

Careers in Platform Solutions at Rochester





Platform Solutions

State of the art

Platform Solutions is a transatlantic business, part of BAE Systems Electronics and Integrated Solutions operating group, serving the defence and aerospace communities with capabilities and products that improve operational safety and enhance mission effectiveness. The business supports a wide range of military and commercial platforms.

Our world-class technology is helping to redefine what an aircraft (and its pilot) can achieve. Our business is built on many years of competency and experience – our history can be traced back to Elliott Brothers who made flight instrumentation – giving us over 90 years of control and mission systems experience. For example, the products we've developed for both rotary and fixed-wing aircraft offer pilots a heightened sense of their surroundings. That greater degree of awareness means they can safely take off and land in extremely low-visibility conditions, including fog, sandstorms, heavy rain and darkness.

Working with our customers and suppliers, we aim to deliver effective systems and a through-life capability to meet the most challenging requirements.

BAE Systems is an international company engaged in the development, delivery, and support of advanced defence and aerospace systems in the air, on land, at sea, and in space. The company designs, manufactures, and supports military aircraft, combat vehicles, surface ships, submarines, radar, avionics, communications, electronics, and guided weapon systems. It is a pioneer in technology with a heritage stretching back hundreds of years and is at the forefront of innovation, working to develop the next generation of intelligent defence systems. BAE Systems has major operations across five continents and customers in some 130 countries. The company employs nearly 96,000 people and generates annual sales of approximately £15 billion* through its wholly owned and joint-venture operations.

The Electronics and Integrated Solutions (E&IS) Operating Group of BAE Systems designs, develops and manufactures a wide range of electronic systems and subsystems for both military and commercial applications.

The E&IS Operating Group has more than 17,000 employees working at more than 50 sites in the U.S., U.K. and Israel.

*On a pro forma basis, assuming BAE Systems had owned Armor Holdings for the whole of 2006.

Defence Avionics



Commercial Avionics



Vehicle Systems



Organised for success

Through three distinct business areas, we are capturing and exploiting the potential of our transatlantic capability. Our market-facing business areas brings all of the capabilities of Platform Solutions to bear on the needs of our customers, enabling us to more thoroughly understand the market, harness our customer relationships, and ensure execution of our programmes.

Defence Avionics

UK and Middle East Fixed-Wing Avionics

Our UK and Middle East fixed-wing organisation focuses on serving the needs of our defence customers in the UK and Middle East. Even the most capable airframe in the world needs the right systems for it and its crew to perform their mission successfully. Providing mission-critical systems on major platforms, including Typhoon, Tornado, Nimrod and Hawk, we are working to ensure the best platform performance possible.

As well as being a provider of innovative solutions, we also ensure they continue to add value for our customers throughout the life of the platform. We provide a full range of innovative and adaptable support services, ensuring the equipment will be ready for action whenever needed.

US Fixed-Wing Avionics

The US fixed-wing organisation serves the needs of our major US markets around C-17, F-35 and other US platforms such as F-22. Working closely with our key customers, this market area draws capability from across Defence Avionics, in the UK and US, to deliver a reliable solution to our customers' needs.

Rotary-Wing Avionics

Servicing the needs of the rotary-wing market globally, this market area draws together our capabilities and technologies, allowing us to apply them to key rotary wing platforms – such as UH-60, V-22, CH-47 and EH101 – and to grow our footprint and capability in this market area.

International Avionics

Our international avionics market area is a growing business, leveraging a strong presence in Asia. We are working to ensure we deliver real advantages through innovative defence systems, cutting-edge next-generation technologies, and unsurpassed support services, around the world.

Avionics Products

Our Avionics Products team supports our market facing business groups to fully understand the current and emerging needs of our customers. This group is then responsible for designing state of the art, business winning solutions to meet or exceed these needs.

The Avionics Products group is split into four specialist capability areas that operate across all three Defence Avionics sites. This ensures we make full use of our technology across our product range and also ensures we develop long term strategies.

Defence Avionics is responsible for the design, manufacture and support of electronic and information systems that make the platforms more capable.



