



W. M. KECK OBSERVATORY

On the summit of Mauna Kea, Island of Hawai'i

INFRASTRUCTURE TECHNICIAN

This position requires you to submit your [resume on-line](#) with your cover letter that states why you are uniquely qualified for the position.

Additional information about WMKO and this position may be found on our website at www.keckobservatory.org EEO/M/F/D/V

POSITION DESCRIPTION

POSITION TITLE:	Infrastructure Technician	DEPARTMENT:	Operations and Infrastructure
INCUMBENT:		FLSA STATUS:	Non-Exempt
REPORTS TO:	Infrastructure Supervisor	MEMBER:	
SUPERVISES:	N/A		

SUMMARY:

Under the general supervision of Infrastructure Supervisor, this position is responsible for fabrication, installation, maintenance and repair of summit infrastructure. Summit infrastructure consists of the machinery, equipment and structures that make up the physical plant, telescope, enclosure, and other systems at the summit facility. Primary responsibilities include maintenance and repair of existing infrastructure and fabrication and installation of new infrastructure for upgrades and new development. The ideal candidate is committed to WMKO's core values, adheres to company policy, works well with others and is a motivated, self-starter who can handle multiple tasks and priorities within a fast paced environment.

ESSENTIAL FUNCTIONS:

1. Participate in fabrication, installation, maintenance, troubleshooting, repair and operation of the machinery, equipment and structures that make up the summit infrastructure so that they are in good operating condition and safe. The infrastructure includes, but is not limited to:
 - a. Facility machinery including: refrigeration, hydraulics, pumps, motors, compressors and cranes.
 - b. Mechanical systems including: structures, mechanisms, large precision bearings, drive mechanisms, optics and instrumentation mounting and alignment systems, and safety systems.
2. Read and interpret mechanical CAD-based drawings and apply them to fabrication, installation, repair and maintenance of summit infrastructure.
3. Assemble and repair machinery and mechanisms, including tight-tolerance precision mechanisms, using industry standard tools and best practices.
4. Collaborate with design engineers on upgrade and development projects by providing technical input to the design, contributing to installation planning, problem-solving during installation, and proactive communication with design engineers throughout the project.

5. Execute the preventative maintenance program to ensure equipment is in good operating condition and available for observing. This includes performing work orders scheduled and specified in the Infrastructure Preventative Maintenance (IPM) system.
6. Perform field fitting of structures and mechanisms including physical layout, materials and supplies specification, assembly, mounting and installation, and modification.
7. Perform milling, lathe turning, cutting, grinding, and other machining.
8. Perform MIG, TIG, and stick electrode welding; brazing and soldering; plasma and flame cutting.
9. Organize parts and conduct inventories to insure that tools and parts are available when needed.
10. Participate in the safe exchange of telescope optics.
11. Keep supervisor informed of progress, problems and concerns related to the observatory; provide status reports as required.
12. Under the guidance of supervisor and the Summit Lead, collaborate with other summit technicians to create an efficient, effective and unified work environment based on the principles of teamwork and mutual responsibility for shared objectives.
13. Drive WMKO vehicles as necessary to transport employees to and from the summit in a safe manner.
14. Remove snow and ice as required to make the facility accessible, operational and safe.
15. Work effectively with coworkers and others by sharing ideas in a constructive, positive manner; listening to and objectively considering ideas and suggestions from others; keeping commitments; keeping others informed of work progress and issues; addressing problems and issues constructively to find mutually acceptable and practical solutions; and respecting the diversity of the WMKO workforce in actions, words, and deeds.
16. Maintain commitment to a high standard of safety, comply with all safety laws and WMKO safety policies/rules, and report actual and potential safety violations to appropriate supervisory or management personnel to further WMKO's core value of safety.
17. Perform any other duties consistent with the scope of the position as specified by supervisor.

Minimum Qualifications:

Education and Experience

1. Ten years of overall work experience performing fabrication, installation, maintenance and repair of machinery and mechanical systems in an industrial environment at journeyman (i.e., licensed or certified) level, or equivalent.
2. Five years of relevant work experience as a mechanic/millwright, machining and welding/fabrication, and at least one of the following areas: electrical, HVAC/refrigeration, hydraulics, and/or piping.

