

FIRE ENGINEER

JOB DESCRIPTION

Classification Responsibilities: A Fire Engineer is primarily responsible for the safe and efficient operation of firefighting apparatus in response to emergencies, and for pumpers, ladder trucks, and other special firefighting apparatus at the emergency scene. Duties include driving a fire engine, ladder truck, or other large apparatus to and from fires and drills, regulating the water pressure from a pumper, and checking motorized apparatus for proper operation and general condition. If an apparatus is not engaged at a fire scene, Fire Engineers may participate in other firefighting activities. A portion of a Fire Engineer's work also consists of the routine maintenance of apparatus and equipment and to maintain them in a response-ready mode. Fire Engineers may be required to fill in for a Fire Captain in an acting capacity. This class is responsible for performing related work as required.

Distinguishing Features: Fire and Medical Department motorized apparatus operation requires constant alertness, observation, and judgment to ensure the maintenance of proper pressure requirements and adherence to vertical and angular limitations of ladders as dictated by established operating principles. Work at fire scenes and other emergencies may involve strenuous physical exertion, often under very adverse climatic conditions. In these situations, the employee is subjected and exposed to dangers and hazards that could result in severe injuries. Work is performed under the supervision of a Fire Captain who reviews work through observation of work in progress, meetings, and overall results achieved. Occasionally, Fire Engineers may be required to fill in for a Fire Captain in an acting capacity. Fire Engineers are required to work 24-hour shifts and 56-hour workweeks; however, incumbents may be assigned to work 8-hour or 10-hour shifts and 40-hour workweeks while assisting on special projects. Incumbents in the Fire Engineer class, and administrative/day or other assignments from the Fire Engineer class, may be demoted to a lower level class; must be able to demonstrate proficient performance of the essential functions of the lower level class including but not limited to firefighting duties; and will be required to possess and maintain required certifications including but not limited to current Arizona Emergency Medical Technician (EMT) certification and valid Arizona Driver's License. This class is FLSA nonexempt.

QUALIFICATIONS

Minimum Qualifications Required. Three years current consecutive firefighting or other sworn experience with the Mesa Fire and Medical Department (with no break in service or approved for reinstatement list within one year of resignation). Graduation from an accredited college or university with an Associate's Degree in Fire Science, Fire Science Technology, Advanced Emergency Medical Technology (Paramedic), Emergency Response and Operations, or Emergency Management OR the following semester courses/approved substitutions from an accredited college or university with a grade C or better (equivalent courses from an accredited college or university may be approved by Human Resources and the Fire and Medical Department):

Fire Apparatus, 3 hours, (FSC117).

Fire Hydraulics, 3 hours (FSC118).

Firefighter I & II Certification OR Fire Department Operations, 11 hours (FSC102).

Supervisory Training for Firefighters, 3 hours (FSC202), OR equivalent 200+ level supervision course, 3 hours, OR City of Mesa HR Training Supervisor's Academy.

Special Requirements. Possession of a current Arizona Emergency Medical Technician (EMT) Certification. Possession of a current or previous (at least one) Driver Operator Certification (DOC). Must possess a valid Arizona Driver's License. Must meet the qualifications to wear a tight fitting respirator by passing a medical evaluation in accordance with CFR 1910.134 by promotion date and must maintain certification.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualifications. None.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public in conducting business inspections and school programs, delivering emergency care, assessing patient needs, giving instructions and information, and responding to questions. Presents public safety training classes and school programs and instructs others in a classroom setting regarding fire safety, fire prevention, firefighting, and Emergency Medical Services (EMS) training. Prepares written documents such as Business Inspection Reports, memos, repair orders, and fire and emergency medical service reports in order to document technical and legal matters.

