



Code: 6675
Family: Construction, Maintenance, and Skilled Labor
Service: Operation and Construction
Group: Industrial Trades
Series: Metal Working Trades

CLASS TITLE: HELICOPTER MECHANIC

CHARACTERISTICS OF THE CLASS

Under supervision, performs skilled mechanical maintenance and repair work on various components and sections of helicopters, and performs related duties as required

ESSENTIAL DUTIES

- Performs preventive maintenance inspections required by the Federal Aviation Administration (FAA) and manufacturers to ensure safe operating conditions of helicopters
- Disassembles and examines parts and components using precision and diagnostic instruments to measure parts for wear and defects
- Diagnoses mechanical problems observed during inspection and those reported by pilots to determine needed repairs
- Performs maintenance and repair work on sections of helicopters including airframes, engines, and electronic components
- Refers to blueprints, diagrams, and repair manuals in order to determine how to make repairs and replace worn or defective parts
- Reassembles and tests parts and performs routine repairs and maintenance or removes electrical components and specialized equipment for repair by vendors
- Fabricates parts, including work aids such as braces or supports, to hold aircraft components in place during maintenance and repair
- Maintains records of scheduled inspections, maintenance, repairs, and replacement of aircraft components as required by manufacturer's specifications and department protocols
- Prepares and signs off on inspection reports providing inspectors authorization upon completion of repairs and inspections
- Prepares work activity reports
- Maintains clean and orderly work areas
- Ensures that the aircraft facility and the equipment used in the repair and maintenance of helicopters are adequately maintained and comply with industry standards and reports conditions that do not comply to the supervisor.

NOTE: *The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS

Education, Training, and Experience

- Successful completion of a US Department of Labor registered machinist apprenticeship training program and journeyman status; or an equivalent combination of education, training, and experience

Licensure, Certification, or Other Qualifications

- Must possess a current airframe and power plant mechanics (A&P) certificate from the Federal Aviation Administration (FAA) and have Inspector's Authorization

- Some positions may require five (5) years of documented professional experience as a Helicopter Mechanic on BELL 412 Helicopters, within the past ten (10) years.

WORKING CONDITIONS

- Exposure to outdoor weather conditions
- Exposure to loud noise, fumes or dust, oily or wet environment
- Work performed using scaffolds and ladders

EQUIPMENT

- Computers and peripheral equipment (e.g., personal computer, computer terminals, hand-held computer)
- Standard tools used in servicing aircraft/ helicopter equipment
- Testing and monitoring equipment (e.g., helicopter rotor blade tracking and balancing equipment, boroscope inspection and computerized vibration monitoring equipment, magnification and Zy-Glo equipment)
- Measuring and precision measuring tools
- Powered and manual cleaning equipment (e.g., steam-cleaners, shovel, power hoses, mops, brooms)
- Personal protective equipment (e.g., hard hat, shoes, glasses, gloves, vest, pads)

PHYSICAL REQUIREMENTS

- Heavy lifting (up to 75 pounds) is required
- Ability to stand and walk for extended or continuous periods of time
- Ability to quickly bend, stretch, twist, or reach out with one's body, arms, and/or legs
- Ability to climb staircases, ladders, and/or step stools
- Ability to operate applicable hand tools, power tools, and equipment
- Ability to tolerate heights while working

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Moderate knowledge of:

- *helicopter components, sections, and mechanical and electronic systems
- *helicopter repair, maintenance, and preventative maintenance methods, practices, and procedures
- *applicable test instruments and hand and power tools
- *applicable safety and code standards specific to helicopters

Some knowledge of:

- *applicable federal, state, and local laws, regulations, and guidelines
- *manufacturers' manuals for servicing equipment
- *applicable emergency operations

Knowledge of applicable City and department policies, procedures, rules, and regulations

Skills

- *ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
- *ACTIVE LISTENING - Give full attention to what other people are saying, taking time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- *CRITICAL THINKING - Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- *COMPLEX PROBLEM SOLVING - Identify complex problems and review related information to develop and evaluate options and implement solutions
- *SYSTEMS ANALYSIS - Determine how a system should work and how changes in conditions, operations, and the environment will affect outcomes
- *EQUIPMENT MAINTENANCE - Perform routine maintenance on equipment and determine when and what kind of maintenance is needed
- *EQUIPMENT SELECTION - Determine the kind of tools and equipment needed to do a job
- *INSTALLATION - Install equipment, machines, wiring, or programs to meet specifications
- *OPERATION AND CONTROL - Control operations of equipment or systems
- *REPAIRING - Repair machines or systems using the needed tools
- *TROUBLESHOOTING - Determine causes of operating errors and decide what to do about it

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WRITE - Communicate information and ideas in writing so others will understand
- RECOGNIZE PROBLEMS - Tell when something is wrong or is likely to go wrong
- REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense
- VISUALIZE - Imagine how something will look after it is moved around or when its parts are moved or rearranged

Other Work Requirements

- INITIATIVE - Demonstrate willingness to take on job challenges
- STAMINA - Demonstrate energy and stamina to accomplish work tasks
- ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks
- DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ANALYTICAL THINKING - Analyze information and using logic to address work or job issues and problems

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
(Valtera Corporation)

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Licensure, Certification, and Other Qualifications updated: July, 2016