

GROUND SUPPORT EQUIPMENT RFP SPECIFICATIONS

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1. AIR TO GROUND RADIO SYSTEM

A. ICOM IC-A14S Transceiver (Quantity – 3)

I. General Specifications:

- | | |
|--------------------------------|------------------------------------|
| a. Frequency Coverage: | 118.00 – 136.975 MHz |
| b. Channel Spacing: | 25 kHz |
| c. No. of Memory Channels: | 100 |
| d. Antenna Impedance: | 50 Ω |
| e. Power Supply Requirement: | 7.4 DC |
| f. Dimensions (WxHxD): | 53 x 120 x 36.9 mm |
| g. Weight: | 12.3 oz (With Antenna and BP-232N) |
| h. Water Resistant Protection: | Yes |

II. Transmitter:

- | | |
|--------------------------|----------------------|
| a. Output Power: | 5.0/1.5W |
| b. Modulation Limiting: | 70-100% |
| c. Microphone Impedance: | 3-Conductor 2.5(d)mm |

III. Receiver

- | | |
|----------------------------|--|
| a. Intermediate Frequency: | 1 st – 46.35 MHz; 2 nd – 250 kHz |
| b. Selectivity: | > 7.5 kHz/-6dB; < 25 kHz/ -60dB |
| c. Audio Output Power: | Internal Speaker >700mW; External Speaker >500mW |

IV. Accessories

- a. Li-Ion Battery Pack
- b. Battery Charger
- c. Antenna, FA-BO2AR
- d. Belt Clip

B. ICOM IC-A110B05 Commercial Base Station (Quantity – 2)

I. General Specifications:

- | | |
|------------------------------|-------------------------------------|
| a. Frequency Coverage: | 118.00 – 136.975 MHz |
| b. Channel Spacing: | 8.33/25 kHz |
| c. No. of Memory Channels: | 20 |
| d. Antenna Impedance: | 50 Ω |
| e. Power Supply Requirement: | AC to DC Transformer for office use |

II. Transmitter:

- | | |
|-------------------------|---------|
| a. Output Power: | 36W |
| b. Modulation Limiting: | 70-100% |

III. Receiver

- | | |
|----------------------------|--|
| a. Receiving System: | Double Conversion Superheterodyne |
| b. Intermediate Frequency: | 1 st – 38.85 MHz; 2 nd – 450 kHz |
| c. Audio Output Power: | Internal 1.5W; External > 10.0W |

C. All applicable equipment including antennas, repeaters, cabling and microphone will be included

- to be considered a complete system.
- D. Contractor will be required to file to appropriate agency to install a new aircraft to ground frequency for use by the FBO to communicate to aircraft.
- E. System will be considered complete once installed by contractor and fully functional.

2. RADIO TO RADIO COMMUNICATION SYSTEM

- A. Motorola CP185 (Quantity – 10)
- I. General Specifications**
- a. UHF Frequency Band
- b. Channel Capacity: 16
- c. Channel Spacing: 12.5/25 kHz
- II. Transmitter:**
- a. RF Output: 2 – 5 W
- b. Frequency Stability: ± 2.5 ppm
- c. Audio Response: +1 to -3 dB
- d. Audio Distortion: < 5%
- III. Receiver**
- a. Sensitivity: <-119 dB
- b. Audio Output Power: 500mW
- IV. Accessories**
- a. LI-Ion Battery
- b. Belt Clip
- c. Antenna
- B. All applicable equipment including antennas, repeaters, cabling, microphone and FCC licensing will be incorporated to be considered a complete system.
- C. System will be considered complete once installed by contractor and fully functional.

