

JUSTIFICATION FOR NON-COMPETITIVE PROCUREMENT

COMPLETE THIS SECTION IF NEW CONTRACT

For contract(s) in this request, answer applicable questions in each of the 4 major subject areas below in accordance with the Instructions for Preparation of Non-Competitive Procurement Form on the reverse side.

Request that negotiations be conducted only with AK Specialty Vehicles for the product and/or services described herein.
(Name of Person or Firm)

This is a request for _____ (One-Time Contractor Requisition # 28613, copy attached) or _____ Term Agreement or _____ Delegate Agency (Check one). If Delegate Agency, this request is for "blanket approval" of all contracts within the Mobile Lab Containment Attach List) Pre-Assigned Specification No. _____
(Program Name) Pre-Assigned Contract No. _____

COMPLETE THIS SECTION IF AMENDMENT OR MODIFICATION TO CONTRACT

Describe in detail the change in terms of dollars, time period, scope of services, etc., its relationship to the original contract and the specific reasons for the change. Indicate both the original and the adjusted contract amount and/or expiration date with this change, as applicable. Attach copy of all supporting documents. Request approval for a contract amendment or modification to the following:

Contract #: _____ Company or Agency Name: _____
 Specification #: 48637 Contract or Program Description: _____
 Mod. #: _____ (Attach List, if multiple)

Karen L Sanger 745-4196 Karen Lu Fire 6/28/06
Originator Name Telephone Signature Department Date

Indicate SEE ATTACHED in each box below if additional space needed:

<input checked="" type="checkbox"/> PROCUREMENT HISTORY	SEE ATTACHED	S. S. R. B. DATE <u>7-12-06</u> APPROVED _____ CONDITIONALLY APPROVED <u>4-0</u> RETURN TO DEPT _____ DISAPPROVED _____
<input checked="" type="checkbox"/> ESTIMATED COST	SEE ATTACHED	
<input checked="" type="checkbox"/> SCHEDULE REQUIREMENTS	SEE ATTACHED	
<input checked="" type="checkbox"/> EXCLUSIVE OR UNIQUE CAPABILITY	See Attached	
<input checked="" type="checkbox"/> OTHER	See Attached	

APPROVED BY: Karen Lu 6/28/06 Cwm Humphrey 7/14/06
DEPARTMENT HEAD OR DESIGNEE DATE BOARD CHAIRPERSON DATE

Procurement History

Describe the requirement and how it evolved from initial planning to its status.

- 1 The Mobile lab project was initially conceived approximately 3 years ago and was funded by DHS with UASI funding which expires in November 2006. The project included two mobile modules consisting of the Data Analysis Module and the Containment Module and equipment to complete the mission. The lab platform will give us the ability to set up a large scale monitoring at an event as well as the capability to make tactical preliminary identifications of unknown solids, liquids, and gases on the scene of an emergency. Additionally, we would be able to provide emergency scene fit testing for respiratory protective equipment. The data collected from the containment module will be pushed into the data analysis module, which will then be analyzed and used for making tactical response decisions. The Data Analysis Module is currently being built by Fleet under an existing contract. The mobile lab containment module, due to its technical requirements and related equipment, could not be built under an existing contract. Over \$500,000 of equipment for this project has already been delivered to the Chicago Fire Department's Special Operations Division. This program is relative to our ability to safely, effectively, and efficiently provide hazardous material's advanced detection and identification to Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) incidents. This request is a determination of what was needed in relation to equipment, training, and operational procedures in order to bring the Special Operations response team to a level of operational readiness for CBRNE incidents.

Is this a first time requirement or a continuation of previous procurement from the same source? If so, explain the procurement history.

2. This is the first procurement for this equipment by the Chicago Fire Department.

Explain attempts made to competitively bid the requirement.

3. Fleet has researched available vendors for this project and has determined that a sole source is necessary for the containment module. This is due to the seamless interoperability needed between the two modules as well as the high level of expertise needed to build a safe containment module. This containment module will be able to accept highly toxic and potentially lethal solid, liquid, and gas samples for detection and identification without posing a risk to the operators. Additionally, funding for this project will be expiring in November 2006. Fleet has provided the fire department with the attached sole source spec.

Describe all research done to find other sources.

4. In completing our research for the containment module platform, on the Internet as well as talking to other major fire departments we have found this concept to be unique with no other fire department with this type of modular concept . With providing our containment module specs to fleet they have returned to us that this is the only vender to be able to meet this our requirements including delivery time.

Explain future procurement objectives. Is this a one-time request or will future requests by made for doing business with the same source?

5. We believe the active life of the containment module to be at a minimum of 4 years. Any changes in technology would go through normal procurement channels and would be required to integrate with the existing modules.

Explain whether or not future competitive bidding is possible. If not, why not?

6. Future competitive bidding would be possible for possible technology upgrades as well as at time of replacement of the modules if other manufacturer could meet the specifications at that time

ESTIMATED COSTS

What is the estimated cost for this requirement. What is the funding source?

- 1 The UASI funding for the containment module is estimated at \$725,405.80 The funding source is the 2004 Urban Area Security Initiative grant.

