

# City and Borough Sitka, Alaska

## Class Specification

<b>Class Title</b>	<b>Fire Engineer/Mechanic</b>
<b>Class Code Number</b>	<b>8120</b>
<b>FLSA Designation</b>	<b>Non-Exempt</b>
<b>Pay Grade and Range</b>	<b>ASEA Bargaining Unit</b>
<b>Effective Date</b>	<b>September 2010</b>

### General Statement of Duties

Provides firefighting and emergency services to the City and Borough of Sitka and performs heavy equipment maintenance; performs related work as required.

### Distinguishing Features of the Class

The principal function of an employee in this class is to prepare all Fire and emergency medical vehicles and equipment to respond to all emergency calls and situations with firefighting, emergency medical, search and rescue, dive rescue and related operations. The work is performed under the direct supervision of the Assistant Fire Chief and Fire Chief but considerable leeway is granted for the exercise of independent judgment and initiative. An employee in this class performs the duties of other employees in the Fire department or related departments as required or as assigned by supervisory personnel. In the absence of a Command Officer, an employee in this class may assume full responsibility and authority for this position. The nature of the work performed requires that an employee in this class establish and maintain effective working relationships with other Department and City employees, victims of fire disasters other public safety agencies and the public. The principal duties of this class are performed in a work environment in which the employee is subject to potential personal danger.

### Examples of Essential Work (Illustrative Only)

- Plans and implements a maintenance program for all Departmental vehicles and equipment;
- Performs minor and major mechanical work on all Fire and Emergency medical vehicles and equipment, including gasoline and diesel engines, brake systems, portable pumps, hydraulic pumps, electric/hydraulic rescue equipment and heavy duty fire pumps;
- Troubleshoots, diagnoses and make repairs to heavy equipment and automotive electrical systems;
- Maintains shop and work areas to ensure a safe and clean work environment;
- Modifies and installs specialized equipment using lathes, mills, air compressors and other mechanical equipment;
- Operates pressure washers, installs electrical and air lines, shop lights and other necessary systems and equipment;
- Removes, installs, repairs and maintains transmissions and differentials;

- Responds to fire alarms through contacting volunteer personnel, delivering all equipment and implementing fire suppression and firefighting techniques to rescue victims and protect private and public property;
- Assumes a designated position on an assigned apparatus and follows command structure instructions for fire suppression or a related emergency service;
- Drives or rides in truck or other emergency Fire vehicles to the location of the emergency using the fastest route and in the safest manner possible;
- Performs equipment set-up upon arrival at a fire scene;
- Provides emergency medical services, including responding to emergency calls, assessing patients condition upon the arrival of a scene, implementing emergency patient treatment, transporting patients to a hospital for further examination and ensuring the stability of all individuals at all times as necessary;
- Dispatches emergency personnel, including the Water Department and Waste Water Treatment Department;
- Completes appropriate rescue, fire fighting and salvage operations at a fire scene;
- Uses established procedures to determine if individuals are trapped within a burning facility and takes appropriate actions to secure their rescue;
- Maintains an awareness of other Fire personnel on detail for the purpose of protecting other Firefighters lives as necessary;
- Implements entry, ventilation, fire suppression and salvage work;
- Lays and connects hoses, and puts in place water streams equipment, generators, supply lines, ladders and ladder pipes;
- Holds nozzle and directs chemical or water streams;
- Operates fire pumps, ladders and elevated platforms according to established procedures;
- Performs ventilation procedures to remove excess heated gases, heat and smoke from the burning structure;
- Operates pump, including opening valve to supply water, monitors to ensure accurate and proper pressure, oil temperature, relief and circulator gauges;
- Ensures that adjacent buildings and/or vehicles are properly protected from damage;
- Performs salvage duties, including removing all burnt items, sweeping and mopping floor, removing excess water and debris and protected any property which has not been damaged;
- Overhauls affected structure to prevent rekindling;
- Takes inventory of all equipment after a suppression has been achieved, recording all equipment which must be left at the site;
- Makes verbal and written analysis of activities involved in any fire emergency situation;
- Performs search and rescue duties and dive rescue responses as necessary;
- Studies and maintains a current working knowledge of streets and other geographical information within the City and Borough of Sitka;
- Performs all necessary training activities in accordance with readiness and preparation for firefighting and emergency medical activities and participates in daily classes developed to increase and maintain skills and field development courses and training, including emergency medical technology, firefighting, fire support, airport emergencies, boat fires, hazardous materials, search and rescue, dive rescue, pre-fire plans, incident commands, all fire and emergency services equipment and related areas;
- Performs physical fitness training to maintain physical abilities necessary for firefighting;
- Participates in courses which develop the skills necessary to obtain further EMT certifications
- Studies training materials to stay current on new technologies and processes in firefighting, hazardous materials, fire prevention, emergency medical and related activities;
- Practices with the use of all related equipment;
- Studies and memorizes streets and other geographical information within the City and Borough of Sitka;
- Attends and provides information for pre-fire planning studies and maintains a current knowledge of pre-fire plans;
- Performs daily apparatus inspection and maintenance to ensure that all equipment is in working order, ensuring that serious maintenance problems are identified and referred for service;
- Performs daily building and ground maintenance to ensure that department facilities maintain a clean and orderly environment;