3. PUSHBACK TUG (DIESEL OR ELECTRIC OPTION)

- A. 32 HP Tractor
- I. General Specifications**
- a. Engine Type: E-TVCS, Liquid Cooled, 4-Cylinder Diesel
1. Make/ Model: Kubota V1505-E3-D24
2. PTO HP: 23
3. Engine HP: 32
4. Rated RPM: 2700
5. Displacement: 91.4 cu. In.
- b. Air Cleaner: Dual paper element
- c. Lubrication: Forced lubrication
- d. Cooling System: Pressurized radiator
- e. Radiator Fan: Radial air flow
- f. Fuel Tank: 8.1 gal
- g. Cooling System: 4.7 qts
- h. Engine Oil: 5.7 qts
- i. Transmission Case: 4.17 gal
- j. Clutch: Dry single plate
- k. Transmission: Hydrostatic Transmission (3 Ranges)

- I. Differential Lock: Standard
- m. Final Drive: Spur gear
- n. Brake: Multi-plate wet disc
- o. PTO Type: Live
 - 1. Rear: 540 RPM
 - 2. Mid: 2500 RPM
 - 3. Total Pump Output: 9.9 GPM
 - 4. Hydraulic Outlet: Front & Optional
 - 5. 3-Point Hitch: Category I
 - 6. Hydraulic Control System: Quarter inching valve
 - 7. Lift Capacity: 1655 Lbs @ lift point
- p. Power Steering
- q. Tire Size: Front: 24x8.5-14 Turf MultiTrac/ Rear: 13.6-16 Turf Multitrac
- r. Traveling Speeds: Forward: 12.3 MPH / Reverse: 9.8 MPH
- s. Dimensions:
 - 1. Length (w/o 3pt): 99.2 In.
 - 2. Width: 53.7 In.
 - 3. Wheelbase: 65.6 In.
 - 4. Ground Clearance: 14.6 In.
 - 5. Weight: 1,764 Lbs.

II. Warranty

- a. 1 year tractor warranty

III. Options:

- a. 4WD
- b. Front mounted tow hitch
- c. Loader Valve
- d. Rear working light
- e. Mid-mount PTO
- f. Weight Options:
 - 1. Front Weights: 4
 - 2. Rear Wheel Weights: 2
 - 3. Rear Bumper Weight Bracket: Included
- g. 60" Rotary Sweeper
- h. 2 year tractor warranty

IV. New, used and leased equipment will be considered.

B. TUG Technologies GT35

I. General Specifications

- a. Engine Type: Liquid Cooled, 4-Cylinder Diesel
 - 1. Make/ Model: Deutz Model BF-4M2012
 - 2. Engine HP: 100
 - 3. Rated RPM: 2500
 - 4. Displacement: 246.5 cu. In.
- b. Fuel Tank: 18 gal
- c. Transmission: Funk Mfg. CO.
 - 1. Type: Torque Converter/Power Shift
 - 2. Speeds: Three Forward, Three reverse
 - 3. Controls: Mechanical with downshift inhibitor

- d. Brake:
 - 1. Service: Wet disc, internal
 - 2. Parking: Mechanical actuated caliper on transmission
- e. Axles:
 - 1. Rear: Planetary – drive/rigid
 - 2. Front: Planetary – drive/steer
 - 3. Interaxle Differential: No Spin
- f. Power Steering
- g. Tire Size: Front: 315/80R22.5 radial, tubeless Rear: 315/80R22.5 radial tubeless
- h. Traveling Speeds: Forward: 12 MPH / Reverse: 12 MPH
- i. Dimensions:
 - 1. Length: 199 In.
 - 2. Width: 84 In.
 - 3. Wheelbase: 84 In.
 - 4. Ground Clearance: 8 In.
- II. Warranty**
- a. 1 year tractor warranty
- III. Options:**
- a. Amber flashing beacon
- b. Front and rear communication jacks
- c. Spare tire and wheel
- d. Front and rear hitch light
- e. Weight Options: Ballast to 35,000 lbs.
- f. Low engine oil pressure, high engine coolant temperature, automatic engine shutdown with override switch
- g. 2 year tractor warranty
- IV. New, used and leased equipment will be considered.**

4. AIRCRAFT TOW BAR

- A. TR-34 Towbar
 - I. General Specifications**
 - a. Maximum aircraft gross weight: 14,000 lbs
 - b. Maximum opening 12 1/2"
 - c. Length: 92" closed, 104" extended
 - d. Weight: 35 lbs.
 - e. Shock ring hitch
- B. TY-TB 75 Towbar
 - I. General Specifications**
 - a. Maximum aircraft gross weight: 75,000 lbs
 - b. Tow Eye: 3" Standard
 - c. Length: 10'
 - d. Multi Link Heads
 - e. Aluminum 3" I.D. Tube

