

**CONTRACT
AWARD****STATE OF ALASKA**
HQ, STATE EQUIPMENT FLEET (Contracting Authority)
2200 E. 42nd Avenue
Anchorage, Alaska 99508**CONTRACT AWARD NUMBER**
CA1875-15**ORDERING DEPARTMENT:**
HEADQUARTERS, STATE EQUIPMENT FLEET
2200 E. 42ND AVENUE
ANCHORAGE, ALASKA 99508
(907) 269-0793 PHONE / (907) 269-0801 FAX**CONTRACTOR:** ROSENBAUER MINNESOTA, LLC**ADDRESS:** 5181 260TH STREET
WYOMING, MN 55092**CONTACT NAME:** MARTY HUFFMAN**PHONE NUMBER:** (651) 462-1000 / (651) 755-7358 CELL**E-MAIL:** MHUFFMAN@ROSENBAUERAMERICA.COM**DATE OF CONTRACT:** JUNE 11, 2014
DATE INITIAL CONTRACT BEGINS: JUNE 11, 2014
DATE INITIAL CONTRACT ENDS: JUNE 11, 2015
NUMBER & PERIOD OF RENEWALS: TWO (1) YEAR RENEWALS
RENEWALS EXPIRE (MO/YR): JUNE 11, 2017
ISSUED IN ACCORDANCE WITH BID # SEF- 1875 **DATED:** FEBRUARY 24, 2014
ESTIMATED VALUE OF INITIAL TERM: \$1,500,000.00**SEND INVOICES IN DUPLICATE TO: STATE EQUIPMENT FLEET, 2200 E. 42ND AVENUE, ANCHORAGE AK 99508****THIS ORDER CONSTITUTES A BINDING COMMITMENT BETWEEN THE STATE AND THE CONTRACTOR LISTED HEREON. UNAUTHORIZED MODIFICATION WITHOUT THE EXPRESSED PRIOR APPROVAL OF THE CONTRACTING AUTHORITY WILL RESULT IN A FINANCIAL OBLIGATION ON THE CONTRACTOR AND/OR UNAUTHORIZED STATE PERSONNEL MAKING THE CHANGE.****DESCRIPTION****CONTRACT TO PROVIDE ARFF TRUCKS****CONTRACTING OFFICER:**
KRISTI FUTREL
PHONE: (907) 269-0793
EMAIL: KRISTI.FUTREL@ALASKA.GOV**TABLE OF CONTENTS****SECTION**

- I. SPECIAL TERMS AND CONDITIONS**
-
- II. STANDARD TERMS AND CONDITIONS**
-
- III. SPECIFICATIONS**
-
- IV. CONTRACT PRICE SCHEDULE**

CONTRACTING AUTHORITY NAME & TITLE
KRISTI FUTREL, CONTRACTING OFFICER III**SIGNATURE****CONTRACTOR AUTHORITY NAME**
MARTY HUFFMAN**SIGNATURE**
On File**IMPORTANT** 1. Contract award number and ordering department name must appear on all invoices and documents relating to this order.
2. The State is registered for tax free transactions under Chapter 32, IRS Code Registration No. 92-601185. Items are for the exclusive use of the State and not for resale.

1.0 CONTRACT:

- 1.1 Intent: ONE (1) YEAR CONTRACT WITH TWO (1) ONE YEAR EXTENTIONS for Purchase of Airport Improvement Project (AIP) Aircraft Rescue and Fire Fighting Vehicles for Alaska Airports.
- 1.2 Quantities: 2 units within the first year on the contract (Funding Approved) and an additional 2 unit per year thereafter dependent upon approved yearly grants.
 - 1.2.1 Funding is appropriated through the Federal Aviation Administration. All future orders are dependent upon approved yearly grants.
- 1.3 Location of Use: Various Alaska Airports, Statewide
- 1.4 Dealer warranty locations, at a minimum: ANCHORAGE.
- 1.5 In addition to the State of Alaska requirements, the Municipality of Anchorage and other Alaska political subdivisions may cooperatively purchase from the resulting contract.
 - 1.5.1 At no time may the contractor change the terms and conditions, alter the price to another entity, which differs from the contractual price, nor charge undisclosed administrative fees to allow cooperative purchasing.

2.0 DELIVERY:

- 2.1 **Pre-delivery service**: Prior to delivery, each vehicle, piece of equipment or attachment shall be serviced and inspected by the dealer or his agent. A certification of this inspection must include the following (as applicable to the type of equipment):
 - 2.1.1 Dealer and vehicle identification.
 - 2.1.2 Check-off of service and inspection performed including a list of all fluids including type weight and specification that are in the equipment as delivered for all fluid compartments.
 - 2.1.3 The vehicle's crankcase, differential and transmission, and other fluid compartments shall be filled to the manufacturer's recommended capacity.
 - 2.1.4 Fuel tank shall be filled to at least register a minimum ¼ full on the fuel gauge, unless restricted by the commercial carrier, when the vehicle arrives at the delivery location.
 - 2.1.5 The vehicle shall be clean and free from defects when delivered and should be ready for immediate and continued use upon delivery.
 - 2.1.6 Units delivered in an incomplete state, or which have deficiencies per the specification, are subject to the damage charges as noted in paragraph 4.0 below.
- 2.2 **Delivery Receipt**:
 - 2.2.1 A delivery receipt will be required. The receipt must be filled out by the vendor, and acknowledged by state receiving personnel by signature and date of actual receipt of equipment. One copy of this delivery receipt is to be given to the state-receiving agency. The original shall accompany the vendor's invoice to support and properly identify the vehicle delivered.
 - 2.2.2 Vendors are cautioned and advised that such delivery forms or other receiving type documents will not in any way be construed to mean the state has formally and fully accepted unit(s) referenced thereon as complete and meeting every specification set forth. Only the Contracting Officer or designee may sign warranty documentation.

3.0 F.O.B. POINT:

- 3.1 The F.O.B. point is as listed in Section IV, Bid Price Schedule. Ownership of and title will remain with the contractor until delivery is complete to final destination and accepted by the State.
- 3.2 The cost of shipping and delivery for orders beyond the limits of Seattle/Tacoma dock will be handled as follows. The contractor will prepay the shipping and delivery charges to any destination named by the State in its order. The contractor will charge-back those shipping and delivery charges to the State as a separate line item on the State's invoice.

- 3.3 All shipping charges over \$100 must be documented by a copy of the actual shipping invoice and received with the invoice charge to the State.

4.0 DAMAGES FOR LATE DELIVERY AND NON-CONFORMING GOODS:

- 4.1 Time is of the essence in this contract. The bidder is expected to deliver goods that conform in all material respects to the contract specifications on or before the date provided therein, as may be amended by written agreement of the parties.
- 4.2 In the event that the equipment is delivered late or does not conform to the contract specifications, the State shall be entitled to offset against the Contract Price, as liquidated damages and not as a penalty, an amount equal to the cost of renting like equipment, multiplied by the number of calendar days elapsing between the delivery date provided in the bid schedule and the delivery date to the State. In the case of a unit of this class, that daily rental fee is determined to be **\$185.00**. The number of days for which liquidated damages shall apply shall include, in the case of non-conforming goods, the time reasonably necessary for the State to perform inspection.
- 4.3 These liquidated damages represent a reasonable estimate of amounts necessary to compensate the State for loss of use of the goods during the period in which the goods would have been available to the State if conforming goods had been timely delivered.

5.0 WARRANTY:

- 5.1 **Standard Warranty Package:** Unless otherwise stipulated by this ITB, the successful bidder will provide a one year (12-month) warranty.
- 5.1.1 Full (100%) Parts and Labor Warranty Coverage components for the first 12-months, at the assigned location, from the date the unit is placed in service.
- 5.1.2 Corrosion Warranty: Twelve (12) year warranty for corrosion inside the cab leading to premature wear of the cab floor. The State is responsible to take every precaution to insure that the units are properly cleaned and chemicals removed during preventative maintenance.
- 5.1.3 Full (100%) Warranty Coverage includes all cost of labor, parts, freight, transportation, per diem, travel, lubricants, miscellaneous cost, etc., to place the unit in like-new condition.
- 5.1.4 Should the manufacturer's standard warranty exceed the minimum State warranty requirements, the manufacturer's warranty will run in conjunction with and enhance the state's warranty, then continue for the remainder of its term.
- 5.1.5 If the state receives from any manufacturer or supplier additional or extended warranty on the whole or any component of the unit, in the form of time and/or mileage, including any pro rata arrangements, or the manufacturer generally extends to fleet customers a greater or extended warranty coverage, the state shall receive corresponding warranty benefits.
- 5.1.6 For clarification, warranty does not apply to normal wear and tear or maintenance items, accident damages, misuse of equipment or failure to operate or maintain equipment as prescribed by vendor/manufacturer.
- 5.1.7 Warranty on Attachments: Same as Standard Warranty Package.
- 5.1.8 In-Service Date: Warranty on vehicles not placed in service immediately upon receipt because of time lag to construct body components and/or installation of special equipment, or due to seasonal usage or other delay, shall be warranted from the date the vehicle is placed in service. The receiving agency shall notify the vendor/manufacturer in writing of the actual "in service" date. Notification of the requirement for delayed warranty will be provided on delivery orders whenever possible.
- 5.2 **Warranty Claims:**
- 5.2.1 Warranty will be provided at the unit's assigned (in-service). Because of the remote location of some equipment it is not always practical to deliver equipment to authorized warranty repair facilities. In these cases, the vendor may perform warranty work at the state's location or, the State of Alaska, at its discretion, reserves the right to perform the warranty work and be reimbursed by the vendor. If travel is required by State personnel to perform the work, actual costs will be used for reimbursement.

- 5.2.2 The State of Alaska has established a warranty procedure whereby the vendor is to be notified via letter, telex, fax, telegram, etc. that warranty work needs to be performed. If time is of the essence, a telephone call confirmed by one of the above written procedures may be utilized.
- 5.2.3 The vendor must notify the state within 24 hours of verbal or written notification that it will begin to perform the warranty work at the equipment location.
- 5.2.4 The State may, at its discretion, proceed to make warranty repairs with its own work force in the case of emergency situation or to preclude excessive downtime (greater than 24 hours). The State will require a Purchase Order (PO) to perform the warranty work.
- 5.2.5 Failure to notify the State that the vendor intends to begin to perform warranty work is considered a contractual breach.
- 5.2.6 The vendor will be invoiced for required warranty work performed by the state. Warranty work performed by the state will be charged at the current SEF shop labor rate at the time of the repair. Actual repair time will be used.
- 5.3 **Warranty Performed by Vendor:**
- 5.3.1 The State will reimburse travel costs not reimbursed by the manufacturer for travel to and from the bidder's closest warranty service center within the State of Alaska to the location of the equipment under warranty. Travel costs will be billed as follows:
- 5.3.1.1 Mileage Charge: mileage will only be reimbursed for travel within Alaska at the rate allowable by the IRS.
- 5.3.1.2 Meals are paid at actual cost and charges must be accompanied by receipts. Receipts are not to exceed the State authorized amount of \$60.00 per day.
- 5.3.1.3 Transportation, such as airfare, shall be reimbursed at actual cost and all charges are to be accompanied by a receipt/copy of the coach ticket.
- 5.3.1.4 Lodging shall be reimbursed at actual cost and shall not exceed \$150.00 per night unless no other lodging is available. Requests for reimbursement must be accompanied by a receipt.
- 5.3.2 Travel will only be reimbursed for time in Alaska.
- 5.3.3 After hours, weekend and holiday travel must be approved by the Contracting Officer to be considered for reimbursement. The State will not pay for weather delays.
- 5.4 **Authorized Warranty Dealer (Contractor):**
- 5.4.1 Contractor (bidder) must have Authorized Warranty Dealer that has all required licenses, facilities and factory certified and trained personnel necessary to perform the warranty servicing and repair work.
- Provide name and address for each Authorized Warranty Dealer for each location.
- (*) Genreal RFire Apparatus, 4004 E. Trent Avenue, Spokane, WA 99202
- Provide contact name and contact information for Warranty Administrator:
- (*) Bruce Carlson, (651) 462-1000 X8119
- 5.4.2 The ultimate responsibility for warranty lies with the contractor (bidder).
- 5.4.3 The State reserves the right to inspect the warranty facility and diagnostic equipment prior to issuing the Notice of Intent to Award a contract.
- 5.5 **Factory Recall:** Nationwide factory recall or product update programs are the responsibility of the vendor and/or manufacturer. The State will attempt to bring affected equipment to an authorized repair facility. However, because of the remoteness of some equipment this is not always practicable or economical. In such cases, factory recall and modification work will be handled the same as warranty work. Factory recall notices sent to the state should, in addition to serial number, include model, year, and dealer from who purchased.

- 5.5.1 **Hazardous Material:** Due to concerns about liability resulting from hazardous materials being left at the work site on State of Alaska property, no vendors will be allowed to use the State rural airport facilities to perform warranty work unless they agree and sign a letter of intent stating that all waste products including oils, coolant and garbage will be removed from the work site. Vendors should note that in some village locations other suitable facilities might be available for rent from local residents or village authority.

6.0 REPAIR ORDERS AND DOCUMENTATION:

- 6.1 Any work performed by the contractor or approved subcontractor, whether warranty or any other work on a piece of equipment purchased under this ITB, will require a copy of the repair order, any invoices showing parts and commodities, including oils and types used.

7.0 PUBLICATIONS:

- 7.1 Paper publications are to be received by the State of Alaska no later than 10 days after receipt of the unit. Custom manuals may be delivered no later than 90 days after receipt of the unit. Delivery will not be considered complete until the publications for each unit have been received by the State of Alaska. Note: Publications, when required, will be ordered on the same Purchase Order as the unit itself.

7.1.1 All paper manuals are to be pre-assembled in factory binders prior to delivery.

7.2 Service Manuals:

7.2.1 Complete set(s) to include applicable information covering prime unit and attachments:

7.2.2 Body, chassis, and electrical

7.2.3 Engine, transmission, and differential(s) (service and rebuild)

7.2.4 Electrical and vacuum troubleshooting

7.2.5 Wiring diagrams

7.2.6 Service specifications

7.2.7 Engine/emission diagnosis

7.3 Parts Manuals:

7.3.1 Complete set(s) including all updates. If updates are not provided during the warranty period, the State may order them from the manufacturer and bill the contractor for the full cost, including shipping.