Commercial Avionics Vehicle Systems

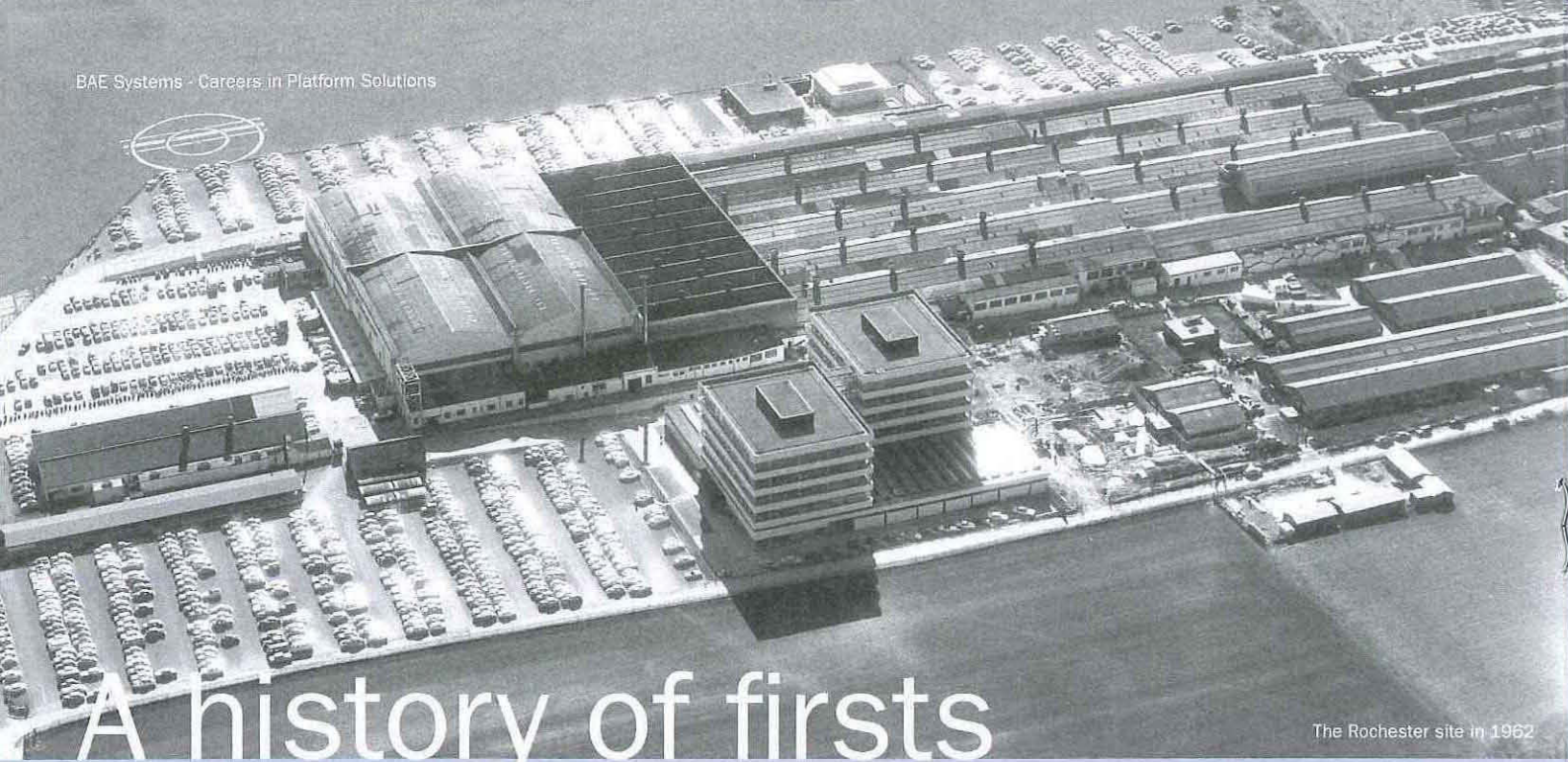
Our Commercial Avionics organisation at Rochester provides high-integrity, safety-critical solutions to the commercial aircraft industry on platforms such as the Boeing 777 and Airbus A320. We work closely with the aircraft designs to provide the optimum blend of high-performance, while maintaining outstanding value to the customer.