5. PORTABLE GROUND POWER UNIT(S)

A. Hobart GPU 400

I. General Specifications

- a. Supply Voltage:
- b. Full Load Input Current:
- c. Frequency: 60 Hz
- d. Nominal Output Voltage: Standard – 28.5, Optional – 14.25
- e. Output Voltage: $\pm .05\%$
- f. Amperes Continuous: 400
- g. Dimensions (LxWxH): 46.5" x 33" x 33"
- h. Weight: 750 lbs
- i. DC Output Cable Length: 40 ft
- j. Input Cable Length: 75 ft
- k. 14V Output Kit: Yes

II. New, used and leased equipment will be considered.

B. Hobart Jet Ex 4P

I. General Specifications

- a. Durable All-Welded Steel Frame: Trailer Mounted Unit
- b. Industrial Engine: 64 HP Minimum
- c. Steel Fuel Tank: 10 Hr Operation at Rated Load
- d. Low Oil Pressure, High Water Temperature and Over Speed Shutdown
- e. Starter Cut-Out
- f. Single 875 CCA Battery
- g. 28.5 V DC Output
- h. 550 Amperes at 28.5 V DC
- i. Adjustable Current Limiting "Soft Start" from 300 amps at 28.5 V to 1600 amps at 20 V
- j. Line Drop Compensation

II. Display/ Instrumentation

- a. Panel, Clearance Lights
- b. Output Voltmeter and Ammeter
- c. Engine Start Switch
- d. Engine Idle/ Run Switch
- e. Engine "On" Light
- f. Low Oil Pressure Bypass Control During Starting
- g. Contactor Close/Open Switch
- h. Contactor "Closed" Light
- i. Gauges: Tachometer, Oil Pressure, Fuel Level, Water Temperature, Hour Meter, Battery Charging Ammeter
- j. Complies With All Applicable Standards

C. Both the Hobart GPU 400 and Hobart Jet Ex 4P may be used and refurbished equipment as long as equipment is in excellent mechanical condition.

D. All equipment should meet compliance with all applicable standards.

E. Equipment should be painted with DuPont Dulux automotive enamel; color should be white.

F. **New, used and leased equipment will be considered.**

6. TOWABLE LAVATORY SERVICE UNIT

A. LC100E

I. General Specifications

- a. Dimensions (LxHxW): 93"; 37"; 46"
- b. Weight (Empty): 750lbs
- c. Waste Tank: 68 Gal
- d. Fill/ Flush Tank: 34 Gal
- e. Pump:
 1. Flojet 12 volt DC electric pump, 4.5 gal per minute @ 45 PSI
 2. Gelstar deep cycle 12 volt marine battery
 3. CE marked 12 volt charger (110/220V)
 4. Guzzler 2600 heavy duty diaphragm hand pump
- f. Fill Hose: 1" I.D. reinforced PVC hose, 10'
- g. Fill Coupler: 1" short grip anodized aluminum fill coupler, with plug
- h. Flow Meter: Fill-Rite manual reset flow meter
- i. Waste Hose: 4" I.D. nylon helix reinforced translucent blue nylon hose, 7'4"
- j. Waste Coupler: Airlinx composite general aviation straight coupler
- k. Chasis: Powder coated steel, color: white

II. New, used and leased equipment will be considered.

7. WATER CART

A. Portable Water Cart

I. General Specifications

- a. Water transfer system
 - b. Heavy-duty water pump
 - c. Commercial-duty construction and design
 - d. Powder coated finish with stainless steel hardware
 - e. New or like new houses and fittings
- II. New, used and leased equipment will be considered.

