GRADUATE SYSTEMS SAFETY ENGINEER

LOCATION: New Malden

STATUS: Permanent Contract / Full Time

START DATE: September 2022

GENERAL MISSION

At Northrop Grumman we work closely with our customers to create software centric capabilities that allow them to execute their mission with ease and success. We are leaders in marine navigation systems, integrated platform management systems, and maritime command and control applications.

Role

Systems Safety Engineering is a holistic analysis and evidence based practice that enables NG to show that risks to life and harm have been reduced, so far is reasonably practicable, and that we deliver products that are safe to own and operate by our clients.

The Safety Engineer role involves working as part of the system safety engineering team supporting the delivery of a number of complex safety critical and safety related systems across multiple platforms. The role is specifically to undertake safety engineering activities in accordance with the NG safety processes and using guidance from Def Stan 00-056 and IEC61508.

Role Responsibilities

- Undertake safety analysis activities as directed by the project safety manager. These may include Hazard Identification (HAZID), Hazard and Operability Studies (HAZOPs), Systems Safety Engineering, Functional Failure Analysis (FFA), Fault Tree Analysis (FTA), Failure Mode, Effects and Criticality Analysis (FMECA) and Safety Case development.
- Develop safety requirements as required for the system to ensure that the system design can meet the safety targets (e.g. random hardware failure probabilities and systematic safety integrity level (SIL) targets for electrical/electronic/ programmable electronic safety-related systems).
- Support the planning of safety activities on a complex project, including effort estimating to deliver the project milestones and safety case objectives.
- Supporting audits at internal and external design reviews and safety committee meetings
- Generating and documenting safety analysis, which will be the subject of internal peer review, governance reviews and presentation to the customer.
- Producing technical documentation to a high standard in accordance with company/customer procedures
- Undertaking analysis that positively impacts the design decisions and solutions proposed by the engineering teams
- Presenting complex and reasoned safety arguments to internal and external stakeholders in order to influence their consideration of safety decisions.
- Working collaboratively within multi-disciplined teams to maximise NGs reputation by generating high quality outputs
- Maintain awareness of the latest legislation and regulations impacting the projects currently working on and analyse the relevant standards and regulations that must be complied with.

Person Specification

Essential qualifications / experience

- Degree in Software, Engineering, Science or Safety Management related discipline

Desirable qualifications / experience

- Experience or knowledge of a safety-related engineering environment
- Awareness of safety assurance of Commercially Of The Shelf (COTS) equipment
- Awareness of the verification of high integrity software
- Ability to understand hardware and software failure modes, causes and effects
- Experience or knowledge in some areas safety/reliability/hazard identification analysis techniques.
- Awareness of the tools and techniques used in Risk Assessments and developing ALARP justifications

What we are looking for

- Adept at problem-solving, able to develop solutions to a variety of problems
- Good attention to detail
- Organised, adept at workload management and prioritising appropriately to meet deadlines
- Flexible and responsive to changing priorities
- Proactive team worker, equally self-motivated and able to work autonomously
- Good interpersonal skills, able to engage effectively with all audiences/stakeholders
- Proficient user of MS office
- Understanding or experience of electrical design generating applications
- Competent in PowerPoint (and face-to-face presentation delivery, where required)
- Fluent in written and spoken English
- Strong customer focus
- Engaging ‘can do’ attitude

Additional information:

- Travel requirements: Occasional UK travel may be required to attend team/customer meetings and training activities
- Clearance requirements: The post-holder must be able hold and maintain UK Government clearances
WHY NORTHROP GRUMMAN

Being a part of Northrop Grumman gives you the opportunity to use your skills to make a difference in our mission of enabling global security. Our company grows because of our employees' dedication and commitment to achieving our mission, something we always remember. In return for working for us you will have access to a benefits package that provides you with flexibility to balance your professional career with your personal life, health & well-being benefits, discount schemes, pension benefits and investment in your future development.

We are committed to equality and diversity in our workplace. Northrop Grumman provides equal employment opportunities to all employees and applicants without regard to an individual's protected status, including race, ethnic origin, nationality, national origin, ancestry, sex/gender, gender identity/expression, gender reassignment, sexual orientation, marriage/civil partnership, pregnancy/maternity, religion or belief, creed, age, disability, genetic information, or any other protected status or characteristic.