Software Verification Engineer (or Senior Software Verification Engineer)

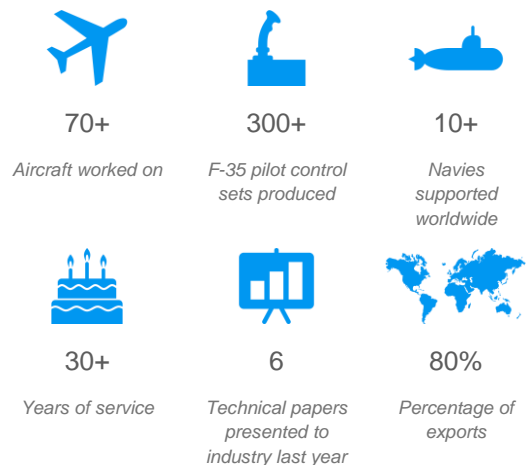ENGINEERING EXCELLENCE AND INNOVATION
FUELLED BY PEOPLE WITH PASSION

COMPANY OVERVIEW

Founded in 1987, Stirling Dynamics has grown from a handful of expert engineers to a team of 100+ staff. The success of the company is made possible through a customer-focussed, can-do culture. Everything we do is underpinned by our company mission statement:

- To deliver innovative technical services and technology solutions into our core markets
- To build sustainable, beneficial relationships between suppliers, clients and institutions
- To be recognised as an innovator and catalyst of new technologies
- To continue to make valuable investments for the future through education, research and development
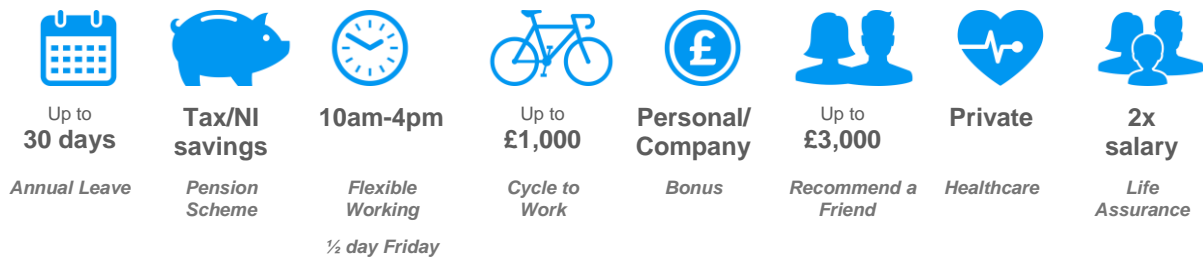
STIRLING AT A GLANCE

70+	300+	10+
Aircraft worked on	F-35 pilot control sets produced	Navies supported worldwide
30+	6	80%
Years of service	Technical papers presented to industry last year	Percentage of exports

STRATEGY AND BUSINESS PERFORMANCE

Strong financial performance is essential to support investment and growth. Looking forward we aim to achieve the following objectives:

- Increased business development and marketing activities to develop new markets
- Addition of new engineering capabilities to meet emerging customer needs
- Technology refresh for control products and systems
- Increased investment in training and professional development schemes

BENEFITS

Up to 30 days	Tax/NI savings	10am-4pm	Up to £1,000	Personal/ Company	Up to £3,000	Private	2x salary
Annual Leave	Pension Scheme	Flexible Working ½ day Friday	Cycle to Work	Bonus	Recommend a Friend	Healthcare	Life Assurance

We offer a range of benefits to our employees to recognise their efforts. Playing hard is equally as important as working hard, so regular events are held throughout the year which provide an ideal opportunity to mix socially.

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THE ROLE

Due to an increase in volume of work from new contracts and supporting continued growth, Stirling Dynamics is looking for a talented Software Verification Engineer to join our team at the Engineer or Senior Engineer level (depending on experience).

The ideal candidate would be familiar with all aspects of verification & validation throughout the software and systems development lifecycle from requirements elicitation to customer acceptance. Experience of embedded systems, real-time operating systems and safety-critical certification of software aspects within the aerospace and defence sectors will be an added advantage.

Working across our portfolio of aerospace, training and simulation and marine systems programmes, the ideal candidate will be flexible, willing to learn and value a changing environment. An ability to work from rapid concepts to more formal safety critical development projects and work closely with control and simulation engineers is essential to success in this role.

This role is based in our Clifton office (moving to North Bristol, December 2019) and may require occasional trips to customer sites in the UK or internationally. **The candidate must be willing to undergo and obtain UK Security Clearance. Applications from individuals working at systems level V&V will also be considered.**

KEY ACCOUNTABILITIES

- Be a key part of the software team providing in-house software engineering capability to the business

- Working across the software development lifecycle, undertake verification and validation (V&V) of software for the following system(s):
    - Non-flight worthy active flight control simulator products (sticks, throttles, pedals and G-Seats)
    - Safety-critical marine and aerospace autopilot control system(s)
    - Safety-related aircraft Nose Wheel Steering System (NWSS) Control Unit(s)

- Be willing to travel and engage with the customer in providing support during system acceptance

- Promote verification and validation know-how and software safety testing expertise within the business

- Provide expertise in the application of safety-critical standards to software V&V within the business

- Contribute to the continuous improvement of the software function in its tooling and processes

- Promote within the project environment adherence to quality and standards, including those issued via the Company's Quality Management System, classifications and statutory bodies

QUALIFICATIONS, KNOWLEDGE AND SKILLS

- Bachelor's Degree qualified (e.g. Software Engineering, Computer Science, Embedded Systems)

- Awareness of DO-178B/C, IEC61508 or other equivalent software safety guidelines and standards

- Experience in writing V&V planning documents, test plans, procedures, results analysis and reporting

- Practical experience in working within the systems (and software) "V-Model" lifecycle

- Fully conversant in UML (or SysML) for systems analysis and specification in influencing software V&V

- Understanding of the testing constraints within embedded, real-time & safety-critical systems

- Exposure to DOORS for requirements management and V&V purposes (desirable)

- Working knowledge of C and C++ (Ada or FORTRAN advantageous)

- Awareness of the role of coding standards in V&V and their application (e.g. MISRA)

- Experience of Real-Time Operating Systems (RTOS): QNX, VxWorks, RT Linux, LynxOS

- Awareness of DevOps, continuous integration and tooling: JIRA, Perforce, GIT, Jenkins, etc.

- Low-level device driver testing experience: CANBUS, RS232, RS485, Ethernet and ADC/DAC

- Prior experience of conducting V&V on MATLAB/Simulink auto-code

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- Experience in the use of testing tools (LDRA highly desirable)
- Experience of Texas Instruments Development Environment and C2000 series processors (desirable)

PERSONAL CHARACTERISTICS

The personal qualities of the jobholder will be key to success in this role. The following characteristics and qualities are identified as essential for the role:

- Enthusiastic, self-motivated and be able to demonstrate initiative
- An ability to manage multiple tasks and work independently when required
- Ability to take ownership of an activity and see through to a successful outcome
- Demonstrable diplomatic and professional approach when dealing with colleagues and customers
- Confidence to challenge practices and the willingness to question to gain a full understanding of issues
- The capability to work efficiently and accurately, with an attention to detail

FACTS AND FIGURES

Pay & Benefits	–	Competitive Package
Department	–	Software
Reporting to	–	Principal Software Engineer
Location	–	Clifton (moving to North Bristol, November 2019)
Contract type	–	Full-time, fixed term/contract
Job Reference	–	22/19