

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 4234

TITLE: FIRE TECHNICIAN

GRADE: F-19

DEFINITION:

Performs technical duties in a distinct functional area in the Fire and Rescue Department and related work as required. Specific assignments include: Apparatus, Emergency Medical Services, Hazardous Materials Response Team, Technical Rescue Operations Team, Fire Protection Equipment and Systems Testing, Inspections, Investigations, Training, and Resource Management.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

Employees in this class perform technical duties in a distinct functional area. Instructions and guidance are furnished with non-routine situations or conditions; however, employees at this level normally exercise initiative and independent judgment. Fire Technicians assigned to Fire Suppression differ from Firefighters in that Fire Technicians operate firefighting equipment and perform firefighting duties as lead workers. Fire Technicians assigned to Emergency Medical Services may be assigned to a paramedic fire engine as the advanced life support provider, may drive or act as a crew leader on an advanced life support unit (ALSU), or basic life support unit (BLSU).

ILLUSTRATIVE DUTIES:

All functional areas:

Performs housekeeping tasks at fire stations and on their grounds;
Maintains records as necessary, and completes incident reports;
Attends training sessions and participates in drills;
Participates in firefighting, rescue, and emergency medical service duties;
Prepares and presents in-station drills;
Participates in the physical fitness program.

Apparatus

Drives a pumper, ladder truck, tiller or rescue squad to/from alarms;
Operates a pumper at draft or fire hydrant;
Operates a specialized unit, such as a boat, hazardous materials unit, or technical rescue unit;
Inspects vehicles and mechanical equipment to ensure that they are working properly, and reports malfunctions to supervisor;
Performs routine maintenance on vehicles and equipment and maintains vehicle log book;
Trains Firefighters in the safe and efficient operation and maintenance of firefighting and rescue apparatus;
Coordinates and oversees work details at the station or at incidents;
If Master Technician designation is achieved: Assist with orientation, training and mentoring of new firefighters and firefighter/medics in their probationary year. Assist newly promoted technicians in their respective specialties. Assist in planning and administration of general shift training.

Advanced Life Support (ALS)

Serves as the medic on an engine company or on a paramedic training unit, or as a crew leader on an Advanced Life Support Unit (ALSU);

Provides advanced emergency medical care to stabilize the condition of the critically ill/injured prior to and during transport to a medical facility;

Administers advanced emergency medical procedures in accordance with Emergency Medical Services Manual, International Trauma Life Support Guidelines, Pediatric Advance Life Support Guidelines, Advanced Cardiac Life Support Guidelines;

Determines the nature and extent of injury or illness, establishes priorities for required emergency care, and determines if Advanced Life Support Care or medivac is needed;

Drives the BLSU or ALSU to and from emergencies;

Ensures that the ALSU and BLSU are maintained ready to respond to emergency calls;

Conducts primary and secondary patient survey;

Collects pertinent information for patient assessment, including the patient's past and present medical history, and transfers this information to appropriate medical personnel;

Takes vital signs and stabilizes patient;

Conducts assessment to determine treatment of a patient with suspected respiratory, cardiovascular, or central nervous system disorder, and begins treatment;

Determines subsequent treatment based on patient reactions, responses and conditions;

Performs cardiopulmonary resuscitation;

Carries out emergency childbirth procedures;

Treats trauma-induced injuries, and assists with the treatment of medical emergencies (e.g., drug overdoses, seizures, diabetic reactions);

Notifies authorities of suspicion of child and elder abuse;

Operates the mobile display terminal (MDT) system;

Complete the Electronic Patient Care Report (ePCR) utilizing the ePCR handheld device;

On the station computer, enters information from written reports into the department reporting system;

If Master Technician designation is achieved: Assist with orientation, training and mentoring of new firefighters and firefighter/medics in their probationary year. Assist newly promoted technicians in their respective specialties. Assist in planning and administration of general shift training.

