



JOB DESCRIPTION

POSITION: Fire Engineer
CLASSIFICATION: Public Safety
POSITITON RANGE: #33
REPORTS TO: Fire Captain
FLSA STATUS: Non-Exempt

General Statement of Duties

Under general supervision performs specialized work in operating and maintaining a variety of automotive firefighting equipment, including pumpers, ladder trucks, and specialty fire apparatus, in response to fire alarms and other emergency scenes. Participates in firefighting activities, fire prevention activities, training, physical fitness programs; and provides emergency medical care to ill and injured persons. Work includes routine operator maintenance and care of fire equipment and apparatus. Work is performed under the supervision of a fire captain who reviews work through meetings, the observation of work in progress, and evaluation of overall results achieved. Occasionally, fire engineers are required to relieve an officer of higher rank. When so assigned, fire engineers are responsible for the management of company programs and the supervision of assigned fire companies and equipment at the scene until relieved by an officer of higher rank. Fire Engineers are required to work 24-hour shifts, however, incumbents may be assigned to work a 40-hour work week.

Essential Functions

Operates and drives fire pumping and aerial ladder apparatus to alarms; regulates water pressure through hose lines. Checks motorized apparatus for proper operation and general condition. Is responsible for proper care and maintenance and minor repair work of equipment and apparatus to which assigned. Identifies need for major repairs; maintains records of maintenance and overhaul. Responds and participates in firefighting activities. Responds to and renders assistance in emergency situations. Climbs ladders and works at heights of 10+ feet in rescuing people trapped on building roofs and upper floors. Moves objects weighing up to 50 pounds or more, including but not limited to: five inch fire hoses, EMS equipment, smoke ejectors, trauma boxes, persons on backboards, and salvage equipment, for distances of more than 20 feet. Performs duties requiring frequent pulling of 40 pounds or more, such as removing hose from apparatus, pulling ceilings, starting power equipment, and opening doors on the apparatus. Work at fire scenes and other emergencies, which may involve strenuous physical exertion, often under adverse climatic conditions. In these situations, the employee is subjected and exposed to dangers and hazards, which could result in severe injuries. Participates in physical fitness activities to maintain physical conditioning. Performs routine operator maintenance and care of equipment and apparatus. Cleans and inspects equipment and apparatus; notifies appropriate department head or supervisor of any defects which need to be corrected. Keeps fire station,

equipment, and grounds in a clean and orderly condition. Works with cleaning fluids and agents, chemicals, pesticides, insecticides, paints, or similar solutions, using protective equipment. Participates in training activities and instruction sessions learning job related material including firefighting and emergency medical services. Acquires and retains a thorough knowledge of the AJFD, including streets, buildings, water supply, unusual hazards, and related items. May perform various public information/education duties as required. Demonstrates continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide seamless customer service.

Minimum Qualifications (Knowledge, Skills and Abilities)

- Knowledge of the principles, practices and procedures of modern firefighting and firefighting vehicles, equipment and apparatus.
- Knowledge of the principles of mechanics, hydraulics, and mathematics as related to Fire Engineer duties.
- Knowledge of the Uniform Fire Code and the procedures involved in fire prevention and safety inspections.
- Knowledge of emergency medical methods and procedures.
- Knowledge of AJFD geography, street names and numbers, and the location of hydrants.
- Knowledge of the operation and maintenance of heavy-duty aerial ladders, pumpers and trucks.
- Knowledge of AJFD traffic laws and regulations; and state statutes governing the operation of emergency vehicles.
- Ability to regulate water pressure from a pumper at fires in accordance with principles of hydraulics.
- Ability to effectively and safely drive and operate the full range of fire apparatus and equipment used by the AJFD.
- Ability to use self contained breathing apparatus and protective clothing to prevent exposure to hazardous materials and infectious diseases.
- Ability to prepare reports on the operation of apparatus.
- Ability to engage in moderate to strenuous physical activity; which may require long working hours under emotional stress.
- Ability to exercise a high degree of self-discipline.
- Ability to tolerate extreme fluctuations in temperature while performing job duties.
- Ability to bend and stoop repeatedly or continually over time to perform emergency medical services or perform duties on the fire ground.
- Ability to participate in physical fitness programs and to comply with AJFD medical and fitness requirements.
- Ability to select and apply appropriate emergency treatment and use specialized equipment apparatus, when required.
- Ability to understand and follow oral and written directions promptly and accurately.
- Ability to establish and maintain effective working relationships with those contacted in the course of work.

Required Training and Experience

- Two (2) years full time employment with the AJFD as a firefighter **AND** an AAS Degree

- in Fire Science Technology, **OR**;
- Two (2) years full time employment with the AJFD, **AND** completion of a credited Fire Tactics and Strategy course at the community college level, **AND** Certificate of Completion in Driver Operator at the community college level within one (1) year from time of appointment.
 - Required Driver Operator Certificate Courses:
 - Fire Hydraulics
 - Emergency Medical Driver Operator
 - Supervisory Training for Firefighters
 - Fire Apparatus
- Commercial Drivers License (CDL) within one (1) year from time of appointment.

Additional Requirements and Qualifications

- Possession of a valid and appropriate Arizona driver's license.
- Possession of an Emergency Medical Technician, Intermediate Emergency Medical Technician or Paramedic Certification.
- Some positions will require the performance of other essential functions depending upon work location, assignment or shift.
- Some positions require the use of personal or AJFD vehicles on AJFD business. Individuals must be physically capable of operating the vehicles and possess and maintain an acceptable driving record. In addition, individuals may be required to pass an Arizona Department of Transportation physical exam to obtain/maintain the appropriate commercial drivers license (CDL). Pre-employment drug testing is required for CDL positions. Employees in CDL positions will be subject to unannounced alcohol and drug testing as a condition of continued employment. Use of a personal vehicle for AJFD business will be prohibited if the employee does not have personal insurance coverage.

This job specification should not be construed to imply that these requirements are the exclusive standards for the position. Incumbents will follow any other instructions, and perform any other related duties as may be required by supervisory personnel.

bhc:msw:515:engineerjob.des
Revised 10/05