ADDENDUM NO. 1

INVITATION TO BID #09-09

BID DESCRIPTION: Aircraft Rescue and Firefighting (ARFF) Vehicle

ADDENDUM ISSUE DATE: Tuesday, September 22, 2009

BID OPENING DATE: Monday, September 28, 2009

BID OPENING TIME: 10:00 AM

Please include the attached specification changes for the ARFF Vehicle Invitation To Bid and Attachment #1.

Direct any and all inquiries about this bid to Wayne Langy, Operations and Facilities Manager, at 815-703-5309 or wlangy@flyrfd.com .

Greater Rockford Airport Authority
dba Chicago Rockford International Airport

Acknowledgment Page

All Vendors shall acknowledge receipt and acceptance of this Addendum No. 1, by signing in the acknowledgment space provided below and submitting this acknowledgment page with their proposal.

Receipt acknowledgment and conditions agreed to this ____day of _____, 2009.

Vendor_____

By_____

Greater Rockford Airport Authority
dba Chicago Rockford International Airport

Invitation To Bid – General Terms and Conditions – Page 4

Replace second paragraph of:

2.4 Warranties

The Contractor further agrees, upon written notice from the Authority, to promptly and without charge, make changes, corrections and/or replacement, to the satisfaction of the Authority, which may be required to make good all defects in design and material under its intended use, for a period of one (1) year, with the one (1) year period commencing on the date of acceptance by the Authority. The Contractor shall receive no compensation for cost in replacement of goods or workmanship.

With the following:

2.4 Warranties

The Contractor further agrees, upon written notice from the Authority, to promptly and without charge, make changes, corrections and/or replacement, to the satisfaction of the Authority, which may be required to make good all defects in design and material under its intended use, for a period of two (2) years, with the first year period commencing on the date of acceptance by the Authority for the base vehicle. The Contractor shall receive no compensation for cost in replacement of goods or workmanship.

The following changes are to the Attachment A portion of the Invitation To Bid. Please refer to Attachment A of ITB#09-09 when referencing page numbers.

1.2 EXPECTED USE (page 5)

This specification covers an all-wheel drive, diesel powered, ARFF vehicle having a mechanical foam/water system designed for extinguishing flammable and combustible liquid fuel fires. The primary function of the vehicle described in this specification is to provide an optimum level of ARFF suppression capability throughout the critical rescue and firefighting access area for the lowest practical cost. The vehicle shall be designed for a degree of off-pavement mobility not normally found in highway vehicles. The vehicle proposed shall meet the ARFF vehicle requirements of Federal Aviation Regulation (FAR) Part 139 and shall be suitable for other fire protection assignments at the Denver Stapleton International Airport.

Replace the above paragraph with the following:

This specification covers an all-wheel drive, diesel powered, ARFF vehicle having a mechanical foam/water system designed for extinguishing flammable and combustible liquid fuel fires. The primary function of the vehicle described in this specification is to provide an optimum level of ARFF suppression capability throughout the critical rescue and firefighting access area for the lowest practical cost. The vehicle shall be designed for a degree of off-pavement mobility not normally found in highway vehicles. The vehicle proposed shall meet the ARFF vehicle requirements of Federal Aviation Regulation (FAR) Part 139 and shall be suitable for other fire protection assignments at the Chicago Rockford International Airport.

1.6 DELIVERY (page 6)

Delivery of the completed vehicle will be to the Chicago Rockford International Airport Maintenance Building at 5751 Falcon Road, Rockford, Illinois 61109. Delivery will be coordinated with Management Personnel or designated representative. Vehicle will be

transported, not driven, on open highways from the manufacturer to the Maintenance Building. Vehicle will have a clean and new appearance both interior and exterior upon delivery. All optional equipment/items will be delivered with the vehicle.