We pioneered the application of fly-by-wire flight controls to the commercial market, as well as the application of head-up displays to the airline community.

BAE Systems has a strong environmental record and has used its technology to help reduce harmful emissions from road traffic. Vehicle Systems operating out of Johnson City in New York State are a world leader in the design and delivery of Hybrid Electric Drive Systems. Their proven systems are being widely used in New York City, Toronto and other US cities as well as military applications. This technology and knowledge is being passed to Rochester to allow the transfer of the Hybrid Electric Drive Systems into the UK and Europe.

Work is taking place with a leading UK Bus manufacturer to produce a number of Vehicles for the UK market. Other markets are also being reviewed to determine the suitability of the systems for these markets.

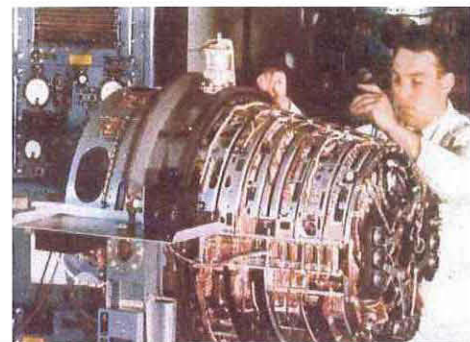




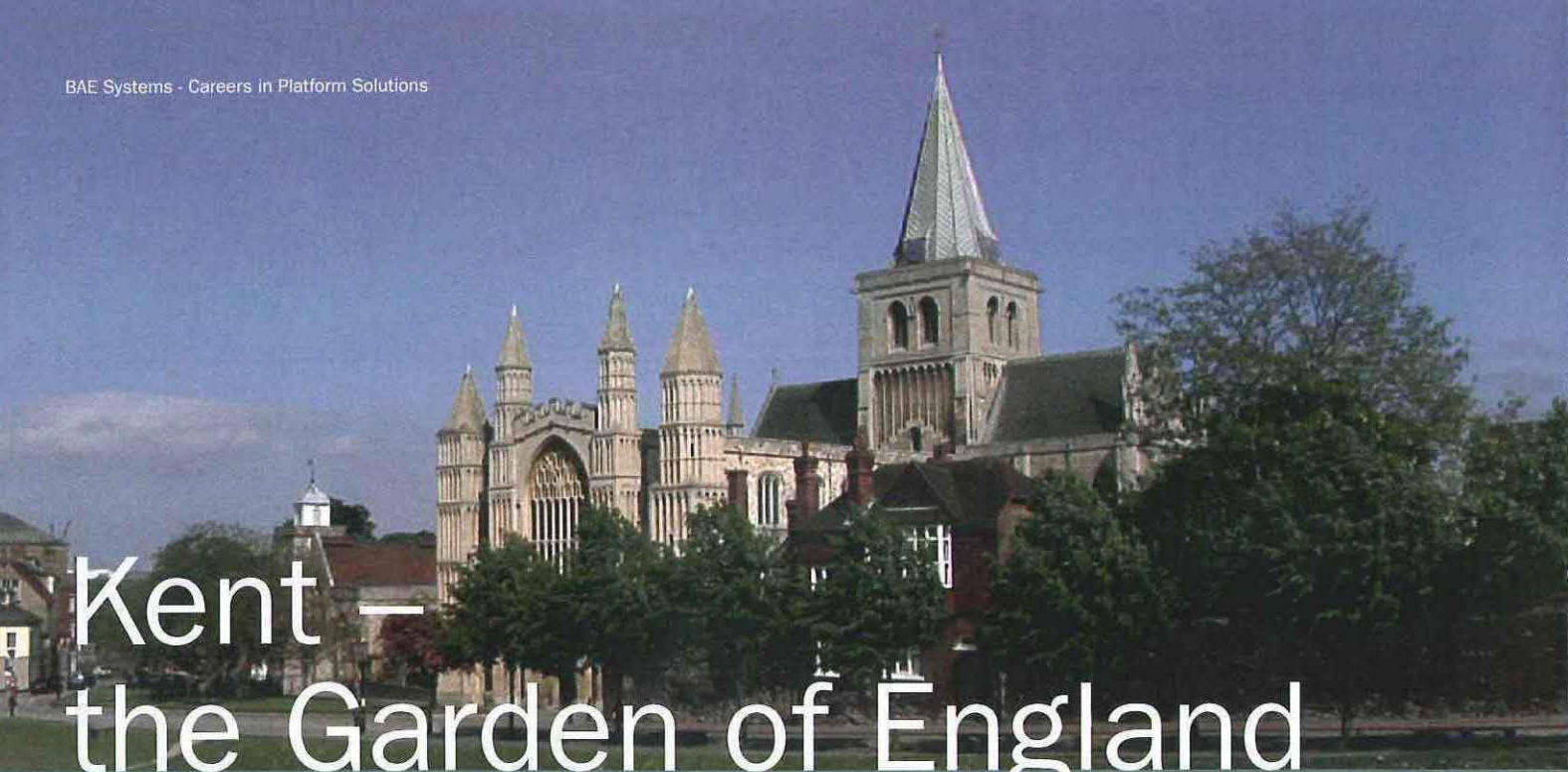
A history of firsts

The Rochester site in 1962

- 1933 – Rochester Airport Site set up by Rochester City Council.
- 1938 – Work commenced on building extensions for the Stirling Bomber production line.
- 1948 – Work commenced on the remote flight guidance and control systems for the Jindivik and drone variants of the Canberra, Sea Vixen and Meteor.
- 1954 – Britain's first supersonic combat aircraft has Elliott's first automatic flight control system.
- 1961 – First head-up display developed. Used in the Buccaneer and gave reliable service for 30 years without requiring an update.
- 1967 – First digital head-up display developed, setting new standards of accuracy and maintainability.
- 1978 – Developed the fly-by-wire quadruplex digital system for the Jaguar.
- 1979 – First use of "off the shelf" dissimilar microprocessors in a civil flight critical application.
- 1990 – First computer-generated holographic head-up display developed.
- 2001 – Awarded the world's first contract for active inceptor systems.
