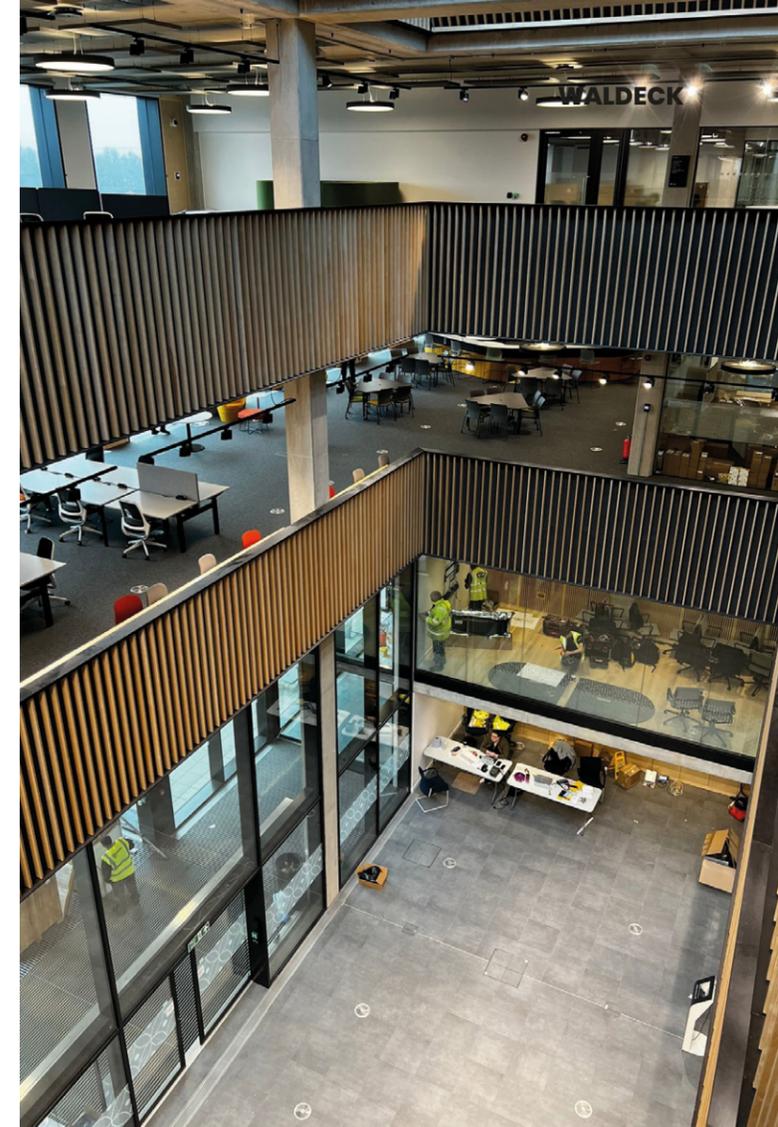
INTRODUCING THE CATALYST

The new 8,800 sqm, four storey building, bringing together the delivery of apprenticeships and skills, to meet employer demand, in flexible, high-quality, digitally enabled space.

Located at the University's Leek Road Campus in Stoke-on-Trent on the former Brindley building site, The Catalyst will be a unified building, bringing together social, study, teaching and support functions. Interwoven with these, the building will also be home to the University's apprenticeship and Business School programmes.

A University hub providing world-class services and settings to support students through their education and towards their employment, the building will also reach out to, and welcome, both current and future students, staff and employers.

Following the Catalyst building recently opening its door, we caught up with Associate Director, Luke Mitchell to find out more about Waldeck's Mechanical & Electrical Building Services Design teams' involvement in delivering the state-of-the-art facility.



CHALLENGE:

Collaboration & Communication during Covid 19

How we overcame it:

At every stage, the project team gave presentations to the end client, the project's M&E Technical Assessor, Imtech and Vinci to communicate the design, inform the developing contractors proposal brief, and engage with future building users at the Staffordshire University.

Frequent workshops with the above stakeholders gave a detailed understanding of how spaces would be used, serviced and how they may change, to ensure solutions would be effective and easily adaptable. All this had to be undertaken through Microsoft Teams at the start of the pandemic – April 2020. This communication line was maintained throughout the ongoing pandemic as it was an effective way to develop design and project progress.

A range of tools and devices were used to facilitate collaboration, including: Dynamic Simulation Modelling (DSM), to drive the team to achieve – and in many cases – exceed environmental

targets; the development of Navisworks and Revizto models to communicate ideas; the construction of red pen sketches to communicate design concepts; and Autodesk Revit's building information modelling software, to collaboratively develop the design and facilitate installation sequencing. There were also bi-weekly workshops for the team during the infancy of the scheme. Waldeck communicated extensively with the Imtech project team on topics such as buildability, sequencing and off-site prefabrication for the M&E installation to optimise productivity, reduce cost (where possible) and deliver an optimised holistic design.

At the handover, frequent communication was used to share the design principles and environmental strategies to enable

Hi Luke, tell us a bit more about Waldeck's involvement in the project?

Imtech Engineering Services commissioned Waldeck to provide digitally focussed RIBA Stage 4 to 6 Mechanical and Electrical (M&E) design consultancy services for Staffordshire University's new eco-leading digital hub providing world-class services and settings to support students through their education and towards their employment.

Waldeck liaised and collaborated with the multiple specialist designers including Audio Visual (AV) and catering to determine the needs of the individual specialists in terms of power, ventilation, cooling, water and control requirements. These requirements enabled the main plant and service distributions to be evaluated holistically and then developed.

Were there many challenges?

There were a few challenges on the project, as with any of this scale and complexity. But working collaboratively as a team and with the wider project team, we were able to overcome them. For example:

CHALLENGE:

Coordinated Raised Access Floors (RAFs) and Spatial Fit

How we overcame it:

A challenge was the spatial limitations within the Raised Access Floors (RAFs). Our team overcame this challenge by undertaking regular clash detection workshops between the M&E disciplines using software such as Revizto. This frequent clash detection methodology ensured that when it came to the installation, it was strategically sequenced and practical.

occupants to operate the building efficiently, maintain, monitor and fine-tune systems.

CHALLENGE:

Technical Design Development

How we overcame it:

In collaboration with Vinci, Imtech and Bryerny Building Physics, Waldeck evaluated Bryerny's comprehensive Dynamic Simulation Model (DSM) to support the University's shift towards being more environmentally sustainable in its day-to-day operations. We examined the technical options available to the University both to shift to low carbon energy supplies and to improve the energy efficiency of its Catalyst building and energy infrastructure.

We undertook a holistic analysis of the options, assessing low and zero carbon technology options as the fundamental baseline to supply key services within the building.

How did we add value and deliver innovation on the project?

Waldeck's development of the conceptual design concentrated on getting the best out of the proposed technologies such as a mixed-mode ventilation system that distributes temperature controlled fresh air via underfloor plenums which then utilise adaptive and energy efficient variable air volume control units, adaptive set-point controls, low energy LED lighting, electrical and telecoms distribution that are adaptable for open space collaboration, a large PV array and an air source heat pump for domestic water heating.

The M&E design deliberately aimed to minimise its impact on local air quality and carbon emissions, so we opted to use electricity as the main heat-generation medium, rather than on-site combustion. This lent itself to an AHU combined with a packaged air source heat pump supplying tempered fresh air,

utilising exhaust air as a renewable source of energy. This strategy of electrification aligned well with CIBSE's Technical Memorandum (TM) 67:2021 for Net Zero. However, this building was never targeted as being a net zero building, the team involved were unfortunate to not achieve an EPC rating of A+ (Net Zero). Our eventual EPC rating was 6 credits short as an A rating.

Being able to integrate all of these sophisticated technologies has been a challenge which Waldeck have so far delivered with praise from the client during its early inhabitancy.

How did the team utilise Building Information Modelling /Management?

Waldeck utilised methods of Building Information Modelling and Management throughout RIBA stage 4 to 6 using Autodesk's Revit MEP and 4Projects. As a standard at Waldeck we always ensure alignment with BS EN ISO 19650-1.

In addition to the above, the Revit add-in MagiCAD was utilised to provide a full suite of system

design calculations within the software and to size equipment, bringing in M&E equipment families from the MagiCAD online cloud database.

The use of calculations within the software enabled a high standard of quality assurance as information was not being passed from one software package to another resulting in possible data loss – "one source of truth".

Are the team and client pleased with the end result?

Waldeck were able to provide a fully designed and clash free co-ordinated M&E package to RIBA Stage 6 utilising BIM considering a combination of complex technologies and ensuing strict spatial limitations with the Raised Access Floor (RAF) were overcome.

The end results is a fantastic example of a dedicated effort and significant collaboration between the parties who have been mentioned to deliver a state of the art and 'future ready' University building.

Graham Collins, Senior Project Manager from Imtech Engineering Services, shared: "Following our initial interview processes Imtech chose Waldeck to design the M&E services for the Catalyst project, Waldeck's wealth of experience in this sector and the requirement to perform to exacting standards certainly held true as they looked at the design philosophy and Imtech's brief to develop, alongside all stakeholders the M&E design to what has turned out to be a fantastic project.

"All the challenges that this project had were looked at and constantly examined to ensure the end user would be happy with the outcome. Leading to a successful handover from the Imtech and Waldeck teams.

"I personally on behalf of Imtech and myself would like to thank Luke and Stephen for their many late days and nights, discussing, informing and briefing the processes and challenges, working fully alongside our team to produce a great design." Professor Martin Jones, Deputy

Vice-Chancellor of Staffordshire University, said the building would have a positive impact on students and the wider community:

"The new Catalyst Building will enhance the learning and social experience of all of our students, enabling them to achieve their full potential and to play an active part in the life of the University and wider community.

"The cutting-edge facilities will support our students to study flexible degrees that meet their needs and those of employers. The University plans to be the catalyst in transforming lives and prospects and helping students secure highly-skilled jobs.

"Many of our students come from the local area and our investment in them, through the Catalyst building and the work of the University, is supporting the region to grow and take on the challenges of the 21st century."

To find out more about the project, please visit our website.





WALDECK APPOINTED ON FOUR-YEAR STONEWATER FRAMEWORK

Leading housing provider, Stonewater, are laying solid foundations for their progressive new housebuilding programme by selecting potential partners to support their development plans.

Stonewater has unveiled a new Employer's Agent Framework to help them achieve their ambition of building at least 1,500 homes every year from 2022/23 onwards.

Waldeck are delighted to have been selected as one of the consultants to guide and advise Stonewater throughout the construction process across a wide range of building projects, ensuring high standards of design and sustainability within a reasonable budget.

The national framework aims to help Stonewater continuously improve its approach to delivering high-quality homes and communities, through new technologies and cost-effective solutions to construction challenges.

As well as leading one of the most significant and progressive development programmes in the UK, the organisation is at the forefront of the housing sector's journey to net-zero carbon.

Stonewater is committed to operating sustainably and demonstrating leadership on climate change, so consultants on the updated framework will demand the highest standards in energy efficiency, use of sustainable materials and resilience.

The framework will also help Stonewater become more agile and digital, as its teams work to reduce the national housing provider's carbon footprint across its wide geographical area.

James Bradbury, Director of Development – Operations at Stonewater, said: "Stonewater is committed to delivering quality, sustainable new homes and places.

"With such a major development programme in the pipeline, it is essential we have an Employers Agent Framework that is fit for purpose so we can most effectively build this volume of homes.