7.3.2 Parts manuals are to be customized by serial number.

7.4 **Operator's Manuals:** Complete set(s) to include prime unit and attachments.

7.5 **Quantities:** As per Section IV – Bid Price Schedule.

7.6 **Manuals:** To be delivered to, and receipt signed by person(s) as noted on the Purchase Order.

7.7 Line Sheets/Bill of Materials:

7.7.1 It is required within 30 days after delivery that the successful bidder provides a comprehensive listing of all components used to assemble the unit.

7.7.2 This includes any components installed by the manufacturer or any subcontractor or the successful bidder.

7.7.3 Information will include at a minimum, when available, make, model serial number on items such as engines, transmissions, axles, tires, bodies, etc. The listings will be specific to each piece of equipment and will be provided on an individual CD for each unit delivered.

7.7.4 A minimum of two (2) CD's per unit are to be provided and marked with the make, model, and last main numbers of the units serial number or State PO number.

7.8 **Service Bulletins, Etc.:** The successful bidder must provide appropriate service bulletins, technical support bulletins, service letters, product support bulletins, and/or any other information type notifications that are sent out to the vendor or used by the manufacturer in the maintenance and report of the vehicle, equipment or attachments being provided. The intent of this clause is that the State of Alaska be provided

notification of any and all changes or improvements that may affect the maintenance, reliability, longevity, and safety of our equipment. This information will be provided as soon as possible to person(s) as noted on the Purchase Order.

8.0 STATEMENT OF ORIGIN: The bidder/contractor will be required to furnish a Manufacturer's Statement of Origin for Automotive or Non-Automotive rolling stock for each unit. All such documents shall be forwarded to:

DOT&PF, HQ State Equipment Fleet
2200 E. 42nd Avenue Room #311
Anchorage, Alaska 99508

9.0 WEIGHT VERIFICATION SLIPS: If required in the Section IV - Bid Price Schedule, a weight scale ticket of the completed unit will be included with the Statement of Origin.

10.0 INSPECTIONS:

10.1 The State's inspection of all materials and equipment upon delivery is for the sole purpose of identification. Such inspection shall not be construed as final or as acceptance of the materials or equipment if materials or equipment do not conform to Contract requirements. If there are any apparent defects in the materials or equipment at the time of delivery, the State will promptly notify the Contractor thereof. Without limiting any other rights of the State, The State at its option, may require the Contractor to:

10.1.1 repair or replace at contractor's expense, any or all of the damaged goods,

10.1.2 refund the price of any or all of the damaged goods, or

10.1.3 accept the return of any or all of the damaged goods.

10.2 Costs of remedying all defects, indirect and consequential costs of correcting same, and/or removing or replacing any or all of the defective materials or equipment will be charged against the bidder.

11.0 INSPECTION TRIP (IF REQUIRED):

11.1 Prior to arrival of the State of Alaska inspectors, the completed unit is to have been inspected and tested by the manufacturer for compliance to the specifications as listed above. The State reserves the right to appoint an independent inspector, at the State's expense, to periodically monitor the progression of the vehicle during the manufacturing process.

11.2 Prior to shipment from the manufacturer's plant, representatives of the State will inspect the completed equipment for conformance to specifications.

11.3 The Contractor shall provide full access to the State's inspector(s), or their designee(s), to the plant (s) including the plant(s) subcontractors where manufacture is taking place.

11.4 Inspection Trip:

11.4.1 The vendor will alert the State of Alaska Contracting Officer, whose name is on the purchase order, at least 30 days prior to having the completed unit ready for inspection

11.4.2 The State of Alaska will arrange and pay for all travel related cost.

11.5 It shall be the responsibility of the State inspector(s) to technically inspect and test the vehicle for compliance with the specifications.

11.6 It shall be the responsibility of the Contracting Authority representative to observe and assist in the inspection and test to assure compliance with the published terms, conditions, and specifications of the bid, and to mediate any disputes, which may arise between the manufacturer and the Department of Transportation's representative(s).

11.7 If it becomes necessary, the State or its representative would conduct a re-inspection of any subsequent work performed by the successful bidder. Should the State decide a re-inspection(s) of the unit is required; the vendor shall be required to pay for round trip air fare, ground transportation and per diem at \$175.00 per day for up to two (2) persons from Anchorage, Alaska. The state will pay for the inspection and will submit an invoice for reimbursement from the vendor.

11.8 The pilot model inspection may result in minor modifications which would require negotiation with the Contracting Officer. A change order to the contract must be issued prior to any modifications being accomplished.

SECTION I
AIP SPECIAL TERMS AND CONDITIONS

11.9 **FINAL ACCEPTANCE REMINDER:** Final acceptance is at final destination; however, all major tests will be conducted at the manufacturer's place of business unless the State has reason to believe alterations or damages have taken place which may have changed the performance or design characteristics of the unit since the time of inspection at the manufacturer's location.

11.9.1 A final inspection of the unit will be conducted at the final destination in Alaska, to assure that the unit still meets specifications.

11.10 These inspections by the State shall be thorough and very critical, and will encompass a complete review of the specifications. Adequate time and technical personnel shall be made available to assist the State in these inspections.

11.11 The bidder or responsible representative shall also be in attendance.

12.0 PRICE:

12.1 **Price Guarantee:** The contractor is responsible to maintain prices under the contract firm for 180 days after bid opening. All price increases or decreases must remain firm for the following 180 days.

12.2 **NO RETROACTIVE PRICE INCREASES WILL BE ACCEPTED.**

12.3 Price adjustments, increases or decreases, for subsequent orders, may be made by providing the Contracting Officer satisfactory evidence that all of the following conditions exist:

12.3.1 The increase is a result of the increased cost at the manufacturer's level and not costs under the contractor's control, and that;

12.3.1.1 The increase will not produce a higher profit margin for the contractor than that on the original contract, and that;

12.3.1.2 The increase affects only the item(s) that are clearly identified by the contractor.

12.3.1.3 Satisfactory forms of the evidence of the above facts may include a certified invoice from the manufacturer, or an affidavit from an independent professional price-tracking firm that is recognized by the industry as reputable and knowledgeable. The contractor must be able to show the difference between the prior year's price and the current difference in the price being requested.

12.4 **Price Decreases:** During the period of the contract, the Contractor must pass on to the state all price decreases, such as fleet rebates. A Contractor's failure to adhere strictly and faithfully to this clause will be considered a material breach of contract. The state reserves the right to cancel the contract if the contractor fails to properly perform the duties set out herein.

13.0 MANUFACTURER'S REBATE (INCENTIVES): In any circumstance during or prior to completion of the contract, whereupon the State of Alaska becomes eligible to receive a rebate for any vehicle purchased under this contract, it shall be the BIDDER'S responsibility to inform the Contracting Officer in writing and to advise the procedures for obtaining such rebates.

14.0 REPLACEMENT PARTS:

14.1 The State of Alaska shall expect the dealer or manufacturer to provide replacement wear parts at their authorized warranty facilities for the entire warranty period within seven (7) days of order. All other parts must be available within ten (10) working days.

14.2 Back order procedures: Back orders are acceptable; however, the ordering shop shall be appraised at time of original orders as to the expected delay in delivery.

14.3 Warranty: All products supplied by the contractor shall be warranted against defects in materials and workmanship for a minimum of 90 days, commencing at the time of installation as long as the installation is within 12 months of purchase. The cost of any defective product and the labor required to replace the defective product shall be the obligation of the contractor.

14.3.1 If the manufacturer's warranty exceeds the stated warranty then manufacturer's warranty supersedes.

14.3.2 Parts Return: Within 12 months of purchase, the State is to be allowed to return new, parts with full refund, less shipping charges.

14.3.3 Invoicing: Full description of item is required on all invoices, packing lists and billings.

15.0 EQUIPMENT RELIABILITY:

15.1 Reliability of equipment is of paramount importance to the State. It is the policy of SEF to require minimum levels of reliability from owned or leased equipment for it to be considered acceptable. Equipment offered for this bid must be capable of meeting the acceptable reliability standard stated below.

15.2 Acceptable Reliability: The State will monitor equipment reliability. Acceptable reliability for this contract is achieved when a machine achieves or maintains a Reliability Ratio (RR) equal to or exceeding the following:

15.2.1 .90 (90 percent) PR during any consecutive 12-months (365 days) during the warranty period.

15.2.2 .75 (75 percent) PR per operational month (recognizing operational as subject to weather and being defined by calendar days) during the consecutive 12-month period.

15.2.3 PR below the state percentages do not meet minimum reliability requirements for state owned equipment.

15.3 Machine Failure and Downtime:

15.3.1 **Machine Failure** is any and all loss of capability to perform fully, as specified, which is not attributed to **Conditioned Failure**. Machine Failure resulting in the unit being out of service is defined as **Downtime**.

15.3.2 **Conditioned Failure** is any Machine Failure attributable to accident, operator abuse or other external cause not attributable to a defect in the machine itself.

15.3.3 **Downtime** is the actual number of days or fractions of days that the equipment is in a state of Machine Failure. Downtime does not count time used for scheduled maintenance (including preventative maintenance and scheduled major overhauls), time lost for repair maintenance and scheduled major overhauls, time lost for repair of damage as a result of operator abuse or machine misapplication; or time lost as a result of accident or an act of God. Downtime includes:

15.3.3.1 Actual shop hours (and/or field repair hours) required to return unit to full operational status following machine failure, including trouble-shooting, repair, necessary replacement of parts, and necessary adjustments, plus

15.3.3.2 Time lost waiting for parts and/or vendor assistance. "Waiting downtime" also applies if need for parts/assistance is discovered during routine maintenance and return to service is deemed counterproductive. In this case, "waiting time" clock begins with notice of need to vendor. Allowance may be considered in "waiting time" calculations if arrival of parts/assistance is delayed by transportation shutdown, to include verifiable transportation scheduling difficulties such as infrequent flights as long as all reasonable alternatives have been exhausted. Parts and assistance are to be provided by the quickest means reasonably possible to avoid unnecessary delays and downtime.

15.3.4 **Out of Service Report (OSR):** Downtime resulting from machine failure is the actual number of hours a machine is out of service as recorded on the OSR or in the Equipment Maintenance Management System (EMS).

15.3.4.1 The State will record all downtime on an OSR or EMS work order, which will be originated for each occurrence of downtime. The document will show the date and time a unit went down, the location where the machine was based, the reason the machine is down, date and time the vendor was notified (if applicable), the date and time the machine was returned to service, and the total hours of downtime.

15.3.4.1.1 The Contract Manager will finalize and approve the OSR or EMS work order. Both are available for contractor review.

15.3.5 **Reporting Downtime:** The Contracting Officer will maintain documentation of all Downtime, and shall send copies of such documentation to the contractor.

15.3.6 **Calculation of Reliability Ratio:** RR is the mathematical ration of operated time (uptime) to out of service time (downtime). The RR will be calculated according to the following formula:

$$RR = \frac{\text{Days in a Month} - \text{Days Out of Service}^*}{\text{Days in a Month}^{**}} = \frac{DM - DO}{DM}$$

Days in a Month **

DM

Note * : Fractional Days apply, i.e., a unit is out of service 8 hours in a 24 hour period equals 1/3 or .33% of a day.

Note **: A day is allocated as 24 consecutive hours from 12:00 AM to 12:00 PM.

Example: 30 days DM with 2 days and 8 hours DT would result in:

$$RR = \frac{30 - 2.33}{30} = .92$$

- 15.3.7 **Unacceptable Reliability**: If an item of equipment fails to perform at an acceptable level of reliability during the warranty period, the Contracting Officer will notify the contractor and request immediate remedy. Failure to remedy the piece of equipment within 30 days for failure will result in a breach of contract and the immediate return of the equipment and reimbursement of the **Guaranteed Value (V)** of the unit:

Original Cost of the unit less (-) Freight = \$_____ (V)

Guaranteed Value (V) less (-) the **Cost of Operation** as listed in the Equipment Rental Rate Blue Book _____ or comparable equipment or the current Federal Fixed Usage Rate for the Class for the State of Alaska (a, b or c per hour) times (X) the number of hours used = _____(DV).

- a. Example: Cost of a single unit, less freight = \$150,000. The hourly cost is \$150.00 per hour. The unit was used 150 hours prior to failing the acceptable reliability. The contractor guarantees the unit's worth at \$127,500.00.

- 15.3.8 Prior to return, the State will correct all reasonable cosmetic deficiencies (such as excessive rust) and those deficiencies that are directly related to damage due to accidents, misuse of equipment or failure to operate or maintain equipment as prescribed by the vendor/manufacturer, prior to public auction.
- 15.3.9 The tires will be serviceable with at least 50% remaining thread.
- 15.3.10 Oil samples, as per manufacturer's service manual recommendations, will be taken by State of Alaska maintenance personnel on the engine, transmission, differentials and hydraulics.
- 15.3.11 In the case of dispute, at the expense of the State, a qualified agent from Northern Adjusters, Inc. or another professionally recognized appraiser may be commissioned for an independent claim appraisal. Such appraisal shall be binding upon the State and the contractor.

16.0 PERFORMANCE BOND FOR WARRANTY & PERFORMANCE:

- 16.1 A Performance Bond is due within 30 days of the first purchase order.
- 16.1.1 The State does not have backup equipment in many of its locations. Consequently, new-unit reliability and warranty performance is of vital importance. To insure the possible reliability and warranty service the State requires the contractor to post performance bond in one of the forms listed below. The purpose of the posted performance bond is to secure performance over the entire term of the contract. The performance bond must cover any remaining warranty in the event that the contractor is unable to or otherwise fails to complete the warranty period. The amount of the performance bond will be **\$50,000.00**. Release of the performance security will be contingent solely upon the acceptable completion of the terms of the original contract.
- 16.1.2 The Performance Bond must be posted in one year terms for the life of the contract by a surety company agreed to by the parties to this contract. Failure to post the successive bond, or to provide an alternative security as listed below, will be cause for breach of contract and immediate cancellation of any future orders.
- 16.1.3 The Performance Bond must be written in a form satisfactory to the State by a company authorized to do surety business in Alaska. The performance bond must provide a statement that it is payable to the State of Alaska as security for the contractor's full and faithful performance of the contract.
- 16.2 **Alternate Security**: In lieu of a performance bond, a contractor may post security in the form of a certified or cashier's check, or a certificate of deposit, to be returned to the contractor provided that the contractor

fully and faithfully performs the contract, including all warranty obligations.