Skills

1. Ability to read and interpret mechanical drawings.
2. Capability of operating common maintenance shop hand and machine tools.
3. Basic knowledge of mechanics, pneumatics, and hydraulics.
4. Basic knowledge of shop fabrication practices (milling, turning, welding, cutting, forming, grinding, fastening, assembly, etc.)
5. Basic computer skills with office productivity software for e-mail and word processing.
6. Problem solving—the individual identifies and resolves problems in a timely manner and gathers and analyzes information skillfully.
7. Interpersonal Skills—the individual maintains confidentiality, remains open to others' ideas and exhibits willingness to try new things.
8. Oral communication—the individual speaks clearly and persuasively in positive or negative

situations, demonstrates group presentation skills and conducts meetings.

9. Written Communication—the individual edits work for spelling and grammar, presents numerical data effectively and is able to read and interpret written information.
10. Planning/organizing—the individual prioritizes and plans work activities, uses time efficiently and develops realistic action plans.
11. Quality control—the individual demonstrates accuracy and thoroughness and monitors own work to ensure quality.
12. Adaptability—the individual adapts to changes in the work environment, manages competing demands and is able to deal with frequent change, delays or unexpected events.
13. Dependability—the individual is consistently at work and on time, follows instructions, responds to management direction and solicits feedback to improve performance.
14. Safety and security—the individual actively promotes and personally observes safety and security procedures, and uses equipment and materials properly.

Desirable Qualifications

1. EPA refrigeration certification.
2. Electrician license.
3. Knowledge of computer aided building automation systems, such as BACnet.
4. Experience working at an astronomical observatory.

Other Requirements

1. Valid Hawaii's driver's license.
2. Successful completion of high altitude physical and continuing ability to work effectively at 14,000 foot altitude.
3. Willingness to commit to CARA core and cultural values.
4. Ability to work varying schedules including weekdays, weekends, holidays and occasional evening hours.

Working Conditions:

1. Work at the Observatory (14,000 feet elevation) on a frequent basis.
2. Occasionally work in difficult areas such as the top of domes (over 100 feet high) using fall arrest gear and in cold conditions.
3. Must be able to see, hear, touch, feel, sit and stand, and lift (up to 40 lbs.) for short periods of time.
4. May sit for extended periods at a computer workstation.

PAY AND BENEFITS:

WMKO offers a competitive wage and benefits package commensurate with qualifications and experience.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is regularly required to sit. The employee frequently is required to use hands, hands to finger, handle, or feel objects, tools or controls and talk or hear. The employee is occasionally required to stand; walk; reach with hands and arms; and stoop, kneel, crouch or crawl. The employee must be able to lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, color vision, depth perception and the ability to adjust focus.

SPECIAL REQUIREMENTS:

Employment is contingent upon successfully passing an employee reference check, criminal background check and a five year motor vehicle history check. This is a non-exempt position under FSLA regulations.

AT WILL EMPLOYMENT:

I understand that if employed, I am employed AT WILL and that no contract between myself and this employer is created by my completion of this application, my receiving employment, my continued employment or my receiving benefit of employment of any type. No promises of any form or nature have been made to me, no guarantee of any length of employment is or shall be binding on this Employer, unless in writing. I reserve the right to terminate my employment at any time and the Employer has the same right at any time.

I agree to physical or other testing when such testing is reasonably necessary in determining job related abilities or reasonable expectation of successfully performing the job to the Employer's standards.

This job description does not constitute an employment agreement between the Employer and employee, and is subject to change as the needs of the Employer and requirements of the job change.

The statements contained herein reflect general details as necessary to describe the principal functions of this job, the level of knowledge, and skill typically required and the scope of responsibility but should not be considered an all inclusive listing of work requirements. Individuals may perform other duties as assigned including work in other functions areas to cover absences or relief, to equalize peak work periods, or otherwise to balance the work load.

Incumbent

Date

Supervisor

Date