"Having access to suitably qualified construction consultants who share our values will ensure we deliver on our customer promise to build places that people wish to call home."

Graham Wright, Director at Waldeck, shared: "We are delighted to have been selected as a trusted partner to work closely with Stonewater and their supply chain on their ambitious housebuilding programme over the next four years.

"We have been working with Stonewater on a variety of schemes over the past 5 years providing Employer's Agent, Principal Designer, Clerk of Works, Party Wall and Health & Safety services and look forward to continuing to support them through this exciting period."

"This news comes as Waldeck expand our Commercial offering (Employer's Agent, Principal Designer, Clerk of Works, Building Surveying, Project Management and so on) into the South West with our new Bristol office and Yorkshire via our Sheffield office, following six years of successful organic growth in the West Midlands."

Following a competitive tendering exercise towards the end of 2021, Stonewater selected the 15 consultants for the framework – which will operate over four years from March 2022.

WALDECK SUPPORT LINCOLN COLLEGE CAREERS WEEK

As part of our on-going support to the local community and drive to recruit the next generation of engineering talent into our Lincoln office, Waldeck joined more than 30 other local and regional employers in support of this year's Lincoln College Construction Week.

The annual event included a careers fair and trade competitions and was designed to showcase the college students' talent to local employers, give construction firms a voice in how the College shapes their curriculum and start conversations about job and apprenticeship opportunities in the local area.

Director, Stuart Denniss, Head of Marketing, Hannah Cook and Associate Director, Will Green, represented Waldeck at the Careers Fair.

Lincoln College Group Managing Director for Education and Training, Mark Locking, said:

"This week is a great example of our mission, to be led by employers in developing highly skilled and productive employees.

"It's not about just giving young people qualifications, it's much more about us nurturing the skills and behaviours that employers need so our students have the ability to walk into great jobs and build rewarding careers for themselves.



"A huge thank you to all of the employers who supported this event and to our staff who work so hard to create these opportunities for our students."

Our Director, Stuart Denniss, is also a former Lincoln College student, he shared: "This is really important to us as a company, it's where I started and where I learnt the foundations for the career I have now. At Waldeck we're building up the number of apprentices we take on and this is the perfect opportunity to see the talent that is available and to start building relationships with our future employees

"We were also delighted to be able to donate a DISTO Laser Measure and Tool Kit as two of the prizes for the student competition."

"It's not about just giving young people qualifications, it's much more about us nurturing the skills and behaviours that employers need so our students have the ability to walk into great jobs and build rewarding careers for themselves."

To find out more about our current apprenticeships please call the team on 08450 990285 or email join.us@waldeckconsulting.com.

WE ARE RECRUITING:

EX-FORCES PERSONNEL

INTRODUCTION

With over 13,000 personnel leaving the Forces every year, Waldeck recognise the incredible talent pool of ex-service personnel in the UK who have transferable skills and experience that can add significant value to our business.

WORKING WITH MORSON FORCES

We are delighted to be working with Morson Forces as we actively recruit in this market and hope that our relationship can aid the transition from military to civilian life, for anyone joining our team from a Forces background.

Morson Forces is the dedicated recruitment arm of our parent company, Morson Group. It is focused on securing skilled employment for ex-forces personnel and partners to support their transition into civilian life.

DEMONSTRATED SUPPORT

Morson Group are holders of the MoD Armed Forces Covenant Gold Award which is the Ministry of Defence's highest badge of honour for organisations who have demonstrated outstanding support for those who serve and have served.

Currently, Morson Group has in excess of 2,500 ex-military contract and permanent staff from the Royal Navy, Army and RAF, working across a variety of projects in the UK and overseas.

JOIN OUR TEAM

Whether you're experienced in an engineering profession, looking for your next career move, or simply considering your first civilian role, we are keen to engage with the ex-forces community.

To find out more about our current opportunities please call the team on 08450 990285 or email join.us@waldeckconsulting.com.



RICHARD SARGENT PROMOTED TO PROGRAMME DIRECTOR FOR NUCLEAR NEW BUILD

Please join us in congratulating Richard Sargent who has recently been promoted to Programme Director for Nuclear New Build.



Richard has over 15 years' experience in the nuclear industry and is currently seconded into Waldeck's EDF Energy Hinkley Point C (HPC) team, supporting the next generation of Nuclear New Build in the UK.

Richard has been working on the Hinkley Point C project for 6 years and is now leading Waldeck's engineering team who are working on the project and is himself embedded within the client team as part of the Joint Design Office.

So Richard, tell us a little bit about your new role?

In my new role as Programme Director for Nuclear New Build, I will have overall responsibility for Waldeck's HPC team and the relationship we have with EDF. Having already been responsible for our largest contract with EDF on the project, this step up is a natural progression for me. Looking further afield, the role will involve developing what we're delivering on HPC and also applying our experience and knowledge to other projects in the nuclear industry.

What has been the most rewarding project to work on so far, and why?

Hinkley Point C has without a doubt been the most rewarding project of my career so far. I was fortunate enough to work on the project back in 2012 when it was merely a greenfield site, so to be able to see the progress to where we are now, on one of the busiest construction sites in the world, is extremely rewarding.

The day-to-day challenges you face on such a complex project means there is always a problem to solve, so rarely a day goes by without feeling like you've fixed something.

What is your favourite part about your job?

I thrive on interactions with people so being responsible for the Waldeck HPC team means I am constantly helping people to overcome issues and supporting them in their development.

In addition, working on the HPC project means there is always something new to learn – the range of technologies and disciplines being employed is staggering! From a wider perspective I really enjoy knowing that I am contributing to the global climate change crisis by providing the UK with cleaner energy.

What advice would you give someone wanting to start a career in Engineering, in particular within the nuclear sector?

Consider apprenticeships as well as the traditional degree route. I went to university to complete a Master's degree in engineering, but on starting my career I remember reflecting that in the real world I was only using a small portion of the technical skills I learnt on the degree course.

The most useful skill in engineering (and life for that matter) is an ability to communicate and interact with people, as well as apply some good old common sense and pragmatism. All of that can be learnt in any environment, and the technical skills you do need to be an engineer can be learnt by combining on-the-job learning with study via an apprentice route. Having said all that, going to university to get a degree is great fun!

To find out more about our Nuclear capability, please get in touch with Richard by calling 08450 990285.

JUAN RODRIGUES: CHARTERED ENGINEER

A huge congratulations to one of our Civil Engineers, Juan Rodrigues, on recently becoming a Chartered Engineer!



Juan is part of our embedded Review and Acceptance Team within the Joint Design Office (JDO) at Hinkley Point C.

Congratulations on becoming a Chartered Civil Engineer! How have you found the journey to getting chartered?

Thank you! I actually found the journey quite exciting. I am not going to lie, it requires time and commitment all the way through. However, it has been gratifying to achieve Chartered status.

Throughout the process you learn a lot and gain more awareness of other topics related to the industry that expands beyond any one person's individual engineering role, I found this particularly interesting and useful

Becoming a Chartered Engineer is definitely worthwhile and something that I will now encourage all my colleagues to work towards.

Have you had much support from your team?

The team have been amazing and really supportive all the way through. When I joined Waldeck, I had already completed my Career Appraisal, which is part of the process to become Chartered, however, as soon as I notified to my line managers about my application for my Professional Review, they immediately encouraged me to do as many mock interviews as possible with members of the team.

Richard Sargent and Lotomau Komiti organised some really challenging and helpful interviews for me, with themselves playing the roles of "interviewers". During these interviews I received some very constructive feedback and useful tips ahead of the big day.

Please can you tell us a bit about your career so far?

During my career as an Engineer I have worked in different sectors from construction to consultancy, working on different roles such as Site Engineer, Contract Manager and Structural Engineer. I have been involved in a considerable variety of projects (such as residential, hospices, commercial, leisure centres and most recently, nuclear).

During the last year since I joined Waldeck, I have been embedded as part of their HPC team. I am very pleased to be part of such a big project, it has been an amazing experience to be part of one of the biggest projects on Europe. Currently, I am part of the Review and Acceptance Team.

What is the most rewarding part of your job?

Knowing that my role has important impact into our society, and be able to provide sustainable solutions that can help to improve the life quality of the present and future generations, by guaranteeing the delivery of efficient, sustainable and innovative projects.

What are your future career aspirations?

Keep looking for challenges that push me to go further into my own professional development, and inspire others around me to do the same!

Would you recommend a career in engineering to others, if so – why?

Of course I do. Engineering is innovating, challenging and inspiring. Engineers have a very important role in our society. We contribute a considerable amount to the construction of sustainable developments, creating a better world for our future generations. For example – hot topics such as Net Zero – Civil Engineers have a key role to guarantee the achievement of this goal.

MEET THE TEAM:

PEYMAN BAND

As part of a series of 'Meet the Team' interviews with our Civil & Structural Engineering team, we caught up with Principal Structural Engineer, Peyman Band, to find out more about his role at Waldeck.



Peyman recently became a Chartered Civil & Structural Engineer and has experience which spans design consultancy and the delivery of engineering solutions for building structures across a range of sectors and materials.

Peyman possesses comprehensive technical knowledge and design experience in Structural Engineering and has been involved in a wide range of project types and values both locally and internationally.

So Peyman, tell us a little bit about your role as Principal Structural Engineer?

I am a Principal Structural Engineer with experience working on numerous major projects in the UK and abroad. I have been involved in a wide range of design projects from small schemes to multi-million-pound design projects. I have predominantly been involved in steel and concrete design of buildings, foundations, industrial portal frames, inspection and assessment of structures, and design of pavement and retaining walls.

My role is extremely interesting as I get to improve my analytical, engineering, and managerial skills by working on a wide variety of engineering projects here at Waldeck.

I also work closely with clients and our in-house multi-disciplinary team to ensure the delivery of innovative, constructible, and commercially viable design solutions for our projects.

What has been the most rewarding project to work on so far, and why?

All projects regardless of size and value are equally important as they have their unique challenges and problems that need to be solved. I am currently working on a new Network Rail Station project, where I've had the opportunity to act as Contractors Responsible Engineer (CRE) for all the Civil and Structural aspects of this project. In this multi-disciplinary project, while fulfilling my CRE duties, I lead a team of 7 engineers and technicians for the technical delivery of the project, as well as liaising with other disciplines, the Client, and the Principal Contractor on a regular basis.

The design and construction of this Design & Build project has had major challenges due to the programme restrictions and the fact that it is located on a logistically difficult brownfield site. However, utilising the latest technology and a fully federated 3D model has helped us to overcome these challenges

effectively, and seeing this project being built on-site is the rewarding element which makes it all worthwhile.

You also became a Chartered Engineer last year, congratulations! How does it feel to be Chartered?

Becoming professionally qualified with the Institution of Civil Engineers (ICE), the world's first professional engineering body, is very satisfying and getting letters after your name is a great feeling that I can't really describe!

But more importantly, the journey to Chartership helped me acquire comprehensive knowledge and experience in a variety of engineering and managerial fields. To get to the chartered level, I had to achieve a decent level of competency in various attributes required by the Institution, but I have to say, investing the time and effort has really paid off.

What's next for you and the Civil & Structural team?

