Job Description

Position: Senior Lab Engineer **Department:** Lab **Supervisor:** Lab Manager **Classification:** Exempt

Role:

Perform a wide range of technical duties in support of ARRL publications, membership services and spectrum defense objectives.

Major Duties & Responsibilities:

- Perform RF and electronic design, research, and development, as assigned, in support of ARRL objectives.
- Perform electronic testing to equipment as assigned in support of ARRL objectives.
- Responsible for writing technical articles and reports, as assigned, in support of ARRL objectives
- Execute technical reviews of materials published in or being considered for ARRL publications and periodicals.
- Provide technical membership support and maintain technical membership contacts.
- Participate in the administration of the ARRL Laboratory activities.
- Other duties assigned as needed

Accountability:

• The SLE reports directly to the ARRL Laboratory Manager

Education and Experience

- A bachelor's degree in a radio or electronics technical discipline, or equivalent professional experience.
- General Class or higher Amateur Radio license, with a commitment to obtain an Amateur Extra license within one year of hire.

Knowledge, Skills and Abilities:

- Broad experience and familiarity with the Amateur Radio practices and applications.
- Experience in RF design techniques and practice, including digital radiocommunications
- General familiarity with test equipment, such as oscilloscopes, signal generators and spectrum analyzers.
- Knowledge of Amateur Radio operating techniques.
- General experience with modern amateur radio equipment.
- Ability to perform engineering-level testing and electronic design.

- Ability to initiate and manage projects related to ARRL technical objectives, including timelines, and expected metrics of performance and completion.
- Ability to write and update well-organized reports on project progress.
- Ability to write technically appropriate and accurate correspondence on various amateur radio technical topics, as assigned.
- Ability to communicate with others and be able to explain technical subject matter to non-technical people.
- Ability to perform peer-review of articles, chapters, and books, as assigned.
- Working knowledge of MS Office and desktop applications.
- Ability to use hand tools.
- Must be a self-starter with a desire to see a project through to completion.

Essential Functions and Responsibilities:

20%	Evaluation of the suitability of electronic design, research, and development.
20%	Primarily self-directed with an ability to provide technical leadership to internal and
	external teams.
10%	Assist in the development of web pages, articles, book, chapters, books and Lifelong
	Learning modules.
10%	Evaluation of the suitability, accuracy, and timeliness of electronic testing.
10%	Evaluation of the suitability and timeliness of technical articles written
10%	Membership contacts to help resolve technical problems experienced by members
10%	Work with other departments and non-ARRL entities to assist in projects and programs
	in support of ARRL objectives.
5%%	Use membership and industry contacts to promote amateur radio and to sell ARRL
	Membership and publications.
5%%	Other duties as assigned

Interpersonal Skill

• Work normally involves contact with technical and non-technical persons inside and outside of the organization. Outside contacts take the form of vendors, consultants, and volunteers.

Physical requirements:

- Ability to sit or stand at a desk workstation for extended periods.
- Ability to use hand tools and test equipment.
- Ability to lift 50 pounds.

Mental requirements:

• Ability to understand both written and verbal technical material and instructions.

Supervision required:

• This position requires some supervision, but it is expected that the employee can be given general assignments and will develop specific work solutions and plans from those assignments. The supervision required is essentially that of planning overall objectives and workload and to fine tune the solutions and plans developed by the employee.

Working conditions and environment:

- This is an onsite full-time position located in Newington, CT. Electronic workbenches.
- Electronic laboratory facility.
- Office or meeting facilities at other organizations for professional travel to meetings or conventions.
- Outdoor environments for possible field testing of antennas, or for radio noise.

Non-essential job functions:

- Physical maintenance of Laboratory facilities.
- Driving of automobiles to pick up needed parts or to attend local meetings and functions.
- Travel by automobile of common-carrier transportation to ARRL Conventions, industry meetings or technical symposia, etc.

Safety requirements:

- Technical and physical ability to work with electronic circuits and voltages safely.
- Technical and physical ability to work with soldering equipment and hand tools safely.
- Technical and physical ability to work with small power equipment safely by using safe operating procedures and by using and operating supplied safety features.
- Safety goggles, laboratory coat, tower-climbing belt and hard hat are available and shall be used by the employee when appropriate.
- Technical and physical ability to work with slightly toxic and caustic chemicals by following safety instructions provided by the chemical manufacturers.
- Ventilation of work area occasionally required and operated by employee.

Personal Appearance:

• Work environment is Lab/shop/office. Dress code is business casual with special attention to safety. No loose-fitting garments or jewelry that could get caught in machinery or equipment. Personal safety equipment will be provided when required.