Hazardous Materials Response Team

Responds to accidental and intentional releases of hazardous materials;

Detects the presence of hazardous materials using specialized electronic instruments and product testing materials;

Identifies the hazardous material's chemical and physical properties by using reference books, computerized databases, and information retrieved from industry experts;

Develops a hazardous materials incident site characterization diagram, to include topography, location of sewers and storm drains, exposures, natural bodies of water, and location of hazardous materials;

Develops a technical site safety action plan, to include work zones, evacuation plans, "hot zone" action levels, and other emergency procedures for all site workers;

Obtains gas, liquid, or soil samples to evaluate hazardous material concentrations;

Performs damming or diking procedures to stop the spread of hazardous material;

Performs decontamination procedures on citizens, departmental personnel, tools, and equipment;

Oversees/directs off-loading procedures when products are transferred from container to Container;

Tests meters and equipment, and ensures sufficient haz-mat supplies are on hand;

Conducts target hazard preplanning and walk-through of buildings known to contain hazardous material to become familiar with the layout;

Conducts, develops, and participates in hazardous materials response team training;

If Master Technician designation is achieved: Assist with orientation, training and mentoring of new firefighters and firefighter/medics in their probationary year. Assist newly promoted technicians in their respective specialties. Assist in planning and administration of general shift training.

Technical Rescue Operations Team

Participates in underground rescues;

Stabilizes and works in building collapses, trench cave-ins, and high-angle, below-grade and confined-space rescue situations;

Shores, and makes safe, a trench or collapsed building, and establishes a safety zone around the trench/building collapse to prevent further collapse;

Prepares, inspects and utilizes a variety of rope systems for ascending, descending and hauling tools, equipment and people;

Evaluates the dangers of a confined space, safely entering into and exiting from confined spaces using personal protective clothing, gear, and breathing equipment;

Searches for victims, evaluates victim's condition, prepares victims for removal, extricates victims, and provides basic life support;

Operates hand tools, power tools, and dewatering devices;

Ventilates a trench or confined space prior to rescue;

Excavates trenches and breeches/tunnels through structures;

Protects victims and self from utility equipment;

Develops, conducts or participates in training in all aspects of technical rescue operations;

If Master Technician designation is achieved: Assist with orientation, training and mentoring of new firefighters and firefighter/medics in their probationary year. Assist newly promoted technicians in their respective specialties. Assist in planning and administration of general shift training.

Fire Protection Systems Section

Inspects commercial buildings and facilities under construction to ensure that the components of their fire protection water system (e.g., main water line, standpipes, sprinklers, pump) are properly installed and comply with all applicable fire and life safety codes/standards, and that their fire protection equipment (e.g., smoke detectors, fire alarms, stairwell pressurization, smoke evacuation systems) operate properly;

Witness performance tests on fire protection equipment/systems conducted by the installing contractor;

Prepares reports on the status, test results, etc. of the fire protection equipment and systems inspected at each job site;

Prepares reports of inspection, issues Notices of Violation as required by law;

Answers inquiries from contractors, developers or owners regarding fire protection equipment and system requirements, as well as installation deficiencies;

Investigates, and assists in troubleshooting, problems in fire protection equipment and systems in existing buildings.

Inspections Branch

Inspects commercial buildings to identify fire code violations or life safety hazards prior to issuance of use and occupancy permits, Fire Prevention Code Permits (FPCP), Office for Children, Home Daycare Life Safety Certificates or state regulated health care life safety inspections; or other state or county business licenses requiring such inspections;

Inspects commercial buildings in response to citizen complaints concerning threats to fire safety or life safety;

Conducts follow-up inspections to ensure code violations have been corrected;

Prepares reports of inspection, issues Notices of Violation as required by law;

Provides emergency services personnel performing fire safety inspections with technical assistance in enforcing the Fire Prevention Code;

Provides the business community and the building/development industry with technical assistance on Building Code, Fire Prevention Code, fire, and life safety issues;

Receives and responds to telephone calls, inquiries and requests for information from the public, business community and other government agencies regarding fire prevention regulations and fire safety;

May issue summonses, and secures warrants as allowed by law.

Fire and Hazardous Materials Investigations Section

Conducts investigative activities, to include investigating fires, explosions, attempts or threats to commit such offenses, false alarms, possession and manufacture of explosive devices/substances, storage/use/disposal/transportation of hazardous materials and hazardous waste, and environmental crimes;

Inspects hazardous material sites for compliance with code;

Investigates/manages short-and long-term hazardous materials cases;

Prepares and presents case information to the Commonwealth Attorney's Office for prosecution and testifies in court;

Enforces and develops investigation and departmental policies and procedures;

Enforces the Fire Prevention Code and the Code of Virginia as it pertains to Fire and Hazardous Material's related laws;

Interviews witnesses and examines an incident scene for evidence as to its cause;