Our current Civil & Structural Engineering team have a diverse range of experience and expertise that allows us to design a broad spectrum of projects across our core markets such as rail, data centres, energy and manufacturing. On top of this, we continue to work closely with our multi-disciplinary colleagues from departments such as the Mechanical & Electrical Building Services Design and Architecture, which continues to enable us to work on larger multi-disciplinary projects and help our key clients to achieve their aspirations across more than one discipline.

Finally, myself and my team are currently preparing to commence the design of one of the largest logistic projects in Europe, which is a major rail freight interchange infrastructure project, so watch this space!

Waldeck also has an in-house ICE approved training programme to help young graduate engineers to start their journey to Chartership. This training combines tailored classroom sessions, along with on-the-job training to develop our engineers' skillset and assist them in gaining valuable experience. Helping to develop and grow the next generation of engineers is something which I am really passionate about and hope I can contribute to over the coming months as the team continues to evolve.

To find out more about our Civil & Structural Engineering team visit our website.

CONGRATULATION TO ANGUS KNOWLSON ON HIS PROMOTION TO JUNIOR MECHANICAL ENGINEER

Last year we welcomed Graduate Mechanical Engineer, Angus Knowlson to our well-established Mechanical & Electrical team, having recently finished his studies in Mechanical Engineering (BEng Hons) at the University of Manchester.



12 months on, we're delighted to congratulate Angus, who is based in our Irlam (Manchester) office, on his promotion to Junior Mechanical Engineer! We caught up with Angus to find out more:

Congratulations Angus! How have you found the past year at Waldeck?

Thank you! The last year has taught me a lot about Building Services Engineering such as the use of software like Revit and AutoCAD along with the codes of practice which we operate by. I've really enjoyed working as the mechanical lead under several projects and although challenging, have found the experience very rewarding.

Can you tell us more about what you will be doing in your new position?

As Junior Mechanical Engineer, I'll be working with greater freedom to manage and complete projects in abundance with relevant building regulations and codes of practice. I'll be looking to lead my own projects as well as more commonly assume mechanical lead roles on other projects.

What do you enjoy most about your job?

I enjoy learning more about building services whether its enrolling onto CIBSE approved Mechanical Building Service training courses, working alongside Principal Mechanical Engineers or self-research. I also enjoy applying sustainable practices within my work through design and will develop this to greater effect with experience.

What projects and markets are you and the team focussing on for 2022?

A lot of our projects are currently across the Built Environment, including schools, hotels, universities, prisons and rail. We're also hoping to broaden our focus to conducting more SBEM calculations and EPC ratings which I'll be playing a large role in progressing.

What's next for you career-wise?

Next, I will be working towards the position of Intermediate Mechanical Engineer as well as undertaking the role of our M&E Teams Social Secretary and Resident DJ!!!

Our Director of Mechanical & Electrical Building Services Design, Adam Machan commented: "Angus has proven to be a valued member of our M&E team over the past 12 months and has taken on vital roles to see our projects through to completion. This has been recognised by the team and clients, and has resulted in his well-deserved promotion.

"Angus, along with other members of the team has played a key part in the growth of our Manchester presence, which we look forward to expanding considerably over the coming year."

To find out more about Waldeck's Mechanical & Electrical Building Services Design please visit our website.



CHRIS WELLS:

INDUSTRY WORK PLACEMENT CATCH-UP

Placement Mechanical Engineer, Chris Wells, joined our team in Sheffield to take part in a one-year work placement, before returning to the University of Sheffield in September to complete his final year of studies.



To support his year in industry, Chris has just become the first ever SKILLcard Industry Placement card holder.

The SKILLcard Industry Placement Card has been designed to recognise students on qualification programmes requiring longer periods of high-quality work experience placements. The card identifies the holder as taking part in a work placement in the building engineering services industry and allows them access to CSCS-controlled sites, with their designated employer.

The SKILLcard means that Chris can get a fully rounded experience of projects and take part in site visits that are essential to our project delivery.

We caught up with Chris to find out more about his placement so far, and why he would recommend a placement year at Waldeck to other students.

Hi Chris! Tell us a bit more about what you are studying?

I am studying general engineering with a mechanical specialism at the University of Sheffield. This means the first two years of my degree gave me an exposure to a range of engineering disciplines, whilst last year and when I return for final year after this placement, my degree solely comprises of mechanical engineering modules alongside my final year project.

What made you decide to choose Waldeck for your placement?

As a student from an interdisciplinary degree, I was really attracted to the fact that the mechanical and electrical engineers work so close and collaboratively. My specialism in mechanical and the location of the M&E team in Sheffield seemed like the perfect opportunity. Looking through past projects on the Waldeck website I was excited at the prospect of being involved in similar work should I join and so was delighted when the teams Director, Adam Machan, offered me the position.

What do you get up to in your role?

As a Placement Mechanical Engineer, I assist Senior Engineers in the team, completing mechanical calculations and designing the services. So far, I've been involved in a range of services' design – natural gas, heating and cooling, and ventilation as well as some of the electrical services.

What has been your favourite part so far?

From day one, I feel like I've been involved in work that has direct real-world consequences which is an exciting change from work completed for degree and as such, I've really enjoyed getting involved in work from the beginning. The M&E team have been very friendly and helpful in getting me involved in a wide range of tasks and feeling like a valued member of the team.

What has been the hardest part so far?

Adjusting to having a regular work routine after three years of being a student and the disruption caused by the pandemic. Having the structure has been refreshing and hopefully something I can keep up next year with my studies.

What projects have you been working on?

I completed work for the electrical services involved in the HMP Liverpool refurbishment job when I joined. Since then, I've mainly been involved in the mechanical services designing for various school projects we have on the go. Currently, I am working on heating and cooling design for our Laurence Calvert school job.

Would you recommend a placement to other students? If so, why?

Definitely. I am really enjoying my placement so far and I would strongly recommend Waldeck as a placement host.

The team are friendly, approachable, and knowledgeable and I feel like I'm learning a lot whilst still having a meaningful contribution to the work the team produces.

Being able to see some concepts I've learnt at university in a job-related setting has helped those skills develop further and the placement has also helped my ability to work in a professional manner and be more conscious of my professional development. I think for other students gaining this experience is invaluable and if you have the chance, it's definitely worth going for it.

To find out more about placements at Waldeck, please contact Group HR Advisor, Becky Hicks for more information by calling 08450 990285.

Sheffield to Barcelona Charity Hitchhike

Waldeck offer all employees one additional day's annual leave each year to take part in a volunteering or fundraising activity of their choice.

Earlier this month, Chris used his additional day as part of a charity hitchhike!

Chris explains: "I took part in a charity hitchhike from Sheffield to Barcelona through the #Bummit Charity Hitchhiking Society at The University of Sheffield, where I am studying.

"We hitchhiked in teams of two or three but there were about 115 people in total who took part!

"The hitchhike was to raise money for 5 charities: Sunflower of Peace, The Sleep Charity, MAG (Mines Advisory Group), FoodCycle and Manor Community Transport.

"So far I've raised £195 of the £250 target set for each person by the event organisers. I'm also going to be doing a walk between Sheffield and Manchester with the team I did the hitchhike with, in a few weeks' time to continue fundraising!"





WALDECK CONFIRMED AS ROYAL INSTITUTE OF BRITISH ARCHITECTS CHARTERED PRACTICE

We are delighted to share that our commitment to delivering the highest professional, ethical and best practice standards in architecture have been recognised by the Royal Institute of British Architects (RIBA) and as a result, Waldeck are now a RIBA Chartered Practice.



Director of Architecture & Digital, Stuart Dennis, shares: "Our experienced architecture team are committed to the highest standards of professionalism, best practice and ethics and we are thrilled that this has been recognised by RIBA as Waldeck becomes a RIBA Chartered Practice."

Continued >

"We have a proven track record of delivering high quality design for our clients and collaborating successfully with the wider design team to meet our client's objectives.

"Our combination of experience and expertise ensures we deliver practical, buildable and cost-effective solutions time and time again."

Chartered Architect from the team, David Foster, adds: "As a multi-disciplinary consultancy, we are committed to excellence in design and service delivery, and this is matched by the goals and aspirations of the Royal Institute of British Architects (RIBA) as a global professional body.

"The opportunities and support from RIBA will allow Waldeck to deliver better buildings, places, communities, and more sustainable environments though an underlying approach of inclusivity and being ethically and environmentally aware.

"The work RIBA undertakes to promote architecture in the UK is of vital importance in the current climate; especially in response to the COVID-19 crisis; the on-going climate emergency; and diversity and equality. The advocacy that the RIBA undertakes is vitally important in the protection of the title and the role of the architect in today's construction industry including post-Grenfell.

"What this means for our current and future clients is clarity and confirmation that Waldeck have proven and will continue to prove compliance of best practice mirrored with the highest quality standards required from RIBA. This creates a trust and credibility which other practices may not be able to achieve, as the following example benchmark requirements are above that of the ARB: Employment, Equality, Diversity and Inclusion, Health and Safety, Environmental Management and Quality Management." As an overview, our Architecture team provide services which include:

- BREEAM Assessments
- Building Information Modelling (BIM)
- Concept Design & Co-Ordination
- Detailed Design
- Facilities Management Solutions
- Feasibility Studies
- Implementation & Project Delivery
- Master Planning
- Planning Applications
- Procurement & Tender Process
- Sustainable & Low Carbon Design
- Visualisations & Animations

To find out how our team could help you with your next project, please get in touch with Stuart or David by calling 08450 990285.

Some recent projects the team have been involved with include:

Coventry MSCP (Multi-Storey Car Park) & Station



Phenix Suite Salons' First UK Franchise



Perry Barr Rail Station



Harrods' Shoreditch Photography & Website Studio





34—
COMMITTED TO THE FUTURE
OF UK ENGINEERING



38—
MORSON
PROJECTS
LAUNCH OUR NEW
EARLY CAREERS
DEVELOPMENT
PROGRAMME

60—
MORSON
PROJECTS'
BRISTOL TEAM
DOUBLE IN
SIZE AND
CONTINUE
TO GROW



MORSON PROJECTS:

COMMITTED TO THE FUTURE OF UK ENGINEERING

A huge thank you to Manufacturing & Engineering Magazine for featuring us in their latest issue. Here's what they had to say...

Multi-disciplinary engineering consultancy, Morson Projects, commit to the future of UK engineering following the creation of 200 jobs across their offices, including Manchester, Hull, Belfast, Bristol, Yeovil and Chester.

The Morson Projects team is currently 900+ personnel strong, with over 350 people deployed on Aerospace & Defence programmes. The business is looking to grow it's team by almost 20% over the coming 12 months.

Morson Projects are a long-term supplier for top industry clients such as BAE Systems, Leonardo Helicopters, Vertical Aerospace, Rolls Royce, Airbus, Raytheon and Bombardier where they have been involved in many of their major programmes in recent history.

From lightweight composite structures to complete systems integration, Morson Projects' engineering teams work independently, or in partnership with their client's existing project delivery teams to provide comprehensive support throughout design, development, manufacturing and into service.

BUT WHAT ARE MORSON PROJECTS DOING TO MAINTAIN THEIR STRONG POSITION IN THE MARKET?

We caught up with Associate Director, Gareth Beck, who leads Morson Projects' Marine, Aerospace & Defence Engineering division, to find out more: "At Morson Projects, we continually strive to deliver the best engineering and technical solutions to our client's problems. Across the Marine, Aerospace & Defence sector, this is achieved by creating the most robust and efficient ways of designing and analysing structures, systems and software.