8. PORTABLE AIR START

A. Bottle Air Start

I. General Specifications

- a. 3 lbs per minute recovery
- b. Two high flow relief valves prevent aircraft over pressurization
- c. ASME certified receiver tank (with inspection man-way)
- d. Pressure gauge and relief valve
- e. Unloaded starting
- f. Low oil level protection
- g. Inner & after cooler system
- h. Automatic condensate drain system

- i. Heavy duty fan cooled air compressor
- j. Central air start control panel
- k. Emergency shut off valve removes all air flow to aircraft
- l. Heavy duty fifth wheel steering with towbar operated brakes
- m. Meets or exceeds all airport noise restrictions
- n. 30 ft. (9.1 m) start hose with scuff jacket and aircraft coupling

II. Warranty

- a. 1 year on workmanship
- b. 1 year on new/ refurbished components
- c. 1 year on chassis

III. New, used and leased equipment will be considered.

9. PORTABLE PRE-CONDITIONED AIR / HEAT CART

A. Pre-Conditioned Air Unit

I. General Specifications

- a. 20-30 Ton Capacity
- b. Cooling Discharge Air Temperature: 34 – 37 degrees Fahrenheit
- c. Engine should be diesel and in excellent mechanical condition
- d. All hoses, connections, etc., should be new or in excellent condition

II. Options

- a. 28 VDC Power Supply
- b. 400 Hz Power Supply
- c. Heat pack with discharge temperature over 100 degrees Fahrenheit

III. New, used and leased equipment will be considered.

10. FUEL TRUCKS

A. (1) 5000 Gallon Jet A Fuel Truck

I. General Specifications

- a. Chassis: International/ Freightliner/ Sterling
- b. Year: 1998 or Newer
- c. Engine: Diesel
- d. Transmission: Automatic
- e. All Drive Train Fluids & Filters Replaced
- f. Tires to be 75% Without Wear Checking
- g. Brakes to be inspected and replaced if necessary
- h. Interior upholstery to be in good condition or replaced if necessary
- i. Front Axle: Single – 14,000#
- j. Rear Axle: Single – 40,000#
- k. Chassis Accessories: Master battery disconnect switch, hour meter, exhaust modified per NFPA 407
- l. Tank: 5,000 gallon stainless steel or aluminum tank per DOT-406, one compartment tank fully baffled; tank shall be leak tested with new rubber sills and mounting hardware installed as necessary.
- m. Water Drain: Two Morrison 372 emergency type valves in tank with synflex tubing drain line

- n. Internal Valve: 3" Internal Valve
- o. Vent: Pneumatically or mechanically operated vent to work in conjunction with the internal valve(s) during fueling, bottom loading and defueling
- p. Pump: Gorman Rupp pump rated at 300 GPM; pump shall be hot-shift PTO driven.
- q. Bypass: 3" bypass valve; valve and servo shall be rebuilt as necessary.
- r. Deadman Valve: 3" deadman valve with new 50' cord and electric handle mounted at the side reel. Valve and servo shall be rebuilt as necessary.
- s. Hose Reels: (3) Hannay reels, electric rewind – new chains installed after paint. Shutoff valves shall be immediately upstream of the house reels.
- t. Hoses: (2) New 1 ¼" x 50' mxm on the overwing reels, (1) New 2" x 50' mxm on the underwing reel – test certificates shall be supplied with the manual.
- u. Overwing Nozzles: (2) OPW 295SAJ series overwing nozzles complete with 1 ½" jet spouts, 100 mesh strainers, grounding cables, dust covers and swivel inlets.
- v. Underwing Nozzle: (1) Underwing nozzle complete with a dust cap, 100-mesh strainer and swivel inlet – the nozzle shall be rebuilt.
- w. Static Reel: Spring rewinding reel, new 50' plastic coated static cable and clamp installed.
- x. Meter: (1) Liquid Controls 300 GPM meter and (1) Liquid Controls 100 GPM meter with Veeder Root mechanical register heads to read in gallons – totalizers shall be zeroed prior to shipment.
- y. Filter Vessel: 300 GPM filter separator complete with in/out Millipore connections, water defense and a spring-loaded drain. New 5th edition elements installed after flow test.
- z. Air Elimination: An air eliminator and pressure relief valve shall be installed on the filter vessel discharging back to the product tank.
- aa. Differential Pressure Gauge: Gammon 0-15 PSI differential pressure gauge with test valve and new filter installed.
- bb. Control Panel: The unit shall include an aluminum control panel with a 4" nozzle pressure gauge, differential pressure gauge w/ test button, pump pressure gauge and operating instructions.
- cc. Bottom Load: Three-lug bottom load adapter with brake interlock, pre-check and high level shutoff.
- dd. Fire Extinguisher: (2) New UL 20lb BC fire extinguishers with brackets for storage
- ee. Lights and Wiring: Betts vapor proof system including brake lights, turn signals, marker lights and back-up lights. Lights on bottom load area, cabinet, meter registers and control panel. Back-up alarm at the rear of unit and an LED amber beacon on the front of tank dam with an on/off switch in the truck cab.
- ff. Interlock System: Brake interlock switches on the pump, bottom load connection, overwing nozzle holders and the underwing nozzle holder. Momentary override switch on the dash with a wire sealed red cover.
- gg. Emergency Shutdowns: (2) Emergency shutdowns; one located on the left side and one on the right side of the unit.
- hh. Piping: Non-ferrous piping with Victaulic connections.
- ii. Additive Injection: Hammonds or Gammon additive injection system complete with suction tube and Prist tank or 5-gallon pail holder.
- jj. Maintenance and Operating Manual: Provide one copy of maintenance and operating manual per unit.
- kk. New PPG Defleet paint on cab and equipment, color specified by county during award.
- ll. New decals per NFPA 407 and all other required markings