What is the estimated cost by fiscal year, if the job project or program covers multiple years?

2. O

Explain the basis for estimating the cost and what assumptions were made and/or data used.

3. See attached Quotes

Explain whether the proposed Contractor or the City has a substantial dollar investment in original design, tooling or other factors which would be duplicated at City expense if another source was considered.

4. The City has no investment in the design of any of the items requested.

Explain what negotiation of price has occurred or will occur. Detail why the estimated cost is deemed reasonable.

5. The Fire department deems the price reasonable given the technology involved and the functionality of the module and equipment.

Schedule Requirements

Explain how the schedule was developed and at what point the specific dates were known.

1. This department received final approval to expend this money in April 2005. The ensuing months were spent researching the most appropriate avenue of obtaining this equipment. The current expiration date of the UASI funding is **November 30th, 2006**. With a 120 day build and integration schedule, it is imperative for this department to have a contract released with priority to ensure this equipment can be ordered and paid by this expiration date. The City cannot afford to lose this amount of funding.

Is the lack of drawings and/or specifications a constraining factor to competitive bidding?

2. D/N/A.

Outline the required schedule by delivery or completion dates and explain the reason why the schedule is critical.

3. See Number 1 above.

Describe in detail what impact delays for competitive bidding would have on City operations, programs, costs and budgeted funds.

4. Competitive bidding is not possible.

Exclusive or Unique Capability

If contemplating hiring a person or firm as a Professional Service Consultant, explain in detail what professional skills they possess.

1. DNA

Does the proposed firm have personnel considered predominant in the particular field?

2. DNA

What prior experience of a highly specialized nature does the person of firm possess?

3. DNA

What technical facilities or test equipment does the person or firm exclusively possess of a highly specialized nature which is vital to the job.

4. DNA

What other capabilities and/or capacity does the proposed firm possess which is necessary for the specific job?

5. DNA

If procuring products or equipment, describe the intended use and explain any unique capabilities, features and/or functions the items have which no other brands or models, etc. possess. Is compatibility with existing equipment critical from an operational standpoint? Explain why.

Data Analysis Module and the Containment Module and equipment to complete the mission. will give us the ability to set up a large scale monitoring at a event as well as the capability to make tactical preliminary identifications of unknown solids liquids and gasses on the scene of an emergency. Additionally we would be able to provide emergency scene fit testing for respiratory protective equipment. The data collect from the containment module will the be pushed into the data analysis module which will then be analyzed and used for making tactical response decisions. This program is relative to our ability to safely, effectively, and efficiently provide hazardous material's advanced detection and identification to Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) incidents. This capability will allow the Chicago Fire department to greatly increase ability to protect the first responders and citizens of the City of Chicago on the scene of a terrorist attack, hazardous material incident, including, Chemical, Biological, Radiological, Nuclear and Explosive material.

Is competition precluded because of the existence of patent rights, copyrights, trade secrets, technical data, or other proprietary data?

7. NO

If procuring replacement parts and/or maintenance services, explain whether or not replacement parts and/or services can be obtained from other sources?

8. Replacement parts and maintenance service is provided through Fleet management for the module. Equipment onboard has warranties provided by the individual manufacturers