- 2002 – Awarded the Queen's Award for Innovation for Helmet-Mounted Displays.
- 2006 – Quantum head-up display developed – the next-generation of head-up displays.



One factor that has remained constant at Rochester has been the high degree of innovation in avionics. This innovation is achieved through the hard work and dedication of our employees, who work relentlessly to provide our users with the solutions they require, now and into the future.



Kent – the Garden of England

Known as the Garden of England, Kent boasts beautiful countryside and coastline, as well as a rich heritage. With more historic homes and castles than any other county, over 50 golf courses and many places to shop (including Bluewater, the largest mall in Europe), there really is something for everyone.

With the second oldest cathedral in the country, the City of Rochester certainly has a real sense of history. The novelist Charles Dickens is probably the area's most famous son and the Dickensian Christmas celebrations are certainly worth checking out.

You'll find, however, that Rochester is very well situated for the demands of the modern world too. Within easy travelling distance of London, it's also well situated for accessing Europe and a whole range of international destinations. Gatwick Airport is just an hour's drive away and the continent can be quickly reached by ferry or high-speed rail links (35 minutes to Calais on Eurotunnel).

Property

Whether you're looking for a country cottage, executive housing or even a traditional oast house, Kent can offer tremendous choice in terms of property.

The average semi-detached house in Medway cost just over £188,000 in 2006 - slightly below the UK average of £189,000. Detached houses were in the region of £280,000 compared to a UK average cost of £320,000.

Education

Kent can provide first-class education for your children. The county has just under 1,000 primary and secondary schools, as well as some of the best private schools in the country. There also ten colleges and four universities.