II. Warranty

- a. 1 year on workmanship
- b. 1 year on new/ refurbished components
- c. 1 year on chassis
- d. 5 year on paint and finish

III. Optional Equipment

- a. PLC control system with touch screen color display to record: fueler login, tail number/ flight number input, data logging via SD card, fuel/defuel control and status, high/low throttle selection, interlock indication/ diagnostics, emergency trip indication, gauge/meter calibration reminder, PM reminder and filter element change reminder.
 - 1. Add wireless capability to PLC control system.
 - 2. Add capability to monitor PPM, print the PPM on a ticket and shut the truck down if the PPM ventures outside of set parameter.
- b. Ultrasonic tank level system with digital display.
- c. Install intrinsically safe deadman timer control system with coil cord, electric deadman handle and blue signal light on control panel.
- d. Rochester 8" tank contents gauge on left side of tank.
- e. Single receptacle Scully overfill prevention system.
- f. Large digital meter display on left side of unit.
- g. Lockable aluminum toolbox on right side of unit.
- h. Gammon visual sampler with backlighting and spring loaded fill and drain valves.
- i. Stainless steel sense lines in lieu of Synflex.
- j. Rear mounted camera with 7" LCD screen in cab
- k. Aluminum head duty chock box holder.
- l. Defuel capabilities
- m. 10 gallon product recovery tank complete with a 10" fill lid, vent, contents gauge, high level shut off and spring loaded drain.
- n. Safety rails which automatically raise and lower when interlocked
- o. Veeder Root EMR-3 or LC LCR-II electronic register head with and Epson TMU-295 electronic ticket printer in the cab of the truck.
- p. New PPG Defleet paint on tank, color specified by county during award.

B. (1) 3000 Gallon Jet A Fuel Truck**I. General Specifications**

- a. Chassis: International/ Freightliner/ Sterling/ Ford
- b. Year: 1998 or Newer
- c. Engine: Diesel
- d. Transmission: Automatic
- e. All Drive Train Fluids & Filters Replaced
- f. Tires to be 75% Without Wear Checking
- g. Brakes to be inspected and replaced if necessary
- h. Interior upholstery to be in good condition or replaced if necessary
- i. Front Axle: Single – 12,000#
- j. Rear Axle: Single – 21,000#
- k. Chassis Accessories: Master battery disconnect switch, hour meter, exhaust modified per NFPA 407
- l. Tank: 3,000 gallon stainless steel or aluminum tank per DOT-406, one compartment tank fully baffled; tank shall be leak tested with new rubber sills and mounting hardware

