



Engineer Manager

Department: Engineering

Location: Anchorage, Alaska

FLSA: Exempt

Reports To: Chief Network Officer

Approved By: Jens Laipenieks

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Position Description

Under general direction the Engineering Manager provides oversight and technical direction to engineering, including but not limited to Wireline, Cellular, and Internet Service Provider Networks while ensuring compliance with appropriate industry specifications.

Principle Accountabilities

- Supervises engineering staff by assigning work, checking quality, answering questions, handling personnel issues, monitoring projects, and working jobs as needed to ensure jobs are completed in a timely and accurate manor.
- Engineering Manager is an on-call and hands on when need be position.
- Provide technical support and supervision to project design, technical analysis, engineering, and ongoing operations of switching and network equipment to ensure a high level of service and compliance with appropriate industry specifications to our business and residential customers.
- Manage and coordinate the activities between the Network Engineers and other workgroups internally and externally
- Gathers, interprets, and analyzes information to make the best possible recommendation as to the future technical direction of the company.
- Ensure current and future service demands are accomplished on a timely, technologically competent, and economically appropriate basis.
- Assure design and implementation is compliant with telecommunication principles, industry standards, National Electrical Code requirements, environmental requirements including hazardous material, FCC/FAA and other regulatory guidelines, AC and DC power principles, etc.



- Maintain contact with zoning, planning and permitting agencies to stay abreast of changes that may require plant additions or rearrangements; apply knowledge in the budgeting, planning and design of the network.
- Attend training classes, lectures, seminars, etc., to maintain knowledge of current and future telecommunications industry practices and produces.
- Lead bidding and contract negotiations
- Oversee vendor management for equipment and services.
- Engineer overall central office equipment including network configuration and capacity as well as engineering of the peripheral elements (frame, DACS, battery, power bays, emergency generators, subscriber carrier, etc.).
- Engineer and maintain overall data network including network design, documentation and maintenance of ASTAC's LAN/WAN data networks.
- Engineer and record maintenance of outside plant, including coordinating with outside plant specialists; assisting engineering personnel for less-complex outside plant projects.
- Design, implement, and record maintenance of overall special circuit.
- Assist marketing and sales in new product development.
- Responsible for highest level trouble shooting.
- Analyze overall traffic plan, size, and dimension network elements to provide capacity and functionality ahead of growth.
- Assist the Chief Network Officer in the development of the capital and operating budgets.
- Provide or assist in staff training and development

Additional Responsibilities

Description of nonessential functions or functions performed only occasionally.



Knowledge, Skills, and Abilities

- Requires in depth knowledge of Cisco routers, switches, firewalls, Linux OS, Foundry FastIron OS.
- Comprehensive knowledge of RUS Contract forms, specifications, guidelines and recommended work procedures and construction manuals.
- Skilled in reading and interpreting technical documents and forms including work orders, staking sheets, schematics and specification manuals.
- In-depth knowledge of telephone plant accounting methods including relationships of various processes (W.O., Contracts, Plant Accounts, Units, etc.). Familiarity with DMS-10 and Redcom switches is preferred
- Working knowledge of protocols and networking fundamentals, including SIP, OSPF, UDP, QOS, TCP/IP, 802.1Q, and Q-n-Q, Cisco VTP, GVRP, BGP, etc.
- Ability to interact successfully with members of the cooperative and the public, directors, staff and employees of ASTAC, outside consultants, vendors, contractors, and regulatory oversight agencies; accurately representing ASTAC's position and projecting a positive image of ASTAC.
- Knowledge of industry regulations affecting engineering projects.
- Thorough working knowledge of the unique aspects and challenges of working in Arctic conditions.
- Exemplary demeanor consistent with a management level position including:
 - Honesty
 - Excellent interpersonal skills and a strong team player
 - Ability to maintain a high level of confidentiality
 - Ability to identify, analyze, organize, and solve problems
 - Ability to be practical and creative
 - Ability to work independently and be detail oriented
 - Ability to accept responsibility and set priorities to meet daily work demands
 - Ability to manage multiple, concurrent tasks and projects

Education and Experience Required

- Undergraduate degree in Electrical Engineering or related field



- Six (6) or more years progressive experience in appropriate telephone technologies, (a combination of appropriate education and experience may be considered in lieu of Electrical Engineering degree)
- Two or more years of supervisory experience within the communications industry.

Work Conditions

- Intermittent extended hours of employment requiring considerable physical and emotional stamina and occasional travel at all hours of the day by a variety of means of transportation.

Note: This job description in no way states or implies that these are the only duties to be performed by the employee(s) incumbent in this position. Employee(s) will be required to follow any other job-related instructions and to perform any other job-related duties requested by any person authorized to give instructions or assignments.

A review of this position has excluded the marginal functions of the position that are incidental to the performance of fundamental job duties. All duties and responsibilities are essential job functions and requirements and are subject to possible modification to reasonably accommodate individuals with disabilities.

To perform this job successfully, the incumbent(s) will possess the skills, aptitudes, and abilities to perform each duty proficiently. Some requirements may exclude individuals who pose a direct threat or significant risk to the health or safety of themselves or others. The requirements listed in this document are the minimum levels of knowledge, skills, or abilities.

This document does not create an employment contract, implied or otherwise, other than an "at will" relationship.