16.2.1 A certified or cashier's check, made payable to the State of Alaska.

16.2.2 A Certificate of Deposit (CD) made payable to the State of Alaska. Inclusion of other verbiage on the "payee" or pay to" line will render the security unacceptable.

17.0 TRADE RESTRICTION CLAUSE (9 CFR Part 30.13FAA Order 5100.38):

- 17.1 The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:
- 17.1.1 is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
 - 17.1.2 has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
 - 17.1.3 has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.
- 17.2 Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.
- 17.3 Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.
- 17.4 The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.
- 17.5 This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.
- 17.6 Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 17.7 This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

18.0 CIVIL RIGHTS ACT OF 1964, TITLE VI – CONTRACTOR CONTRACTUAL REQUIREMENTS (49 CFR Part 21 AC 150/5100-15)

- 18.1 During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:
- 18.1.1 **Compliance with Regulations.** The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
 - 18.1.2 **Nondiscrimination.** The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The

contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

- 18.1.3 **Solicitations for Subcontracts, Including Procurements of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- 18.1.4 **Information and Reports.** The contractor shall provide all information and reports required by the regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.
- 18.1.5 **Sanctions for Noncompliance.** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:
- 18.1.5.1 Withholding of payments to the contractor under the contract until the contractor complies, and/or
- 18.1.5.2 Cancellation, termination, or suspension of the contract, in whole or in part.
- 18.1.6 **Incorporation of Provisions.** The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

19.0 AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS (Airport and Airway Improvement Act of 1982, Section 520, Title 49 47123, AC 150/5100-15, Para. 10.c):

- 19.1 The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

20.0 DISADVANTAGED BUSINESS ENTERPRISES (49 CFR Part 26):

- 20.1 **Contract Assurance (§26.13):** The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the

contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

- 20.2 **Prompt Payment (§26.29):** The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than **30** days from the receipt of each payment the prime contractor receives from the **State of Alaska**. The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the **Contracting Officer**. This clause applies to both DBE and non-DBE subcontractors.

21.0 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES (49 CFR Part 20, Appendix A):

- 21.1 No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.
- 21.2 If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

22.0 ACCESS TO RECORDS AND REPORTS (49 CFR Part 18.36(i), FAA Order 5100.38):

- 22.1 The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representative's access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

23.0 ENERGY CONSERVATION REQUIREMENTS (49 CFR Part 18.36 & Public Law 94-163):

- 23.1 The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

24.0 BREACH OF CONTRACT TERMS (49 CFR Part 18.36):

- 24.1 Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

25.0 RIGHTS TO INVENTIONS (49 CFR Part 18.36(i)(8) & FAA Order 5100.38):

- 25.1 All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

26.0 TERMINATION OF CONTRACT (49 CFR Part 18.36(i)(2) & FAA Order 5100.38):

- 26.1 The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.
- 26.2 If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

- 26.3 If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.
- 26.4 If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.
- 26.5 The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

27.0 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION (49 CFR Part 29 & FAA Order 5100.38):

- 27.1 The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

28.0 CLEAN AIR AND WATER POLLUTION CONTROL (49 CFR Part 18.36(i)(12) & Section 306 of the Clean Air Act & Section 508 of the Clean Water Act):

- 28.1 Contractors and subcontractors agree:
 - 28.1.1 That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;
 - 28.1.2 To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued there under;
 - 28.1.3 That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;
 - 28.1.4 To include or cause to be included in any construction contract or subcontract which exceeds \$100,000 the aforementioned criteria and requirements.

29.0 BUY AMERICAN PREFERENCES (Section 9129 of the Aviation Safety and Capacity Expansion Act of 1990 & Title 49 U.S.C. Chapter 501, AIP Program Guidance Letter 91-3):

- 29.1 The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:
 - 29.1.1 Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs b. (1) or (2) shall be treated as domestic.
 - 29.1.2 Components. As used in this clause, components mean those articles, materials, and supplies incorporated directly into steel and manufactured products.
 - 29.1.3 Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

SECTION II

AIP STANDARD TERMS AND CONDITIONS

- 1.0 ACCESSORIES:** When accessories are supplied, they must be certified to be compatible with the rest of the equipment. Certification will be written evidence satisfactory to the State that the accessories are compatible. The bidder's failure to supply this evidence within the time required by the State will cause the State to consider the bid non-responsive and reject the bid.
- 2.0 ADDITIONS OR DELETIONS:** The State reserves the right to add or delete items, agencies or locations as determined to be in the best interest of the State. Added items, agencies or locations will be related to those on contract and will not represent a significant increase or decrease in size or scope of the contract. Such additions or deletions will be documented via mutual agreement, will be at prices consistent with the original bid price margins,
- 3.0 ALTERATIONS:** The contractor must obtain the written approval from the contracting officer prior to making any alterations to the specifications contained in this ITB. The State will not pay for alterations that are not approved in advance and in writing by the contracting officer.
- 4.0 AMENDMENTS:** Contract terms shall not be waived, altered, modified, supplemented or amended without prior written approval of the Contracting officer.
- 5.0 ASSIGNMENT(S):** Assignment of rights, duties, or payments under a contract resulting from this ITB is not permitted unless authorized in writing by the State of Alaska, Department of Administration, Division of General Services. Bids that are conditioned upon the State's approval of an assignment will be rejected as nonresponsive.
- 6.0 AUTHORITY:** This solicitation is written in accordance with Alaska statutes AS 36.30 and 2 AAC 12.
- 7.0 BILLING INSTRUCTIONS:** Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order, not to the Division of General Services. The ordering agency will make payment after it receives the merchandise or service and the invoice. Questions concerning payment must be addressed to the ordering agency.
- 8.0 BRAND AND MODEL OFFERED:** Unless otherwise specified, when brand names and model numbers are used to specify the type and quality of the goods desired, bidders must clearly indicate the brand names and model numbers they intend to provide. The bidder's failure to identify the brand and model offered will cause the State to consider the offer non-responsive and reject the bid.
- 9.0 CERTIFICATION OF COMPLIANCE WITH AMERICAN'S WITH DISABILITIES ACT OF 1990:**
- 9.1 By signature of their bid/proposal the bidder/proposer certifies that they comply with the American's with Disabilities Act of 1990 and the regulations issued there under by the federal government.
- 9.2 Services or activities furnished to the general public on behalf of the State must be fully accessible. This is intended to ensure that agencies are in accordance with 28 CFR Part 35 Section 35.130 and that services, programs or activities furnished to the public through a contract do not subject qualified individuals with a disability to discrimination based on the disability.
- 10.0 COMPLIANCE WITH ALL GOVERNMENT REGULATIONS:** The bidder must comply with all applicable federal, state, and borough regulations, codes, and laws, and pay all applicable federal, state, and borough taxes, and is liable for all required insurance, licenses, permits, and bonds. Failure to comply with such requirements shall constitute a breach of contract and shall be grounds for contract cancellation. Damages or costs resulting from noncompliance shall be the sole responsibility of the bidder.
- 11.0 CONFLICT OF INTEREST:** An officer or employee of the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if (1) the officer or employee is an employee of the administrative unit that supervises the award of this contract; or (2) the officer or employee has the power to take or withhold official action so as to affect the award or execution of the contract.
- 12.0 CONSOLIDATION OF AWARDS:** Due to high administrative costs associated with processing of purchase orders, a single low bid of \$50 or less may, at the discretion of the State, be awarded to the next low bidder receiving other awards for consolidation purposes. This paragraph is not subject to the protest terms enumerated in "INSTRUCTION TO BIDDERS", "FILING A PROTEST" above.
- 13.0 CONSUMER ELECTRICAL PRODUCT:** AS 45.45.910 requires that "...a person may not sell, offer to sell, or otherwise transfer in the course of the person's business a consumer electrical product that is manufactured after August 14, 1990, unless the product is clearly marked as being listed by an approved third party certification program." Electrical consumer products manufactured before August 14, 1990, must either be clearly marked as being third party certified or be marked with a warning label that complies with AS 45.45.910(e). Even exempted electrical products must be marked with the warning label. By signature on this bid the bidder certifies that the

SECTION II

AIP STANDARD TERMS AND CONDITIONS

product offered is in compliance with the law. A list of approved third party certifiers, warning labels and additional information is available from: Department of Labor and Workforce Development, Labor Standards & Safety Division, Mechanical Inspection Section, P.O. Box 107020, Anchorage, Alaska 99510-7020, (907)269-4925.

- 14.0 CONTINUING OBLIGATION OF CONTRACTOR:** Notwithstanding the expiration date of a contract resulting from this ITB, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance and parts availability requirements have completely expired.
- 15.0 CONTRACT ADMINISTRATION:** The administration of this contract, including any/all changes, is the responsibility of the Contracting Officer, HQ State Equipment Fleet.
- 16.0 CONTRACT EXTENSION:** Unless otherwise provided in this ITB, the State and the successful bidder/contractor agree: (1) that any holding over of the contract excluding any exercised renewal options, will be considered as a month-to-month extension, and all other terms and conditions shall remain in full force and effect and (2) to provide written notice to the other party of the intent to cancel such month-to-month extension at least thirty (30) days before the desired date of cancellation.
- 17.0 CONTRACT FUNDING:** Bidders are advised that funds are available for the initial purchase and/or the first term of the contract. Payment and performance obligations for succeeding purchases and/or additional terms of the contract are subject to the availability and appropriation of funds.
- 18.0 DEFAULT:** In case of bidder default, the State may procure the goods or services from another source and hold the bidder responsible for any resulting excess costs and may seek other remedies under law or equity. Alaska Statutes and Regulations provide for suspension and disbarment of non-responsible bidders.
- 19.0 DELIVERY:** All deliveries shall be F.O.B. final destination point with all transportation and handling charges paid by bidder. Responsibility and liability for loss or damage shall remain with bidder until final inspection and acceptance when responsibility shall pass to the State except as to latent defects, fraud and bidder's warranty obligations.
- 20.0 DISCONTINUED ITEMS:** In the event an item is discontinued by the manufacturer during the life of the contract, another item may be substituted, provided that the contracting officer makes a written determination that it is equal or better than the discontinued item and provided that it is sold at the same price or less than the discontinued item.
- 21.0 DISPUTES:** Any dispute arising out of this agreement shall be resolved under the laws of Alaska. Any appeal of an administrative order or any original action to enforce any provision of this agreement or to obtain any relief from or remedy in connection with this agreement may be brought only in the superior court for the State of Alaska.
- 22.0 FIRM OFFER:** For the purpose of award, offers made in accordance with this ITB must be good and firm for a period of ninety (90) days from the date of bid opening.
- 23.0 FORCE MAJEURE (Impossibility to perform):** Neither party to this contract shall be held responsible for delay or default caused by acts of God and/or war, which is beyond that party's reasonable control. The State may terminate this contract upon written notice after determining such delay or default will reasonably prevent successful performance of the contract.
- 24.0 HUMAN TRAFFICKING:**
- 24.1 By signature on this contract, the offeror certifies that:
- 24.1.1 the offeror is not established and headquartered or incorporated and headquartered, in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report; or
- 24.2 The most recent United States Department of State's Trafficking in Persons Report can be found at the following website: www.state.gov/g/tip/
- 24.3 Failure to comply with this requirement will cause the state to reject the bid or proposal as non-responsive, or cancel the contract.
- 24.4 This pertains to goods and services above \$50,000.00.
- 25.0 INDEMNIFICATION:** The Contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the Contractor under this agreement. The Contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the

SECTION II

AIP STANDARD TERMS AND CONDITIONS

Contractor and the independent negligence of the Contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "Contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the Contracting agency's selection, administration, monitoring, or controlling of the Contractor and in approving or accepting the Contractor's work.

26.0 INSPECTIONS: Goods furnished under this contract are subject to inspection and test by the State at times and places determined by the State. If the State finds goods furnished to be incomplete or not in compliance with bid specifications, the State may reject the goods and require bidder to either correct them without charge or deliver them at a reduced price, which is equitable under the circumstances. If bidder is unable or refuses to correct such goods within a time deemed reasonable by the State, the State may cancel the order in whole or in part. Nothing in this paragraph shall adversely affect the State's rights as buyer, including all remedies and rights granted by Alaska statutes.

27.0 INSURANCE:

27.1 Without limiting Contractor's indemnification, it is agreed that Contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the Contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the contracting officer prior to beginning work and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the Contractor's services. All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21.

27.2 Proof of insurance is required for the following:

27.2.1 Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.

27.2.2 Commercial General Liability Insurance: covering all business premises and operations used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.

27.2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.

27.3 Failure to supply satisfactory proof of insurance within the time required will cause the State to declare the bidder nonresponsive and to reject the bid.

28.0 ITEM UPGRADES: The State reserves the right to accept upgrades to models on the basic contract when the upgrades improve the way the equipment operates or improve the accuracy of the equipment. Such upgraded items must be at the same price as the items in the basic contract.

29.0 NEW EQUIPMENT: Equipment offered in response to this ITB must be new equipment. New equipment means equipment that is currently in production by the manufacturer and is still the latest model, edition or version generally offered. The equipment must be warranted as new by the manufacturer and may not have been used for any purpose, other than display (not demonstration), prior to its sale to the State. The State will not accept remanufactured, used or reconditioned equipment, including used or reconditioned components or parts of. It is the contractor's responsibility to ensure that each piece of equipment delivered to the State complies with this requirement. A contract's failure to comply with this requirement will cause the State to seek remedies under breach of contract.

30.0 ORDER DOCUMENTS: Except as specifically allowed under this ITB, an ordering agency will not sign any vendor contract. The State is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the State under this ITB. The State of Alaska Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this ITB.