- installed as necessary.
- m. Water Drain: Two Morrison 372 emergency type valves in tank with synflex tubing drain line terminating in ball valve and 90 degree elbow.
 - n. Internal Valve: 3" Internal Valve
 - o. Vent: Pneumatically or mechanically operated vent to work in conjunction with the internal valve(s) during fueling, bottom loading and defueling
 - p. Pump: Gorman Rupp pump rated at 300 GPM; pump shall be hot-shift PTO driven.
 - q. Bypass: 3" bypass valve; valve and servo shall be rebuilt as necessary.
 - r. Deadman Valve: 3" deadman valve with new 50' cord and electric handle mounted at the side reel. Valve and servo shall be rebuilt as necessary.
 - s. Hose Reels: (3) Hannay reels, electric rewind – new chains installed after paint. Shutoff valves shall be immediately upstream of the house reels.
 - t. Hoses: (2) New 1 ¼" x 50' mxm on the overwing reels, (1) New 2" x 50' mxm on the underwing reel – test certificates shall be supplied with the manual.
 - u. Overwing Nozzles: (2) OPW 295SAJ series overwing nozzles complete with 1 ½" jet spouts, 100 mesh strainers, grounding cables, dust covers and swivel inlets.
 - v. Underwing Nozzle: (1) Underwing nozzle complete with a dust cap, 100-mesh strainer and swivel inlet – the nozzle shall be rebuilt.
 - w. Static Reel: Spring rewinding reel, new 50' plastic coated static cable and clamp installed.
 - x. Meter: (1) Liquid Controls 300 GPM meter and (1) Liquid Controls 100 GPM meter with Veeder Root mechanical register heads to read in gallons – totalizers shall be zeroed prior to shipment.
 - y. Filter Vessel: 300 GPM filter separator complete with in/out Millipore connections, water defense and a spring-loaded drain. New 5th edition elements installed after flow test.
 - z. Air Elimination: An air eliminator and pressure relief valve shall be installed on the filter vessel discharging back to the product tank.
 - aa. Differential Pressure Gauge: Gammon 0-15 PSI differential pressure gauge with test valve and new filter installed.
 - bb. Control Panel: The unit shall include an aluminum control panel with a 4" nozzle pressure gauge, differential pressure gauge w/ test button, pump pressure gauge and operating instructions.
 - cc. Bottom Load: Three-lug bottom load adapter with brake interlock, pre-check and high level shutoff.
 - dd. Fire Extinguisher: (2) New UL 20lb BC fire extinguishers with brackets for storage
 - ee. Lights and Wiring: Betts vapor proof system including brake lights, turn signals, marker lights and back-up lights. Lights on bottom load area, cabinet, meter registers and control panel. Back-up alarm at the rear of unit and an LED amber beacon on the front of tank dam with an on/off switch in the truck cab.
 - ff. Interlock System: Brake interlock switches on the pump, bottom load connection, overwing nozzle holders and the underwing nozzle holder. Momentary override switch on the dash with a wire sealed red cover.
 - gg. Emergency Shutdowns: (2) Emergency shutdowns; one located on the left side and one on the right side of the unit.
 - hh. Piping: Non-ferrous piping with Victaulic connections.
 - ii. Additive Injection: Hammonds or Gammon additive injection system complete with suction tube and Prist tank or 5-gallon pail holder.
 - jj. Maintenance and Operating Manual: Provide one copy of maintenance and operating manual per unit.

- kk. New PPG Defleet paint on cab and equipment, color specified by county during award.
- ll. New decals per NFPA 407 and all other required markings

II. Warranty

- a. 1 year on workmanship
- b. 1 year on new/ refurbished components
- c. 1 year on chassis
- d. 5 year on paint and finish

