Forestry Technician, GS-0462-05

Wildland Firefighter Apprentice

Wildland Fire Apprenticeship Program

SPD# FDIA005

I. Introduction

This is a standard wildland fire management position description intended for use in the Department of Interior (DOI). The position description is only to be used for positions enrolled as a Department of Labor registered apprentice in the Wildland Fire Apprenticeship Program (WFAP). The position is located on a wildland fire module or crew within the fire management organization. The purpose of the position is to serve in a developmental trainee capacity as a wildland fire apprentice. The position serves as a firefighter on one or more of the following module types: engine, handcrew (suppression, fuels or wildland fire module) helitack or smokejumper.

Other developmental wildland fire related duties performed under the guidance and direction of a journey level firefighter, will involve fire prevention, patrol, detection, dispatch, and prescribed burning. The incumbent will also be instructed on and involved in, the proper maintenance and repair of firefighting tools, equipment and facilities. As part of the apprenticeship program, attends compulsory training in a residential academy setting.

This is a developmental bridge position which functions in a training environment in order to gain the necessary experience to prepare the incumbent for meeting and obtaining the wildland fire qualifications required, to be placed into the fully qualified senior firefighter position, GS-462-05 Forestry Technician (DOI SPD# FDI0205).

II. Major Duties

Wildland Fire Apprentice Work 60%

Serves as an intermediate trainee on a fire crew, performing recurring fire suppression and fuels management developmental duties which provide orientation and familiarization to the work processes and various functional areas of the wildland firefighting career field. The apprentice may serve on multiple module types listed below, it is required that they serve on a handcrew or engine prior to completion of the program; not all types are required.

Handcrew - Apprentice Serves on a handcrew, or on a prescribed or wildland fire module. Performs all aspects of wildland and prescribed fire operations such as, line construction, ignition

device (e.g. fusees, drip torches, flares, and terra torch) use, patrolling fire line, and the use of water and hand tools to perform mop-up. Performs the duties of a chainsaw operator and performs chainsaw maintenance and simple repairs. Collects fire weather data, fuel loading data, tree stand density data and fuel and/or soil moisture samples.

Wildland Fire Engine - Apprentice

Serves on a wildland fire engine. Starts pump engine, primes pump, adjusts engine speed and pump valves, lays hose, and uses appropriate nozzles and nozzle adjustment in effective use of water and additives. Services and makes minor repairs to engine; inspects, checks and services accessories such as pump, water lines, tank, reels, or pump power plant; and keeps in fire readiness. Inspects, cleans and stows hose. Makes emergency repairs and adjustments of pump while in use. Performs line construction and mop-up activities. Performs the duties of a chainsaw operator and performs simple chainsaw maintenance.

Helitack or Smokejumper - Apprentice

Serves on a helitack module. Loads helicopter with personnel and cargo, considering methods, weight distribution, necessity for securing cargo, total weight, etc. Inventories and inspects helicopter accessories, fire tools, and equipment. Assures that needed tools and equipment are available for firefighting tasks. Performs helicopter longline operations and maintains accessory equipment. May exit helicopter in remote areas to assist in the construction of helispots, or to attack small fires, or spot fires. Performs helicopter longline operations. May serve as a rappeller or short hauler. May serve as a first year smokejumper training in all aspects of smokejumper operations. May parachute into remote areas to suppress wildfires. Receives initial hands on instruction and oversight on the packing of parachutes for cargo and personnel. Maintains specialized equipment used in smokejumper operations. Performs the duties of a chainsaw operator and performs simple chainsaw maintenance.

Duties relevant to all module types

Practices briefing small tactical groups utilizing standard wildland fire briefing outline.

Gathers and considers information on weather data, topography, fuel types, and fire behavior in responding to wildland fire incidents. When positioning and deploying personnel and equipment, recommends best approaches and practices to use in the protection of values at risk.

Responsible for operation and maintenance of specialized equipment used to respond to wildland and prescribed fire situations. Accomplishes emergency repairs as necessary to permit continued use of equipment. In those instances when the apparatus cannot be used effectively in suppressing the fire, the incumbent takes alternative control action in suppressing the fire.

Other Training Assignments (40%)

As a member of a team or group reviews land/fire management planning documents including, land and resource management plan, fire management plans, wildland fire emergency response plans, fire danger operating plans, community wildfire protection plans, and prescribed fire burn plans, to

both gain an understanding and to communicate to other firefighters the relationship between guidance documents and the hands on work of a journey level wildland firefighter.

Reviews local cooperator agreement documents to understand the scope and limitations of wildfire response in their local area.

Attends advanced training in wildland fire, human performance, risk management and natural resource in a residential academy setting.