Manual/Physical: Operates fire vehicles (i.e., automobiles, fire apparatus, and heavy construction equipment) requiring a standard Arizona Driver's License to perform normal and emergency-level firefighting duties. Operates various types of motorized fire apparatus and ground monitors. Operates power-driven machinery such as hydraulic and pneumatic rescue tools to rescue trapped or endangered persons, and force entry into locked vehicles or structures. Uses axes, pry tools, pike poles, and power saws to gain entry into vehicles or structures. Performs searches and rescues inside buildings on fire, and treats victims who require first aid. Handles firefighting equipment on apparatus and at emergency scenes. Works in small, cramped areas in order to rescue trapped, endangered, or injured people. Aims fire streams. Climbs ladders and works at heights greater than 10 feet to reach and rescue people trapped on building roofs or upper floors. Moves material such as burnt building debris from one place to another using a shovel, rake, or rubbish hook to rescue trapped or endangered persons, or to overhaul a burned out structure. Moves objects up to 165 pounds or more (including a five inch fire hose) and EMS equipment for distances of more than 20 feet using a lifting aid as appropriate. Digs up ground using a pick, shovel, spade, brush hook, or McLeod tool to fight brush fires and rescue trapped persons from cave-ins. Uses a hammer, saw, screwdriver, or similar tools to overhaul fire scenes, eliminate dangerous situations, and perform routine maintenance on fire apparatus.

Works in a variety of weather conditions. Enters data into a terminal, personal computer, or other keyboard device to document fires, first aid incidents, and building inspection reports. Mixes gasoline and oil to fuel power tools used in firefighting and rescue activities. Works with cleaning fluids and agents, chemicals, pesticides, insecticides, paints, or similar solutions using routine and nonroutine protective equipment when performing fire station maintenance duties and mitigating a hazardous materials incident. Inspects alarm systems and fire control systems to determine compliance with

prescribed fire code enforcement standards. Inspects safety violations to determine compliance with the Uniform Fire Code (UFC) during building inspections. Distinguishes colors to identify the National Fire Protection Association (NFPA) 704M System (hazardous materials), and chemicals involved in fires by smoke color. Uses equipment instructions and preplans in order to safely work and operate equipment at emergency incidents.

Detects natural gas leaks while performing emergency work at scenes of gas leaks. Detects audible traffic sounds when approaching traffic at vehicle accidents in roadways, sounds of impending building collapse at structure fires, and calls for assistance. Detects alarms, sirens, and other audible signs of alarm or warning in order to remove self from danger or to assist others in hazardous situations. Uses appropriate Personal Protection Equipment (PPE), including a self-contained breathing apparatus (SCBA) while performing firefighting tasks in environments that may be immediately dangerous to life (IDLH atmospheres). Meets scheduling and attendance requirements.

Mental: Comprehends and makes inferences from written material to perform firefighting duties in accordance with Fire and Medical Department standard operating procedures, and building inspections in compliance with the UFC. Learns job-related material regarding firefighting and emergency medical services in an on-the-job training setting. Learns job-related material regarding emergency medical training and firefighting tasks in a classroom setting.

Knowledge and Abilities:

(Knowledge and abilities obtained through successful completion of the Mesa Firefighter - Recruit Training Academy, which is required for employment.)

Knowledge of:

firefighting methods and modern fire prevention practices;
the UFC and procedures involved in inspections;
emergency medical methods and procedures;
overhaul and salvage operations;
the principles of hydraulics and their application to the operation of fire apparatus;
departmental rules and regulations;
City geography, street names and numbers, and the location of hydrants;
the operation and maintenance of heavy-duty aerial ladders and trucks; and
City traffic laws and regulations and state statutes governing operation of emergency vehicles.

Ability to:

regulate water pressure from a pumper at fires in accordance with principles of hydraulics;
position ladder trucks at a fire in order to gain the safest and most expeditious access to the building;
prepare reports on the operation of apparatus;
give instructions on the operation of apparatus to firefighters;
become familiar with structures within assigned district in order to detect fire and safety hazards;
engage in moderate to strenuous physical activity, which under emergency situations may require long working hours under emotional stress;
exercise a high degree of self-discipline;

participate in physical fitness programs and comply with department medical and fitness requirements; and establish and maintain effective working relationships with employees, coworkers, supervisors, and the general public.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised to Update Pay Grade and Increments 5/15

CT/hn/pa

CS4342.DOCX (40-hour workweek) PAY GRADE: FE40

CS4333 (56-hour workweek) PAY GRADE: FE24

EEO-PSW

NDOT SAFETY-Yes SECURITY-No

NDOT RANDOM-No

DOT SAFETY-No CDL-No

RESP-Yes IND-7710

JOB FCTN-PUB SWORN-Yes

INCREMENTS 81-200