III. Optional Equipment

- a. PLC control system with touch screen color display to record: fueler login, tail number/ flight number input, data logging via SD card, fuel/defuel control and status, high/low throttle selection, interlock indication/ diagnostics, emergency trip indication, gauge/meter calibration reminder, PM reminder and filter element change reminder.
 - 1. Add wireless capability to PLC control system.
 - 2. Add capability to monitor PPM, print the PPM on a ticket and shut the truck down if the PPM ventures outside of set parameter.
- b. Ultrasonic tank level system with digital display.
- c. Install intrinsically safe deadman timer control system with coil cord, electric deadman handle and blue signal light on control panel.
- d. Rochester 8" tank contents gauge on left side of tank.
- e. Single receptacle Scully overfill prevention system.
- f. Large digital meter display on left side of unit.
- g. Lockable aluminum toolbox on right side of unit.
- h. Gammon visual sampler with backlighting and spring loaded fill and drain valves.
- i. Stainless steel sense lines in lieu of Synflex.
- j. Rear mounted camera with 7" LCD screen in cab
- k. Aluminum head duty chock box holder.
- l. Defuel capabilities
- m. 10 gallon product recovery tank complete with a 10" fill lid, vent, contents gauge, high level shut off and spring loaded drain.
- n. Safety rails which automatically raise and lower when interlocked
- o. Veeder Root EMR-3 or LC LCR-II electronic register head with and Epson TMU-295 electronic ticket printer in the cab of the truck.
- p. New PPG Defleet paint on tank, color specified by county during award.

c. (1) 3,000 Gallon AVGAS Fuel Truck

I. General Specifications

- a. Chassis: International/ Freightliner/ Sterling/ Ford
- b. Year: 1998 or Newer
- c. Engine: Diesel
- d. Transmission: Automatic
- e. All Drive Train Fluids & Filters Replaced
- f. Tires to be 75% Without Wear Checking
- g. Brakes to be inspected and replaced if necessary
- h. Interior upholstery to be in good condition or replaced if necessary
- i. Front Axle: Single – 12,000#
- j. Rear Axle: Single – 21,000#
- k. Chassis Accessories: Master battery disconnect switch, hour meter, exhaust modified per NFPA 407

- l. Tank: 3,000 gallon stainless steel or aluminum tank per DOT-406, one compartment tank fully baffled; tank shall be leak tested with new rubber sills and mounting hardware installed as necessary.
- m. Water Drain: (1) Morrison 372 emergency type valve in tank with synflex tubing drain line terminating in ball valve and 90 degree elbow.
- n. Internal Valve: 3" Internal Valve
- o. Vent: Pneumatically or mechanically operated vent to work in conjunction with the internal valve during fueling and bottom loading
- p. Pump: Gorman Rupp or Blackmer pump rated at 100 GPM; pump shall be hot-shift PTO driven - Blackmer pump requires a low level float to be installed in the bottom of the tank.
- q. Bypass: Inline bypass valve or bypass built into the pump.
- r. Hose Reels: (1) Hannay reel, electric rewind – new chains installed after paint. Shutoff valves shall be immediately upstream of the house reels.
- s. Hoses: (1) New 1 ¼" x 65' mxm on the reels – test certificates shall be supplied with the manual.
- t. Overwing Nozzles: (1) OPW 295SA series overwing nozzles complete with 1" round spouts, 100 mesh strainers, grounding cables, dust covers and swivel inlets.
- u. Static Reel: Spring rewinding reel, new 65' plastic coated static cable and clamp installed.
- v. Meter: (1) Liquid Controls 100 GPM meter and with Veeder Root mechanical register head to read in 1/10 gallons – totalizer shall be zeroed prior to shipment.
- w. Filter Vessel: 100 GPM filter separator complete with in/out Millipore connections, water defense and a spring-loaded drain. New water absorbing elements installed after flow test.
- x. Air Elimination: An air eliminator and pressure relief valve shall be installed on the filter vessel discharging back to the product tank.
- y. Differential Pressure Gauge: Gammon 0-30 PSI differential pressure gauge with test valve and new filter installed.
- z. Control Panel: The unit shall include an aluminum control panel with a differential pressure gauge w/ test button, pump pressure gauge and operating instructions.
- aa. Bottom Load: 2" Kamvalock bottom load adapter with brake interlock, pre-check and high level shutoff.
- bb. Fire Extinguisher: (2) New UL 20lb BC fire extinguishers with brackets for storage
- cc. Lights and Wiring: Betts vapor proof system including brake lights, turn signals, marker lights and back-up lights. Lights on bottom load area, cabinet, meter registers and control panel. Back-up alarm at the rear of unit and an LED amber beacon on the front of tank dam with an on/off switch in the truck cab.
- dd. Interlock System: Brake interlock switches on the pump, bottom load connection, overwing nozzle holder. Momentary override switch on the dash with a wire sealed red cover.
- ee. Emergency Shutdowns: (2) Emergency shutdowns; one located on the left side and one on the right side of the unit.
- ff. Piping: Non-ferrous piping with Victaulic connections.
- gg. Maintenance and Operating Manual: Provide one copy of maintenance and operating manual per unit.
- hh. New PPG Defleet paint on cab and equipment, color specified by county during award.
- ii. New decals per NFPA 407 and all other required markings