SECTION II

AIP STANDARD TERMS AND CONDITIONS

- 31.0 PAYMENT:** Payment for agreements under \$500,000 for the undisputed purchase of goods or services provided to a State agency will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement, which establishes a lower interest rate or precludes the charging of interest.
- 32.0 PRICES:** The bidder shall state prices according to the requirements of this ITB. Prices quoted for commodities or services must be in U.S. funds and include applicable federal duty, brokerage fees, packaging, and transportation cost to the FOB point so that upon transfer of title the commodity or service can be utilized without further cost.
- 33.0 PRODUCT IDENTIFICATION:** Bidders must clearly identify all products bid. Brand name and model or number must be shown for the prime unit as well as attachments where applicable. The State reserves the right to reject any bid when the product information submitted with the bid is incomplete and/or is not easily ascertainable from the bid documents or through independent verification.
- 34.0 PROPRIETARY INFORMATION AND STATEMENTS OF CONFIDENTIALITY:**
- 34.1 Except as set forth in this provision, all information in all bids will be made public under AS 36.30.530 not later than the time of issuance of a notice of intent to award.
- 34.2 If the offeror submits information considered by it to constitute a trade secret or proprietary data, such information may be expressly designated as such, and must be accompanied by the offeror's certification that (1) the information has consistently been maintained by its owner as a trade secret or as proprietary information, (2) the owner of the information has taken due care to protect it from release to non-privileged persons, and (3) to the best knowledge of the offeror, the information has not lost its status as trade secret or proprietary information, whether by lack of diligent protection, release to any non-privileged person or otherwise.
- 34.3 **Absence of such certification, any claim of confidentiality will be ignored, and the bidder may not hold any reasonable expectation of confidentiality.**
- 34.4 Any information so certified will be held confidential so long as the contracting officer concurs that it constitutes a trade secret or proprietary data, and deems it not critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid.
- 34.5 By submission of a bid, the offeror consents to the contracting officer's exercise of reasonable judgment as to concurrence with any assertion of confidentiality, and waives any and all claims for release of information that the contracting officer reasonably deems not confidential notwithstanding a certified assertion of confidentiality.
- 34.6 A certified assertion of confidentiality in which the contracting officer concurs, with respect to information the contracting officer deems critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid, will cause the bid to be rejected as a non-responsive bid.
- 35.0 QUANTITIES:** The State reserves the right to reduce or increase the quantity of items ordered under any contract resulting from this Invitation to Bid.
- 36.0 SEVERABILITY:** If any provision of the contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected; and, the rights and obligations of the parties will be construed and enforced as if the contract did not contain the particular provision held to be invalid.
- 37.0 SHIPPING DAMAGE:** The State will not accept or pay for damaged goods. The contractor must file all claims against the carrier(s) for damages incurred to items in transit from the point of origin to the ultimate destination. The State will provide the contractor with written notice when damaged goods are received.
- 38.0 STANDARD AND SPECIAL TERMS AND CONDITIONS:** The terms and conditions of this section are standard to State of Alaska, Department of Transportation and Public Facilities, Statewide Equipment Fleet contracts for the purchase of goods. There may also be other special terms and conditions in an Invitation to Bid or Request for Proposal which apply only to this contract. In the event of a conflict between the standard and special terms and conditions, the Special Terms and Conditions take precedence.
- 39.0 SUBCONTRACTOR(S):** Within five (5) working days of notice, the apparent low bidder must submit a list of the subcontractors that will be used in the performance of the contract. The list must include the name of each subcontractor and the location of the place of business for each subcontractor and evidence of each subcontractor's valid Alaska business license. Subcontractors can only be changed per AS 36.30.115 (b).

SECTION II

AIP STANDARD TERMS AND CONDITIONS

- 40.0 SUCCESSORS IN INTEREST:** This contract shall be binding upon successors and assigns.
- 41.0 SUITABLE MATERIALS:** All materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, and suitable for the manufacturer's intended purpose unless the specifications allow for used, rebuilt or remanufactured equipment.
- 42.0 TAXES:** Prices quoted in bids must be exclusive of federal, state, and local taxes. If the bidder believes that certain taxes are payable by the State, the bidder may list such taxes separately, directly below the bid price for the affected item. The State is exempt from Federal Excise Tax because articles purchased are for the exclusive use of the State of Alaska.
- 43.0 WARRANTY:** Unless otherwise stated, all equipment shall be new and current model and shall carry full factory warranties. Bidder warrants all goods delivered to be free from defects in labor, material and manufacture and to be in compliance with bid specifications. All implied or expressed warranty provisions of the Uniform Commercial Code apply. All warranties shall be for and benefit the State

SPECIFICATION #195-3000
Class V 3,000 Gallon Aircraft Rescue
And Fire Fighting Vehicle
January 21, 2014

GENERAL SPECIFICATION:

It is the intent of these specifications to describe the requirements necessary to supply a well-designed, self-contained, properly engineered diesel powered Class V Aircraft Rescue and Fire Fighting (ARFF) vehicle. The unit shall be new and unused.

The ARFF vehicle shall consist essentially of a three (3) crew cab on a 6x6, custom or commercial chassis with single tires. It is to be all-wheel drive, single engine diesel powered, with an automatic transmission OR optional four (4) crew cab

The firefighting package shall include a water tank with a minimum capacity of 3,000 gallons and a liquid foam agent concentrate tank of a minimum 400 gallons.

The unit shall contain all component parts necessary for an aerated water/foam proportioning system capable of pumping at least 1,200 GPM expelled through a cab controlled roof turret, and one (1) each, one (1) inch water/foam hand line twinned with a dry chemical line (mentioned below) and two (2) each, 1-3/4 (1.75) inch soft hose hand-lines pre-connected to 1-1/2 (1.5) inch discharge outlets. A high and low flow low-attack turret shall be included.

There shall also be a mounted dry chemical system with a minimum 500 pound capacity sodium based dry chemical (450 pounds of Purple K), nitrogen charged, expelled through a 100 foot hand-line and from the roof turret. The one (1) inch water/foam and 100 foot dry chemical hand lines shall be twinned and mounted on single electric rewind reel utilizing a dual agent discharge nozzle. This apparatus shall be equipped with various other components as called for in these specifications.

VEHICLE PROCUREMENT SPECIFICATION, CLASS 5

1.0 SCOPE: This Procurement Specification (PS) covers a commercially produced diesel engine driven ARFF vehicle for an Index E airport. It includes a 3000-4500 gallon water/Aqueous Film Forming Foam (AFFF) fire suppression system: 500 lb. sodium-based dry chemical and 460 lb. halogenated agent complementary systems.

The ARFF vehicle is intended to carry rescue and firefighting equipment for the purpose of rescuing aircraft passengers, preventing aircraft fire loss, and combating fires in aircraft.

2.0 CLASSIFICATION:

The ARFF vehicle(s) covered by this PS are classified in accordance with Part 139, Certification and Operations: Land Airports Serving Certain Air Carriers, Section 315, Aircraft Rescue and Firefighting: Index Determination; Section 317, Aircraft Rescue and Firefighting: Equipment and Agents; and Federal Aviation Administration (FAA)

Advisory Circular (AC) 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles, as follows:

Airport Index	Vehicle Class	Minimum Rated Capacities (gallons/liters)
Index E	5	3000 gallon/11,356 liter water/AFFF solution
Index E	5	3500 gallon/13,249 liter water/AFFF solution
Index E	5	4000 gallon/15,142 liter water/AFFF solution
Index E	5	4500 gallon/17,034 liter water/AFFF solution

3.0 VEHICLE CONFORMANCE/PERFORMANCE CHARACTERISTICS:

The ARFF vehicle will be in accordance with the applicable requirements of National Fire Protection Association (NFPA) 414, Standard for Aircraft Rescue and Fire Fighting Vehicles (2007 Edition), and AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles.

- 3.1 **Manuals:** Technical manuals will consist of operator, service, and parts manuals. All manuals are required to be provided in hardcopy and in digital format on CDs when requested.
- 3.2 **Technical manuals:** The overall format for the manuals will be commercial. Each technical manual will have a title page. Line art will be used to the maximum extent possible for illustrations and parts lists. One complete set of engine and transmission parts, service and operator's manuals will be packed with each vehicle.
- 3.3 **Operator's manual:** The operator's manual will include all information required for the safe and efficient operation of the vehicle, including fire extinguishing systems, equipment, and any special attachments or auxiliary support equipment. As a minimum, the operator's manual will include the following:
 - 3.3.1 The location and function of all controls and instruments will be illustrated and functionally described.
 - 3.3.2 Safety information that is consistent with the safety standards established by the Occupational Safety and Health Administration (OSHA) and NFPA.
 - 3.3.3 All operational and inspection checks and adjustments in preparation for placing the vehicle into service upon receipt from the manufacturer.
 - 3.3.4 Tie down procedures for transport on a low-boy trailer.
 - 3.3.5 Warranty information and the period of the warranty coverage for the complete vehicle and for any component warranty that exceeds the warranty of the complete vehicle. Addresses and telephone numbers will be provided for all warranty providers.
 - 3.3.6 General description and necessary step-by-step instructions for the operation of the vehicle and its fire extinguishing system(s) and auxiliary equipment.
 - 3.3.7 A description of the post-operational procedures (draining, flushing, re-servicing, et cetera).
 - 3.3.8 Daily maintenance inspection checklists that the operator is expected to perform, including basic troubleshooting procedures.
 - 3.3.9 Disabled vehicle towing procedures.
 - 3.3.10 Procedures and equipment required for changing a tire.
 - 3.3.11 Schedules (hours, miles, and time periods) for required preventative maintenance and required

periodic maintenance.

- 3.3.12 Line art drawing of the vehicle, including panoramic views (front, rear, left, and right sides) showing basic dimensions and weights (total vehicle and individual axle weight for the unloaded and fully loaded vehicle). For the purposes of this AC, "unloaded" is defined as a lack of agent, occupants and compartment load, and "loaded" is defined as including agent, occupants and compartment load.
- 3.4 **Service Manual:** The service manual will identify all special tools and test equipment required to perform servicing, inspection, and testing. The manual will cover troubleshooting and maintenance as well as minor and major repair procedures. The text will contain performance specifications, tolerances, and fluid capacities; current, voltage, and resistance data; test procedures; and illustrations and exploded views as may be required to permit proper maintenance by qualified vehicle mechanics. The manual will contain an alphabetical subject index as well as a table of contents. The service manual will contain at least the following, where applicable:
- 3.4.1 Firefighting system schematic(s).
 - 3.4.2 Hydraulic schematic.
 - 3.4.3 Pneumatic schematic.
 - 3.4.4 Electrical schematic.
 - 3.4.5 Winterization schematic.
 - 3.4.6 Fuel schematic.
 - 3.4.7 Schedules for required preventative maintenance and required periodic maintenance.
 - 3.4.8 Lubrication locations, procedures, and intervals for parts of the vehicle and equipment that require lubrication.
- 3.5 **Parts Manual:** The parts manual will include illustrations or exploded views (as needed) to identify properly all parts, assemblies, subassemblies, and special equipment. All components of assemblies shown in illustrations or exploded views will be identified by reference numbers that correspond to the reference numbers in the parts lists. All purchased parts will be cross-referenced with the original equipment manufacturers (OEM) name and part number. The parts identification manual will provide the description and quantity of each item used for each vehicle. The size, thread dimensions, torque specifications, and special characteristics will be provided for all nonstandard nuts, bolts, screws, washers, grease fittings, and similar items. The manual will contain a numerical index. The parts manual will contain a list of all of the component vendor names, addresses, and telephone numbers referenced in the parts list.
- 3.6 **Painting, Plating, and Corrosion Control:**
- 3.6.1 **Finish:** Exterior surfaces will be prepared, primed, and painted in accordance with all of the paint manufacturer's instructions and recommendations. Vehicles will be painted and marked in accordance with AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport. The interior finish of all compartments will be based on the manufacturer's standard production practice. This may include painting, texturing, coating or machine swirling as determined by the manufacturer. All bright metal and anodized parts, such as mirrors, horns, light bezels, tread plates, and roll-up compartment doors, will not be painted. All other surfaces capable of being

painted must be in the appropriate yellow-green color.

- 3.6.2 **Dissimilar Metals:** Dissimilar metals, as defined in MIL-STD-889, Dissimilar Metals, will not be in contact with each other. Metal plating or metal spraying of dissimilar base metals to provide electromotive compatible abutting surfaces is acceptable. The use of dissimilar metals separated by suitable insulating material is permitted, except in systems where bridging of insulation materials by an electrically conductive fluid can occur.
- 3.6.3 **Protection against deterioration:** Materials that deteriorate when exposed to sunlight, weather, or operational conditions normally encountered during service will not be used or will have a means of protection against such deterioration that does not prevent compliance with performance requirements. Protective coatings that chip, crack, or scale with age or extremes of climatic conditions or when exposed to heat will not be used.
- 3.6.4 **Reflective stripes:** A minimum eight (8) inch horizontal band of high gloss white paint or white reflective tape (Retro reflective, ASTM-D 4956-09, Standard Specification for Retro reflective Sheeting for Traffic Control, TYPE III & above) must be applied around the vehicle's surface.
- 3.6.5 **Lettering:** The manufacturer will apply the airport's 'Name' and 'Insignia' (if available) in a contrasting color or by decal on both sides of the vehicle in long radius elliptical arches above and below the lettering center line. The size of the lettering will be a minimum of 2½-inches to a maximum of 6-inches. Reflective lettering is allowed if the material is the same as that which is used for the reflective stripe (as specified in AC 150/5210-5).
- 3.7 **Vehicle identification plate:**
- 3.7.1 A permanently marked identification plate will be securely mounted at the driver's compartment. The identification plate will contain the following information:
- 3.7.2 NOMENCLATURE
- 3.7.3 MANUFACTURER'S MAKE AND MODEL
- 3.7.4 MANUFACTURER'S SERIAL NUMBER
- 3.7.5 VEHICLE CURB WEIGHT: kg (pounds)
- 3.7.6 PAYLOAD, MAXIMUM: kg (pounds)
- 3.7.7 GROSS VEHICLE WEIGHT (GVW): kg (pounds)
- 3.7.8 FUEL CAPACITY AND TYPE: gals (gallons)
- 3.7.9 DATE OF DELIVERY (month and year)
- 3.7.10 WARRANTY (months and km (miles))
- 3.7.11 CONTRACT NUMBER
- 3.7.12 PAINT COLOR AND NUMBER
- 3.7.13 A second permanently marked information data plate will be securely mounted on the interior of the driver's compartment. The plate will contain the information required by NFPA 414, Standard for Aircraft Rescue and Fire Fighting Vehicles (2007 Edition), Section 1.3.5 Vehicle Information Data Plate. A single plate that combines or contains the information required for both plates is acceptable.
- 3.8 **Environmental conditions:**