Participates in local fire and safety training in the techniques, practices, and methods of fire suppression and in the safe, efficient operation and use of tools, equipment and vehicles used in fireline activities. Participates in crew proficiency checks and drills. Participates in safety sessions and fire critiques.

May be assigned to a fire lookout to provide detection and reporting of wildfires. Reports smoke and fire to a dispatcher giving location, estimated size and other pertinent information. Reports weather and fire behavior information keeping the dispatcher and/or other officials informed of current conditions.

After orientation and training may serve in a wildland fire dispatch center communicating weather and resource status, responding to non-emergency radio and telephone calls. Identifies jurisdiction of reported fires and notifies appropriate officials.

Under the guidance of a journey worker, may perform project or other land management work such as road and trail maintenance, habitat manipulation, miscellaneous equipment and facilities maintenance and interpretive work with the public.

May assist higher level workers in forestry/range/desert research efforts; in the marketing of forest/range/desert resources; or in the scientific management, protection, and development of forest/range/desert resources.

Other Significant Facts

The duties of this position are so rigorous that employment is limited to young and physically vigorous individuals who must meet established age and physical qualification requirements.

This is a testing designated position (TDP) under the Department of the Interior Drug-Free Workplace Program.

Incumbent is subject to medical examination and must pass the work capacity test for arduous positions.

Incumbents are required to sign the apprentice agreement and adhere to the standards established by the National Interagency Joint Apprentice Agreement.

May be assigned to more than one firefighting resource or module during the term of apprenticeship.

May require a valid state driver's license to operate light vehicles and 4X4s.

Performs other similar duties as assigned.

III. Factor Levels

Factor 1. Knowledge Required by the Position (Level 1-4, 550 points)

Knowledge of fire behavior including causes of wildland fire, influence of temperature, humidity, wind, topography, slope and fuel moisture conditions, and fuels in order to know where to attack the fire, build fire line, where to be positioned to manage a wildland fire, and to identify hazards.

Knowledge of accepted fire safety practices and procedures to prevent injury and loss of life.

Knowledge of wildland fire management techniques, methods and conditions to accurately analyze fire circumstances, determine when additional forces may be needed, or determine when circumstances warrant disengagement.

Specific technical firefighting knowledge such as, but not limited to, fire engine and pump operations, hose lays, handcrew operations and/or helicopter operations to enable the incumbent to function in assigned capacities and to instruct or lead others in those duties if necessary.

Specialized knowledge and necessary certifications such as, chainsaw operation and repair, longline certification, rappelling, smokejumping, pump operation and water handling, use of specialized equipment used in response to wildland urban interface situations, and helicopter accessory equipment used in wildland fire management and prescribed burns.

Knowledge of air operations, rappelling, helicopter capabilities and limitations, helicopter contracts, load balance and capacity, load calculating, and manifesting of personnel and equipment. Knowledge of work procedures and practices in working with helicopters and aircraft.

Knowledge of tactical methods and techniques for use of water and additives in controlling and mopping-up fires in order to efficiently and effectively accomplish operations where water is in short supply.

Ability to operate four-wheel drive pickup trucks and may require the ability to operate a fire engine.

Skill in use of hand tools such as Pulaskis, shovel, McLeod; and power tools including chainsaw, portable pumps to build fireline, control wildland fire, and to perform other non-fire related duties.

Knowledge of agency and interagency qualification, position task book requirements, and certification standards and procedures adopted by the National Wildfire Coordinating Group (NWCG).

Knowledge of reporting requirements and procedures.

Knowledge and skill of standard first aid procedures sufficient to perform preliminary first aid and triage as necessary.

Knowledge of the organization and the function of cooperative interagency fire organizations such as DOI, USDA, NWCG, NICC, GACC, state and local governments to facilitate wildland fire operations in a multi-jurisdictional setting.

Knowledge of related fields such as forestry, range, wildlife, botany, soils and water, cultural and historical resources in order to make informed fire operational decisions.

Knowledge of general range/forestry technician work in order to personally perform and lead others in the performance of a variety of work in such areas as hazard tree removal, hazard fuel reduction, prescribed burning, recreation, wildlife and watershed, and in the general facility of vehicle and equipment maintenance and upkeep.

Oral and written communication skills sufficient to effectively interact with people at all levels, internal and external to the organization, including the public.

Knowledge of fire terminology to communicate with other crewmembers.

Ability to perform basic computer technology skills such as word processing, electronic mail, internet use, and specialized fire information databases and programs.

Knowledge of appropriate act requirements to include the Equal Opportunity Act, Civil Rights Act, Age Discrimination in Employment Act, Rehabilitation Act, 29 CFR 1604.11(a) Sexual Harassment sufficient to function within a diverse workforce.