II. Warranty

- a. 1 year on workmanship
- b. 1 year on new/ refurbished components
- c. 1 year on chassis

- d. 5 year on paint and finish

III. Optional Equipment

- a. PLC control system with touch screen color display to record: fueler login, tail number/ flight number input, data logging via SD card, fuel/defuel control and status, high/low throttle selection, interlock indication/ diagnostics, emergency trip indication, gauge/meter calibration reminder, PM reminder and filter element change reminder.
 - 1. Add wireless capability to PLC control system.
- b. Ultrasonic tank level system with digital display.
- c. Rochester 8" tank contents gauge on left side of tank.
- d. Single receptacle Scully overfill prevention system.
- e. Large digital meter display on left side of unit.
- f. Lockable aluminum toolbox on right side of unit.
- g. Gammon visual sampler with backlighting and spring loaded fill and drain valves.
- h. Stainless steel sense lines in lieu of Synflex.
- i. Rear mounted camera with 7" LCD screen in cab
- j. Aluminum head duty chock box holder.
- k. 10 gallon product recovery tank complete with a 10" fill lid, vent, contents gauge, high level shut off and spring loaded drain.
- l. Safety rails which automatically raise and lower when interlocked
- m. Veeder Root EMR-3 or LC LCR-II electronic register head with and Epson TMU-295 electronic ticket printer in the cab of the truck.
- n. 50' air house with air tools and a spring loaded rewind hose reel for storage.
- o. New PPG Defleet paint on tank, color specified by county during award.

11. Crew Access Stair

- A. Watkins Aircraft Support Products Model A01152D (or equivalent)

I. General Specifications

- a. Adjustable height from 92.5 inches to 135 inches.
- b. Manual screw leveling jacks.
- c. Capacity 500 pounds.
- d. Padded bumpers on lead edge to aircraft.
- e. Towbar equipped.

II. Options

- a. Platform and stair lights.

- B. **New, used and leased equipment will be considered.**

12. Baggage / Cargo Cart

- A. Watkins Aircraft Support Products (or equivalent)

I. General Specifications

- a. 8,000 pound capacity
- b. Rigid axle running gear
- c. 5th wheel steering
- d. All bearings lubed and sealed
- e. 20-25 mph towing speed

II. Options

- a. Tarp and holder
- b. Flat or v-style floor

B. **New, used and leased equipment will be considered.**

13. Belt Loader

A. **Watkins Aircraft Support Products Beltloader (or equivalent)**

I. General Specifications

- a. Aircraft Compatibility. Ability to service aircraft with lower lobe doorsill heights between 37 and 108 inches.
- b. Conveyor Bed.
 - 1. Belt width: 24 inches
 - 2. Belt movement: forward-stop-reverse.
 - 3. Belt support: roller bed.
- c. Engine should be diesel and in excellent mechanical condition
- d. Transmission and Drive Axle:
 - 1. Hydraulic motor/differential
 - 2. Variable forward and reverse speeds
- e. Steering System. Manual
- f. Brakes:
 - 1. Dynamic: Automatic
 - 2. Parking: Manual disc.

II. Options

- a. Rear lift

B. **New, used and leased equipment will be considered.**