- 3.8.1 Vehicle operation and storage temperature conditions will vary with geographical location. Thus, the locality temperature range can go from -40° to 110°F. Refer to NFPA 414 for vehicle winterization criteria.
- 3.9 **Extreme temperature range:** The vehicle will be capable of satisfactory storage and operation in temperatures ranging from -40° to 110°F. The vehicle will be equipped with a cab, chassis, and agent winterization system, permitting operation at -40°F. The winterization system will not detract from the performance of the vehicle or the firefighting system in ambient temperatures up to 110°F. The vehicle chassis winterization system will maintain the engine coolant, lubricants, fuel, and electrical systems operational at ambient temperatures of - 40°F. The vehicle agent winterization system will provide sufficient insulation and heating capacity, by means of hot circulating liquids and/or forced air heat exchangers, to permit satisfactory operation of the vehicle and firefighting systems for a 2-hour period at ambient temperatures as low as -40° F with the vehicle fully operational and the engine running. At the end of this 2-hour period, the vehicle will be capable of successfully discharging its agents. All compartments not winterized will be marked as such on the interior of the compartment. The marking will state that the compartment is not winterized and cannot be used for the storage of items capable of freezing.
- 3.10 **Reduction of potential foreign object damage.** All loose metal parts, such as pins, will be securely attached to the vehicle with wire ropes or chains. Removable exterior access panels, if provided, will be attached with captive fasteners.
- 3.11 **Vehicle Mobility:**
- 3.11.1 **Operating terrain:** The vehicle will be capable of operating safely on paved roads, graded gravel roads, cross country terrain, and sandy soil environments. Cross country terrain consists of open fields, broken ground, and uneven terrain. An off-road, high-mobility suspension system resulting in no more than 0.5 Grms acceleration at the driver's seat of the vehicle when traversing an 8-inch (20 cm) diameter half round at 35 mph (56 kph) must be provided. The suspension design by which the manufacturer meets the suspension performance requirements is at the manufacturer's discretion.
- 3.11.2 **Gradeability:** The fully loaded vehicle will be able to ascend any paved slope up to and including 50-percent.
- 3.11.3 **Side slope stability.** The fully loaded vehicle will be stable on a 30° side slope when tested in accordance with NFPA 414.
- 3.11.4 **Cornering stability:** The fully loaded vehicle will be stable in accordance with NFPA 414 when tested in accordance with NFPA 414.
- 3.12 **Weights and dimensions:**
- 3.12.1 **Overall dimensions:** The maximum dimensions listed below are desirable to ensure vehicles can be accommodated in existing fire stations. Likewise, the overall dimensions should be held to a minimum that is consistent with the best operational performance of the vehicle and the design concepts needed to achieve this performance and to provide maximum maneuverability in accordance with NFPA 414.

Vehicle Capacity/Dimensions	3000 Gallons	4500 Gallon
Length (inches/cm)	480/1219	540/1372
Width (inches/cm, excluding mirrors)	124/315	122/31
Height (inches/cm)	154/391	154/391

NOTE: For Airport Operator Validation: Consult AC 150/5210-15, Aircraft Rescue and Fire Fighting Station Building Design, Appendix A, to ensure vehicles measurements do not exceed existing airport fire station dimensions.

- 3.13 **Angles of approach and departure:** The fully loaded vehicle will have angles of approach and departure of not less than 30°.
- 3.14 **Field of vision.** The vehicle will have a field of vision in accordance with NFPA 414.
- 3.15 **Mirrors:** Combination flat and convex outside rearview mirrors will be installed on each side of the cab. The flat mirrors will be of the motorized remote control type, providing not less than 60° horizontal rotational viewing range. The flat mirrors will also have electrically heated heads. Mirror remote and heating controls will be located on the instrument panel within reach of the seated driver. To provide the driver a clear view of the area ahead of the vehicle and to eliminate potential blind spots, a rectangular mirror will be installed on the lower corner of each side of the windshield, having a minimum area of 35 square inches. The vehicle will have a back-up (rear-view) camera with a display monitor mounted above the driver in the cab. Cameras and monitors that are designed to replace the function of the side-view mirrors are not an approved option in this specification.
- 3.16 **Chassis and vehicle components:**
- 3.16.1 **Engine:** The vehicle will have a turbocharged diesel engine that is certified to comply with the Environmental Protection Agency (EPA) and state laws for off-highway emission requirements at the time of manufacture. The engine and transmission must operate efficiently and without detrimental effect to any drive train components when lubricated with standard, commercially available lubricants according to the recommendations of the engine and transmission manufacturers.
- 3.16.2 **Acceleration:** The fully loaded vehicle will accelerate from 0 to 50 miles per hour (mph) on a level paved road within 35 seconds.
- 3.16.3 **Maximum speed:** The fully loaded vehicle will attain a minimum top speed of 70 mph on a level, paved road. Pump and roll on a 40-percent grade. The fully loaded vehicle will be capable of pump and roll operations on a paved, dry, 40-percent grade in accordance with NFPA 414.
- 3.16.4 **Altitude:** Where justified, the vehicle, including the pumping system, will be designed for operation at 2,000 feet above sea level.
- 3.16.5 **Engine cooling system:** The engine cooling system will be in accordance with NFPA 414. A label will be installed near the engine coolant reservoir reading "Engine Coolant Fill."
- 3.16.6 **Fuel system:** The fuel system will be in accordance with NFPA 414.
- 3.16.7 **Fuel priming pump:** The vehicle will be equipped with an electric or pneumatic fuel pump in addition to the mechanical fuel pump. The electric/pneumatic pump will be used as a priming pump capable of re-priming the engines fuel system.

- 3.16.8 **Fuel tank:** The vehicle will have one or two fuel tanks with a minimum usable capacity in accordance with NFPA 414, as amended by NFPA 414. Each tank will have a fill opening of 3 inches minimum, readily accessible to personnel standing on the ground and designed to prevent fuel splash while refueling. Each tank will be located and mounted so as to provide maximum protection from damage, exhaust heat, and ground fires. If more than one tank is furnished, means will be provided to assure equalized fuel level in both tanks. An overturn fuel valve will be provided for each tank to prevent spillage in the event of a rollover. Each fuel tank must be prominently labeled "Diesel Fuel Only".
- 3.16.9 **Exhaust system:** The exhaust system will be in accordance with NFPA 414. The exhaust system will be constructed of high grade rust resistant materials and protected from damage resulting from travel over rough terrain. The muffler(s) will be constructed of aluminized steel or stainless steel. Exhaust system outlet(s) will be directed upward or to the rear, away from personnel accessing equipment compartments and the engine air intake, and will not be directed toward the ground.
- 3.17 **Transmission:** A fully automatic transmission will be provided. The transmission will be in accordance with NFPA 414.
- 3.18 **Driveline:** The vehicle driveline will be in accordance with NFPA 414. If the driveline is equipped with a differential locking control, a warning/caution label will be placed in view of the driver indicating the proper differential locking/un-locking procedures. The operator's manual will also include a similar warning/caution. All moving parts requiring routine lubrication must have a means of providing for such lubrication. There must be no pressure lubrication fittings where their normal use would damage grease seals or other parts.
- 3.19 **Axle capacity:** Each axle will have a rated capacity, as established by the axle manufacturer, in accordance with NFPA 414.
- 3.20 **Suspension:** The suspension system will be in accordance with NFPA 414 and AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles.
- 3.21 **Tires and wheels:** Tires and wheels will be in accordance with NFPA 414. The vehicle will be equipped with single tires and wheels at all wheel positions. The vehicle will be equipped with tubeless steel belted radial tires with non-directional on/off-road type tread mounted on disc wheel assemblies. Tire and wheel assemblies will be identical at all positions. Tires and wheels will be certified by the manufacturer for not less than 25 miles of continuous operation at 60 mph at the normal operational inflation pressure. A spare tire and wheel assembly will be provided; however, the spare tire and wheel assembly are not required to be mounted on the vehicle. Tires will be new. Retreads, recaps, or re-grooved tires will not be permitted.
- 3.21.1 Tire bead locks shall be installed on all tires and rims.
- 3.22 **Towing Connections:** The vehicle will be equipped with towing connections in accordance with NFPA 414. The vehicle will be designed for flat towing; the capability to lift and tow the vehicle is not required. The tow connections may intrude into the 30 degree approach angle.
- 3.23 **Brake System:** The vehicle will be equipped with a multi-channel all-wheel antilock brake system with at least one channel for each axle. The brakes will be automatic, self-adjusting and fully air-actuated. Brakes will be in accordance with CFR 49 CFR 393.40 through 393.42(b)), 393.43, and 393.43 through 393.52.

The braking system, complete with all necessary components will include:

- 3.23.1 Air compressor having a capacity of not less than 16 standard cubic feet per minute (scfm).
 - 3.23.2 Air storage reservoir(s), each tank equipped with drain (bleed) valves, and with safety and check valves between the compressor and the reservoir tank.
 - 3.23.3 Automatic moisture ejector on each air storage reservoir. Manual air tank drains are acceptable if they are labeled, are centrally located in one compartment and are accessible by an individual standing at the side of the vehicle.
 - 3.23.4 Automatic slack adjusters on cam brakes or internal self-adjusting brakes on wedge brakes on all axles.
 - 3.23.5 Spring set parking brakes.
 - 3.23.6 All components of the braking system will be installed in such a manner as to provide adequate road clearance when traveling over uneven or rough terrain, including objects liable to strike and cause damage to the brake system components. No part of the braking system will extend below the bottom of wheel rims, to ensure, in case of a flat tire, that the weight of the vehicle will be supported by the rim and the flat tire and not be imposed on any component of the braking system. Slack adjusters and air chambers will be located above the bottom edge of the axle carrier.
- 3.24 **Air dryer:** A replaceable cartridge desiccant air dryer will be installed in the air brake system. The dryer will have the capability of removing not less than 95 percent of the moisture in the air being dried. The dryer will have a filter to screen out oil and solid contaminants. The dryer will have an automatic self-cleaning cycle and a thermostatically controlled heater to prevent icing of the purge valve.
- 3.25 **Compressed air shoreline or vehicle-mounted auxiliary air compressor.** A vehicle mounted 110V air compressor shall be provided.
- 3.26 **Steering:** The vehicle will be equipped with power steering. Rear-wheel steering technology is not an approved vehicle option.
- 3.27 **Steering effort:** The steering system performance will be in accordance with NFPA 414.
- 3.28 **Turning diameter:** The fully loaded vehicle will have a wall to wall turning diameter of less than three times the overall length of the vehicle in both directions in accordance with NFPA 414.
- 3.29 **License plate bracket.** A lighted license plate bracket will be provided at the left rear and left front of the vehicle. The location of the left front bracket will be placed so as not to interfere with the operation of firefighting systems.
- 3.30 **Cab:** The vehicle will have a fully enclosed two door cab of materials which are corrosion resistant, such as aluminum, stainless steel, or glass reinforced polyester construction. Steps and handrails will be provided for all crew doors, and at least one grab handle will be provided for each crew member, located inside the cab for use while the vehicle is in motion. The lowermost step(s) will be no more than 22 inches above level ground when the vehicle is fully loaded. A tilt and telescoping steering column will be provided.
- 3.31 **Windshield and windows.** The windshield and windows will be of tinted safety glass. Each door window will be capable of being opened far enough to facilitate emergency occupant escape in the event of a vehicle accident. The vehicle windows will have an electric control system.

SECTION III
SPECIFICATIONS

- 3.32 **Cab interior sound level.** The maximum cab interior sound level will be in accordance with NFPA 414.
- 3.33 **Instruments and controls.** All instruments and controls will be illuminated and designed to prevent or produce windshield glare. Gauges will be provided for oil pressure, coolant temperature, and automatic transmission temperature. In addition to the instruments and controls required by NFPA 414, the following will be provided within convenient reach of the seated driver:
- 3.33.1 Master warning light control switch
 - 3.33.2 Work light switch(es), and
 - 3.33.3 Compartment "Door Open" warning light and intermittent alarm that sounds when a compartment door is open and the parking brakes are released or the transmission is in any position other than neutral.
- 3.34 **Windshield deluge system:** The vehicle will be equipped with a powered windshield deluge system. The deluge system will be supplied from the agent water tank and will have an independent pumping system. The deluge system activation switch will be located within reach of the seated driver and turret operator.
- 3.35 **Forward Looking Infrared (FLIR):** A forward looking infrared (FLIR) camera and in-cab monitor, meeting the requirements of NFPA 414, will be provided. In addition, the FLIR monitor described in NFPA 414 will have a minimum dimension of 10 in (25 cm) (measured diagonally) and be located in a position where it is visible to both the seated driver and turret operator.
- 3.36 **Climate Control System:** The offeror/contractor's standard heater/defroster and air conditioning system will be provided. The climate control system will induct at least 60 cubic feet per minute of fresh air into the cab. Cab mounted components will be protected from inadvertent damage by personnel.
- 3.37 **Seats:** The driver seat will be adjustable fore and aft and for height. The turret operator's seat, located to the right front of the driver's seat, will be a fixed (non-suspension) type. Each seat will be provided with a Type 3 seat belt assembly (i.e., 3-point retractable restraint) in accordance with CFR 49 CFR 571.209. Seat belts must be of sufficient length to accommodate crew members in full Personal Protective Equipment (PPE).
- 3.38 **Seat Options:** Two types of seat options are allowed in the vehicle. A standard seat contains a hard/fixed back. For these seats, a remote-mounted bracket designed to store a Self-Contained Breathing Apparatus (SCBA) will be provided. The remote-mounted bracket for the driver and turret operator (at a minimum) must be placed inside the cab. The brackets for seat positions #3 and #4 may be placed outside of the cab if necessary. An SCBA seat, on the other hand, contains an opening which can accommodate someone wearing an SCBA. The chart below represents the user's stated preference for the vehicle seating configuration.