Replace the above paragraph with the following:

Delivery of the completed vehicle will be to the Chicago Rockford International Airport Maintenance Snow Removal Equipment (SRE) at 5751 Falcon Road, Rockford, Illinois 61109. Delivery will be coordinated with Management Personnel or designated representative. Vehicle will be transported, not driven, on open highways from the manufacturer to the Maintenance Building. Vehicle will have a clean and new appearance both interior and exterior upon delivery. All optional equipment/items will be delivered with the vehicle.

1.7 PRODUCT (page 6)

The completed vehicle shall be delivered with enough product to fill all reservoirs to capacity. Upon filling, the vehicle will be "ON-LINE" and fully functional. The vehicle will be delivered with three (3) complete fills of training foam/dry chemical and charging cylinders.

Replace the above paragraph with the following:

The completed vehicle shall be delivered with enough product to fill all reservoirs to capacity. Upon filling, the vehicle will be "ON-LINE" and fully functional. The vehicle will be delivered with three (3) complete fills of training foam/dry chemical and charging cylinders. The training foam shall be ARFF 3%.

1.9 WARRANTIES (page 7)

The following limited warranties shall be provided:

Base vehicle:	Two years
Engine:	Five years
Transmission:	Five years
Water Pump:	Two years
Agent Tanks:	Lifetime
Onan Hydraulic Generator:	Seven years

Replace the above paragraph with the following:

The following limited warranties shall be provided:

Base vehicle:	Two years
Engine:	Five years
Transmission:	Five years
Water Pump:	Two years
Agent Tanks:	Lifetime
Onan Hydraulic Generator:	Five years

2.4 SAFETY FEATURES (page 9)

Per the AC and NFPA 414 plus the following:

a. A Whelen 295 HFSA1 siren shall be installed in the floor console between the driver and the turret operator/officer. A Whelen SA314P speaker shall be installed in the front bumper to maximize forward sound projection.

b. Two Grover Stuttertone Model AL1510 or equal air horns shall be mounted in a protected area under the cab, below the level of the front bumper.

Replace the above paragraph with the following:

Per the AC and NFPA 414 plus the following:

c. A Whelen 295 HFSA1 siren or equivalent shall be installed in the floor console between the driver and the turret operator/officer. A Whelen SA 314P speaker or equivalent shall be installed in the front bumper to maximize forward sound projection.

d. Two Grover Stutterhorn Model AL/510 air horns or equal shall be mounted in a protected area under the cab, below the level of the front bumper.

3.1 PERFORMANCE (page 9)

Per the AC and NFPA 414.

a. Automotive performance for the vehicle shall be in accordance with Chapter 2, Section 7 of the A/C for a Class 2 vehicle.

b. Fire fighting system performance of the vehicle shall be in accordance with Chapter 3 of the A/C for a Class 2 vehicle.

Replace the above paragraph with the following:

Per the AC and NFPA 414.

a. Automotive performance for the vehicle shall be in accordance with Chapter 2, Section 7 of the A/C for a Class 5 vehicle.

b. Fire fighting system performance of the vehicle shall be in accordance with Chapter 3 of the A/C for a Class 5 vehicle.

6.2 CREW SPACE and DOORS (page 13-14)

Paragraph c. page 14 - Delete items 15 and 16.

6.3 EQUIPMENT (page 15)

Per the AC and NFPA 414 plus the following:

d. Two Grover Stuttertone Model AL1510 air horns shall be provided. The air horns shall be mounted in a protected area below the level of the front bumper and in such a position so that the trumpets shall be in front of the vehicle's seated occupants.

Replace the above paragraph with the following:

d. Two Grover Stutterhorn Model AL/510 air horns or equivalent shall be provided. The air horns shall be mounted in a protected area below the level of the front bumper and in such a position so that the trumpets shall be in front of the vehicle's seated occupants.

7.2 BRAKE SYSTEM (page 17)

Per the AC and NFPA 414 plus the following:

Should read as follow:

Per the AC and NFPA 414 section 4.9 plus the following:

7.5 TRANSFER CASE)page 18)

Per the AC and NFPA 414 plus the transfer case shall incorporate a drive to the front and rear axles which shall not allow the vehicle to stall as long as the tire(s) of any axle have traction. The transfer case shall be integral with the transmission.

