



**State
Police**

KATHY HOCHUL
Governor

STEVEN G. JAMES
Acting Superintendent

POSTING DATE: 03/19/2024

APPLICATION DUE BY: 04/09/2024

Title: Radio Engineer
Starting Salary: \$86,057.00

Location: Division Headquarters - Communications
Albany, New York 12226
Albany County

Salary Grade: 24

Employment Type: Full-Time

Work Days: Monday-Friday

Union Representation: PS&T

The Radio Engineer, SG-24, assigned to the New York State Police Communications Section provides professional-level technical support to emergency communications systems and their supporting infrastructure, for the New York State Police. The Radio Engineer position is responsible for the design, evaluation and maintenance of assigned aspects of the State Police land mobile radio systems and its components throughout the State. The Radio Engineer may be required to design, evaluate or oversee maintenance of antenna structures, radio towers, equipment shelters, sites and access roads, and primary and emergency power systems. The Radio Engineer position is responsible for performing land mobile radio communications evaluations statewide; operates essential test equipment; maintains liaison with vendors for preventative maintenance and repair services; reports any deviations from the contracts; programs radios; responds to emergencies; builds radio files; researches and tests equipment; and travels to regional sites to address any issues that arise. The Radio Engineer will be also support temporary communication facilities during planned and unplanned events.

DUTIES

- Oversees the design, construction and maintenance of communications facilities, including remote tower sites and critical infrastructure.
- Prepare IPP (Initial Project Proposal) and Scope of work for Maintenance Projects
- Develop PSE (Plans, Specifications and Estimates) for maintenance Projects.
- Responsible for engineering, technical support and analysis for the Division of State Police and partner agencies. This includes the development of coverage

maps, Radio Frequency propagation studies, and interference and intermodulation studies using computer modeling and test equipment to propose tower siting, equipment specification, and components required to provide radio coverage while avoiding interference.

- Collaborates with State Police peers, including sworn and nonsworn personnel, Division of Homeland Security and Emergency Services engineers, State Agency peers, as well as County and Federal Communications Engineers and contractors on system design and integration, antenna and radio selections, interference, joint operations, site co-locations and other functions across the full spectrum of planning, deploying and operating public safety communications systems.
- Responsible for providing periodic preventative and remedial maintenance on radio, microwave, satellite, and networking equipment, and develop test procedures and performance standards for such equipment and associated antenna, cable, antenna system and IP and telephone network equipment.
- Maintains, troubleshoots, and repairs electric equipment, software, and configuration, and supporting systems for radio, data, and satellite equipment; and specifies maintenance procedures and oversees contractor work.
- Develop, understand, and interpret technical standards for the operation and maintenance of emergency communications systems and assets including the engineering and technical principals of operation, as well as practical and operational impacts of such standards.
- Responsible for monitoring radio system status and radio system use, for compliance with agency and Federal requirements, as well as for improper outside use, including deployment of systems to capture and record radio broadcasts, deployment of direction-finding equipment to trace interference and improper or unauthorized users of New York State Police or other law enforcement radio systems.
- Be familiar with FCC licensing rules, guidelines and protocols.
- Develop multi-agency Tactical Interoperable Communications plans on a regular basis for both planned and unplanned events involving State, Federal and local partner agencies and systems.
- Travel extensively throughout the State to support routine and emergency response activities.
- Deploy regularly throughout the State to support operations during law enforcement response to disaster activities, including deploying mobile command vehicles and temporary area and event wide radio communications systems.

MINIMUM QUALIFICATIONS

- A Professional Engineer Certificate in Civil Engineering or Systems Engineering or related field,

OR

- Six years of experience as a Radio System Engineer as defined above,

OR

- A Master's Degree in Electrical Engineering, Electronics Engineering, Applied Engineering, Physics, or related field and one year of general experience as a Radio System Engineer involving the development, deployment, operation, and maintenance of wireless land mobile radio or other wireless communication systems,

OR

- A Bachelor's Degree in Electrical Engineering, Electronics Engineering, Applied Engineering, Physics, or related field and two years of general experience as defined above,

OR

- An Associate's Degree in Electrical Engineering, Electronics Engineering, Applied Engineering, Physics, or related field and four years of general experience as defined above,

AND

- A valid New York State Driver License.

Preference will be given to individuals who meet the following credentials:

- Experience with Communications Tower and Communications Shelter construction and design.
- Experience maintaining Communication Towers and Communications Shelters.
- Experience with voice and data equipment systems used in conjunction with Public Safety Answering Points for the prompt assignment of emergency service calls to response personnel.
- Experience in analyzing public safety systems suspected to be performing below specifications or predictions.
- Experience in analyzing and identifying alternate infrastructure for public safety communications systems.
- Experience in the design and management of MPLS/IP systems.

- Experience in the design and implementation of public safety answering points for the purposes of supporting public safety communications systems.
- Experience and design of infrastructure in a public safety environment for the purpose of continuity of operations.

This position will be filled contingent permanent.

Resumes will be evaluated to determine whether candidates will proceed to the interview phase of the process.

HOW TO APPLY:

Kindly send a letter of intent, complete resume and transcripts to:

Email: personnelresumes@troopers.ny.gov

Place in the Subject line: *Radio Engineer*