Position	Standard	SCBA-Seat
Driver	X	
Turret		X
# 3		X
# 4		X (With Crew of 4)

- 3.39 **Windshield wipers and washer.** The vehicle will be equipped with electrically powered windshield

- wipers. The wiper arms and blades will be of sufficient length to clear the windshield area described by SAE J198, Windshield Wiper Systems - Trucks. Individual wiper controls will include a minimum of two speed settings and an intermittent setting. The wiper blades will automatically return to a park position, out of the line of vision. The vehicle will be equipped with a powered windshield washer system, including an electric fluid pump, a minimum one gallon fluid container, washer nozzles mounted to the wiper arms (wet arms), and a momentary switch.
- 3.40 **Warning Signs:** Signs that state "Occupants must be seated and wearing a seat belt when apparatus is in motion" will be provided in locations that are visible from each seated position in accordance with NFPA 414."
- 3.41 **Lateral accelerometer and/or stability control system.** The vehicle will be equipped with a lateral accelerometer and/or an electronic stability control system in accordance with NFPA 414.
- 3.42 **Monitoring and Data Acquisition System (MADAS):** The vehicle will be equipped with a MADAS as prescribed by NFPA 414.
- 3.43 **Body, compartments, and equipment mounting:**
- 3.43.1 **Body:** The vehicle will have a corrosion-resistant body.
- 3.43.2 **Compartments:** The vehicle body will have lighted compartments in accordance with NFPA 414 with a minimum of 10 cubic feet of enclosed storage space.
- 3.43.3 **Compartment doors:** Storage compartments will have clear anodized aluminum, counterbalanced, non-locking, roll-up or single hinged doors as determined by the manufacturer. Door latch handles on roll-up doors will be full- width bar type. Door straps will be provided to assist in closing the compartment doors when the rolled up or hinged door height exceeds six feet above the ground.
- 3.43.4 **Scuff plates:** Replaceable scuff plates will be provided at each compartment threshold to prevent body damage from sliding equipment in and out of the compartments. The Scuff plates will be securely attached to the compartment threshold but will be easily replaceable in the event of damage.
- 3.43.5 **Drip rails:** Drip rails will be provided over each compartment door.
- 3.43.6 **Shelves:** An adjustable and removable compartment shelf will be provided for every 18 inches of each vertical storage compartment door opening. Shelving adjustments will require no more than common hand tools, and will not require disassembly of fasteners. Shelves will support a minimum of 200 pounds without permanent deformation. Each shelf will be accessible to crew members standing on the ground or using a pull out and tip-down configuration. Each shelf will have drain holes located so as to allow for drainage of any water from the stowed equipment.
- 3.43.7 **Drainage Mats:** Each compartment floor and shelf will be covered with a removable black mat designed to allow for drainage of any water from the stowed equipment.
- 3.43.8 **SCBA storage tubes:** A single compartment or tubes for storage of four SCBA bottles will be provided. If tubes are provided, two will be installed on each side of the vehicle. The tubes will be of sufficient size to accommodate the procuring agencies SCBA cylinders.
- 3.44 **Ladder, handrails, and walkways.** Ladders, one 24ft. two section Duo Safety and one Little Giant model

26 23 foot combination ladder, mounted on the vehicle. Ladder, stepping, standing, and walking surfaces will be in accordance with NFPA 414. Handrails will be provided in accordance with NFPA 414. The lowermost step(s) or ladder rungs will be no more than 22 inches (56 cm) above level ground when the vehicle is fully loaded. The lowermost steps may extend below the angle of approach or departure or ground clearance limits if they are designed to swing clear. The tread of the bottom steps must be at least 8 inches (20 cm) in width and succeeding steps at least 16 inches (40 cm) in width. The full width of all steps must have at least 6 inches (15 cm) of unobstructed toe room or depth when measured from, and perpendicular to, the front edge of the eight-bearing surface of the step.

- 3.45 **Ancillary equipment.** Ancillary equipment listed in NFPA 414 A.4.2.1 (1)-(17) is not covered by this Procurement Specification in accordance with AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles. Ancillary equipment is funded separately by other sources.

NOTE: Equipment funding will be obtained as a separate contract under the provisions of AC 150/5210-14, Aircraft Rescue and Fire Fighting Equipment, Tools, and Clothing.

3.46 **Agent system:**

- 3.46.1 **Agent (fire) pump.** The vehicle will be equipped with a centrifugal pump capable of providing the performance specified herein as prescribed by NFPA 414.
- 3.46.2 **Agent System Piping:** All piping, couplings, and valves and associated components that come into contact with the agent will be in accordance with NFPA 414.
- 3.46.3 **Tank to pump connection:** A check valve and shutoff valve will be provided in each tank to pump line.
- 3.46.4 **Piping, couplings, and valves.** All agent system piping will conform to NFPA 414 criteria.
- 3.46.5 **Overheat Protection:** The agent system will be equipped with an overheat protection system in accordance with NFPA 414. Overheat protection is not required on vehicles utilizing a pre-mixed pressurized foam system.
- 3.46.6 **Pressure relief valves:** The agent system will be equipped with pressure relief valves in accordance with NFPA 414.
- 3.46.7 **Drains:** The agent system will be equipped with a drainage system in accordance with NFPA 414.
- 3.47 **Water tank:** The vehicle will have a water tank with a manufacturer certified minimum capacity of at least 3,000 gallons.
- 3.47.1 **Water Tank Construction:** The water tank will be constructed of passivated stainless steel, polypropylene, or Glass Reinforced Polyester (GRP) construction. All materials used will be capable of storing water, foam concentrate, and water/AFFF solutions.
- 3.47.2 **Water tank overhead fill cover and drain.** The water tank will be equipped with a 20 inch fill tower. The tower will be designed to allow for video inspection of the water tank interior. The water tank will incorporate a drainage system in accordance with NFPA 414.
- 3.47.3 **Water tank overflow system and venting.** The water tank will incorporate a venting system to

relieve pressure on the tank during fill and discharge operations at maximum flow rates. It will have an overflow system to relieve excess fluid in the event of tank overflow. Drainage from the vent and overflow system will not flow over body panels or other vehicle components and will not be in the track of any of the tires. Tank vent hoses will be of the non-collapsible type.

- 3.47.4 **Water tank top fill opening.** A top fill opening of not less than 8 inches internal diameter with a readily removable ¼-inch mesh strainer will be provided. The fill opening may be incorporated as part of the manhole cover, and will be sized to accommodate a 2½-inch fill hose.
- 3.47.5 **Water tank fill connections.** Water tank fill connections shall be provided on both right and left sides of the vehicle. The water tank will incorporate National Hose thread connections and will be in accordance with NFPA 414. If the vehicle is fitted with the "structural firefighting capability option," the additional requirements listed in paragraph 3.6.8 must be incorporated. Four (4) under truck nozzles shall be provided with flow rates per NFPA 414 standards **2012 edition**.
- 3.48 **Foam system: (NOTE: The requirements of section 3.6.3 do not apply to pre-mixed pressurized foam systems.)**
- 3.48.1 **Foam concentrate tank:** The foam concentrate tank(s) will have a manufacturer certified working capacity sufficient for two tanks of water at the maximum tolerance Equipment for 3 to 6 percent foam concentrate (i.e., 7.0-percent).
- 3.48.2 **Foam tank construction:** The foam tank will be constructed of passivated stainless steel, polypropylene, or GRP construction. All materials used will be capable of storing foam concentrate.
- 3.48.3 **Foam tank drain.** The foam tank will incorporate a drain and drain valve. The valve will be on the left side of the vehicle and controlled by a crew member standing on the ground. The drain line will have a minimum 1½-inch I.D. The foam tank drain outlet will be located so that the contents of the tank can be drained into 5-gallon cans and 55-gallon drums.
- 3.48.4 **Foam tank top fill trough:** The foam tank will incorporate a top fill trough mounted in the top of the tank readily accessible to at least two crew members on top of the vehicle. The top fill trough will incorporate a cover, latch, and sealed so as to prevent spillage under any operating condition. The top fill trough will be designed to allow two standard 5 gallon foam concentrate containers to be emptied simultaneously. The top fill trough neck will extend sufficiently close to the bottom of the tank to reduce foaming to a minimum during the fill operation. The top fill trough will incorporate readily removable, rigidly constructed 10 mesh stainless steel, brass or polyethylene strainers. All components in and around the top fill trough will be constructed of materials that resist all forms of deterioration that could be caused by the foam concentrate or water.
- 3.48.5 **Foam tank fill connections:** The foam tank will incorporate a 1.5-inch National Hose thread female hose connection on the left side of the vehicle to permit fill an external transfer hose at flow rates up to 25-gpm. The connections will be provided with chained-on long handled plugs or rocker lug plugs. The top of the connections will be no higher than 48 inches above the ground and readily accessible. The fill lines will incorporate check valves and readily removable, rigidly constructed ¼-inch mesh strainers. All components in the foam tank fill system will be

constructed of materials that resist all forms of deterioration that could be caused by the foam concentrate or water.

- 3.48.6 **Foam tank vent and overflow system:** The foam tank will incorporate a vent system to relieve pressure on the tank during fill and discharge operations at maximum flow rates and an overflow system to relieve excess liquid in the event of tank overflow. Drainage from the vent and overflow system will not flow over body panels or other vehicle components and will not be in front of or behind any of the tires. Tank vent hoses will be of the non-collapsible type.
- 3.48.7 **Foam Transfer Pump:** A foam transfer pump will be provided and mounted in a compartment on the vehicle. The pump will be capable of transferring and drawing foam liquid concentrate at adjustable flow rates up to 25-gpm directly through the pump and loading connections (see 3.6.3.2). All materials and components that come in contact with the foam will be compatible with the foam concentrate. The pump and its plumbing will have provisions for flushing with water from the water tank. A suitable length of hose with appropriate connections will be provided for filling the foam tank from an external foam storage container.
- 3.48.8 **Foam Flushing System:** The foam concentrate system will be designed in accordance with NFPA 414 so that the system can be readily flushed with clear water.
- 3.48.9 **Foam Concentrate Piping:** All metallic surfaces of the piping and associated components that come into contact with the foam concentrate will be of brass, bronze, or passivated stainless steel. The foam concentrate piping will be in accordance with NFPA 414.
- 3.49 **Foam Proportioning System:** The vehicle will have a foam proportioning system for Aqueous Film-Forming Foam (AFFF) (whether 3- or 6-percent foam concentrate) in accordance with NFPA 414. If a fixed orifice plate system is used, a plate will be provided for each percentage foam concentrate; the additional plate will be using common hand tools.
- 3.50 **Primary vehicle turret.** The vehicle will be equipped with a standard roof-mounted turret, high reach extendable turret, and/or high flow bumper mounted turret to serve as the primary source of agent delivery, as specified below:
 - 3.50.1 **Roof turret:** The roof turret will be mounted near the front of the roof of the vehicle. It will have a non-air-aspirating, constant flow, variable stream nozzle with dual flow rates for foam or water rated as specified in NFPA 414. The discharge pattern will be infinitely variable from straight stream to fully disperse. The roof turret will be power operated; power controls will be positioned for use by the driver and the crew member seated to the right of the driver. The type of nozzle or turret drain will be per the manufacturer's recommendation.
 - 3.50.2 **Bumper turret:** The vehicle will be equipped with a joystick controlled, constant flow, and non-air-aspirating, variable stream type:
 - 3.50.2.1 ~~Fixed mount low volume single rate (minimum 250 GPM) bumper turret.~~ (as per am2)The bumper turret will be capable of discharging at a minimum flow rate of foam or water as specified by the user, with a pattern infinitely variable from straight stream to fully disperse. The bumper turret will be capable of automatic oscillation, with the range of oscillation adjustable up to 90° each side of

center (left and right) with vertical travel capabilities of +45°/ 20° meeting section 4.20.2 in NFPA 414.

3.51 **Pre-connected hand line(s).**

3.51.1 One 200 foot, 1¾-inch pre-connected woven jacket hand line(s), with a 1½-inch control valve and a pistol grip nozzle, will be located on (or accessible from) left side of the vehicle. A safety system will be provided to prevent charging of the hose until the hose has been fully deployed. The hand line(s) and nozzle(s) will be in accordance with NFPA 414, and will allow for a minimum of 95 gpm at 100 psi nozzle pressure. A control for charging the hand line will be provided for operation by both the driver and the turret operator.

3.51.1.1 In addition, the vehicle will be equipped with the following hand line: 100 feet of twinned 1-inch dry chemical / foam-water hose on a reel.

3.52 **Structural firefighting capability.** The vehicle will be equipped with an agent system structural control panel, on the left side of the vehicle, operable while standing on the ground. Structural panel activation will be interlocked to operate only with the vehicle parking brakes set and the transmission in neutral position. Controls and instruments will be grouped by function. The control panel will be hinged or accessible from the rear for maintenance. Instruments will be lighted for night operation.

3.52.1 **The structural panel will include, as a minimum, the following:**

3.52.1.1 Panel activation switch, including the panel lights.

3.52.1.2 Engine tachometer.

3.52.1.3 Engine oil pressure gauge with low pressure warning light.

3.52.1.4 Engine coolant temperature gauge with high temperature warning light.

3.52.1.5 A liquid filled gauge or digital indicator for pump suction, -30 inches Hg vacuum to 600 psi.

3.52.1.6 A liquid filled gauge, or digital indicator for pump pressure, 0 to 600 psi.

3.52.1.7 An adjustable pump pressure using either an electronic pressure governor or manual control with a relief valve will be provided.

3.52.1.8 Foam or water selection.

3.52.1.9 Water and foam tank liquid level indicators, located adjacent to the water and foam tank fills.

3.52.2 **The structural firefighting capability will also require installation of the following items:**

3.52.2.1 A priming pump and control (for drafting using the large intake connection).

3.52.2.2 Water tank isolation valve.

3.52.2.3 **Discharge connections.** Two 2½-inch discharge connections with male National Hose threads will be provided. One 2½-inch discharge will be provided on each side of the vehicle. Each connection will be equipped with a cap, a quarter-turn control valve, a bleeder valve, and a pressure gauge. Each connection will be rated at 250-gpm minimum.

3.52.2.4 **Intake connections.** The vehicle will be equipped with one valved 4½-inch intake connection on both sides. The vehicle will be equipped with one valved 2½-inch

intake connection on the left side adjacent to the 4½-inch intake connection with both having either a 30° or 45° turn-down fitting. The 4½-inch intake connections will have male National Hose threads, quarter-turn control valves, bleeder valves, strainers, and caps. The 2½-inch intake connection will have rocker lug female National Hose threads, a quarter-turn control valve, a bleeder valve, a strainer, and a plug. The vehicle will be capable of filling its water tank by pumping from a draft, a hydrant, or a nurse truck through either of the intake connections without the use of a hose from a discharge connection to a tank fill connection.

3.52.2.5 **Primary turret discharge nozzle.** The vehicle will be equipped with a complementary agent discharge mounted parallel to the AFFF solution discharge on the primary turret mounted on the cab roof.