- Communicates fire prevention information and/or Fire Department policies to the public as requested;
- Conducts educational classes/seminars for the public;
- Responds to non-emergency calls from the public as directed;
- Provides needed information and demonstrations concerning how to perform certain work tasks to new employees in the same or similar class of positions;
- Keeps immediate supervisor and designated others fully and accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems;
- Attends meetings, conferences, workshops and training sessions and reviews publications and audio-visual materials to become and remain current on the principles, practices and new developments in assigned work areas;
- Responds to citizens' questions and comments in a courteous and timely manner;
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities;
- Performs other related duties as assigned.

### **Required Knowledge, Skills and Abilities**

- Thorough knowledge of the geography of the City and Borough of Sitka, (or the ability to quickly learn this information), including hydrant locations, the layout and location of public utilities and potentially hazardous materials and substances;
- Thorough knowledge of the methods, materials, tools and standard practices of the automotive mechanic's trade, with particular reference to heavy duty maintenance and Fire and emergency services equipment;
- Thorough knowledge of the operating and maintenance requirements of heavy duty fire equipment;
- Thorough knowledge of servicing and repair of air brakes and air systems.
- Thorough knowledge of heavy equipment and automotive repair and maintenance safety principles and practices including the use of air powered equipment, lifts and hoists;
- Thorough knowledge of heavy equipment hydraulic system operation and maintenance;
- Thorough knowledge of automotive electrical systems
- Thorough knowledge of hydraulics and hydraulic pump repair;
- Good knowledge of mechanical engineering principles and practices;
- Good knowledge of current fire suppression and firefighting techniques, including all related equipment;
- Good knowledge of fire records systems, communications equipment and use, fire computer applications and fire reporting procedures;
- Good knowledge of the principles and practices involved in emergency medical services;
- Good knowledge of hydraulics as applied to pump operation and fire equipment;
- Good knowledge of all safety practices involved in fire suppression and firefighting;
- Good knowledge of 911 and related communications systems;
- Skill in performing fire support and firefighting duties and the use of all related equipment;
- Skill in operating mechanical tools for heavy equipment and automotive repair;
- Ability to replace heavy equipment and automotive engines, electrical systems, hoses and belts and specialty parts;
- Ability to inspect heavy equipment and vehicles for common maintenance problems and monitor fluid levels;
- Ability to operate air powered wrenches and tire break-down equipment;
- Ability to perform engine tune-ups including computerized control systems;
- Ability to train employees in more technical mechanical applications and processes;
- Ability to work under extremely stressful situations which result from responding to emergency situations, including the responsibility for remaining calm and carrying out all duties with the recognition of the threat to life and property;
- Ability to work within a command structure requiring strict adherence to the following of orders;
- Ability to remain on call at all times on a rotating schedule;

- Ability to add, subtract, multiply, divide and derive percentages;
- Ability to communicate well with others, both orally and in writing, using both technical and non-technical language;
- Ability to understand and follow oral and/or written policies, procedures and instructions;
- Ability to prepare and present accurate and reliable reports containing findings and recommendations;
- Ability to operate or quickly learn to operate a personal computer using standard or customized software applications appropriate to assigned tasks;
- Ability to use logical and creative thought processes to develop solutions according to written specifications and/or oral instructions;
- Ability to perform a wide variety of duties and responsibilities with accuracy and speed under the pressure of time-sensitive deadlines;
- Ability and willingness to quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology;
- Integrity, ingenuity and inventiveness in the performance of assigned tasks.

#### **Acceptable Experience and Training**

- Graduation from high school or possession of a GED; and
- Some related firefighting and heavy equipment repair; or
- Any equivalent combination of experience, education and training which provides the knowledge, skills and abilities necessary to perform the work.

#### **Required Special Qualifications**

- Possession of a driver's license issued by the State of Alaska;
- EMT-I certification in the State of Alaska, advanced certification preferred and ability to maintain certification on an on-going basis.
- Possess an IFSAC or FF1 certification.

#### **Essential Physical Abilities**

- Sufficient clarity of speech and hearing or other communication capabilities, with or without reasonable accommodation, which permits the employee to communicate effectively, including during emergency situations which may involve a high degree of noise;
- Sufficient vision or other powers of observation, with or without reasonable accommodation, which permits the employee to perform firefighting and emergency medical duties;
- Sufficient manual dexterity with or without reasonable accommodation, which permits the employee to operate firefighting and medical;
- Sufficient personal mobility and physical reflexes, with or without reasonable accommodation, which permits the employee to perform all duties involved in protecting lives and property.

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