Careers and rewards

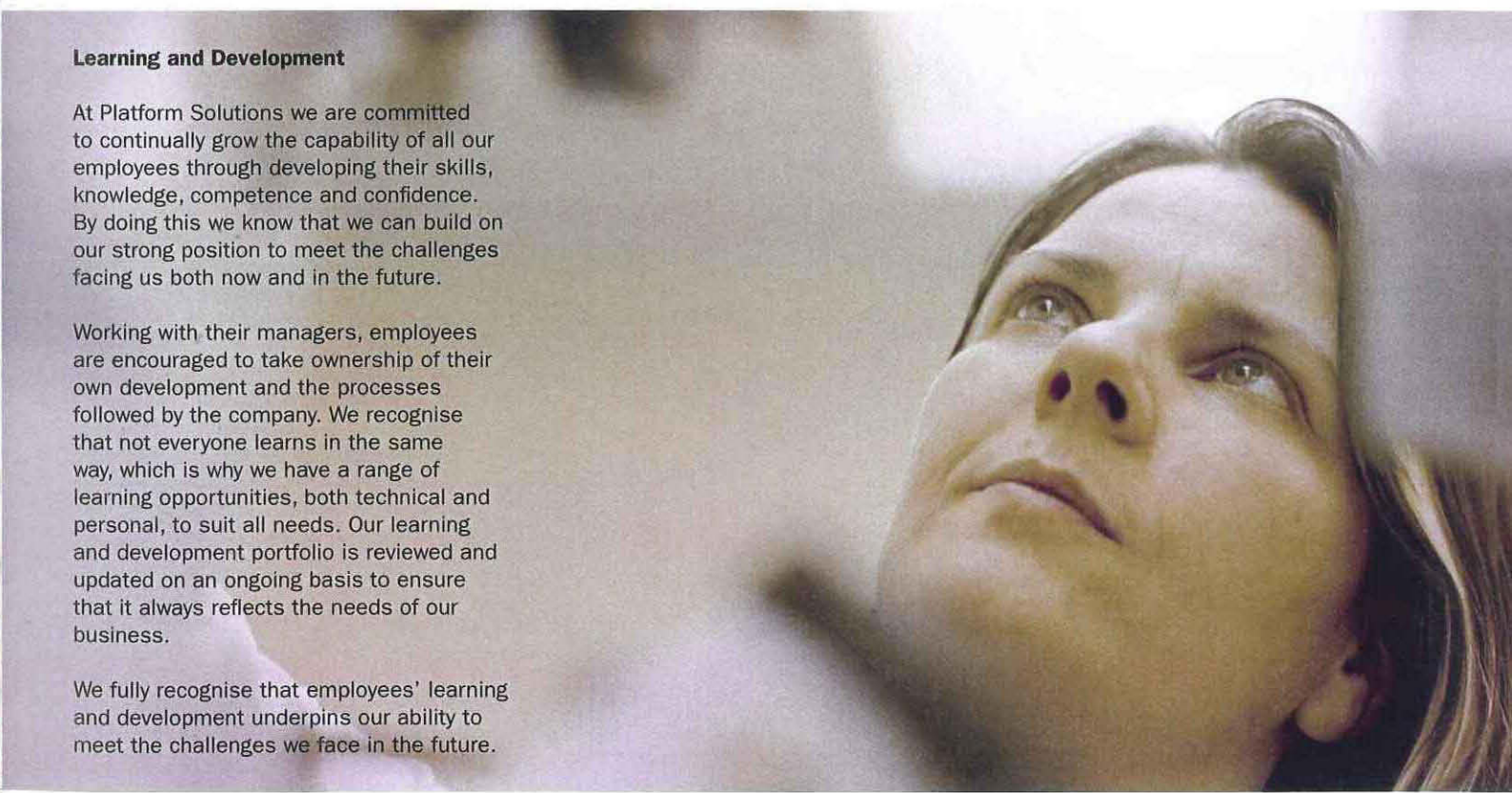
As a business, we are committed to rewarding contribution and competence. For us, it is important that our people know what is expected of them, and that we support and manage their aspirations and development. Together with our functions, we take career development seriously considering opportunities, needs and experience at all stages of people's careers. Our extensive and wide-ranging development portfolio supports this. We ensure that we review salary levels and operate different bonus schemes to support reward for contribution. We place value on our people, and reward them when they strive beyond their roles.

Learning and Development

At Platform Solutions we are committed to continually grow the capability of all our employees through developing their skills, knowledge, competence and confidence. By doing this we know that we can build on our strong position to meet the challenges facing us both now and in the future.

