

SHAWNEE HEIGHTS FIRE DISTRICT POSITION DESCRIPTION

POSITION TITLE: Engineer

REPORTS TO: Captain or Lieutenant

LAST REVISED: November 11, 2021

JOB SUMMARY STATEMENT:

The position of Engineer with the Shawnee Heights Fire District is responsible for driving and operating various types of fire apparatus. Responsible for the location, operation, and routine maintenance requirements for various types of hydraulic, electric, gasoline, diesel, and mechanically operated pieces of firefighting, rescue/extrication, and EMS equipment. Extensive knowledge of street layouts, addresses, water supply sources, and target hazards located within assigned response area, as well as a working knowledge of the same throughout the district. Must also have a thorough understanding of water supply, pumping operations, and hydraulic principles.

DUTIES AND RESPONSIBILITIES:

- Serves as one (1) member of a team delivering fire protection, EMS, rescue/extrication, and hazardous materials response on a full-paid or an on-call basis.
- Safely operates and drives various types of fire apparatus and other fire department vehicles (Pumpers, Aerials, Rescue Trucks, Brush Trucks, Suburban's, etc.). Understands and practices defensive driving techniques.
- Operates fire pumps, aerial ladders, and other types of fire apparatus equipment, which requires a thorough understanding and ability to apply proper water supply system, pumping system, pneumatic system, hydraulic system, and electrical system principles and methods under emergency scene conditions.
- Identifies and reports apparatus and equipment maintenance problems and deficiencies to supervisor.
- Instructs firefighter personnel in driving skills, pump operations and hydraulics, aerial operations, streets, and other daily training drills as assigned or requested.
- Knows the location of and assists other firefighters in accessing adjunct firefighting equipment and supplies from assigned apparatus.
- Performs fire fighting duties as assigned or requested.
- Provides emergency medical treatment in various settings and conditions.
- Maintains apparatus in a clean and ready condition for emergency response at all times on assigned shift.
- Completes reports and forms, both computer generated or hand written, of personal and company activities, emergency responses, station maintenance requests, and emergency apparatus and equipment maintenance requests.
- Conducts public relations tours of the fire station, fire apparatus, and firefighting equipment as assigned or required.
- Participates in the gathering and recording of information obtained through pre-fire planning.
- Gathers information and prepares emergency response reports as required.
- Participates in fire station duties and maintenance activities as assigned.
- Responds on alarms as outlined in District policy.
- Participates in regular scheduled drills as outlined in District policy.
- Performs other duties as required or assigned.

EDUCATION & SPECIAL LICENSE(S)/CERTIFICATION(S):

- High School graduation or GED equivalent (prefer graduation from a two (2) year junior college or technical school or a four (4) year college or university with an associate or bachelor's degree in Fire Science or Technology Administration).
- Must possess a valid State of Kansas non-commercial Class "B" driver's license.
- Must maintain a State of Kansas certification as an EMT.
- Must possess the following certifications (Pro-Board is a recognized alternate to IFSAC):
 - IFSAC Firefighter I
 - IFSAC Hazardous Material Operations
 - IFSAC FFII certificate
 - IFSAC Driver Operator Fire Apparatus certification

EXPERIENCE:

A minimum of two (2) years firefighting/EMS experience.

SKILLS:

- Competent in oral and written communications skills
- Ability to study, learn, and put into practice various fire service-related skills and topics
- Ability to work effectively as a member of a team toward achieving assigned goals
- Ability to operate modern computer systems and associated software packages.

MENTAL REQUIREMENTS:

- Knowledge of modern fire fighting, rescue/extrication, EMS, and hazardous materials principles, practices, and methods.
- Knowledge of the operation and maintenance parameters and requirements of various types of fire apparatus and equipment used in fire fighting, rescue/extrication, and EMS activities.
- Knowledge of instructional and training principles and methodologies.
- Ability to read, comprehend, and follow rules, regulations, policies and procedures, and standard operating guidelines.
- Knowledge of the methods and practices used in the delivery of emergency medical services and other rescue/extrication techniques
- Knowledge to safely and effectively operate complex fire apparatus systems, both on the training field and at emergency scenes.
- Knowledge of the geographical layout of the District, and the location of water supply sources and target hazards.
- Ability to prepare clear and concise reports and forms.
- Working knowledge of the computer system and software applications used by the District.
- Knowledge and ability to read, interpret, and learn new concepts in science and mathematics.

PHYSICAL REQUIREMENTS AND DESCRIPTIONS:

- Performing fire-fighting tasks (e.g., hose line operations, extensive crawling, lifting and carrying heavy objects, ventilating roofs or walls using power or hand tools, forcible entry), rescue operations, and other emergency response actions under stressful conditions while wearing personal protective ensembles and self-contained breathing apparatus (SCBA), including working in extremely hot or cold environments for prolonged time periods.
- Wearing an SCBA, which includes a demand valve-type positive-pressure face piece or HEPA filter masks, which requires the ability to tolerate increased respiratory workloads.
- Exposure to toxic fumes, irritants, particulates, biological (infectious) and non-biological hazards, and/or heated gases, despite the use of personal protective ensembles and SCBA.
- Depending on local jurisdiction, climbing six or more flights of stairs while wearing fire protective ensemble weighing at least 50 lb or more and carrying equipment/tools weighing an additional 20 to 40 lb.
- Wearing fire protective ensemble that is encapsulating and insulated, which will result in significant fluid loss that frequently progresses to clinical dehydration and can elevate core

- temperature to levels exceeding 102.2°F.
- Searching, finding, and rescue-dragging or carrying victims ranging from newborns up to adults weighing over 200 lb to safety despite hazardous conditions and low visibility.
- Advancing water-filled hose lines up to 2½ in. in diameter from fire apparatus to occupancy [approximately 150 ft], which can involve negotiating multiple flights of stairs, ladders, and other obstacles.
- Climbing ladders, operating from heights, walking or crawling in the dark along narrow and uneven surfaces, and operating in proximity to electrical power lines and/or other hazards.
- Unpredictable emergency requirements for prolonged periods of extreme physical exertion without benefit of warm-up, scheduled rest periods, meals, access to medication(s), or hydration.
- Operating fire apparatus or other vehicles in an emergency mode with emergency lights and sirens.
- Critical, time-sensitive, complex problem solving during physical exertion in stressful, hazardous environments, including hot, dark, tightly enclosed spaces, that is further aggravated by fatigue, flashing lights, sirens, and other distractions.
- Ability to communicate (give and comprehend verbal orders) while wearing personal protective ensembles and SCBA under conditions of high background noise, poor visibility, and drenching from hose lines and/or fixed protection systems (sprinklers).
- Functioning as an integral component of a team, where sudden incapacitation of a member can result in mission failure or in risk of injury or death to civilians or other team members.

SUPERVISORY RESPONSIBILITY:

Direct: None

EMPLOYEE ACKNOWLEDGEMENT/SIGNATURE:

Signature _____ Date _____

Printed Name _____

SUPERVISOR ACKNOWLEDGEMENT/SIGNATURE:

Signature _____ Date _____

Printed Name _____ Title _____

FIRE CHIEF APPROVAL:

Signature _____ Date _____

Printed Name _____ Title _____