"Over the past 12 months our business has evolved considerably, client demand has increased and we are investing more than ever before in the future of our team, the next generation of engineering talent and key industry programmes.

"Two recent examples of this include the launch of our new Early Careers Development Programme, and our appointment on the government-backed ADCoSCA Programme."

EARLY CAREERS DEVELOPMENT PROGRAMME LAUNCH

For over 40 years Morson Projects have prided themselves on their ability to nurture and grow early careers engineers to fully meet their career potential.

To mark the end of National Apprenticeship Week 2022 (7-11th Feb 2022) Morson Projects announced the launch of their new in-house Early Careers Development Programme.

The programme has been designed to attract and retain the best future talent across the industry to allow Morson Projects to continue delivering market-leading engineering consultancy.

They will do this by empowering their early careers employees to take ownership of their own continual professional development with a structured career path framework.

Importantly, the programme also gives their senior engineers an opportunity to share their knowledge and experience with the next generation of budding engineers in a measured way through the bespoke mentoring scheme.

Lead Design Engineer, Sally Entwistle, who is the Training Co-ordinator for the Early Careers Development Programme, explained: "We have developed early careers engineers to an exceptional level within our business for a long time now, and growing our own talent is fundamental to how we operate.

"When developing the new programme, it was extremely important to us that we involved engineers from across our team in the process. The focus for Morson Projects isn't just on the early careers engineers, it is also about the more experienced members of the team developing their skillsets and growing within their roles, sharing their knowledge in the best interest of the team, our business and our clients."



ADCOSCA PROGRAMME INVOLVEMENT

Morson Projects' engineers and technical staff are constantly exploring new and improved ways of working, it's not just our job it's in our DNA.

Their varied customer base means that they are continually improving and optimising their design and analysis process as they gain new experience and solve new problems for clients. Due to these broad and ever-evolving solutions, the way that they design and analyse aircraft structures, systems and software is always at the cutting edge of innovation and technology.

Having tried and tested many working practices throughout their career-history, Morson Projects are able to work closely with clients and key stakeholders to understand and adapt their ways of working to optimise efficiencies, saving them time and money.

As a result of this, a team of engineers from Morson Projects are supporting the new government-backed Advanced Design of Composites Structures for Future Combat Aircraft (ADCoSCA) Programme which is being led by the National Composites Centre (NCC) and the Defence Science Technology Laboratory (Dstl). Morson Projects are part of a select group working together to explore the art of the possible for the next generation of combat aircraft.

Director, Syd Carson who has been responsible for the delivery of some of our most prestigious projects, shared: "We are delighted to have been selected as a trusted partner to support the NCC and Dstl as they seek to innovate, improve and deliver the next generation of UK aircraft capability.

"Our team have a real breadth of experience and knowledge built across many years of providing aerospace engineering consultancy and solutions for clients. This programme provides a fantastic platform for a group of our industry-leading engineers to look back at what we have previously achieved and apply our learnings from these projects to enhance the future of UK aircraft design."

SUMMARY

Gareth concluded: "As a team we have had unrivalled exposure to many different ways of designing aircraft and as a result we are able to share and harness this experience to ensure we bring the most advanced, robust and efficient aircraft analysis and design techniques to our clients."

"Due to the unprecedented growth we are seeing as we continue to work on the UK's most significant programmes, now more than ever we are focussed on attracting, developing and retaining the best talent. It is an exciting time at Morson Projects as we look to expand our team substantially over the coming months."

"Our team have a real breadth of experience and knowledge built across many years of providing aerospace engineering consultancy and solutions for clients."



MORSON PROJECTS LAUNCH OUR NEW EARLY CAREERS DEVELOPMENT PROGRAMME

We are delighted to announce the official launch of our new Early Careers Development Programme!

As our industry booms and businesses continue to seek out the very best 'next generation' of engineers, following the success of our Graduate Development Programme, we are proud to share that we are expanding the scope of our in-house programme to include all early careers engineers, including graduate and apprentice entry levels.

The programme has been designed to attract and retain the best future talent in our industries to allow Morson Projects to continue to deliver market leading engineering consultancy.

We do this by empowering our early careers employees to take ownership of their own continual professional development with a structured career path framework.

Importantly, the programme also gives our senior engineers an opportunity to share their knowledge and experience with the next generation of budding engineers in a measured way through our bespoke mentoring scheme.

JORDAN KNAPP, (Lead Design Engineer) who is the Chair of the programme, explains more about the key features of the programme: The programme focusses around the development of technical competence and core skills, which are achieved through: Exposure to a wide range of projects to develop expertise and knowledge. Formal and on the job training to develop, technical skills, project management and leadership skills.

Opportunity to contribute to research projects / initiatives at local academic establishments. Exposure to different disciplines and departments within the company to improve collaborative working.

Formal presentations to Managers and Directors to showcase progression / capability. "The new structured learning programme will empower the next generation of engineers and create long term succession planning for our team through a mapped-out career plan which has clear lines of progression and accountability."

SALLY ENTWISTLE, (Lead Design Engineer) who is the Training Co-ordinator for the programme, explains more about how the programme has taken shape: "Our Early Careers Development Programme has been a long time in the making, and our first cohort of Graduates were key to helping us develop this new, enhanced programme.

"We have developed early careers engineers to an exceptional level within our business for a long time now, and growing our own talent is fundamental to how we do business. But, as business booms and we continue to grow at speed we needed a more structured consistent approach and clear career progression for our new engineers.

"The first cohort on the new programme will run as a pilot across our MADE (Marine, Aerospace & Defence Engineering) and PACE (Power, Automation and Control) divisions, with the backing of Morson Projects Operations Board and support from the wider Morson Group HR function. We are looking forward to developing the programme and rolling it out across the other divisions within the business as soon as possible."

ANNA DAVANZO, (Design Engineer) who is our Mentor Trainer, is a Chartered Engineer and has brought years of experience from previous roles to help formalise the mentoring elements of the programme. She explains: "When developing the new programme, it was extremely important to us that we involved engineers from across our team in the process. The focus for Morson Projects isn't just on the early careers engineers, it is also about the more experienced members of the team developing their skillsets and growing within their roles, sharing their knowledge in the best interest of the team, our business and our clients.

"We have over 15 existing staff members directly supporting the programme and I have now delivered the initial mentor training to this group. In my role, I will continue to support the mentors throughout their journeys."



Jordan Knapp
Design Lead Engineer



Anna Davanzo
Design Engineer



Gareth Beck
Director of Marine,
Aerospace & Defence
Engineering



"In addition to this, as a Chartered Engineer, part of my role will be supporting the early careers engineers to gain chartership further down the line and also to maximise the opportunities for the more experienced members of staff through their mentorship roles."

GARETH BECK, Director of our MADE (Marine, Aerospace & Defence Engineering) Division, concludes: "For over 40 years we have prided ourselves on our ability to nurture and grow early careers engineers to fully meet their career potential.

"Due to the unprecedented growth we are seeing across all our engineering sectors, now more than ever we must attract and develop the best talent. It was therefore imperative we levelled up our Early Careers Development Programme and the team have done exactly that.

"I'm very excited to see the potential our programme will unlock in the years to come. It doesn't stop there though. We also recognise that we need to engage budding engineers at much younger ages. We are therefore taking our passion for engineering into primary schools around the country with the goal of enthusing children to choose a pathway in engineering, be it via further education or an apprenticeship with Morson Projects."



Interested in joining our Early Careers Development Programme?

For a confidential conversation please email: ECDP@morson-projects.co.uk or call 0161 707 1516 and ask to speak to the programme's dedicated Resourcing Manager, Matthew Thompson.

MEET THE TEAM:

SALLY ENTWISTLE & ANNA DAVANZO



Sally Entwistle
Lead Engineer



Anna Davanzo
Design Engineer

Hi both, can tell us a little bit more about you and your role?

SALLY: My main responsibility as a Design Engineer is leading engineering teams to deliver the design of new products for clients, as well as modifications for existing ones. These products vary from military aircraft, passenger aircraft, rotorcraft and Unmanned Aerial Vehicles (UAVs).

My day-to-day tasks include using 3D software to model aircraft components, such as primary structure, wing components, exterior panels, systems and interiors. My team liaises with other departments such as stress and the client to ensure the part meets its intended use.

Something I'm really passionate about is being involved in the training of new and existing staff, this has recently seen me working with engineers from across the business to develop our in-house Graduate Development Programme and also present new ideas to the Operations Board about how we train and communicate across our teams in the future.

ANNA: I am a Chartered Engineer currently working on the ADCoSCA programme as a Lead Engineer focussing on certification.

I am also the Internal Systems Monitoring Auditor for the Design Organisation Approval (DOA) which means that I audit the processes and procedures which the team in the DOA follows, as well as ensuring the DOA projects are adhering to the appropriate procedures

to make sure that the work we carry out is in line with relevant regulations.

One thing that really motivates me is seeing young people becoming inspired by engineering, which is why I wanted to be involved in the Early Careers Programme. Alongside a team of experienced engineers we have developed the Early Careers Programme to guide junior engineers through the start of their careers. I have been a mentor for many years and it is one of the parts of my job that I find very rewarding.

How did you get into a role in engineering?

SALLY: My Dad was my main inspiration to pursue a career in engineering, he was an engineer in the aerospace sector and would often take me to work with him where I would use the drawing boards, I guess it sparked an interest within me which I later pursued.

I carried out my work experience at Morson Projects when I was at school and then joined the team 13 years ago as Project Manager before re-training on-the-job to be a Design Engineer.

ANNA: I've always had a love for aircraft and aviation and used to visit Duxford Imperial War Museum often with my Dad when I was young and loved seeing the different aircraft.

I started my private pilot's licence when I was 16 and flew solo in an Cessna 145 before I had

Following the launch of our Early Careers Development Programme, we caught up with two of our engineers who are leading the scheme, Sally Entwistle and Anna Davanzo, to find out more about their careers so far and what they enjoy most about their jobs.

even driven a car. I wanted to be a pilot in the RAF when I left school but I was too short, so I wasn't really sure what else I wanted to do but my A-level physics teacher suggested aerospace engineering. I undertook a degree in Aerospace Engineering and have never looked back – I love the challenges of being an engineer, the fast pace and that I am constantly learning.

What is your favourite part about your job?

SALLY: Every day is different, but for me the favourite part of my job is identifying problems and creating solutions fixing them! As I mentioned, investing in people and continual staff development is also really important to me, and something I am keen to drive within the business. I have travelled for training all over the UK, as well as to Belfast and Canada.

ANNA: There are so many things I enjoy about my job, it's hard to narrow it down to a favourite, but I'd say there is a huge amount of pride and satisfaction when you see a part that you have designed flying on an aircraft. I have been involved in major and minor modifications as well as repair work throughout my career and I have seen many of my designs flying on aircraft, but I'll always remember my very first repair and the feeling I got when I stood in my office overlooking the runway and watched the aircraft taking off and flying for the first time with the repair that I had designed and stressed.

What projects have you been involved with recently that you can share with us?

SALLY: I recently returned from maternity leave to re-join one of our aerospace teams where we are delivering the design and stress engineering for a crucial aerospace defence project in the UK.

Alongside this, I am also working on a variety of projects, predominantly aerospace at the moment but I also recently had the opportunity to work on-site at a manufacturing firm which engineered production lines and a waste to energy plant. Everyday can be a new challenge!