3.53 **Dry chemical agent system:** The vehicle will be equipped with a 500 lb. minimum capacity sodium based dry chemical agent system. The propellant gas cylinder will be replaceable within fifteen minutes by two crew members standing on the ground and be equipped with a cylinder replacement hoisting system. The propellant gas cylinder will be secured to withstand off-road operations. A pressure indicator will be visible to any person opening the tank fill cap. Blow-down piping will be directed beneath the vehicle. The dry chemical agent tank will include lifting rings and will have a nameplate indicating, as a minimum, the following:

3.53.1 Extinguishing agent.

3.53.2 Capacity.

3.53.3 Weight full

3.53.4 Weight empty.

3.53.5 Operating pressure.

3.53.6 Hydrostatic test date.

3.53.7 Type of agent required for re-servicing.

3.54 **Dry chemical hose reel.** A hose reel, equipped with at least 100 feet of dry chemical hose, will be mounted in a compartment. Hand line agent and purge controls will be mounted in or adjacent to the compartment. All electrical components will be sealed against entry of water. The hose reel will have both electric and manual rewind provisions. The manual rewind handle will be bracket mounted and stored in the compartment. A quick acting control will be provided to activate the hand line from the cab of the vehicle.

3.55 **Halogenated agent system:**

3.55.1 A 460 lb. Halotron I clean agent system including an agent storage container, a hose reel and an argon propellant cylinder will be provided. The agent storage container will conform to ASME standards for unfixed pressure vessels. The system will be capable of discharging a minimum of 90% of the containerized agent without flow fluctuations or interruptions. The propellant gas cylinder will be replaceable within fifteen minutes by two crew members standing on the ground and be equipped with a cylinder replacement hoisting system. The propellant gas cylinder will be secured to withstand off-road operations. A pressure indicator will be visible to any person

opening the tank fill cap. Blow-down piping will be directed beneath the vehicle. The Halotron I agent tank will include lifting rings and will have a nameplate indicating, as a minimum, the following:

- 3.55.1.1 Extinguishing agent.
- 3.55.1.2 Capacity.
- 3.55.1.3 Weight full.
- 3.55.1.4 Weight empty.
- 3.55.1.5 Operating pressure.
- 3.55.1.6 Hydrostatic test date.
- 3.55.1.7 Type of agent required for re-servicing.

- 3.55.2 **Halotron I hose reel.** A Halotron I hose reel will be provided in a compartment on the side of the vehicle. The reel will include 150 ft. of 1 in. booster type hose and an appropriate nozzle. The hose reel will be equipped with an electric rewind motor with manual rewind provisions and rollers to facilitate hose deployment. A tension device will be installed to prevent the hose from inadvertently unreeling. The nozzle will be capable of discharging a minimum of 5 lb./ sec. of Halotron I agent in accordance with the performance requirements of the A/C. Controls at the reel will allow charging of the Halotron I agent in the agent storage container, and into the hand line.
- 3.55.3 **Halotron I system charging cylinder.** One (1) 400 cu. ft. argon cylinder with an integral pressure gauge bottle will be provided for discharging the vehicle mounted Halotron I system. One (1) spare 400 cu. ft. argon cylinder will be provided. Each cylinder will have sufficient capacity to discharge all of the Halotron I agent in the agent storage container and perform a blow down operation of the system without requiring a cylinder change. A means of lifting the argon cylinder to its stored position or lowering it to ground level will be provided. The design will be such that it will allow one person to safely perform the argon cylinder re-servicing on the vehicle. The lifting/lowering mechanism will be stored on the vehicle adjacent to the nitrogen cylinder storage area. This storage provision must accommodate for the braking and for the high G forces experienced during off road travel as described in this specification.
- 3.56 **Electrical systems and warning devices.** The vehicle will have a 12-volt or 24-volt electrical and starting system in accordance with NFPA 414.
 - 3.56.1 **Alternator:** An appropriate charging system, in accordance with NFPA 414, will be provided. The minimum continuous electrical load will include operation of the air conditioning system.
 - 3.56.2 **Batteries.** Batteries will be of the maintenance-free type; addition of water will not be required during normal service life. The battery cover and vent system will be designed to prevent electrolyte loss during service and to keep the top of the battery free from electrolyte.
 - 3.56.2.1 **Battery compartment.** The batteries will be enclosed in a weatherproof enclosure, cover, or compartment and be readily accessible.
 - 3.56.3 **Battery charger or conditioner.** The vehicle will have a DC taper type battery charger or an automatic battery conditioner, or voltage monitoring system, providing a minimum 12 amp output. The charger/conditioner will be permanently mounted on the vehicle in a properly ventilated,

accessible location. The charger/conditioner will be powered from the electrical shoreline receptacle (see 3.10.1). A charging indicator will be installed next to the receptacle. When a battery conditioner is provided, the conditioner will monitor the battery state of charge and, as necessary, automatically charge or maintain the batteries without gassing, depleting fluid level, overheating, or overcharging. A slave receptacle will be provided at the rear or on either side of the vehicle cab. Battery jump studs may be installed on the exterior of the battery box in lieu of a slave receptacle.

3.56.4 **Electromagnetic interference.** The vehicle electrical system will be in accordance with SAE J551-2 for electromagnetic interference.

3.56.5 **Work lighting:**

3.56.5.1 **Cab interior lights.** Cab interior light levels will be sufficient for reading maps or manuals. At least one red and one white cab interior dome light will be provided.

3.56.5.2 **Compartment lights.** White lighting sufficient to provide an average minimum illumination of 1.0 foot candle will be provided in each compartment greater than 4.0 cubic feet and having an opening greater than 144 square inches. Where a shelf is provided, this illumination will be provided both above and below the shelf. All compartments will be provided with weatherproof lights that are switched to automatically illuminate when compartment doors are opened and the vehicle master switch is in the 'on' position. Light switches will be of the magnetic (non-mechanical) type.

3.56.5.3 **Ladder, step, walkway, and area lights.** Non-glare white or amber lighting will be provided at ladders and access steps where personnel work or climb during night operations. In addition, ground lighting will be provided. Ground lights will be activated when the parking brake is set in accordance with AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles. These area lights will be controlled with three-way switches on the cab instrument panel and near the light sources. The switch located in the cab will be a master switch and must be turned on before auxiliary switches near the light sources are operational.

3.56.5.4 **Spot/Floodlights:** Two spot/floodlights will be attached at the end of the primary turret or at the end of the HRET assembly. The lights will illuminate the area covered by the turret. Both lights will be controlled from switches in the cab. LED lights will be used.

3.56.5.5 **Flood Lights.** Two telescoping floodlights will be provided. One light will be mounted on the left and right sides of the vehicle. 250W LED lights will be used. Both lights will be mounted on extension tubes and controlled from switches in the cab and manually raised. To prevent these lights from accidental damage, the cab will be equipped with a visual warning signal to alert the driver if the lights are inadvertently left in the "up" position.

3.56.5.6 **Scene Lights:** A total of six high mounted floodlights will be provided to illuminate

the work areas around the vehicle. Two lights will be mounted on the front and two will be mounted on each side of the vehicle. The lights will be powered by the vehicle alternator driven system or auxiliary generator, and the lights in the front will be controlled from switches in the cab LED lights will be used.

- 3.56.6 **Audible warning devices:**
- 3.56.6.1 **Siren:** The vehicle will be equipped with an electronic siren system. The amplifier unit will include volume control and selection of "Radio," "PA," "Manual," "Yelp," "Wail," and "Hi-Lo" (European) modes, and a magnetic noise canceling microphone. The amplifier, microphone, and controls will be within reach of the driver and the turret operator. Siren activating foot switches will be located in front of the driver and the turret operator. The siren speaker will be rated at 100 watts minimum and will be located in a guarded position as low and as far forward on the vehicle as practical.
 - 3.56.6.2 **Horn:** Dual forward facing air horns will be installed in protected locations near the front of the vehicle. Air horn activating foot switches will be located in front of the driver and the turret operator.
- 3.57 **Emergency Warning Lights:** All emergency warning lights must meet the requirements of AC 150/5210-5. Where applicable, LED lights will be used as the primary light type. Lighting units will be installed on the top front, sides, and rear of the vehicle to provide 360° visibility. A switch will be provided on the instrument panel to control all of the top, side, front and rear emergency warning lights. A switch will also be provided on the instrument panel to disable all lower emergency warning lights when desired. All lighting systems will meet NFPA 414 emergency lighting criteria.
- 3.57.1 **Emergency warning light color.** All emergency warning lights will meet the requirements of AC 150/5210-5.
 - 3.57.2 **Headlight flashing system.** A high beam, alternating/flashing, headlight system will be provided. The headlight flasher will be separately switched from the warning light panel.
- 3.58 **Radio circuit.** The vehicle will have three separate 30 amp circuits with breakers and connections provided in a space adjacent to the driver and turret operator for installation of radios and other communications equipment after the vehicle has been delivered. To facilitate the installation of the communications equipment the manufacturer will provide three antennas pre-installed on top of the cab. Radios are an airport responsibility and not part of this specification.
- 3.59 **Power receptacles.**
- 3.59.1 **Primary power receptacles.** The vehicle will have two duplex 15-amp 110-volt power receptacles, one installed adjacent to the cab door on each side of the vehicle. Each duplex receptacle will include one straight blade and one twist-lock connection. These outlets will be powered by the generator.
 - 3.59.2 **Auxiliary power receptacles.** The vehicle will have 2-12-volt auxiliary power receptacles mounted adjacent to the driver and crew member positions, preferably in the instrument panel.
 - 3.59.3 **Cable reel.** The vehicle will be equipped with an electrical cable reel, located within a compartment. The reel will be equipped with 200 feet of 20 amps, 600 volt; 90°C insulated

electrical cable. The electrical cable will be equipped with a rubber ball stop to prevent cable pull through during rewinding operations. A four-way roller guide will be provided on the cable reel to prevent chafing of cable insulation. The cable reel will have an electric rewind motor with provisions for manual rewind in the event of motor failure; the manual rewind handle will be securely stored near the cable reel. A portable weatherproof duplex outlet box, with built-in circuit breakers and twist-lock receptacles, will be provided for on the cable end. The cable reel will be powered by the auxiliary generator.

3.59.4 **Auxiliary Generator:** A minimum 10 kilowatt (kW) (continuous rating), 120/240-volt, 60 hertz, diesel, hydraulic, or split shaft Power Takeoff (PTO)-driven generator will be provided.

3.60 **Line voltage electrical system.**

3.60.1 **Electrical shoreline connection.** The battery charger/conditioner will be powered from a covered, polarized, insulated, labeled, recessed (flush mounted), male, 110 volt AC auto-eject receptacle. The connection will be located on the exterior of the vehicle at the rear or on either side of the cab. A weatherproof charge meter will be installed next to the receptacle. A 15 amp rated, 110-120-volt, AC straight blade (non-twist-lock) connector will be provided.

3.61 **Air systems.**

3.61.1 Air hose reel. An air hose reel will be provided in an enclosed compartment on the vehicle. The hose reel will be equipped with 200 feet of 3/8-inch I.D. hose line. A 3/8 inch National Pipe Taper (NPT) fitting and female style quick disconnect will be connected to the end of the hose line. A four-way roller guide will be provided for the hose reel to prevent hose chafing and kinking. The hose line will be equipped with a rubber ball stop to prevent hose pull through on roller guides during rewinding operations. The hose reel will have an electric rewind motor and provisions for manual rewind in the event of motor failure; the manual rewind handle will be securely stored near the hose reel. A pressure protected air supply from the chassis air system will be connected to the hose reel. The air supply lines will be routed with minimum bends and located or guarded from damage from the carried equipment.

3.62 **Quality of Workmanship:** The vehicle, including all parts and accessories, will be fabricated in a thoroughly workmanlike manner. Particular attention will be given to freedom from blemishes, burrs, defects, and sharp edges; accuracy of dimensions, radii of fillets, and marking of parts and assemblies; thoroughness of welding, brazing, soldering, riveting, and painting; alignment of parts; tightness of fasteners; et cetera. The vehicle will be thoroughly cleaned of all foreign matter.

4.0 REGULATORY REQUIREMENTS:

4.1 **Recoverable Materials.** The contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with Title 48: Federal Acquisition Regulations System, Part 2823-Environment, Conservation, Occupational Safety, and Drug-free Workplace, Subpart 2823.4 Use of Recovered Material, 403 Policy and 404 Procedures.

4.2 Green Procurement Program. Green Procurement Program (GPP) is a mandatory federal acquisition program that focuses on the purchase and use of environmentally preferable products and services. GPP requirements apply to all acquisitions using appropriated funds, including services and new requirements.

FAR 23.404(b) applies and states the GPP requires 100% of EPA designated product purchase that are included in the Comprehensive Procurement Guidelines list that contains recovered materials, unless the item cannot be acquired:

- 4.2.1 competitively within a reasonable timeframe;
- 4.2.2 meet appropriate performance standards, or
- 4.2.3 at a reasonable price.
- 4.2.4 The prime contractor is responsible for ensuring that all subcontractors comply with this requirement. Information on the GPP can be found at:
http://www.dot.gov/ost/m60/DOT_policy_letters/apl8_04.pdf or FAR 23.404(b):
http://www.acquisition.gov/far/current/html/Subpart%2023_4.html.