Replace the above paragraph with the following:

Per the AC and NFPA 414 plus the transfer case shall incorporate a drive to the front and rear axles which shall not allow the vehicle to stall as long as the tire(s) of any axle have traction.

7.6 TRANSMISSION (page 18)

The transmission shall be an Allison automatic transmission seven (7) forward speeds. It shall be electronically controlled, fully compatible and certified for use with the electronically controlled engine.

Replace the above paragraph with the following:

The transmission shall be an Allison automatic transmission or equivalent with seven (7) forward speeds and engineered to provide maximum performance, including off road capability for the size and maximum gross weight of the verhicle. It shall be electronically controlled, fully compatible and certified for use with the electronically controlled engine.

8.2 LIGHTING AND MARKING SYSTEM (page 19)

Per the AC and NFPA 414 plus the following:

a. Two (2) Whelen FN 24" LED Mini-Lightbars, each with 12 LED elements shall be mounted on the vehicle's top surface, at the front center body section of the vehicle to meet visibility requirements. Each lightbar is to have the following configuration for LED element colors [Three (3) forward facing – red, clear and red; one (1) red on each side; one (1) red on each corner; three (3) rear facing red.]
b. One (1) Whelen FN 24" LED Mini-Lightbar with 12 LED elements shall be mounted on the top rear of the engine cover. The lightbar is to have 12 red LED elements located as follows [Three (3) forward facing; one (1) on each side; one (1) on each corner; three (3) rear facing.]
c. Two (2) Whelen forward facing, red rectangular LED lights shall be mounted on the front of the vehicle near bumper height.
d. Two (2) Whelen rear facing, red rectangular LED lights shall be mounted at the rear of the vehicle near bumper height.
e. Three (3) Whelen red rectangular LED lights shall be mounted on each side of the vehicle.
f. Two (2) Whelen Model 1200 amber strobes shall be mounted on the top center of the vehicle, one (1) on each side.

Replace the above paragraph with the following:

Per the AC150/5220-10D, NFPA 414 section 4.24.4.2, plus the following:

a. Two (2) Whelen FN 24" LED Mini-Lightbars or equivalent, each with 12 LED elements shall be mounted on the vehicle's top surface, at the front center body section of the vehicle to meet visibility requirements. Each lightbar is to have the

following configuration for LED element colors [Three (3) forward facing – red, clear and red; one (1) red on each side; one (1) red on each corner; three (3) rear facing red.]

b. One (1) Whelen FN 24" LED Mini-Lightbar or equivalent with 12 LED elements shall be mounted on the top rear of the engine cover. The lightbar is to have 12 red LED elements located as follows [Three (3) forward facing; one (1) on each side; one (1) on each corner; three (3) rear facing.]

c. Two (2) Whelen or equivalent forward facing, red rectangular LED lights shall be mounted on the front of the vehicle near bumper height.

d. Two (2) Whelen or equivalent rear facing, red rectangular LED lights shall be mounted at the rear of the vehicle near bumper height.

e. Three (3) Whelen or equivalent red rectangular LED lights shall be mounted on each side of the vehicle.

f. Two (2) Whelen Model 1200 amber strobes or equivalent shall be mounted on the top center of the vehicle, one (1) on each side.

8.2 LIGHTING AND MARKING SYSTEM (page 20)

n. NFPA 1901 ground lighting shall be provided.

Replace the above paragraph with the following:

n. A ground lighting system shall be provided sufficient to illuminate the ground below the side of the vehicle.