ANNA: For the last two years I worked on a key UK defence project with an amazing team of engineers, there were a lot of challenges on the project which is really what I think engineering is all about – overcoming problems and finding solutions.

The project I am currently working on is a research and development programme called ADCoSCA which is a project looking at the 'art of the possible' within aerospace, challenging current design and certification philosophies.

What advice would you give to young women looking to pursue a career in engineering?

SALLY: Don't let anything stand in your way when pursuing a career.

There is more support out there than ever before for young people and women to help access

a career in engineering and similar fields. If you are passionate about a career in engineering, be proactive, seek out the programmes to help you develop and gain as much experience as you can.

ANNA: One thing that I think is important for women wanting to pursue a career in engineering is to find a good mentor who can support and encourage you. But, my main piece of advice would be to be yourself – your ideas, opinions and views are as valid as anybody else's. Diversity within any industry is so important because with diversity comes a much greater breadth of knowledge and understanding. Lastly, just go for it because you won't regret a career in engineering.

What's next for you and the team?

SALLY: In addition to everything we have discussed, we are currently working on a high-profile aircraft for which, we aim to deliver a leading-edge innovative product and get it into production.

As engineers we can adapt to new demands, our skills are transferable to allow us to work in other industries so hopefully the future sees us utilising our expertise on a broad range of exciting projects.

To find out more about our Early Careers Development Programme visit our website.

MORSON PROJECTS SHARE COMPOSITE DESIGN EXPERTISE WITH SALFORD RACING STUDENTS

We recently welcomed a group of students from the University of Salford's Racing team to our office in Irlam as part of our on-going support.

The students met with Chris Summers, Principal Engineer, Graham Eardley, Principal Engineer and Ben Barakat, Design Engineer to have their composite design questions answered, in order for them to finalise their racing car designs for the up-coming IMechE Formula Student. We caught up with Chris from the team to find out more about how we were able to help the students with this specific element of their racing car design.

Hi Chris. Tell us a little bit more about the composites design team?

Our composite design team is one of the most capable teams in the UK. Having worked for years with our industry partners on programs such as C-Series, A350, AW189 and Tempest, we can bring decades of cutting-edge experience in all areas of the composite design process. We have expertise from generating new material allowables, structural design and optimisation, tooling design and manufacturing support.



How did the team get involved in helping the students?

Graham and myself are both big motorsport fans, heading each year to Spa for the F1 or Le Mans for the 24-hour race. When we heard that Morson Projects were involved with supporting Salford Racing Team we jumped at the chance to help out. Getting Ben involved was important to us too, as he is one of the best composite design and manufacture engineers in the country.

What did you go through with the students?

The team from Salford Racing were very impressive, they came with a complete digital mock-up of their car and designs for the components that they were looking to make from carbon fibre composites. We went through a whole range of topics including guidance on some of their structural analysis methods and design for manufacture processes. Probably most importantly for the team, we took a deep dive into the manufacturing and tooling they would be creating themselves to manufacture the parts.

How will what you are showing the students help them?

We really want to see Salford Racing getting the car to the track and the worst situation for the team would be investing time and money into a design which would not be manufactured.

By helping the team to understand manufacturing processes that are available to them, we will enable them to make better, more reliable design choices that have a greater chance of success.

In many ways the 'Formula Student' project presents the teams with problems that mirror all our aerospace and defence programs on a day-to-day basis.

Find out more about Salford's Racing team:
www.salfordracing.com



PRINCIPAL ENGINEERS

CHRIS SUMMERS & GRAHAM EARDLEY

Following their involvement in delivering a recent training session with Salford Racing students, and as part of a series of 'Meet the Team' articles, we caught up with Chris Summers and Graham Eardley to find out more about their roles as Principal Engineers, within our Composite Design & Stress team.

Hi both, tell us a little bit more about you and your role?

CHRIS: My day-to-day role can best be summed up as an engineering project leader. At Morson Projects I have had opportunities to work on a wide variety of projects, leading teams of engineers in the delivery of multi-million-pound aircraft projects from design through to manufacture, to collaborating with colleagues and peers within the industry on cutting-edge R&D programmes. There is so much more to the role such as being a mentor for early careers engineers, team communications, business development and strategic planning.

GRAHAM: Within my role, it is my responsibility to lead a team of engineers to deliver projects efficiently and to a high quality through the use of good engineering practice, lateral thinking and good team work.

Like Chris, I am also involved in a lot of the R&D activities, such as the current government-backed ADCoSCA programme. I am also currently enrolled on the wider Morson Group's Leadership Development Programme.

How did you get into a role in engineering?

CHRIS: I always loved anything mechanical growing up. I was lucky to spend time with both my granddads, who had served in the Royal Navy and RAF and I became fascinated by planes. Then I remember seeing Top Gun (on VHS!) when I was quite young and was hooked. I studied Aeronautical Engineering at Loughborough University with a view to following my grandad and entering the RAF, but for medical reasons I was unsuccessful. As one door closed another one opened, and from that point I focused everything on working in engineering.

GRAHAM: My role in engineering has developed on from my University Degree, where I did a Masters in Mechanical Engineering at the University of Manchester, part of this course was to do an industrial placement.

At the time of the placement, I was still deliberating over what I wanted to do for a career and the opportunity to do my Industrial Placement at Morson Projects arose; with Morson Projects being a multi-disciplined consultancy and based locally in Manchester I took

the opportunity to use this to help me find an area of engineering that I had a hunger to pursue.

What is your favourite part about your job?

CHRIS: I have always loved the satisfaction of seeing something that you have helped create succeed out in the real world. When I was younger this would be standing by the side of the runway watching an aircraft that you worked on, take off for the first time. It felt like being part of history and I have been lucky enough to work on several programmes where I have been on-site for its first flight. As I have grown through my career I now get as much satisfaction seeing others develop and succeed.

GRAHAM: For me, it's definitely the variety of projects undertaken within the company. Over the years I have had the opportunity to work on not only a variety of aircraft; both commercial and military, but also helicopters, bikes and ambulances! Working within a consultancy has allowed for this variety and for me to develop a broad knowledge across multiple sectors and work other



Chris Summers
Principal Engineer



Graham Eardley
Principal Engineer

experienced engineers from a variety of companies across the UK and the World.

What projects have you been involved with recently that you can share with us?

CHRIS: The current project I am working on is working within Team Tempest which I think is the most exciting and important UK aerospace project of our generation. I also have experience on various other military aerospace projects such as the Advanced Hawk wing with BAE Systems, Project Dolphin with Marshal Aerospace and A400M with Airbus. My civil aerospace background also includes the many years on the A350-900/1000 as well as all other Airbus aircraft in some way or another.

GRAHAM: Although we work on many fascinating and rewarding large-scale projects, recently I had the opportunity to be involved in the design and manufacture of composite leaf springs on a conceptual trike for people with conditions such as MS. The 'Triple Tread' was a unique project to be involved in that was out of the norm for us, it was a good opportunity to be involved in a project for a good cause, but also allowed us to optimise a component, manufacture and test through to delivery.

What are you and your teams' main areas for focus when designing and delivering a project?

CHRIS: Our focus is always to deliver the best possible technical solution within the constraints of the project. Engineers naturally strive for perfection but the engineering does not exist in a bubble. Really great engineering finds ways to solve problems within the constraints of time and cost. What we at Morson Projects are

so good at as a team is taking our different experiences with all our clients and partners and innovating in our approaches and processes to solve technical challenges without compromising the end safety or quality.

GRAHAM: Exactly! Our ultimate aim as engineers is to develop a safe, effective product. We aim to do this through our ability to be agile and adaptable to clients' requirements and processes, whilst using our expertise in composites, aircraft structures and our sleek ways of working.

What's next for you and the team?

CHRIS: We have had an amazing two years working with BAE Systems as part of Team Tempest and are looking forward to a future where the UK is designing and manufacturing an indigenous combat aircraft. We can't wait to be part of the revolutions that will be needed to make the UK a world leader again.

GRAHAM: We are continuing our support to a number of companies within the military sector and also looking forward to the next developments in the sector, with the obvious being eVTOL, this is an exciting time for the aerospace sector and along with our Design Office Approval, we are in a unique position to have a large impact on the development of these aircraft.

We're also continuing to expand our team across all levels and have recently launched our new Early Careers Development Programme which will be pivotal to the future of our business.

MEET THE TEAM:

CHIEF STRESS ENGINEER JOHN ROACH

As part of a series of 'Meet the Team' articles, we caught up with John Roach, to find out more about his two roles as a Chief Stress Engineer & the Chief of the Office of Airworthiness, as well as what he enjoys most about his career in engineering.

Hi John, tell us a little bit more about you and your role?

For those of you who know me, you may say I like to blow my own Trumpet... I am a Chartered Mechanical Engineer, one of the more senior members of the Morson Projects team having more than 40 years' experience, 30 of those at Morson Projects.

I am interested in all aspects of engineering and have worked in many sectors of industry on numerous products; fixed wing aircraft, rotorcraft, nuclear power stations, nuclear re-processing, lifting gear, chemical plant (structures & pipe stress), submarines, rail vehicles, complex mechanisms, to mention a few.

As Chief Stress Engineer I am responsible for forming, developing and managing my in-house team of structural analysts. I am accountable for the analysis we deliver to our customers and take an active role in technically directing, planning and co-ordinating teams of engineers to deliver a world class product.

In my role of the Chief of the Office of Airworthiness (CoOoA) I am responsible for the airworthiness of the flying parts, systems and equipment designed, approved and certified by Morson Project's UK CAA Part



21J DOA (Design Organisation Approval) team. I ensure that there is a level of independence in the Certification and Verification to meet the relevant Certification Specifications and the Environmental conditions. The position of CoOoA although appointed by Morson Projects, is subject to the authorisation by the CAA following their assessment of my credentials; qualifications, knowledge, experience and of strong character to ensure a level of independence.

For those who don't know me, my other passion is playing a Cornet (not actually a Trumpet), which I have done since the age of 8.

How did you get into a role in engineering?

You may say engineering is in my blood, both my grandfathers worked in the Steel Industry, my dad worked in engineering as a Fitter and ended up the Foreman of a test facility, pressure testing valves and calorifiers. My mum was a Tracer in the drawing office where they both worked, they actually met on the shop floor.

As a child I was always tinkering with stuff, making go carts using pram wheels, extending the forks on my bike and respraying them by adding transfers and so on. When leaving school it seemed like an engineering apprenticeship was the right route for my progression.

What is your favourite part about your job?

I really enjoy being in at the beginning of a project and seeing it through its full life cycle, having an influence on its development, solving the numerous problems that often emerge and working with a great team of mixed disciplines, abilities and personalities.

I love passing on my knowledge, encouraging and supporting young engineers. It is really rewarding watching them grow as both engineers and individuals.

"I am a Chartered Mechanical Engineer, one of the more senior members of the Morson Projects team having more than 40 years' experience, 30 of those at Morson Projects."



Most of my team has been organically grown, starting at undergraduate (for work experience) or graduate level to become world class engineers.

What projects have you been involved with recently that you can share with us?

Over my years at Morson Projects I have been privileged to be involved in and responsible for some great projects. Learjet85 has to be one favourite. It was the first composite fuselage, designed and stressed by Morson Projects from forward to rear pressure bulkheads with all structure and mechanical systems in between. Morson Projects were awarded the 'Queens Award for Export' for our work on that project.