5.0 PRODUCT CONFORMANCE PROVISIONS:

- 5.1 **Classification of inspections.** The inspection requirements specified herein are classified as follows:
 - 5.1.1 Performance inspection (see 5.2).
 - 5.1.2 Conformance inspection (see 5.3)
- 5.2 **Performance inspection.** The vehicle will be subjected to the examinations and tests described in 5.6.3.1 through 5.6.3.5 (if applicable). The contractor will provide or arrange for all test equipment, personnel, schedule, and facilities.
- 5.3 **Conformance inspection.** The vehicle will be subjected to the examinations and tests described in 5.6.3.1 through 5.6.3.5 (if applicable). The contractor will provide or arrange for all test equipment, personnel, and facilities.
- 5.4 **Product conformance.** The products provided will meet the performance characteristics of this PS, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The purchaser reserves the right to require proof of such conformance.
- 5.5 **Technical proposal.** The offeror/contractor will provide an itemized technical proposal that describes how the proposed model complies with each characteristic of this PS; a paragraph by paragraph response to the characteristics section of this PS will be provided. The offeror/contractor will provide two copies of their commercial descriptive catalogs with their offer as supporting reference to the itemized technical proposal. The offeror/contractor will identify all modifications made to their commercial model in order to comply with the requirements herein. The vehicle furnished will comply with the "commercial item" definition of FAR 2.101 as of the date of award. The purchaser reserves the right to require the offeror/contractor to prove that their product complies with the referenced commerciality requirements and each conformance/performance characteristics of this PS.
- 5.6 **Inspection requirements.**
 - 5.6.1 **General inspection requirements.** Apparatus used in conjunction with the inspections specified herein will be laboratory precision type, calibrated at proper intervals to ensure laboratory accuracy.
 - 5.6.2 **Test rejection criteria.** Throughout all tests specified herein, the vehicle will be closely observed

for the following conditions, which will be cause for rejection:

- 5.6.2.1 Failure to conform to design or performance requirements specified herein or in the contractor's technical proposal.
 - 5.6.2.2 Any spillage or leakage of any liquid, including fuel, coolant, lubricant, or hydraulic fluid, under any condition, except as allowed herein.
 - 5.6.2.3 Structural failure of any component, including permanent deformation, or evidence of impending failure.
 - 5.6.2.4 Evidence of excessive wear.
 - 5.6.2.5 Interference between the vehicle components or between the vehicle, the ground, and all required obstacles, with the exception of normal contact by the tires.
 - 5.6.2.6 Misalignment of components.
 - 5.6.2.7 Evidence of undesirable roadability characteristics, including instability in handling during cornering, braking, and while traversing all required terrain.
 - 5.6.2.8 Conditions that present a safety hazard to personnel during operation, servicing, or maintenance.
 - 5.6.2.9 Overheating of the engine, transmission, or any other vehicle component.
 - 5.6.2.10 Evidence of corrosion.
 - 5.6.2.11 Failure of the firefighting system and sub-systems.
- 5.6.3 **Detailed inspection requirements.**
- 5.6.3.1 **Examination of product.** All component manufacturers' certifications, as well as the prototype and production/operational vehicle testing outlined in Table 1, will be examined to verify compliance with the requirements herein. Attention will be given to materials, workmanship, dimensions, surface finishes, protective coatings and sealants and their application, welding, fastening, and markings. Proper operation of vehicle functions will be verified as defined by NFPA 414, Acceptance Criteria chapter. A copy of the vehicle manufacturer's certifications will be provided with each vehicle in accordance with NFPA 414. The airport may accept a manufacturer or third party certification for any/all prototype and production/operational vehicle testing performed prior to delivery which proves that the vehicle meets the performance parameters of NFPA 414.

SECTION III
SPECIFICATIONS

Table 1 - Vehicle Test Data

<i>NFPA 414 paragraph</i>	<i>Test</i>
Production Vehicle Operational Tests (NFPA 414 - Section 6.4)	
(6.4.1)	Vehicle Testing, Side Slope
(6.4.2)	Weight / Weight Distribution
(6.4.3)	Acceleration. NOTE: <i>With the modification that the instrumentation must be a GPS-based electronic data collection system.</i>
(6.4.4)	Top Speed
(6.4.5)	Brake Operational Test
(6.4.6)	Air System / Air Compressor Test
(6.4.7)	Agent Discharge Pumping Test
(6.4.8)	Dual Pumping System Test (As Applicable)
(6.4.9)	Pump and Maneuver Test
(6.4.10)	Hydrostatic Pressure Test
(6.4.11)	Foam Concentration Test
(6.4.12)	Primary Turret Flow Rate Test
(6.4.13)	Piercing/Penetration Nozzle Testing (As Applicable)
Prototype Vehicle Tests (NFPA 414 – Section 6.3)	
(6.3.1)	Rated Water and Foam Tank Capacity Test
(6.3.2)	Cornering Stability. NOTE: <i>With the modification that the evasive maneuver / double-lane change test must be conducted at 35 mph (56 kph).</i>
(6.3.3)	Vehicle Dimensions
<i>NFPA 414 paragraph</i>	<i>Test</i>
(6.3.4)	Driver Vision Measurement
(6.3.5)	Pump and Roll on a 40 Percent Grade
(6.3.6)	Electrical Charging System
(6.3.7)	Radio Suppression
(6.3.8)	Gradability Test
(6.3.9)	Body and Chassis Flexibility Test
(6.3.10)	Service/Emergency Brake Test
(6.3.11)	Service/Emergency Brake Grade Holding Test
(6.3.12)	Steering Control Test
(6.3.13)	Vehicle Clearance Circle Test
(6.3.14)	Agent Pump(s)/Tank Vent Discharge Test
(6.3.15)	Water Tank Fill and Overflow Test
(6.3.16)	Flushing System Test
(6.3.17)	Primary Turret Flow Rate Test
(6.3.18)	Primary Turret Pattern Test
(6.3.19)	Primary Turret Control Force Measurement
(6.3.20)	Primary Turret Articulation Test
(6.3.21)	Handline Nozzle Flow Rate Test
(6.3.22)	Handline Nozzle Pattern Test
(6.3.23)	Ground Sweep/Bumper Turret Flow Rate Test
(6.3.24)	Ground Sweep/Bumper Turret Pattern Control Test
(6.3.25)	Undertruck Nozzle Test
(6.3.26)	Foam Concentration/Foam Quality Test
(6.3.27)	Warning Siren Test
(6.3.28)	Propellant Gas
(6.3.29)	Pressure Regulation
(6.3.30)	AFFF Premix Piping and Valves
(6.3.31)	Pressurized Agent Purging and Venting
(6.3.32)	Complementary Agent Handline Flow Rate and Range
(6.3.33)	Dry Chemical Turret Flow Rate and Range
(6.3.34)	Cab Interior Noise Test

6.0 PACKAGING:

- 6.1 Preservation, packing, and marking will be as specified in the Procurement Specification, contract or delivery order.
- 6.2 The vehicle must be delivered with full operational quantities of lubricants, brake and hydraulic fluids, and cooling system fluid all of which must be suitable for use in the temperature range expected at the airport.
- 6.3 The vehicle must be delivered with one complete load of firefighting agents and propellants. One complete load is defined as all of the agents and propellants necessary for the vehicle to be fully operational. One load would include, at a minimum: one fill of a foam tank; one fill of a dry chemical tank (if applicable); one fill of a halogenated tank (if applicable); one spare nitrogen cylinder for a dry chemical system (if applicable); and one spare argon cylinder for a halogenated system (if applicable). Agents and propellants for required testing or training are not included. For the initial training period, water should be used in place of other extinguishing agents. The manufacturer may pre-ship agents and propellants to a receiving airport to reduce overall procurement costs.
- 6.4 The vehicle manufacturer must provide initial adjustments to the vehicle for operational readiness and mount any ancillary appliances purchased through the vehicle manufacturer as part of the vehicle.

7.0 TRAINING:

- 7.1 Upon delivery of the vehicle to the airport, the manufacturer must, at no additional cost, provide the services of a qualified technician for five consecutive days (or up to eight days for a high reach extendable turret) for training. This is considered sufficient time for the purchaser to adjust shift work schedules to get maximum employee attendance to training sessions at some point during the training period. During this time sufficient repetitive learning opportunities must be provided by the manufacturer to allow various shifts to complete the training requirements.
- 7.2 The technician must provide thorough instruction in the use, operation, maintenance and testing of the vehicle. This setup must include operator training for the primary operators, which will give them sufficient knowledge to train other personnel in the functional use of all firefighting and vehicle operating systems. Prior to leaving the vehicle, the technician should review the maintenance instructions with the purchaser's personnel to acquaint them with maintenance procedures as well as how to obtain support service for the vehicle.
- 7.3 Training must include written operating instructions, electronic training aids (videos/power point), or other graphics that depict the step-by-step operation of the vehicle. Written instructions must include materials that can be used to train subsequent new operators.

8.0 MISCELLANEOUS:

- 8.1 All filters (engine air, engine oil, and hydraulic, etc.) to be easily accessed by maintenance personnel.
- 8.2 **Delivery:**
 - 8.2.1 The vehicle must be delivered with full operational quantities of lubricants, brake and hydraulic fluids, and cooling system fluid all of which must be suitable for use in the temperature ranges expected at the airport. In Alaska, this can range from -60 to +90.

SECTION III
SPECIFICATIONS

- 8.2.2 The vehicle must be provided with all firefighting agents and propellants to make it operational upon delivery.
- 8.2.3 The vehicle manufacturer must provide initial adjustments to the vehicle for operational readiness and mount any ancillary appliances purchased through the vehicle manufacturer as part of the vehicle.
- 8.2.4 Delivery to Final Destination:
- 8.2.4.1 Bonded drive-a-way delivery shall be required in all cases of surface movement of the ARFF vehicle.
- 8.2.4.2 Surface movement (vehicle being driven) is limited to loading for truck or vessel shipment. Surface movement over the Alaska-Canada (ALCAN) highway is not acceptable.
- 8.2.4.3 When shipping from Seattle/Tacoma area to or through Anchorage, vessel shipment shall be under deck (*TOTEM OCEAN TRAILER EXPRESS*)
- 8.2.4.4 Any shipping over water (other than *TOTEM OCEAN TRAILER EXPRESS*) to other destinations will require the unit to be completely wrapped (top and all sides) in a heavy-duty fire retardant shrink wrap to protect the unit from salt spray. The unit shall be located near the center, not the outer edge of the barge. Below is the company that can do the shrink wrap:
- Pro-Tect Construction Services Inc.*
- 18420 68th Ave S, #109
- Kent, WA 98032
- Phone: 425-251-3112 or 877-850-9727
- christy@ProtectConstruction.com
- 8.2.4.4.1 Pricing of shrink wrap is to be included in the bid.
- 8.2.4.5 The Contracting Officer shall be kept informed of transportation shipping dates and companies involved.
- 8.3 Component Manufacturer's Certification:
- 8.3.1 The vehicle manufacturer shall provide a copy of the component manufacturer's certification (signed application approval) for each of the following ARFF vehicle components, to the Contracting Officer, not later than delivery of the ARFF vehicle to the FOB point:
- 8.3.1.1 Axles.
- 8.3.1.2 Complementary Agent Pressure Relief Device.
- 8.3.1.3 Complementary Agent Storage Container.

- 8.3.1.4 Engine; Prime Mover and Pump, if separate.
- 8.3.1.5 Handline Hose(s) with Couplings Attached.
- 8.3.1.6 Propellant Gas Cylinder(s).
- 8.3.1.7 Propellant Gas Cylinder Regulating Device(s).
- 8.3.1.8 Tires.
- 8.3.1.9 Transfer Case.
- 8.3.1.10 Transmission.
- 8.3.1.11 Wheels.

9.0 REFERENCED DOCUMENTS:

9.1 Source of documents.

- 9.1.1 The CFR may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402.
 - Title 14, Code of Federal Regulations (CFR), Part 139, Certification of Airports (14 CFR Part 139)
 - Section 139.315 Aircraft Rescue and Firefighting: Index Determination.
 - Section 139.317 Aircraft Rescue and Firefighting: Equipment and Agents.
 - Section 139.319 Aircraft Rescue and Firefighting: Operational Requirements.
 - Title 49; Code of Federal Regulations (CFR), Part 393: Parts and Accessories Necessary for Safe Operation: Subpart C-Brakes.
 - Title 49; Code of Federal Regulations (CFR), Part 571, Motor Carrier Vehicle Safety Standards, Part 209, Standard No. 209; Seat Belt Assemblies.
- 9.1.2 SAE documents may be obtained from SAE, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.
- 9.1.3 National Fire Protection Association (NFPA): NFPA documents may be obtained from NFPA, Batterymarch Park, Quincy MA 02269-9101.
 - NFPA 412, Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment (2009
 - NFPA 414, Standard for Aircraft Rescue and Fire Fighting Vehicles (2007 Edition)
 - NFPA 1901, Standard for Automotive Fire Apparatus (2009 Edition)
- 9.1.4 Federal Aviation Administration (FAA): FAA ACs may be obtained from the FAA website: http://www.faa.gov/regulations_policies/advisory_circulars/
 - AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles
 - AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an AirportFAA Orders, Specifications, and Drawings may be obtained from: Federal Aviation Administration, ATO-W CM-NAS Documentation, Control Center, 800 Independence Avenue, SW, Washington, DC 20591. Telephone: (202) 548-5256, FAX: (202) 548-5501 and website: http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/atc_facilities/cm/cm_documentation/

SECTION IV
 BID PRICE SCHEDULE

BID SCHEDULE

DELIVERY: Not more than 270 days ARO (After Receipt of Order).

FOB: Airport as designated on Purchase Order.

F.O.B. Clarification: The FOB point for bid evaluation purposes is Dockside Seattle/Tacoma area. However, the bidder is responsible for shipping the unit to the final assigned destination. Final shipment to in-service locations as annotated on the Purchase Order will be arranged and pre-paid by the contractor. The actual cost from the Seattle/Tacoma area will be invoiced as a separate line item on the invoice for full reimbursement by the State. Shipping arrangements will always be in the best interest of the State and any extraordinary costs or circumstances must be pre-approved by the Contracting Officer prior to shipment.

LOT #1

Item #	Unit	Description	Total \$ Amount
1a	ea.	3,000 Gallon Aircraft Rescue and Fire Fighting Vehicle (ARFF) Three (3) crew cab on a 6x6, custom or commercial chassis with single tires. It is to be all-wheel drive, single engine diesel powered, with an automatic transmission Make / Model Offered: Rosenbauer Panther 6X6	\$672,594.00
1b	ea	Optional four (4) crew cab	\$850.00
1c	ea.	Training Per specification 7.0	\$0
1d	ea.	Publications Per Section I, 7.0 and Section III, 3.0	\$0
1e	ea.	Delete Halotron System	(\$17,700.00)
1f	ea.	Delete Right Side Pre-Connect Hand line	(\$1,495.00)
1g	ea.	Add Chevron Striping to rear of vehicle	\$1,250.00
1h	ea.	Add under truck nozzles	\$2,344.00

<u>TO BE COMPLETED BY BIDDER:</u>		
Rosenbauer Minnesota, LLC COMPANY SUBMITTING BID	5181 260 th Street	10024584
	ADDRESS	ALASKA BUSINESS LICENSE NO:
	Wyoming, MN 55092	
	CITY, STATE, ZIP	
	651-462-1000 / 651-755-7358 Mobile	
	PHONE/FAX	
	mhuffman@rosenbaueramerica.com	
	E-MAIL ADDRESS	