



## Posting Notice

### Personnel Requisition Details

|                                 |  |
|---------------------------------|--|
| Job Type Description:           | Technical Specialist II  |
| FLSA:                           | Non-Exempt   |
| Secondary Title:                | ALMA LO/IF Technical Specialist  |
| Position Type                   | Staff Position   |
| Division:                       | Electronics Division - SO  |
| Location of Position:           | Array Science Center, Socorro, NM  |
| Job Status:                     | Regular Full Time  |
| FTE:                            | 1  |
| Length of Appointment:          | At Will  |
| Work Schedule:                  | Normal Business Hours  |
| Amount of Travel Required:      | Occasional   |
| Number of Positions Supervised: | 0  |
| Position Summary:               | <p>Under general supervision from scientists and engineers, assembles, calibrates, tests, analyzes, troubleshoots and/or repairs the Digital Transmission System and Receiver modules. Work performed is moderately independent. This is the middle level of three progressively more complex positions.</p> <p>Will support assembly, test, troubleshooting, training on, and field installation for a variety of ALMA Back End analog, or LO, or power supply LRUs. Primarily, employee will operate test equipment and LabView-programmed test stands to verify performance, establish and conduct related training procedures for other integration and operations personnel, and support operations performance of modules; but may also oversee and assist with installation, troubleshoot. Will perform tests mostly in North America, but some work for testing and training in Chile may be required. The array, called the Atacama Large Millimeter Array (ALMA), is a radio astronomy telescope being built near San Pedro de Atacama in Chile.</p> |
| Job Duties Summary:             | <p>Discusses the design, layout, assembly, testing and troubleshooting procedures and problems with engineers and technical staff. May draw sketches to clarify design details and functional requirements of assemblies. Designs, fabricates, assembles, and tests prototype or production units. Sets up standard test apparatus or devises test equipment to conduct functional, operational, environmental, and life tests to evaluate the performance and reliability of prototype or production units. Analyzes and interprets test data.</p> <p>Locates and orders parts and equipment; identifies necessary components by using part numbers and/or standard color codes. Locates and evaluates</p>  |

|                       |   |
|-----------------------|---|
|                       | <p>substitute parts for functional equivalence of any obsolete/non-obtainable components or parts. Writes technical reports and develops charts, graphs, and schematics to describe and illustrate an assembly's operating characteristics, malfunctions, deviations from design specifications, and functional limitations. Recommends changes required to achieve functional requirements of the units.</p> <p>Follows project schedules set by supervisors. Records final test results, and writes reports on proper fabrication techniques. Assist in the installation of finished units. May check functionality of installed equipment to evaluate system performance under actual operating conditions. Exercises a high degree of initiative and judgment, requiring a broad technical background, in the form of considerable experience (and some education) in the field of work or in closely related fields. Performs miscellaneous functions, such as maintenance and servicing of facilities and equipment, records and reports. May perform preventive and corrective maintenance of test apparatus and peripheral equipment. May train and lead technicians and others in the performance of their duties. Proactive compliance with all NRAO policies and procedures. Other duties as assigned.</p>   |
| Competency Summary:   | <p>Must possess leadership capabilities and work independently and reliably with minimal supervision. Must be able to communicate effectively both verbally and in writing. Must be able to perform advanced soldering techniques.</p> <p>Experience with commercial or military electronics repair or construction preferred. A 2-year degree in electronics or closely-related curriculum is preferred. Several years of experience in the use and training of Radio Astronomy LO/IF equipment for training other operations personnel. Experience in actual creating and use of LabView for conducting tests is required. Ability to read and follow electrical schematics is required. Ability to work with personal computer spread sheet and word or text processor software for data logging and documentation is preferred, as is experience using an on-line ordering system. Use of general Machine Shop type tools preferred. Ability to climb steep ladders, work in laboratory and external weather environments, and lift portable test equipment, electronic sub-assemblies, or tool bags of weight up to 40 lbs. is required. Must have the ability to work effectively in a team and clearly communicate technical information both in writing and orally. Ability to communicate in English is required. Must have the visual acuity, color perception, manual dexterity, hearing, and physical ability to perform satisfactorily all essential duties and responsibilities. Must have a valid drivers license.</p> |
| Minimum Education:    | Associate's Degree (AA) in Engineering Technology training or years of directly related experience may be sufficient.   |
| Preferred Education:  | Bachelor's Degree in a related field is preferred.  |
| Minimum Experience:   | Five years of related work experience.  |
| Preferred Experience: | Five to ten years of related work experience.   |
| Physical Demands:     | Will be required to stand and sit; perform fine hand manipulation. Must be able to operate a personal computer. Must occasionally lift and/or move up to 50 pounds. Specific vision abilities include close vision, distance vision, color and depth perception. May be required to do work at 16,500 in elevation.   |
| Work Environment:     | Work is typically performed in a research or development environment, but employees may be occasionally required to work outdoors. Must work near moving mechanical parts and/or with electrical equipment. Occasionally  |

|  |  |
|--|--|
|  | required to climb or balance; and stoop, kneel, and crouch. May occasionally work at high altitudes; and in high, precarious places and in outside weather conditions, and may be exposed to chemicals, or the risk of electrical shock. |
| Requisition Number:                                | 00468  |
| Skills & Abilities (ie Software, Hardware, Certifi | Must possess a valid driver's license. Good vision, may be correctable. Must pass any applicable knowledge/skills tests including soldering small components using a microscope and ability to work with fiber optics.                   |
| Job Open Date:                                     | 07-10-2013   |