Working with their managers, employees are encouraged to take ownership of their own development and the processes followed by the company. We recognise that not everyone learns in the same way, which is why we have a range of learning opportunities, both technical and personal, to suit all needs. Our learning and development portfolio is reviewed and updated on an ongoing basis to ensure that it always reflects the needs of our business.

We fully recognise that employees' learning and development underpins our ability to meet the challenges we face in the future.



Want to be part of it?



Platform Solutions careers

If you think you are ready for a demanding challenge, and have the skills and competencies that match the role, please get in touch with us.

More details of current vacancies can be found at www.baesystems.com/defenceavionics

Alternatively, if you can't find what you are looking for, email your cv and/or details of areas of interest to: opportunitiesatrochester@baesystems.com or speak with a member of our Resourcing team on 01634 203450.



SOME OF THE BIGGEST NAMES IN THE INDUSTRY. SOME OF THE BIGGEST PROJECTS IN THE WORLD.

That's the big secret behind our phenomenal success. You'll find some of the very best people in the Defence Avionics industry in Rochester. Working on some of the most amazing projects in the world.

Our record of groundbreaking technologies include the world's first airborne radar, the first fly-by-wire digital control unit and the first multi-mode head up displays all originated here in Rochester. And we're proud to have won 15 Queen's Awards for our innovations.

With Defence Avionics you will enjoy the kind of career opportunities most people never manage to find in a lifetime.

Power Systems Applications Authority

£45,000 - £60,000

You will provide technical leadership for the HybriDrive(r) power systems applications in the UK and Europe. The applications systems authority will provide support to Business development, applications engineering, and production programmes.

You will be responsible for technical assessments and application of vehicle power train performance/requirements, and will be the main systems interface into the design centre in the US.

You will be an acknowledged expert in vehicle propulsion and auxiliary systems, including mechanical, electrical and electronics areas.

(Vacancy Ref: 33218)

Power Systems Mechanical Authority

£45,000 - £60,000

You will provide project leadership for the mechanical applications design, development, documentation, and fabrication of electronic packages and hybrid electric propulsion systems for commercial and military ground vehicle applications. You will interpret and implement customer and military specifications relative to power electronics packaging and propulsion systems design, and liaise with the System Design Authority in the US regarding an acceptable solution. This role will require extensive liaison with Manufacturing, Quality, vendors and other Engineering functions within the business.

(Vacancy Ref: 33218)

Principal Systems Engineer

£35,000 - £45,000

In this key technical role working in the Vehicle Management Systems business area you will be involved in the system requirements, design and test of safety-critical electro-mechanic systems. You will require an understanding of electronics, mechanics and software, and the ability to evaluate and analyse system performance in order to specify requirements, produce system designs, and write subcontract specifications. In addition, the job will involve hands-on integration and testing to validate system performance. Experience of the following technologies would be advantageous: Force sensors, position sensors, electric motors and gearboxes. Experience of systems safety and certification to either military or civil standards would also be useful.

(Vacancy Ref: 34311)

Hardware Team Leader (Electronics)

£30,000 - £45,000

You will lead a Hardware Engineering Team on one of our avionics products which include our range of leading-edge mission computers, displays and flight control products. You will be responsible for ensuring your team delivers the required technical solution, on time and within budget.

A good relevant degree qualification is essential coupled with knowledge of current and emerging technologies together with relevant design tools and techniques. The role requires continuous liaison with other engineering functions and therefore strong communication skills are required. This role would suit someone with proven technical leadership ability.

(Vacancy Ref: 35750)

Lead Hardware Engineer

£30,000 - £45,000

You will be a key member of a multidisciplinary team responsible for the formulation and optimisation of innovative electronic hardware design solutions for our range of leading-edge mission computers, displays and flight control products.

You have a good relevant degree qualification coupled with knowledge of current and emerging technologies together with relevant design tools and techniques. You will liaise with other technical functions and therefore strong communication and leadership skills are required.

(Vacancy Ref: 34663)

Mechanical Systems Designer

£35,000 - £50,000

You will be responsible for producing conceptual designs for our leading-edge helmet-mounted display systems, active control sticks and head-up displays.

