POSITION DESCRIPTION

SUMMARY:

Under the general supervision of the Infrastructure Supervisor, this position is responsible for conventional and Computer Numerical Control (CNC) machining of mechanical parts. Reading and interpreting complex mechanical fabrication drawings, understanding materials and their properties, and performing mechanical fabrication, assembly, adjustment and troubleshooting of precision mechanisms are all required. In addition, this position will participate in maintenance of the summit infrastructure, including repairs of mechanical systems and preventative maintenance. Commitment to WMKO’s core values, adherence to company policy, working well with others, and the ability to handle multiple tasks and priorities within a fast-paced environment are all required.

ESSENTIAL FUNCTIONS:

1. Perform conventional and CNC machining, milling, lathe turning, cutting, grinding, and related tasks to fabricate mechanical parts per engineering designs.

2. Provide technical input and engage in technical interchange with mechanical engineers on the mechanical design, prototyping, development and installation of mechanical systems at the observatory.

3. Provide hands-on fabrication, assembly, disassembly, adjustment, measurement, troubleshooting and repair of complex mechanisms and machinery.

4. Participate in installation, maintenance, troubleshooting and repair of the machinery, equipment and structures that make up the summit infrastructure so that they are in good operating condition, available for observing and safe. The infrastructure includes, but is not limited to:
   a. Physical Plant machinery
   b. Telescope Yoke, Tube, Platforms, Decks and other Structures
   c. Dome and Shutter
   d. Other infrastructure

5. Execute the Preventative Maintenance program for summit infrastructure to ensure equipment is in good operating condition and available for observing. This includes performing work orders as scheduled and specified in the maintenance management system.

6. Participate in the safe exchange of telescope primary mirror segments.

7. Drive WMKO vehicles as necessary to transport employees to and from the summit in a safe manner.

8. Remove snow and ice as required to make the facility accessible, operational and safe.

9. Other duties are required

10. 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.

11. 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.
Minimum Qualifications:

**Education and Experience**
1. Knowledge of materials, their properties, and suitability in different mechanical applications.
2. Five years of related work experience in an industrial environment with proven capability for installation, maintenance, and troubleshooting of mechanical systems.
3. Eight years of experience as an industrial machinist building high precision (tolerances to .001") complex mechanical parts using conventional and CNC milling equipment, lathe, and standard machine shop equipment and tools.
4. Journeyman Machinist or equivalent

**Skills**
1. Ability to read and understand policies, instructions, and directives in English.
2. Ability to read, fully understand and interpret mechanical fabrication and assembly drawings designed to ASME 14.5M-1994 standard for complex, tight tolerance mechanical parts and assemblies.
3. Capability of operating common maintenance shop hand and machine tools.
4. Ability to maintain pneumatics and hydraulics.
5. Basic computer skills with office productivity software for e-mail, word processing and spreadsheets.
6. 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. Adaptable—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. Experience working at an astronomical observatory
2. G-Code/SurfCam programming experience
3. Supervisory experience

**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.
5. Ability to flexibly work at the summit and headquarters locations as scheduled.

**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 frequently lift and/or move up to 20 pounds and occasionally lift and/or move up to 40 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.

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.