Prepares reports on the results of an investigation and actions taken;

Enforces the provisions of the Fire Prevention Code;

Enforces blasting and explosive regulations;

Inspects blasting sites and vehicles transporting explosive material within Fairfax County;

Inspects occupancies where explosive material is either used or stored;

Patrols blasting areas, investigates blasting and explosive complaints and incidents, and issues permits related to inspections conducted;

Conducts blasting and explosive investigations and technical analysis and prepares detailed reports and recommendations as a result of those investigations or analyses;

Maintains liaison with regulatory agencies at the state, federal, and local level including liaison and briefing of elected officials at all levels and citizen groups as it relates to blasting regulations;

Investigates incidents and complaints involving the release of hazardous materials, hazardous waste disposal issues, and environmental crimes for the determination of origin and cause and responsible party;

Track cleanup and conducts regulatory enforcement activities.

Training Division

As an instructor in the Training Division, trains career and volunteer firefighters in a variety of areas, including forcible entry, hose placement, ventilation techniques, search and rescue methods, the use of tools/ropes/knots/breathing apparatus, the care and maintenance of fire and rescue equipment, and emergency medical treatment and transportation procedures;

Determines the training objectives, develops training programs, and utilizes educational principles to facilitate program enhancement;

Tests students to determine the skills attained;

Recommends remedial training;

Oversees practical evolutions.

Urban Search and Rescue Team

Manages the supply and equipment aspects of the Urban Search and Rescue Team, serving as logistical focal point to Office of Foreign Disaster Assistance (OFDA), Federal Emergency Management Agency (FEMA), The International Search and Rescue Advisory Group (INSARAG), Department of Defense (DOD), other groups and committees as assigned;

Manages assigned warehouse space to ensure adequacy, security, and accessibility.

Ensures monthly and quarterly maintenance and documentation is performed on all required tools and equipment; repairs cache equipment or assures repairs are affected by qualified vendors;

Maintains all assigned vehicles and warehouse equipment (pallet jacks, forklifts, cargo trucks, tractor trailers, utility vehicles);

Assists in the administration of program grant funds that include line item budgetary requirements, accountability of all expenditures, and tracking all associated costs.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

All functional areas

Knowledge of laws, regulations, departmental policies and procedures, standard operating procedures, training manuals and safety bulletins covering the area to which assigned;

Knowledge of streets and target hazards in assigned area;

Knowledge of appropriate types of safety gear and procedures, and the ability to use them correctly;

Knowledge of the principles and practices of fire suppression;

Knowledge of firefighting equipment and supplies;

Knowledge of, and the ability to effectively apply, the principles and practices of fire prevention, the Virginia and Fairfax County Fire Prevention Codes, other codes pertaining to fire prevention or life safety, and compliance methods;

Ability to perform basic life support techniques, including cardiopulmonary resuscitation on infants, children, and adults;

Ability to remain composed in difficult or stressful situations requiring emergency action, and to make sound decisions promptly under emergency conditions;
Ability to use sound judgment in making independent decisions;
Ability to effectively communicate both orally and in writing;
Ability to establish and maintain effective working relationships with others;
Ability to accept constructive criticism;
Ability to understand and follow written and oral instructions;
Ability to read, understand and apply job-related, written material;
Ability to coordinate or lead the work of coworkers, the public, and other workers (such as utility workers) responding to the scene;
Ability to write complete, concise, and accurate reports, letters, memoranda and other work-related documents;
Ability to train others in an area of specialization;
Ability to analyze situations and, giving due regard to the circumstances, adopt an effective course of action which follows accepted practices;
Ability to effectively use the Electronic Patient Care Report (ePCR) handheld device.

Apparatus Technician

Ability to safely drive a pumper, ladder truck, rescue squad, tanker, or other Fire and Rescue Department vehicles in all weather conditions and in other hazardous situations;
Ability to train others in all aspects of the apparatus to which assigned;
Ability to identify the various types of hose loads and racks, deploy all hose lines carried on the apparatus, and recognize defective hoses;
Ability to supply water from static and residual water sources and maintain proper pressure to supply attack lines, supply lines, master stream devices, foam devices, relay operations, shuttle operations, and fire protection systems;
Ability to operate the aerial device.