8.2 LIGHTING AND MARKING SYSTEM (page 20)

u.1.a. A 9000 watt Wilburt "Night Scan" [Model NS15-9000 (OPT)] telescoping light tower shall be mounted on the vehicle's roof. The lighting system shall be controlled from a handheld remote control device with 25 ft. of cable, which can be operated either from the cab or outside the vehicle. Mounting provisions shall be provided to secure the remote control and cable inside the cab in a manner in which the driver can operate the control from a seated position, but can be easily removed for remote operation outside the vehicle

Replace the above paragraph with the following:

u.1.a. The wattage shall be a standard wattage for the Wilburt telescoping light tower of this type and shall be mounted on the vehicle's roof. The lighting system shall be controlled from a handheld remote control device with 25 ft. of cable, which can be operated either from the cab or outside the vehicle. Mounting provisions shall be provided to secure the remote control and cable inside the cab in a manner in which the driver can operate the control from a seated position, but can be easily removed for remote operation outside the vehicle

8.3 POWER SUPPLIES (page 21)

b. A high capacity dual alternator system shall be provided having a combined output of 320 amps. The 320 amp capacity shall be sufficient to service the full operational load of the equipment and accessories specified with a 20% reserve. The alternator system shall consist of two 160 amp alternators providing a redundant backup if one alternator should fail. A dash mounted warning system shall be provided to indicate an alternator failure.

Replace the above paragraph with the following:

b. The alternator(s) shall have a minimum output at idle speed to meet the minimum continuous electrical load of all components on the vehicle. A dash mounted warning system shall be provided to indicate an alternator failure.

8.3 POWER SUPPLIES (page 22)

e. The single electrical inlet connections shall be mounted on the rear of the vehicle and provide power to both the battery charger, auxiliary air compressor, and the engine coolant pre-heater.

Replace the above paragraph with the following:

e. The single electrical inlet connections shall be mounted on the rear of the vehicle and provide power to both the battery charger, auxiliary air compressor, and the engine coolant pre-heater. An acceptable alternative to the above would be to provide two(2) electrical connections on one, but both must be auto eject.

8.3 POWER SUPPLIES (page 22)

f. A quantity of six SAE, group 31 type batteries, rated at 950 CCA each shall be provided.

Replace the above paragraph with the following:

f. A quantity of six SAE, or equivalent batteries that meet or exceed the minimum CCA of the engine manufacturer and sufficient to support the maximum vehicle requirements each shall be provided.

9.6 POWER REQUIREMENT (page 23)

The vehicle shall be equipped with a turbo charged and after cooled diesel engine, equipped with an electronic fuel management system. The engine shall be a Caterpillar C16 in-line six cylinder, four stroke engine, rated at a minimum of 680 BHP @ 2100 RPM. The engine shall meet EPA emission standards at time of vehicle manufacture.

Replace the above paragraph with the following:

The vehicle shall be equipped with a turbo charged and after cooled diesel engine, equipped with an electronic fuel management system. The engine shall be a Caterpillar C16 in-line six cylinder, four stroke engine, or equivalent rated at a minimum of 680 BHP @ 2100 RPM. The engine shall meet EPA emission standards at time of vehicle manufacture.

10.8 OFF-ROAD HIGH MOBILITY SUSPENSION (page 24)

The vehicle shall be equipped with an <u>All-Wheel Independent Suspension</u> to meet the desired ride quality and handling characteristics for an Off-Road High Mobility Vehicle as defined by Section 58 in the A/C.

Replace the above paragraph with the following:

The vehicle shall be equipped with a suspension capable of off-road operation that could include independent suspension and/or rear wheel turning.

11.1 AGENT CONTAINER(S) AND COMPONENTS, DELIVERY PIPING AND VALVES AND PROPELLANT CONTAINERS AND COMPONENTS (page26)

a. The handline for dry chemical shall be 100 ft. of one inch type twinned booster hose on a manual swing-out type hose reel. The hose reel shall be equipped with a 12

VDC electric rewind motor with manual rewind provisions. A tension device shall be installed to prevent the unreeling of the hose. This handline shall be installed to provide deployment of the hose from the lower forward compartment on the right side of the vehicle, whether in place or swung out of the compartment. The reel shall have heavy duty lock pins to keep it in place whether stowed or swung out. The pins shall have springs to hold them locked. The nozzle shall be a Williams Hydro-Chem type capable of discharging 5 lbs. per second of dry chemical and 60 GPM of foam solution in accordance with the performance requirements of the A/C. Controls at the handline shall allow charging of the nitrogen into the dry chemical tanks, and charging of the dry chemical into the handline.