Factor 2. Supervisory Controls (Level 2-2, 125 points)

The supervisor provides general instructions either orally or through work orders for continuing assignments. The employee independently carries out standard assignments and independently

works out solutions to problems. Unusual problems or unfamiliar situations are referred to supervisor for specific guidance.

Work is reviewed for technical accuracy and compliance with established procedures. Assignments or projects with problems or issues new to the employee may be more closely reviewed for accuracy and assurance that any special directions or guidance were applied. Technical review of the employee's incident assignments may be documented by supervisory or senior staff on the incidents.

Factor 3. Guidelines (Level 3-2, 125 points)

Specific instructions and procedures have been established prior to actual wildland fire suppression activities. General guidelines can be found in agency and bureau published directives such as wildland fire operations manuals, handbooks, and guides. Guides such as safety regulations must be applied.

Some guidelines are also contained in the prescribed burning and hazard fuel reduction plan, emergency medical services plan, safety plan, and other specific local guides pertinent to the local unit or specific to the type of work being performed.

Since every possible situation cannot be anticipated and covered in training, the employee must use judgment in applying applicable procedures and practices, if a supervisor is not immediately available for consultation.

Factor 4. Complexity (Level 4-2, 75 points)

Practices and may lead others in fire suppression activities under adverse conditions as related to climate, fuels, and terrain. As an experienced specialized firefighter is expected to have the technical knowledge to perform in specific fire assignments, (i.e., chainsaw operator, faller, water handling specialist, rappeller, smokejumper, etc.) safely and efficiently. The work involves conditions and elements that must be identified and analyzed to discern interrelationships. Decisions as to what must be done depend, to a considerable degree, on the employee's analysis of the situation and issues involved, in determining the selected course of action.

Factor 5. Scope and Effect (Level 5-2, 75 points)

The work involves the execution of specific rules, regulations, or procedures and typically comprises a complete segment of an assignment or project of broader scope. Work involves the execution of specific procedures, techniques, which differ with each fire's fuel type, weather conditions, and topography. The effect of the work performed minimizes loss of natural resources, improvements, property or life. The performance of the crew contributes to the overall effectiveness of the wildland fire management effort.

Factor 6 &7. Personal and Purpose of Contacts (Level 2/A, 45 points)

Contacts are primarily with other members of the work unit, project, crew, and others outside the immediate wildland fire management organization. Other contacts may include the public, private landowners, tribal representatives, or local residents. Contacts are made to exchange information about wildland fire suppression activities. Contacts with the general public during incident operations may be to ensure the safety of others.

Factor 8. Physical Demands (Level 8-3, 50 points)

Essential functions require arduous exertion for protracted periods of time such as, but not limited to, extensive running, walking, climbing, kneeling, stooping, pulling hose, jumping and twisting.

Duties involve rigorous fieldwork requiring above average physical performance, endurance and superior conditioning. Work requires prolonged standing, walking over uneven ground, and recurring bending, reaching, lifting and carrying of items weighing over 50 pounds and shared lifting and carrying of heavier items, and similar activities requiring at least average agility and dexterity.

Duties include demands for activities in emergencies under adverse environmental conditions and over extended periods of time. Operation of some specialized fire equipment can place extended physical stress on employee during fire activities.

Factor 9. Work Environment (Level 9-3, 50 points)

The work is primarily performed in forest, range and desert environments in steep terrain where surfaces may be extremely uneven, rocky, covered with thick tangled vegetation, smoky conditions, etc. Temperatures commonly exceed 100 degrees F and fall below freezing. Risks include smoke inhalation, fire entrapment, snake or insect bites and stings, exposure to excessive machinery noise, and falling and rolling material. Personnel must adjust and cope with exposure to weather elements, dust and smoke, poor bivouac and eating situations under an unpredictable set of circumstances. Incumbent may be required to live in backcountry camps for extended periods of time. The hazardous nature of the work requires that personal protective equipment be worn (boots, hardhat, gloves, flame resistant clothing, etc.). Work may require travel by light fixed-wing or rotor-wing aircraft.

Evaluation Summary	Final Level	Points
Knowledge Required by the Position	1- 4	550
Supervisory Controls	2- 2	125
Guidelines	3- 2	125
Complexity	4- 2	75
Scope and Effect	5- 2	75
Personal Contacts	2	
Purpose of Contacts	a	45

Physical Demands	8- 3	50
Work Environment	9- 3	50
Total Points:		1095
Final Grade:		**GS-5**
Official Title: Forestry Technician	**SPD# FDIA005**	
Standard(s) used to evaluate the position	Flysheet for Forestry Technician, GS-0462, TS-111 Dec 1991, Aid & Technical Work in the Biological Sciences Series, GS-0400,TS-111 Dec 1991	
Comments: Major duties account for 100% of time. This position is at the full performance level.		