Advanced Life Support

Knowledge of advanced emergency medical procedures, techniques, drugs, and equipment related to emergency treatment of life-threatening illnesses and injuries, familiarity with when they should be used, and the ability to apply them appropriately;
Knowledge of the department's Emergency Medical Services Manual and all related protocols and guidelines;
Knowledge of Basic Life Support techniques;
Knowledge of the anatomy and physiology of the major systems of the body;
Knowledge of the principles of triage, and the ability to apply them in multiple casualty incidents;
Knowledge of the causes, signs, symptoms and treatment of shock, dehydration, and over-hydration;
Ability to direct other providers (ALS and BLS) in patient care;
Ability to effectively rescue injured persons from hazardous situations;
Ability to comprehend medical terminology and follow complex instructions relayed by a physician;
Ability to accurately assess and monitor a patient's condition;
Ability to perform cardiopulmonary resuscitation on infants, children, and adults.

Hazardous Materials Response Team

Knowledge of what type of leak control and containment device can be used for a given type of leaking container and given type of hazardous material;
Knowledge of natural drainage, sanitary, and storm water management systems, and the procedures used to handle haz-mat incidents in each;
Knowledge of basic chemistry, such as the characteristics of acids, bases, and gases;
Knowledge of sources from which to obtain authoritative information about hazardous material;
Ability to effectively rescue injured persons from hazardous situations;
Ability to read and interpret chemical data information reference materials.

Technical Rescue Operations Team

Knowledge of the basic rules of physics (e.g., the laws of force, resistance, action-reaction, use of a fulcrum point on a lever, cause and effect of physical motion, and momentum);
Knowledge of different types of anchors and multi-anchor systems, and the ability to use them properly;
Knowledge of different rope systems (e.g., hauling, lowering and repelling systems), and the ability to use them properly;
Knowledge of building construction, construction materials, structural terminology, and support systems;
Knowledge of soil conditions;
Knowledge of search and rescue techniques, including tunneling, breaching, and penetrating;
Knowledge of different types of structural collapses (e.g., pancake, V, and lean-to collapses);
Knowledge of shoring and supplemental shoring procedures;
Ability to effectively rescue injured persons from hazardous situations;
Ability to read diagrams and blueprints sufficiently to effect a rescue.

Fire Protection Systems Section

Knowledge of fire protection equipment and systems;
Knowledge of basic building construction practices;
Ability to prepare concise and accurate legal notices and reports of inspection;
Ability to conduct fire safety inspections in public buildings to ensure code compliance;
Ability to read building plans to determine compliance with the Fire Prevention codes and other pertinent codes;
Ability to effectively apply appropriate codes and standards.

Fire Inspections Section and Code Enforcement Unit

Knowledge of basic building construction practices;
Ability to read blueprints;
Ability to conduct inspections of buildings and facilities to ensure code compliance;
Ability to prepare concise, accurate legal notices and reports of inspection;
Ability to effectively apply appropriate codes and standards.

Fire and Hazardous Materials Investigations Section

Knowledge of characteristics of Class I explosive hazardous materials and other hazardous materials.
Knowledge of resources from which to obtain authoritative information about Class I Explosive, hazardous materials and hazardous waste regulations and laws.

Strong written and oral communication skills with strong human relations and interpersonal skills;
Strong organizational skills;
Knowledge of investigatory practices and techniques;
Knowledge of local, state and federal statutes;
Knowledge of the judicial system;
Ability to properly process arrestee into the judicial system;
Ability to use a firearm;
Ability to recognize and gather evidence pertaining to the origin and cause of fires, explosions, and other incidents;
Ability to effectively testify in court.

Training Section

Knowledge of instructional techniques/methods, and the ability to apply them effectively;

Resource Management Section

Knowledge of OSHA, ANSI, and NFPA standards for fire, rescue, and emergency medical equipment and supplies;
Ability to repair fire, rescue, and emergency medical equipment to meet prescribed standards.

EMPLOYMENT STANDARDS:

Any combination of education, experience, and training equivalent to:
High school graduation or a G.E.D. issued by a state department of education;
Successful completion of the post-recruit school probationary period;
Two years of paid field experience, following graduation from recruit school, as a Fairfax County Firefighter, **AND**
Possession of a Class “A” medical rating in the assigned medical group. For Class “B” and “C” medical ratings, accommodations will be considered on a case-by-case basis. A Class “D” medical rating will not be considered.

Refer to the Fairfax County Fire and Rescue Department’s Professional Development Resource Guide for an explanation of the promotional criteria that will be used for this rank.