More recently in the role as CoOoA, the design and installation of systems to several Textron Aircraft for conversion to Air Ambulances for service in Norway. The latest (a Latitude 680A) was delivered into service for Christmas.

What are you and your teams' main areas for focus when designing and delivering a project?

Customer focused teamwork, ensuring quality, adherence to the specifications and delivering what the customer wants on time.

To do this we work closely with our customers from the onset of the project and in the main develop the requirement together. We have built up excellent client relationships, these relationships (along with great delivery) have resulted in business growth, team expansion and increased capability. This has also enabled Morson Projects to generate new clients, many in different engineering sectors.

What's next for you and the team?

Due to our excellent performance in 2021 we are looking to expand teams on all current projects and have new exciting contracts won for 2022.

We are currently recruiting at all levels, Graduate's, Junior and Senior Engineers, this is an amazing achievement, especially within the backdrop of the COVID pandemic. In conjunction with this recruitment drive, we have recently launched our new Early Careers Development Programme which will enhance the training and development we provide for the engineers of the future.



MEET OUR IN-HOUSE COMMERCIAL TEAM

One of the core functions of our in house enabling operations is our commercial team. As the team continues to recruit to support the businesses exponential growth we caught up with the team to find out more.

Sophie Williams, Commercial Manager, shares: "Our team are primarily based in Manchester, and support each of Morson Projects business divisions with all of their commercial requirements.

"Morson Projects' offering to clients covers a vast number of sectors such as Aerospace, Defence, Power, Nuclear, Rail and Residential, and is always evolving in-line with our client's needs. As a result of this, no two years are the same. This provides our team with an array of different projects to assist with in a Commercial capacity, ensuring an interesting variety of tasks and exposure to new and different industry sectors.

"The Commercial department is a central business function; with the team being responsible for generating weekly departmental payroll reports, monthly invoice and charge out instructions, weekly cost trackers, managing and updating the project management database and assisting the Project Managers with any other reporting needs.

"We work closely with other internal enabling departments such as Accounts, Administration and IT, which generates effective collaboration across the business and gives great team morale. The team are very close knit; with many team members having worked for Morson Projects for a number of years. We always support each other and pull together in challenging, busy periods – whilst making sure we still have some fun in the office!"

Meet the Commercial team >

We interviewed some of the team to find out more about their roles and what they enjoy most about their jobs:



Hannah Worden
Senior Commercial
Officer

Has worked at Morson Projects for 6.5 years and is currently studying for a BSc in Quantity Surveying at the University of Salford. She is due to graduate this year (Summer 2022).

What does your our day-to-day role entail?

Each day is different, but as an example my roles includes:

- **Reporting the weekly spend against various projects across all of the Morson Projects divisions both internally and externally**
- **Preparing and submitting invoices / payment applications for said projects**
- **Being the Junior Quantity Surveyor on our Power teams larger projects**

What do you find most rewarding about your role?

I love the varied nature of the role and the clear route for progression following graduation. I also work within a great team who all support each other on a daily basis to ensure we achieve our goals and deadlines.



Hollie Miles
Commercial
Officer

Hollie has worked at Morson Projects for 6 months and has just been accepted onto a Business Management with Logistics & Supply Chain Management degree at Edge Hill University.

What does your our day-to-day role entail?

On Monday's we do payroll, I process timesheets and produce hours/cost trackers.

Then, as a general rule the first week of the month we do invoicing, the second week is invoicing breakdowns, the third week is catching up on paperwork, then the fourth/fifth week(s) are spent preparing for month end.

What do you find most rewarding about your role?

I enjoy that everyday is different and we get to see a lot of different aspects of the business. We work closely with many areas of the business – Accounts for payroll and invoicing; Project Managers for job creation, budgets, cost trackers and invoicing, Business Development for quotes.



Ruth Scruton
Commercial
Administration Manager

Ruth has worked at Morson Projects for 6 years. Ruth naturally takes on the role of a supportive mentor within the team and is pivotal in overseeing payroll and administration tasks.

What does your our day-to-day role entail?

My role is very varied, but as an example, core tasks include keeping commercial tasks up to date, trackers, payroll, team tasks, our internal timesheet system and our internal Project Information Management System (PIMS) input/output.

What do you find most rewarding about your role?

The people who I work with and in particular the people in my team are definitely one of the favourite parts about my role, it's also especially rewarding to see a rise in profit on a monthly/annual basis and knowing that we have contributed significantly to that.



Phil Scanlan
Senior Commercial
Officer

Phil has worked at Morson Projects for 2.5 years, during his time with the business he has been studying for his self-funded Association of Chartered Certified Accountants (ACCA) qualification.

What does your our day-to-day role entail?

Key tasks for me as a Senior Commercial Officer include managing commercial aspects of projects and departments throughout the business. this includes invoicing, time bookings and associated costs as well as reporting relevant information back to the decision makers within the business.

What do you find most rewarding about your role?

Getting to experience and learn about a wide array of different areas of the business all within one role.



Bonita Whysall
Commercial Office
Manager

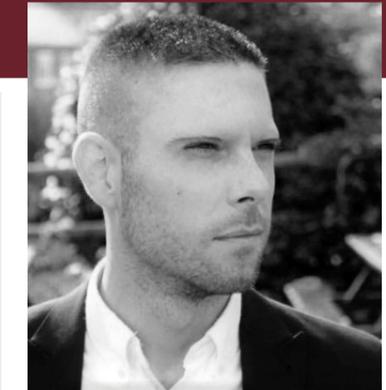
Bonita joined our Waldeck division in 2013, working as an Office Manager for our Peterborough office, since Waldeck's acquisition by Morson Projects, Bonita has become a valued member of the wider Commercial team.

What does your our day-to-day role entail?

Day to day, I am responsible for the commercial administration for all of the Waldeck disciplines; Architecture, Digital, Civil & Structural Engineering and Mechanical & Electrical Building Services Design, this involves processing new quotes and new jobs, checking and approving timesheets, updating projects lists and creating weekly payroll reports.

What do you find most rewarding about your role?

It is a very varied job and I keep a list of all of my tasks as there is so much involved with the role. I am always extremely satisfied at the end of each day when I tick off what I have managed to get done that day!



Sam Jakeman
Projects Finance
Administrator

Sam joined our Italy team in 2014 for Morson's SRL division, which later became part of Morson Projects in 2016. Sam moved back to UK in January 2018 to start working in our Yeovil Office.

What does your our day-to-day role entail?

My role includes invoicing and payroll support on a monthly basis, as well as project management using our Project Information Management System (PIMS) to check and update jobs when values have been reached. Tasks also include producing purchase orders for the Italian jobs and keeping trackers of all costs and invoices updated.

What do you find most rewarding about your role?

The role is varied, especially working alongside the Italian office. It's also rewarding seeing how things can progress throughout the year!

NATIONAL APPRENTICESHIP WEEK:

GROWING THE NEXT GENERATION OF ENGINEERS

We recently joined businesses across the UK as they celebrated National Apprenticeship Week. The aim of the week is to share stories and information to encourage others to consider how apprenticeships can help us to **#BUILDTHEFUTURE**.

But before we look too far into the future, we took a trip back to 1983 when we caught up with two father-and-son duo's from our Brough office, as they talked about the crucial role Apprenticeships have had in building their team over the past 40 years.

Hi Brian, and Vince. Tell us...

What was it like doing an apprenticeship in 1983?

BRIAN: I did my apprenticeship at BAE Systems, Brough (then British Aerospace). Engineering in the 1980's was still a very male dominated environment, and BAE Systems, at the time, employed over 4000 people. Moving from an education environment to being part of such a large organisation was daunting. However, the support and friendship from my peers and colleagues, then as now, was always available.

The methods of training were very different, with no computers (or internet) and manual drawing boards. However, knowledge and experience were still passed down through the generations of engineers, as it is now, which

allowed me to train and develop through the apprenticeship.

VINCE: The first year was based in the onsite training centre with the other 1st year apprentices. You would spend a set amount of time in all the training centre manufacturing sections.

The 2nd year you were assigned to various manufacturing centres on the shop floor.

This gave us an amazing grounding into manufacturing and production methods within the aircraft company and also the problems they would face on a day-to-day basis.

Then 3rd and 4th year we spent a period of time in various technical departments including Aerodynamics, Structural Test, Site Facilities, Structures and Design.

Again, very valuable experience gained throughout my development. I was accepted into Aircraft Design Engineering Function and worked on Hawk, T45 & Gripen Aircraft.

Since then I have worked at some of the biggest aircraft manufacturers in the world including Boeing, Airbus and Bombardier in various countries.

How did an apprenticeship set you up for the successes you have had during your career?

BRIAN: The grounding and early experience gained through my apprenticeship was

invaluable. The basic framework for all my understanding and appreciation of aircraft design and manufacture, was forged during my apprenticeship. These strong foundations allowed me build upon a passion for engineering and hone my skills as an airframe design engineer, as my career developed.

From what you have seen of Jordan and Joe's experiences... How have things changed?

BRIAN: Engineering in the UK has changed massively over the last 39 years. The decline of large-scale manufacturing, especially in Hull and East Yorkshire, has altered the structure of engineering with many smaller 'High Tech' companies evolving. However, the scientific design and technology sector remains very strong, and engineering is still, and in some ways more exciting profession.

The diversity and inclusivity now found within engineering, make it a far more accessible option for young engineers, and the support and guidance available is extensive. Although the methods have changed drastically, Jordan and Joe, can still tap into a wealth of knowledge within Morson Projects.

The basic fundamentals of an apprenticeship remain the same; older and more experienced designers passing down knowledge and experience to the

younger engineers, allowing them to grow and develop.

VINCE: Although they haven't had the same production and technical department experiences as we did, they have still gained a great foundation from the combination of academic learning at College, complemented by the hands-on experience of attending site visits.

Joe and Jordan, what drew you to follow in your fathers' footsteps?

JOE: I always had an interest in engineering and knew that was what I wanted my career to be in. When I finished my A-levels, and was looking at my options for universities, this opportunity became available. My Dad, who also works for the company, made me aware that Morson Projects were wanting to take on Graduate & Pre-Graduate design engineers and that they would sponsor me as I completed my degree.

JORDAN: I have always been interested in how things work and are designed. I always tended towards the maths, physics and engineering subjects in school. I took physics and maths at A-levels but didn't know what I wanted to do after that. I had offers at a few different universities to study engineering and then an opportunity to Join Morson Projects as an apprentice came up just over 10 years ago now. I looked into



BRIAN (Design Manager) and **VINCE** (Lead Design Engineer) met in 1983 on the first day of their Apprenticeships for British Aerospace Brough which is now BAE Systems.

Since later joining Morson Projects in 2009 they have also welcomed both their sons, **JORDAN** (Lead Aerospace Design Engineer) and **JOE** (Junior Design Engineer) to the team as they follow in their father's footsteps.

Morson Projects and really liked the look of them. I was interviewed by the office manager at the time and got the job.

What have you found to be the benefits of choosing this route into engineering?

JOE: Instead of funding my own university degree I was able to take this position within Morson Projects and earn my degree while gain valuable experience in the industry. It also meant that completing my degree over a longer period of time could make the workload more manageable.

JORDAN: I found learning on a part time bases alongside work over 4.5 years instead of the full time 3 years much more manageable. Also seeing how you can apply the learning in the workshop or classroom to my day job as an Apprentice Design Engineer then Junior Design Engineer.

What's next for you?