Capable of working to rigorous requirements, you will ensure we achieve concepts which are low cost, high reliability and fully production-worthy for both military and civil avionics systems. With a good degree in Mechanical or Aerospace Engineering, you will bring substantial experience and excellent leadership skills.

(Vacancy Ref: 23591)

Principal Design Engineer (Optics)

£35,000 - £45,000

You will be a key member of a multidisciplinary team responsible for producing conceptual designs for our leading-edge helmet-mounted display systems, and head-up displays.

A good degree in Physics or Applied Mathematics is essential coupled with experience of designing optical imaging systems. The role will involve liaising with other technical functions and therefore strong communication and leadership skills are required.

(Vacancy Ref: 36022)

Mechanical Design Team Leader

£30,000 - £40,000

As a leader of the mechanical design team, you will deliver the mechanical engineering solution as part of an associated integrated project team.

We're looking for someone with the facility to ensure delivery of required work to meet technical standards, timing requirement and agreed costs. You will monitor the status of projects and have the skills to identify potential problems and know how to solve them.

You will be able to motivate your team to meet programme objectives as well as supervising their performance and training requirements.

(Vacancy Ref: 33053)

Principal Electro-Mechanical Engineer

£30,000 - £45,000

You will lead the electro-mechanical motor development activity primarily for the active control stick projects. Providing theoretical motor electrical and mechanical design, analysis, testing, qualification and associated engineering support covering the whole product lifecycle. This will cover High Value Mechatronic Test Equipment, large hybrid electric power control systems as well as the motor driven stick and throttle controls.

You will have the ability to communicate specifications to suppliers and systems groups, and lead and motivate a small team.

(Vacancy Ref: 35105)

Mechanical Engineer

£25,000 - £35,000

With a degree in Mechanical Engineering and experience on Pro/Engineer CAD you will provide mechanical design/drawing/investigation support to a range of leading-edge helmet-mounted display, active control stick and head-up display systems.

We're looking for a problem solver with experience in mechanical product design and development for complex electro-mechanical products. You must be a team player and a good communicator.

(Vacancy Ref: 30946)

Senior PLD Engineer

£25,000 - £35,000

You will be a member of a dedicated expert team responsible for the design and verification of Programmable Logic Devices (PLD) for our range of leading-edge mission computers, displays and flight control products.

You will have a good relevant degree qualification coupled with proven experience and knowledge of PLD technologies and relevant design tools and techniques.

(Vacancy Ref: 35420)

Electro-Mechanical Engineer

£25,000 - £32,000

You will support the electro-mechanical motor development activity primarily for the active control stick projects. Providing theoretical motor electrical and mechanical design, analysis, testing, qualification and associated engineering support to systems covering the whole product lifecycle. This will cover High Value Mechatronic Test Equipment; large hybrid electric power control systems as well as the motor driven stick and throttle controls.

You will enjoy working in a small team with responsibility across all projects and as a support to hardware and mechanical engineering groups.

(Vacancy Ref: 35104)

Optical Design Team Leader

£30,000 - £40,000

In this brand new role you will lead and develop the optics team as this successful business area expands and grows. You will manage a small team of nine engineers and technicians in efficient product delivery.

With the ability to develop understanding of the new technology you will assist in the generation and maintenance of estimates and outline project plans as well as monitoring and reporting of prototype and development of pre-production processes.

You will be responsible for recruitment for your team, training and regular performance reviews. The role will require a pro-active approach, good communications and problem solving skills.

(Vacancy Ref: 37732)

Senior Design Engineer Optics

£30,000 - £40,000

As a member of this small but growing team, you will help deliver a new generation of optical solutions for helmet-mounted and head-up display products.

You will have hands-on experience of the development of imaging optical systems for use in military and commercial equipment from concept to operational use. Your knowledge of implementing LCD display technologies, including electronic interface, and experience of designing optical systems using Zemax (or similar) are key to this role.

Your personal attributes include the ability to communicate with customers and colleagues and an innovative and pro-active approach to the development of new technology areas.

(Vacancy Ref: 36024)

Design Engineer Optics

£25,000 - £32,000

Working within a small but growing team, you will perform optical modelling of new systems using software tools such as Zemax and Gsover.