Current Fire Technicians wishing to change his or her specialty may do so by taking the Fire Technician promotional examination in the opposite specialty field. Employees successfully completing the examination in the opposite specialty field will be placed on the appropriate eligibility list and selected for transfer in accordance with the standard practice.

CERTIFICATES AND LICENSES REQUIRED:

Current certification as a Commonwealth of Virginia Emergency Medical Technician (EMT-A or EMT-B);
Certification as a Hazardous Materials First Responder in accordance with Fairfax County training standards;
Certification in cardiopulmonary resuscitation (CPR) and automatic electronic defibrillation (AED); **AND**
Possession of a valid Motor Vehicle Driver’s License.
Successful completion of Incident Command System 100

Successful completion of Incident Command System 700

Advanced Life Support

Certified as an Advance Life Support Provider at National Registry Emergency Medical Technician/I (EMT-I) or National Registry Emergency Technician/P (EMT-P) OR as a Commonwealth of Virginia EMT-I or EMT-P;

Certification as a full Advanced Life Support provider (Status A, C) in Fairfax County and in full accordance with all current County training standards;

To be a crew leader on the ALS Transport Unit, must be certified as a full ALS provider in Fairfax County and in full accordance with all current county training standards;

Certification in Advanced Cardiac Life Support;

Certification in International Trauma Life Support Guidelines,

Certification in Pediatric Advance Life Support Guidelines, AND

Certification in Basic Trauma Life Support.

Apparatus Technician

Certification as an apparatus technician in accordance with departmental training standards.

Based on the availability of training, this must be completed within one year of appointment.

Hazardous Materials Response Team

Certification in hazardous materials, in accordance with departmental training standards.

Technical Rescue Operations Team

Certification in technical rescue operations, in accordance with departmental training standards.

Training Section

VDFP or Fairfax County Instructor I certified.

NFPA 1403 certification must be obtained within one year of appointment to the position, based on availability of the training.

Within one year of appointment, obtain and maintain a valid Commercial Driver's License with required endorsements in the state of residence, or must obtain within one year of appointment.

Resource Management

Must hold and maintain a valid Commercial Driver's License with required endorsements in the state of residence.

Urban Search and Rescue Team

Certification in technical rescue operations, in accordance with departmental training standards.

Must be an Urban Search and Rescue (USAR) Team Member

Must meet all minimum FEMA general requirements.

The following certifications must be obtained within one year of appointment to the position, based on the availability of the training.

Fire Protection Systems Section, Inspection Section, and Code Enforcement Unit

Certification as a National Fire Protection Association (NFPA) 1031 Fire Inspector II in accordance with the standards of the Virginia Department of Fire Programs;

Certification in Fire Protection Systems Inspector Module in accordance with the Virginia Department of Housing and Community Development (DHCD) standards

Certification in CORE Module in accordance with the Virginia Department of Housing and Community Development (DHCD) standards;

Must maintain continuing education requirements and maintain above certifications.

Fire and Hazardous Materials Investigation Section

Certification as a National Fire Protection Association (NFPA) 1031 Fire Inspector II in accordance with the standards of the Virginia Department of Fire Programs;

Certification as a National Fire Protection Association (NFPA) 1033 Fire Investigator in accordance with the standards of the Virginia Department of Fire Programs;

Certification in CORE Module in accordance with the Virginia Department of Housing and Community Development (DHCD) standards;

Certification in a Department of Criminal Justice Services (DCJS) basic law enforcement academy to include firearms qualification as described by local authority;

Certification as a Hazardous Materials Technician or Environmental Crimes in accordance with the standards of the Virginia Department of Fire Programs standards;

Certification in hazardous material sampling and air sampling, in accordance with Environmental Protection Agency training standards

Federal Motor Carrier Inspector: Level A, B, Hazardous Materials Communication, Bulk Cargo Tank Inspector and Other Bulk Container Certification

International Society of Explosive Engineers: Certified Blaster

Must complete continuing education requirements and maintain these certifications

NECESSARY SPECIAL REQUIREMENTS:

Regardless of area of assignment, all uniformed fire and rescue personnel that are medically qualified for field duties as a firefighter must maintain a level of fitness sufficient to enable them to participate in fire suppression and rescue activities when the need arises, as demonstrated by successful completion of a Work Performance Evaluation (unless granted light duty due to illness or injury).

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