



1400 WEST MARS HILL ROAD, FLAGSTAFF, AZ 86001  
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## POSITION ANNOUNCEMENT

# NPOI OBSERVER TECHNICIAN I/II

Lowell Observatory is seeking to fill up to 2 Observer Technician (I – II) posts for the Naval Precision Optical Interferometer (NPOI). NPOI is a partnership between Lowell Observatory, the Naval Research Laboratory, United States Naval Observatory-Flagstaff Station, and is currently undergoing a multi-million-dollar upgrade and expansion project due to take place over the next 1-3 years. The OT would be an employee within the Technology Department of Lowell Observatory. The OT primarily conducts observations and provides additional daytime and nighttime opto-mechanical engineering support at NPOI as specified by the end user, generally an astronomer or engineer from one of the three partner institutions. This position is responsible for the safety of equipment and personnel on site during night operations. Based on prior experience each candidate will be considered for both the OTI or OTII position and reports to the Night Operations Manager (NOM).

### RESPONSIBILITIES

The responsibilities of the OTI include night-time setup and operation of the interferometer, the logging of entries and creation of data files required to document the observations, along with performing system closure and shutdown at the end of each observing night. The OTI shall also perform first-level troubleshooting to resolve system problems, record diagnostic information needed by the daytime team members, and perform adjustment and alignments of optics as necessary for optimized data acquisition.

Additional NPOI-related responsibilities include supporting the engineering, scientific, and site maintenance staff from the three partner institutions; support for upgrades to the array and its instrumentation; support for retrofits or servicing efforts; creation and maintenance of on-line procedures, checklists, and documentation. The OTI shall be cognizant of system and facility malfunctions and safety issues and to report such items to Lowell Observatory or Navy staff. When necessary, the OTI may be required to augment Lowell maintenance personnel to aid in performing site safety clearing measures such as snow removal and forest fire fuels abatement.

The responsibilities of the OTII are the same as for the OTI position but may also include performing alignments, adjustments, and maintenance of NPOI optical and mechanical systems under the directions of Lowell Observatory, NRL, or NOFS astronomers and/or engineers. The OTII may also be required to perform training of additional staff or act as an on-call troubleshooter when the Night Operations Manager is not available.

The ideal candidates are committed to Lowell's core values and adhere to company policies, work well with others, are a motivated, self-starter who can handle working closely with a wide array of personnel with varying backgrounds and knowledge levels. The candidates are also expected to be able to handle high stress situations while also remaining positive and safe, such as when troubleshooting systems or problems under the pressure of science objectives.

## QUALIFICATIONS AND EXPECTATIONS

- Strong technical and communication skills
- Strong proficiency with varied computer systems including Windows, Linux, and MAC OSX based systems. Raspbian and other more recent OS's are desirable but not required.
- Past user experience with Linux systems is desirable.
- A demonstrated willingness and ability to learn new systems
- Demonstrated history or experience with troubleshooting technically complex systems.
- Strong attention to detail.
- Ability to reliably work remotely and independently, and in a safe and efficient manner.
- Self-motivated
- Demonstrated professional oral and written communication skills.

## EXPERIENCE AND EDUCATION

Qualified candidates for the OTI post should possess a Bachelor's degree in Astronomy, Physics, Computer Science, Engineering, or a closely related STEM field; though candidates with at least 2-3 years of hands-on experience with operations of computer-based control systems and holding an Associate's degree (or equivalent) will be considered.

Preparation must include a demonstrated understanding of astronomical coordinate systems and time keeping, and prior experience with Linux based multi-window computer-based control systems and/or experience operating telescopes, astronomical instrumentation. Experience operating an optical interferometer is a strong plus. Also, experience with maintaining astronomical instrumentation, along with gathering and reducing astronomical data, will be considered positively.

Qualified candidates for the OTII post must have a Bachelor's degree in Astronomy, Physics, Computer Science, Engineering, or a closely related STEM field, and a minimum of 2 years of observational astronomy experience and experience with Linux based multi-window computer control systems. Alternatively, candidates with a Master's Degree in an appropriate field (Astronomy, STEM, Aviation, and Instrumentation) will be considered. Experience with maintaining astronomical instrumentation, and gathering and reducing interferometric data will be considered positively.

Due to the remote nature of the facility the candidate must have a valid AZ driver's license or be able to acquire an AZ state driver's license upon acceptance of this position.

## WORKING CONDITIONS

The observer works largely at the NPOI facility main array located roughly 15 miles Southeast of Flagstaff, AZ at an altitude of roughly 7000 feet elevation. Environmental conditions can be unpredictable with temperature ranges varying between -20- and 80-degrees F. Inclement winter weather conditions can also be expected which will require some degree of comfort and proficiency with driving in snowy/icy conditions.

Requires a moderate degree of standing, walking, bending, handling, reaching, grasping, driving, and repetitive motions. Additionally, nightly operations typically require long periods of sitting at a computer station during nominal observing. Requires the ability to lift and manipulate heavy objects (20lbs or more).

This position will predominantly work at night, although the schedule can/will vary depending on requirements and the state of the instrument. Weekend work is frequently required and shifts of at least 10 hours or more can be expected due to the nearly 360 days a year operation of the facility.

**Status:** Full Time, Regular 40 hrs /week  
**FLSA Classification:** OTI Hourly, Non-Exempt, OTII Salary, Exempt  
**OTI Compensation :** \$21 - \$22/Hour  
**OTII Compensation :** \$47,840 - \$49,920/Year  
**Benefit Eligible:** Yes\*  
**Location:** Anderson Mesa, AZ

**To Apply:**

Please send the following documents to [humanresources@lowell.edu](mailto:humanresources@lowell.edu)

- Lowell Standard Application- (<http://lowell.edu/about/employment>)
- Letter of interest addressing your qualifications
- Resume
- Phone numbers and e-mail addresses of three professional references

**Applications received by August 23<sup>rd</sup> 2020 will receive full consideration. The position will remain open until filled.**

Benefits Overview: In addition to 10 scheduled paid holidays, Lowell Observatory offers a Flexible Paid Time Off policy for all full-time, benefit eligible employees which allows you to determine how much time you need to rest and enjoy yourself outside of work. The cost of premiums for medical, life & long term disability insurances for benefit eligible employees is 100% paid by the company, and includes a contribution to either an H.S.A or HRA account for first dollar medical expenses.

**Employment is subject to passing a background check**

Lowell Observatory is an Equal Employment Opportunity/Affirmative Action employer and provides equal employment opportunity to all persons without regard to race, color, religion, sex, national origin, age, genetic information, disability, veteran status, political beliefs, sexual orientation, and marital and family status.

Lowell Observatory provides reasonable accommodations to applicants with disabilities. This nonsmoking/drug-free campus is at an elevation of 7,000 ft/2100m, and the LDT is 40 miles south of Flagstaff at an elevation of 7,800 ft/2370m. If you need a reasonable accommodation for any part of the application and hiring process, please notify the Human Resources office for assistance.