You will have experience in optical design and modelling with a basic understanding of imaging systems. You will liaise with mechanical engineers in the production of toleranced drawings and analysis of new displays/display technology for use in Defence Avionics production. You will need a basic understanding of imaging systems, a structured and practical approach and some experience of the build of optical systems/components.

You will need good communication skills and the ability to present results to internal customers.

(Vacancy Ref: 37740)

Optical Engineer

£25,000 - £32,000

You will have a pro-active approach and the ability to control the holographic and optical process development. Your optical expertise will see you drive the development of large holographic optical components and assist in the development of new helmet-mounted display from initial assembly and test through to the production/development of process instruction.

This role requires a good basic knowledge of optics in a lab environment, a structured and practical approach and well developed problem-solving and analytical skills.

(Vacancy Ref: 37739)

Senior Mechanical Design Engineer

£32,000 - £40,000

With a BEng in Mechanical or Aeronautical Engineering you will provide mechanical design, analysis, drawing and investigation support to the whole range of Defence Avionics projects covering the whole product lifecycle. These include head-up displays, helmet-mounted displays, pilot control sticks and throttles, flight control/display computers, high value mechatronic test equipment and maps/displays.

You will have the ability to work on complex electro/opto-mechanical products including detailed design, drawing including geometric tolerancing, design investigations, analysis and environmental qualification.

You will need to be a problem solver with good time management and communication skills.

(Vacancy Ref: 36200)

Principal Mechanical Design Engineer

£35,000 - £45,000

This challenging and exciting role will present you with the opportunity to design flight safety critical products for the world's most advanced military fixed and rotary wing aircraft.

You will provide technical leadership in the design of ground breaking military aircraft display, helmets and flight control sticks/throttles. This role will offer you exposure to the customer as well as the opportunity to work in a team with like-minded engineers.

You will have an in-depth understanding of engineering drawing including geometric tolerancing and the ability to work conceptual design of Opto-Mechanical and Electro-Mechanical products and conduct detailed design, design investigations, analysis and environmental qualifications.

(Vacancy Ref: 38127)

Senior Mechanical Analysis Engineer

£30,000 - £40,000

Working in a team of six you will provide support to programmes across all of the business groups (Displays; Vehicle Management Systems; Missions Systems and Support). You will provide mechanical analysis (stress/thermal) and qualification testing support to a range of projects covering the product lifecycle.

You will have the experience and ability to conduct structural analysis (FEA and hand calcs), dynamics analysis, damage tolerance analysis and thermal analysis on parts and assemblies.

You will be responsible for qualification planning and analogy/analysis reporting and development and qualification testing covering Durability Life testing, HALT and Environmental testing.

You will be an excellent communicator and problem solver with a can-do attitude.

(Vacancy Ref: 37222)

Senior Technical Representative

£24,000 - £28,000

Working within the field service department you will provide support services to meet the needs of our customer base against current and future contracts. You will deliver a technical help service including advising the customer remotely on the solutions to resolve in service equipment.

You must be prepared to travel to customer sites to perform service and support to ensure equipment is fully functional as well as working alongside PDS engineering staff in the further development of the systems and, when appropriate, support installation integration on the site of hardware and software modifications.

You must be a team player but capable of working on your own in order to meet the requirement of client contracts.

You will be educated to BTEC level (or equivalent) in an electronics discipline with a minimum of one year's experience in a development or test engineering role.

This role is paid a base salary with a 20% uplift to cover flexible working inconvenience and overtime.

(Vacancy Ref: 36427)

Senior Hardware Engineer

£27,000 - £35,000

You will utilise your aerospace and/or safety critical product/systems design experience in this role providing design and verification of Programmable Logic Devices (PLDs) across various programmes. This role includes providing the analysis, design, verification and documentation to support the complete PLD lifecycle.

You will have the ability to generate detailed requirements, writing VHDL source code for both synthesis and testbench and to use Mentor Graphic tools for verification. You will interface with Hardware Designers to ensure the viability of complete PLD design and develop the documentation necessary to support design and verification leading to certification.

Experience of multiple PLD vendors, a can-do attitude and problem solving skills are essential.

(Vacancy Ref: 35420)