Replace the above paragraph with the following:

b. The handline for dry chemical shall be 100 ft. of one inch type twinned booster hose on a fixed mount type hose reel. The hose reel shall be equipped with a 12 VDC electric rewind motor with manual rewind provisions. A tension device shall be installed to prevent the unreeling of the hose. This handline shall be installed to provide deployment of the hose from the lower forward compartment on the right side of the vehicle, whether in place or swung out of the compartment. The reel shall have heavy duty lock pins to keep it in place whether stowed or swung out. The pins shall have springs to hold them locked. The nozzle shall be a Williams Hydro-Chem type capable of discharging 5 lbs. per second of dry chemical and 60 GPM of foam solution in accordance with the performance requirements of the A/C. Controls at the handline shall allow charging of the nitrogen into the dry chemical tanks, and charging of the dry chemical into the handline.

11.1 AGENT CONTAINER(S) AND COMPONENTS, DELIVERY PIPING AND VALVES AND PROPELLANT CONTAINERS AND COMPONENTS (page26)

c. An integral electric winch or hoist shall be provided to lift and lower the nitrogen cylinder from the ground level to the stored position. The design shall be such that it shall allow one operator to perform the nitrogen cylinder re-servicing without the need for any heavy lifting or the use of additional equipment.

Replace the above paragraph with the following:

c. The nitrogen cylinder re-servicing operation shall be designed in such a manner that will allow a single operator to perform the re-servicing without the need for heavy lifting.

11.1 AGENT CONTAINER(S) AND COMPONENTS, DELIVERY PIPING AND VALVES AND PROPELLANT CONTAINERS AND COMPONENTS (page26)

f. .Provisions shall be provided to refill the nitrogen cylinder in place through a port or other intake located on somewhere on the vehicle conveniently accessible while standing on the ground.

Replace the above paragraph with the following:

f. .Provisions shall be provided to refill the nitrogen cylinder in place through a port or other intake located somewhere on the vehicle conveniently accessible while standing on the ground. An acceptable alternative is the nitrogen cylinder may be removed from vehicle for servicing or filling.

13.2 CONCENTRATE RESERVOIR AND PIPING (page 27)

Per the AC and NFPA 414 plus the following:

a. The foam reservoir shall be constructed of UV protected Polypropylene material, and shall be provided with a lifetime warranty.

b. A foam fill with a 1.50 inch NSFHT swivel female connection shall be provided on each side of the vehicle. Each fill shall be furnished with a female cam-lock fitting with plug and chain assembly. These connections can also be used as foam tank drains.

c. A pneumatic diaphragm type foam transfer pump shall be mounted in a lower compartment on the left side of the vehicle. The pump shall be plumbed into the foam system to allow filling or emptying the foam reservoir through a 1.50 inch NSFHT swivel female connection, furnished with a female cam-lock fitting with plug and chain assembly.

d. A triangular metal foam container piercing blade with guard shall be installed in the top foam fill.

Replace the above paragraph with the following:

Per the AC and NFPA 414 plus the following:

The vehicle shall be equipped with an electronic foam proportioning system capable of metering ARFF foam at 3% ratio within +/- 0.1% at any pressure, discharge rate, or temperature variation. The system shall be programmable for any foam proportion rate desired and also have a “training mode” selectable by the operator, preferably from the cab, to allow the discharge of foam at a reduced rate of 50% the normal amount of foam for any discharge. A system control pad shall be placed within a compartment on the chassis.