JOE: In few years, I hope to have completed my degree in Engineering and to have further progressed to become a more competent and capable engineer.

I am excited about some of the new projects that Morson Projects have got coming up in the future and the fact the team is growing, hopefully taking on new Apprentices to support this.

JORDAN: I have been leading a team for one of our clients for just over 3 years and we have gone from strength to strength increasing the team and taking on graduates. I have also been more involved in the managing of the Hull office on a day-to-day basis. Our goal is to keep growing the office and take on more graduates to pass on our knowledge to the next generation of engineers.

VINCE: Although towards the end of my career, I am still very passionate about my job and fortunately enjoy coming to work, well most days and looking forward to my next challenge. I have recently become a Mentor within Morson Projects and look forward to helping my Mentee develop into an Engineer.

BRIAN: As Design manager, I enjoy to seeing our team in Hull grow and develop. We now have a group of young engineers that represent the future of the design in the Hull office. There are several exciting projects coming up and I look forward to the fresh challenges and to support the next generation through their early careers.

To get in touch with our Brough team, please call 01482 337755.

MORSON PROJECTS:

CLEANING UP THE UK'S NUCLEAR PAST, SAFER & SOONER

A huge thank you to Building Design & Construction Magazine for featuring us in their latest issue. Here's what they had to say...

Morson Projects have more than 30 years' experience within the UK's nuclear industry, having developed an extensive footprint and a reputation for the delivery of resource, engineering design and project management solutions.

As a long-term supplier for top industry clients such as Sellafield Ltd, Cavendish Nuclear, Dounreay Site Restoration Limited and the United Kingdom Atomic Energy Authority, Morson Projects have been involved in many of their major programmes in recent history.

The Morson Projects team demonstrates a strong track record in the provision of technical, engineering and management support services, delivering fully co-ordinated solutions across a broad range of disciplines, ensuring that nuclear assets are optimised across their whole lifecycle, from design to decommissioning.

We caught up with Associate Director, Ian Ross, to find out more: "We pride ourselves on our depth of knowledge across the nuclear industry, as well as our specialised talent and ability to support such activities as part of a Managed Service with a comprehensive management and quality solution – particularly, for example, across the Sellafield decommissioning programme, where we support the delivery of high-hazard risk-reduction activities."

Tell us more about your team's involvement at Sellafield?

"The Morson Projects team has over 80 technical, engineering and design personnel engaged on Sellafield projects via long-term framework contracts. Our personnel primarily operate from our Kelton House offices at Westlakes Science Park, but we also have personnel working on the Sellafield Site and in Sellafield Limited offices in Whitehaven and at Risley. Our office estate has the capacity to accommodate and facilitate an integrated project team, which allows reach-back into the wider 900 strong Morson Projects capability and for wider resourcing requirements has direct access to the Morson Group's UK-wide technical skills database of 900,000 personnel."

"We are committed to supporting Sellafield's ethos of 'cleaning up our nuclear past, safer and sooner' which has been demonstrated through receiving our ninth consecutive RoSPA Gold Health and Safety Award and our 'One Team' culture to exceed Office for Nuclear Regulation targets with regards to documentation close-outs."

"At the same time, we are committed to supporting the local community and provide funding each year for worthy causes, charities, sports and education. This is part of the Morson Group's commitment to the socio-economic programme, which has raised over £2million for worthy causes throughout the UK over the past 10 years."

What projects are you currently involved with?

"Morson Projects are engaged on the Replacement Analytical Project (RAP) via the Programme and Project Partners (PPP) framework, which is 2 years into a 20 year contract and are looking at early engagement in other projects within PPP, including waste retrieval plants, storage buildings, effluent treatment plants, and laboratories."

"We are also working with our supply chain colleagues to provide support via the Integrated Asset Care (IAC) framework, which is the proposed replacement of the Operation Site Works (OSW) framework. The OSW framework has been extended to its maximum term and is approaching expiry. We are also supporting the new Infrastructure Delivery Partnership (IDP) which will replace the Infrastructure Services Alliance (ISA) currently being delivered by Morgan Sindall and Arup."

"A significant amount of our work (circa £4 million annually) is via the Design Services Alliance (DSA), a 15-year contract which will continue into its 3rd 5-year tranche from 2022 to 2027. The alliance was first set up in 2012 with Sellafield Ltd as an alliance partner working alongside AXIOM (a joint venture comprising Assystem, Jacobs, Mott MacDonald) and Progressive (Aecom and Cavendish Nuclear)."



"The alliance has helped to make Sellafield safer, sooner by cutting over 700 months from hazard reduction schedules – bringing closer the creation of a clean and safe environment for future generations."

What design and engineering services does Morson Projects provide to Sellafield?

"Morson Projects has been involved in providing a diversity of engineering tasks which vary in size and complexity and which include design and engineering service provision, technical author services, safety substantiation, site surveys, plant modifications, commissioning and project management."

"We currently provide the following fixed-price engineering and Technical Documentation services:

- **First Generation Magnox Storage Pond**
Technical Author and Engineering support
- **Box Encapsulation Plant**
Operation and Maintenance Documentation
- **Silo Maintenance Facility**
Operation and Maintenance Documentation
- **Magnox Swarf Storage Silos (MSSS)**
Knowledge Hubs
- **MSSS**
Spares Engineering
- **MSSS**
Plant Operation and Maintenance Documentation
- **MSSS**
Plant Log Maintenance
- **Silo Emptying Plant (SEP) Machine**
Operation and Maintenance Documentation
- **SEP 1 & 2**
Commissioning Support
- **Design support for various plants**

"Asset Care and Technical Documentation services are also delivered via The Decommissioning Alliance – a partnership comprised of Jacobs, Atkins and Westinghouse Electric Company."

What's next for the team?

"We are working closely with our sister company, Morson Talent, to identify additional Suitably Qualified and Experienced Personnel (SQEP) to strengthen our increasing Sellafield activities. We also encourage a strong mentoring culture which supports our Early Careers Development Programme for graduates and apprentices."

"In a time when SQEP resource is at a premium it is extremely important that we look to capture the wealth of knowledge within the existing team and to support the development of the next generation of engineers."



THUMBS UP FOR CHARLIE FOUNDATION:

LEJOG CHARITY CYCLE

Lead Design Engineer, John Robinson, from our Irlam office has committed to completing the Land's End to John O'Groats (LEJOG) cycle in memory of his son, Charlie.

On the 20th of May, John will be accompanied by a group of 12 friends and players from Garstang Rugby Club throughout the 940 mile (1510 km) journey.

Funds raised will go the Thumbs up for Charlie Foundation, which was set up by John and his wife, Nici, in memory of their son Charlie to help provide respite breaks for families whose child has been diagnosed with a brain tumour or families bereaved because of a childhood brain tumour. The money will also contribute towards future research, specifically around paediatric Ependymoma brain tumours.

We caught up with John, to find out more about Thumbs up for Charlie: "As Charlie's parents, we wanted to do something in Charlie's memory. What really helped our family was knowing that there was support available.

"Respite breaks were invaluable for our family. We were able to have much needed breaks provided free of charge by charities. This enabled us to create special memories without further financial burden. We were able to spend quality time with Charlie and his siblings (Jack and Harry). It enabled us to have the little bit of "normality" that we craved.

"When you have a child who is going through treatment it impacts on every aspect of your life; family dynamics, constant stress and anxiety, constant hospital visits for check-ups and treatment, prolonged stays in hospital, the constant worry of a relapse, infection etc and in addition to this is the massive financial constraints.

"Charlie touched everyone's lives, although he was taken from us far too young, his strength, determination and love of life has given us the strength and motivation to make this charity happen in his memory.

"Our community have been fundamental in supporting our family and following Charlie's story. We know that we still have their support as we already have a number of fundraising events planned to raise money for Thumbs up for Charlie Foundation, including the up-coming bike ride."

With just a few weeks to go, John and friends are currently training for the ride by cycling around 100 miles a week, including 35-mile night rides and lunch-break turbo-training!

We wish the group all the best of luck on their journey.

If you would like to sponsor the group, you can do so by following the QR Code below.



ANDY HASSALL COMPLETES LONDON LANDMARKS HALF MARATHON FOR TEENAGE CANCER TRUST

On the 3rd April Business Development Director, Andy Hassall, ran the London Landmarks Half Marathon to fundraise for our 2022 chosen charity – Teenage Cancer Trust.



The trust is the only UK charity dedicated to helping young people living with cancer find the support they need. Whether it be support with their exams or advice with first jobs, Teenage Cancer Trust makes sure young people have the support and advice they need from the very start. They provide young people with independence, support throughout treatment and the facilities to meet other young people who are going through something similar.

With thanks to everyone who has sponsored Andy, we are delighted to share that he has smashed his original target of £1,000 by raising an incredible £2,000!

We caught up with Andy to find out more about his motivation to take part in the Half Marathon.

Hi Andy, what made you decide to take part?

I was due to run the London Landmarks Half Marathon 2 years ago. We all know what happened next! Several lockdowns later and it was finally rescheduled for April 2022.

How have you prepared for the marathon and what challenges did you face whilst training?

This will be my 4th half marathon. Preparation is key. Prior to any running event I always follow a strict 10-week training programme. The plan I use prepares your body for the stress of running 13.1 miles, it also gives me focus and motivation. I did struggle around week 7 of my training!

I normally run my half marathons in the Autumn, so the training takes place in the summer. This is the first half marathon I have done in Spring! It is a struggle running 4 times a week when it's dark, wet and cold.

The warmer weather and lighter nights over the last couple of weeks have got me mentally back on track.

Why did you choose teenage cancer trust and what does the cause mean to you?

I have always tried to support the Morson Group's chosen charities. I like running so have always put the two together. For this run, I chose to support the Teenage Cancer Trust.

When they were announced as one of the charities we were supporting I knew I had to try and raise much-needed funds for them. If you read some of the personal stories on the website they are heart-warming and heart-breaking at the same time! The work they do is amazing.

Were any of your friends and family there cheering you on at the side lines?

Joanne, my wife, came along to support me. We made a long weekend of it, travelled to London on the Friday, caught a show on the Saturday and then took part in the Half Marathon on the Sunday, followed by an evening meal at The Ivy (my reward).

What advice would you give others wanting to do a half marathon for charity?

I've always said anyone can run! To anyone who says they will be slow! I say to them that there is always someone who is faster than you and slower than you. Who cares how fast you are. I would always advise to follow a plan, stick to it, and build up slowly. If 13.1 miles is too scary a prospect, try a 10K or even a 5K Parkrun. And don't forget to smile and enjoy the day!



"When Teenage Cancer Trust were announced as one of the charities we were supporting I knew I had to try and raise much-needed funds for them."

MORSON PROJECTS' BRISTOL TEAM DOUBLE IN SIZE AND CONTINUE TO GROW



As the UK engineering industry booms, there really has been no better time to work in engineering, and no better time to be part of the Morson Projects team. With a plethora of exciting projects for top UK clients, and engagement as trusted partners on key national programmes, our team are busier than ever.

The last 12 months has seen our Bristol office double in size, with an additional 25 roles currently being recruited for across the South West of England.

We caught up with Sam Pike, Principal Design Engineer, who runs our Bristol team to find out more:

Hi Sam, tell us a bit more about the Bristol office team?

