

Surveillance Systems Engineer

Apply

 Ottawa

 Full time

 Posted 7 Days Ago

 JR-8332

Job Posting Title

Surveillance Systems Engineer

Job Category

Systems Engineering

Language Requirements

English / Anglais

Flexible Work Agreement Type

Hybrid / Hybride

Posting End Date

2026-09-23

Job Grade

PIPSC-3

Pay Range

\$111,451 - \$140,007

Job Summary

Under the direction of the Manager, New Surveillance Systems Engineering, the Surveillance Systems Engineer participates in the planning, organizing, and performing work involved in the areas of system requirements, specifications, acceptance tests, configuration control, modifications, design enhancements and deployment of Surveillance system software and hardware. The Surveillance Systems Engineer provides technical expertise on hardware and software issues related to surveillance systems including, but not limited to A-SMGCS, SMR, GSR, and AGL.

Job Description**What NAV CANADA offers you:**

- Challenging, team-oriented work environment
- Competitive compensation and flexible benefits
- Defined benefit pension plan
- Opportunities for growth and development
- Flexible work arrangements
- Diverse and inclusive workforce

Job Description**Key Accountabilities:**

- Prepare detailed plans, system designs, and specifications for the provision and implementation of systems to meet operational, technical and safety requirements.
- Respond to system change and problem reports by determining root cause, identifying impact, workaround and mitigation, proposing and implementing solutions.
- Evaluate vendor supplied systems and software; develop test cases based on Engineering Standards and site-specific requirements to certify and deploy system solutions.
- Promote a Safety and Quality culture; document design, system change, test procedures following ISO and industry standards.
- Participate in projects of varying complexity including documentation of technical requirements, statements of work, engineering briefs and system test scenarios.

Job Requirements

Education:

- Graduation from a recognized university with a degree in electrical, electronic, computer or aerospace engineering.
- Professional Certification: Member or eligible to be a member in a Professional Engineering Association in Canada.

Experience:

- A minimum of 3 years' experience in the planning, design, test and implementation of safety and/or mission critical systems.
- A minimum of 3 years' experience in analyzing requirements, testing and maintaining systems to meet specifications, standards, and operational objectives.
- Experience in investigating, analyzing and resolving engineering issues with surveillance systems such as Surface Movement Radar (SMR) and Advanced Surface Movement Guidance and Control System (A-SMGCS).

Knowledge:

- Knowledge and understanding of engineering principles, practices, and technology in the field of Air Traffic Control (ATC) and surveillance systems.
- Knowledge of electromagnetic theory, RF propagation, signal processing and techniques applicable to surveillance detection Systems.
- Knowledge of problem-solving techniques and strategies, test methodologies, fault-finding techniques and diagnostic tools leveraging the theory and principles of engineering science.
- Knowledge of Windows and Linux operating systems, networking, and communication standards and protocols.
- A working knowledge of project management principles and techniques, system engineering process and practices, business practices and decision-making techniques.
- Knowledge of International standards and regulations such as ICAO and EUROCAE for the safe and reliable provision of aviation surveillance systems.
- Knowledge on Agile Framework .

Abilities:

- Ability to analyze technical problems and propose solutions while meeting industry standards and regulations, and meeting operational safety and efficiency
- Ability to create, document and execute test plans, test cases, and scripts for software and system changes to verify against system requirements.
- Ability to complete technical analysis on projects with a wide range of dollar values and actively supports a Safety and Quality culture.
- Ability to analyze and synthesize technical information, interpret the results of studies, develop strategies, and present recommendations to technical and non-technical audiences.
- Ability to plan, conduct and/or review comprehensive studies, to prepare and/or review reports on specific aspects of unusual problems with existing or new deployments.
- Ability to work autonomously under minimal supervision.
- Ability to adapt to changing priorities, organize and time manage tasks to deliver quality work on time.
- Ability to communicate effectively orally and in writing and to write specification, standards, statements of work and general engineering documents.

Personal Suitability:

- Collaborate effectively in a multidisciplinary team with minimal supervision.
- Demonstrate positive forward-thinking attitude and desire for continuous learning.
- Demonstrates initiative, effective conflict resolution skills, diplomacy, and tact.
- Able to build and maintain strong strategic relationships.

Working conditions:

- This is a hybrid position with a minimum of 3 days per week on site required.

NAV CANADA is committed to building a skilled, diverse workforce reflective of Canadian society. If you do not believe that you match every job requirement listed on this job posting, we still encourage you to apply. NAV CANADA encourages a culture of learning and growth, and recognizes that although some technical skills are mandatory, many others can be taught.

Our Company strives to create an inclusive and barrier-free selection process and work environment. If you require accommodations during this competition process, please ensure that you inform the interview coordinator or hiring manager of any accommodation measures you may require. NAV CANADA will provide accommodations throughout the recruitment and selection process to applicants with disabilities as required.

The successful candidate must meet the security requirement of the position and be legally able to work in Canada.

We thank all applicants for their interest; only those selected for next steps will be contacted.