14.1 PIPING, COUPLINGS, CONNECTIONS, AND VALVES (page 28)

f. A pump operator's panel shall be installed on the left hand side of the vehicle. This panel shall consist of a minimum the following:
Pump engine tachometer
4.50 inch diameter liquid filled pump discharge pressure gauge
4.50 inch diameter liquid filled pump suction pressure gauge
Test connections for the pump pressure and suction gauges
Pump engine oil pressure gauge
Pump engine coolant temperature gauge
A hand throttle to control the pump engine speed
A means of selecting water or foam induction for discharge
A switch to control the operation of the priming pump and valve
Panel illumination
Pilot controlled relief valve
Engine shut down switch

Replace the above paragraph with the following:

f. A structural panel shall be provided on the vehicle that meets the requirements set forth in AC 150/5220-10D.

14.2 WATER PUMPS AND PUMP DRIVE (page 28)

a. The water pump shall be a Waterous Model CRQ with bronze body, bronze impeller and stainless steel shaft, rated at 1950 GPM.

Replace the above paragraph with the following:

a. The water pump shall be a Waterous Model CRQ or equivalent with bronze body, bronze impeller and stainless steel shaft, rated at 1950 GPM.

AUXILIARY EQUIPMENT (page 31, 32, 33)

19. TOOLS AND EQUIPMENT

The following auxiliary equipment shall be supplied with the vehicle, (provisions shall be made to have these items installed into the vehicle compartments during the initial in-service period of the truck):

19.1 Hand Tools

(2) Chock set, Aluminum, 6 inch high minimum, with mounting brackets on outside of vehicle adjacent to front wheels
(2) Brass hydrant wrenches w/brackets
(4) 2-1/2 in. spanner wrenches w/brackets
(4) 5 in. spanner wrenches w/brackets
(1) Axe, rescue, large six pound serrated large non-wedge type head and fiberglass handle mounted on the vehicle
(1) 30 pound MET-L-X fire extinguisher with bracket
(1) 15.5 pound Halotron I fire extinguisher with bracket
(1) Bar, 36" wrecking, w/gooseneck
(1) Piercing applicator, manual, 6 foot, Akron Style 1088
(1) Ladder, 2-section extension, ALCO-LITE Model PEL-24 mounted on the top of the vehicle on a gantry so as to be accessible from the ground
(1) Ladder, Little Giant Model 26, mounted on the top of the vehicle on a fixed bracket
(2) 25’ sections 5” Large Diameter supply hose fitted with Stortz style fittings
(2) Portable 500-watt floodlights with mounting brackets.

19.2 POWER TOOLS

(1) STIHL TS 800 16” Cutquick Cut-Off Machine with Diamond Wheels
(1) Ajax Rescue Tools model 911-RKM Chisel and Impact wrench kit
(1) DeWALT DC305K 36V Cordless Li-ion Reciprocating Saw Kit with AC/DC converter attachment.
(1) DeWALT DCD940KX 18V ½” Cordless XRP Drill/Driver Kit
(1) Set of Hex bit sockets

19.3 HYDRAULIC TOOLS

(1) Hurst S 530 High Pressure “Parrot Blade” Cutter
(1) Hurst SP 510 High Pressure Spreader
(1) Hurst R 430 High Pressure Rescue Ram
(1) Hurst P 620 High Pressure Mini Mate Simo Power Unit
(1) Hurst CEN HR Hose Reel with 66’ Hose Color: red/blue
(1) Hurst CEN HR Hose Reel with 66’ Hose Color: yellow/blue
(1) Hurst connection hose for reel to power-unit connectivity
(1) Hurst Ram Attachment Set

SELF CONTAINED BREATHING APPARATUS

(3) MSA Firehawk M7 4500 SCBA with HUD, Face piece, Voice amplifier, and 812973 Kit rescue hose 40 inch.
(4) MSA 4500 cylinders

Replace all of the above paragraph with the following:

19. TOOLS AND EQUIPMENT

Mounting brackets shall be provided for our in-house install of auxiliary equipment.

19.1 Both ladders can be mounted on the gantry.