"Our Bristol office is a diverse and dynamic team of technical staff, who work predominantly with clients across the Aerospace & Defence industry, such as Leonardo Helicopters, BAE Systems and Eaton. We're also currently engaged on the government-backed ADCoSCA programme.

"During the past 12 months we have welcomed several new starters into the Bristol office, to include experienced design and stress engineers as well as our Graduate Engineer, Alex, who the team will be supporting as he works his way through our Early Careers Development Programme.

"The team provide support on everything from structural design concept through to manufacturing detail, including the integration of systems, stress analysis, tooling design and production support.

"The Bristol office work collaboratively with other Morson Projects design and stress teams located in Manchester, Hull, Belfast and Yeovil."

What services do your team typically provide?

"Each day and each project come with a different set of challenges and unique solutions. Typical services we provide clients with include:

- Certification and Technical Reports
- Check and Final Stress Analysis
- Detailed Design and DFM
- Dynamic Analysis of Mechanisms
- Fatigue and Damage Tolerance
- FEM Analysis Including Pre and Post Processing
- Initial Conceptual Design Studies
- Product Development
- Project Planning and Programme Management
- Prototype and Production Design
- Stress Conceptual Design Evaluation
- Stress Sizing

What makes your team different from competitors?

"I believe that our biggest USP is our willingness and capability to work collaboratively with clients using the multitude of experience and methods that we have gained from working across a variety of different projects for a range of different clients.

"Our collaborative approach enables the team to be adaptable and reactive to any task, resulting in the "right people working on the job". By offering an alternative view point and sharing best practices, we are able to challenge the conventional ways of working. This allows the wider team, the client and ourselves to work in partnership, achieving the best solution to any given challenge."

What's next for the team?

"As we continue to grow our team organically and are looking to invest in the future, we are engaging more and more with local Universities to tap into the next generation of engineering talent. We have exhibited at Careers Fairs at The University of Bath and the University of West England (UWE) in recent weeks, which has been a fantastic opportunity to talk to budding engineers.

"We're currently actively recruiting for roles of all experience levels, and with the support of our Early Careers Development Programme look forward to being able to bring more graduates into our team to support the senior team members. Passing on our knowledge and experience is something we're really passionate about, so it really is an exciting time to be part of our team.

"Furthermore.. staff socials! It's great to have a hybrid working model in place and to have welcomed everyone back to the office. The atmosphere has been refreshing and we look forward to reactivating the social side of work now we are able to."

To find out more about how our Bristol office could support your next project, please get in touch with Sam Pike by calling 0161 707 1516 or sending an email to sam.pike@morson-projects.co.uk.

MEET THE AEROSPACE GRADUATES:

Brough & Bristol

As part of our investment in the future, and as our team continues to grow due to continued client demand, we recently welcomed three new graduates to our Brough and Bristol offices.

The two offices share resource and work closely together to deliver projects for clients such as Leonardo Helicopters and BAE Systems. We took some time out to catch up with Graduate Aerospace Design Engineers, Luke, Yuri and Alex, who joined the team through our Early Careers Development Programme at the start of the year.



Luke Wilson
Graduate Aerospace
Design Engineer

Based in our Brough office
Studied at:
University of Hull
Degree:
**First Class MEng - Integrated
Masters in :
Mechanical Engineering**
Graduated:
June 2021
Joined Morson projects:
January 2022



Yuri Davy
Graduate Aerospace
Design Engineer

Based in our Brough office
Studied at:
Durham University
Degree:
**First Class MEng - General
Engineering specialising in
Aeronautical Engineering**
Graduated:
August 2020
Joined Morson projects:
January 2022



Alex Hyer
Graduate Aerospace
Design Engineer

Based in our Bristol office
Studied at:
University of Nottingham
Degree:
**First Class MEng - Aerospace
Engineering (with a year in
industry)**
Graduated:
June 2021
Joined Morson projects:
January 2022

Alex, Yuri and Luke shared with us about how they knew a career in engineering was for them and how they are getting on in their new roles. Take a look at their full interviews below:

Hi all, tell us.. How did you get into a career in engineering?

ALEX: From a young age I've always loved aviation and aerospace. I never considered studying anything other than Aerospace Engineering when looking at what to study at university, and after a degree and a year placement in industry, I was confident this was the right career and industry for me.

YURI: I've always enjoyed the maths and physics side of learning and after studying maths, further maths and physics A-levels I wanted to use my knowledge in a more practical manner. That's why I chose to study General Engineering at university.

I didn't know what stream of engineering I wanted a career in, which is why General Engineering was perfect, but I started to enjoy the aerospace and design streams of engineering much more than the rest. After finishing my degree in 2020 I planned to take some time out travelling so didn't have a job lined up and due to everything that happened with the pandemic, ended up working for Test and Trace for a while. I worked there until I heard about an aerospace design role at Morson Projects which sounded great, I applied and got the job!

LUKE: Throughout school and college I've always had a passion for maths and physics, studying these subjects along with chemistry for A-level, I then progressed to study a Master's degree in Mechanical Engineering at the University of Hull, completing my 4 years of hard work with a First class in June 2021.

Throughout my course, it soon became apparent that using CAD software for design was the area of the course that I both enjoyed and excelled in. Aerospace

has always been a passion of mine, stemming back to my younger years when my Dad and I spent countless hours building model plane sets as a hobby, this passion, along with the knowledge I have picked up throughout my Master's Degree makes the role at Morson Projects a dream come true for me.

Tell us a bit about your day-to-day role?

ALEX: My role so far has primarily been working with Leonardo Helicopters, working on design solutions to required changes on 3D models. However, I am being trained both as a design and stress engineer and have a varied number of tasks, providing a variety of experiences which allow me to expand my skillset.

YURI: My day-to-day role has changed since I started in early January. At first, I was training on the software and doing general jobs to help settle me in to the role along with Luke. After completing the training, I have moved onto supporting Leonardo Helicopters as part of a Morson Projects team, where my day-to-day role is to help the team implement the required changes which involves deep investigation, developing solutions, presenting ideas and using CAD software to implement changes.

LUKE: Currently, my day-to-day role is very different to when I started in early January, my line-manager Jordan was keen to get myself and Yuri onto a programme where we can get exposure to real engineering situations and processes. The first 4 weeks I completed the Morson Catia V5 training, the next task myself and Yuri were assigned to was to re-write the training we had just completed, making it clearer and more useful for work experience students and new graduates to use in the future.

Since this was completed, I have now moved onto supporting Leonardo Helicopters as part of a Morson Projects team, tasks here involve changes and solutions



to works on an in-service aircraft, these tasks require lots of investigations, presentations to clients with findings and is constantly reinforcing and improving my Catia V5 knowledge.

What do you find most rewarding about your role?

ALEX: I really enjoy the problem solving element of engineering. A large portion of my role is solving engineering issues and developing solutions. I've found both carrying out and completing that challenge can be a rewarding experience. I also enjoy working on noticeable elements of aircraft and seeing that changes I make are physically going to be manufactured and used.

YURI: The most rewarding aspect of my role is how quickly I have been trained and entrusted with important design work. I expected months of shadowing and training before I'd be able to hop onto real projects, but the team has helped me get up to speed very quickly and start doing the job I came to do. I'm still heavily supported by the team at the office who are happy to help me out when I need, but also push me to find the answers by myself. I find this learning on the job style very rewarding as week on week I can see my progress.

LUKE: For me, the most rewarding part of this role is over-coming problems by finding an appropriate solution; quite often on the Leonardo Helicopters project I am working on, solutions to problems aren't always as simple as they may first seem, seeing the problem all the way through to the end and developing an appropriate solution is a great feeling!

Another rewarding aspect of my role is how far I have developed in such a small amount of time, a large part of this fast development has to be accredited to my colleagues in the Brough office who are always more than happy to take the time to assist and support me when required by giving me a push in the right direction but ultimately allowing me to discover the answers myself.

How are you finding the Early Careers Development Programme?

ALEX: The Early Careers Development Programme has been a fantastic opportunity to develop my knowledge and skills whilst working on the job. The programme

has given me the opportunity to work on a diverse number of tasks under the supervision and guidance of experienced and incredibly supportive colleagues.

YURI: I'm really enjoying the Early Careers Development Programme as I can see myself improving every week and I know that I have the support structure in place if I need it. I have been assigned a mentor, Vince, who I have regular meetings with to discuss my development and plans for the future. Having a mentor with so much experience in engineering who can help guide me through my development is a very valuable part of the programme.

LUKE: The Early Careers Development Programme has a huge benefits to the progression of early career engineers, myself and my mentor, Brian, have regular meetings were we discuss developments, areas I have excelled in recently and areas in which I may need some help with. We set SMART (Specified, Measurable, Achievable, Recorded, Timed) targets, which will guide me into becoming a better, more well-rounded engineer, ensuring I am able to complete all of the early career competency matrix.

What are your long-term career aspirations?

ALEX: Due to the variety of tasks I will be exposed to on the Early Careers Development Programme, I have the luxury of experiencing a range of both design and stress tasks in a professional engineering environment. I'm hoping to use these experiences to find my strengths, specialise and work towards being an experienced and highly capable engineer.

YURI: My long-term career aspirations are to become one of the best design engineers in aerospace. I want to push to become a chartered engineer as soon as possible and continue to learn and develop on the job. When I have gained the knowledge and experience, I'd also like to help work in outreach and mentoring to help people develop the way others have helped me.

LUKE: My long term career aspirations are to become a fully chartered, capable and reliable design engineer here at Morson Projects and I look forward to being able to have the chance to pass down gained knowledge on to future early careers engineers in years to come.

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MEET THE TEAM:

CONTROL SYSTEMS ENGINEER JAKE PIKE

As part of a series of 'Meet the Team' articles, we caught up with Jake, to find out more about his role as a Control Systems Engineer within our Power, Automation and Controls Engineering division and how his journey led him to a career at Morson Projects.

Hi Jake, tell us a little bit more about you and your role?

I work as part of the Ematics control systems team, developing SCADA and PLC software to control a variety of different plants and processes.

How did you get into a role in engineering?

After enjoying doing an Electronics A Level, I had the opportunity to chat with Paul Ward (my current boss). He invited me in and got to see what Ematics was all about. We kept in touch as I went to uni, studying Electronic Engineering. As my course was a sandwich course (the third year to be carried out as a work placement, before the final year of the degree), I came to Ematics for the full year, which

I really enjoyed. Throughout my final year I kept in touch, finishing off parts of projects I had been working on, and then came back to join the team permanently once I had graduated.

What is the most rewarding part of what you do?

The most rewarding part of the job is towards the end of a project, where you get to go to site to carry out commissioning. It's great to finally see the system you've spent months (or years) developing actually in place and functioning.

What projects have you been involved with recently that you can share with us?

I'm currently working on a large SCADA project for a UK rail client, which involves creating a unified control system spanning across Britain, providing the management of the electrification of the railways. In the background, I'm also involved with other projects such as power stations and continuous maintenance projects for UK road tunnels.

What are your future career aspirations?

At the moment I'm really enjoying working as part of the team at Ematics. As we get to work in a variety of different industries, I can always look forward to the next project, which will give me good insight to a new field and bring its own, unique challenges.

Would you recommend a career in engineering to others, if so – why?

I'd always recommend a career in engineering as it provides a progressive and challenging career. With a company like Morson Projects, I have the opportunity to work across projects in different sectors whilst also working close to other teams involved in other engineering disciplines.

To find out more about our Ematics team please visit:
www.ematics.co.uk