AK SPECIALTY VEHICLES

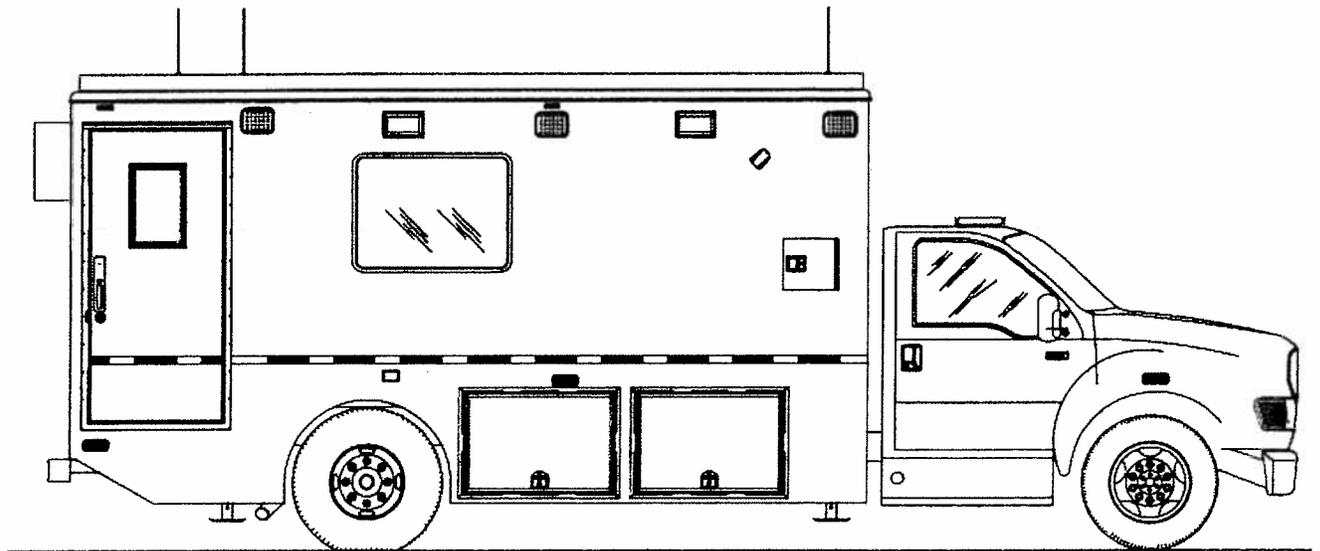
Proposal

TO: Mr. Ed Ebertsch

FOR: C-28 Mobile Hazmat Lab Vehicle

**SUBMITTED BY: Randy Hardwick
Regional Sales Manager**

DATE: June 14, 2006





June 14, 2006
Page 1 of 2

PURCHASE AGREEMENT

City of Chicago
Department of Fleet Management
Attention: Edward Ebertsch
Sr. Automotive Equipment Analyst
1685 N. Throop Street
Chicago, Illinois 60622

PRICING:

- AKSV C-28 Mobile Hazmat Lab Vehicle for The City of Chicago as depicted in the attached specifications and drawings.

Rack Ready Vehicle with Fixed Equipment (2 Glove Boxes & 1 Refrigerator) Installed \$449,900.00
Loose Equipment Total (See attached spreadsheet for details) \$275,505.80

TOTAL VEHICLE PRICE **\$725,405.80**

NOTE: Except as indicated above pricing excludes any applicable local, state or federal taxes, VAT, duties, etc.

FOB:

- City of Chicago
1685 N. Throop Street
Chicago, Illinois 60622

DELIVERY:

- Executed PO must be received by AKSV prior to 7/1/06.
- Chassis must be delivered to AKSV prior to 8/1/06.
- If the above two conditions are met, AKSV will agree to have the vehicle 100% complete by 11/1/06.

PAYMENT TERMS:

- Full payment is due sixty (60) days after delivery.
- Upon completion of the mobile unit, AK Specialty Vehicles will allow ten (10) days of storage. On the eleventh day, a \$90.00 per day storage rate will be charged for every day the unit remains at our facility. Full payment for storage space is required, prior to the release of the mobile unit. Please note: The warranty agreement will begin on the day the unit is complete and ready for delivery.

INSPECTION AND ACCEPTANCE:

- Please review attached Site Planning Guide prior to acceptance.
- Unit must be inspected and accepted by the customer or authorized representative at our factory prior to shipment. Airfare and traveling expenses are not included in this purchase agreement.



June 14, 2006
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PURCHASE AGREEMENT #

WARRANTY:

- Twelve (12) months from delivery. (See attached Warranty Statement.)

VALIDITY:

- This quotation is valid for acceptance within thirty (30) days from the date of this proposal.

Product Improvement Policy:

In accordance with our program of continuing product improvement, AK Specialty Vehicles reserves the right to make changes in the equipment, design, specifications, and material of the products described here, as required.

Please indicate your acceptance of this agreement by placing your signature below. No order is firm until a written acknowledgement is received by the customer.

Presented by:

Accepted for the Customer by:

Randal Hardwick
AK Specialty Vehicles
16745 S. Lathrop Avenue
Harvey, Illinois 60426
T: (708) 596-5066
F: (708) 596-2480

Signed for AK Specialty Vehicles

Signed and Accepted for the Customer

Date

Date

**HazMat Lab Equipment Supplied by AKSV Breakdown
as of 6/14/06**

Item	QTY	Model #	List Price	AKSV Cost	City of Chicago Cost
Smith Detection Hazmat ID and Gas ID	1	#023-3012	\$118,750.00	\$118,750.00	\$135,563.00
IdentifINDER Isotope Identifier	3	IDF-NG	\$10,011.47	\$30,034.41	\$35,540.00
Sabre 4000 Nitrate Identifier	2	4816600NEGC	\$25,650.00	\$51,300.00	\$58,995.00
Tellular Phonecell SX5T-535C includes shipping	3	SX5T-535C	\$454.00	\$1,362.00	\$1,555.00
Panasonic Toughbooks w/port replicator	4	835742 & 736129	\$4,942.00	\$19,768.00	\$27,491.80
DVD-ROM/CD-R/RW	4	743511	\$245.00	\$980.00	\$1,488.00
HP Officejet 7410 all in one	1	680783	\$440.00	\$440.00	\$575.00
Motorola XTL Radio and Repeater Option UHF	2	T99/DX	\$3,445.56	\$6,891.12	\$8,755.00
Motorola XTL Radio VHF	1	T99/DX	\$3,445.65	\$3,445.65	\$4,259.00
Max Rad Antennas	3	82239	\$372.24	\$1,116.72	\$1,284.00

LOOSE EQUIPMENT TOTAL

\$275,505.80

Equipment to be ordered from Advotek (WBE)
Equipment to be ordered from Chicago Communications

AK SPECIALTY VEHICLES

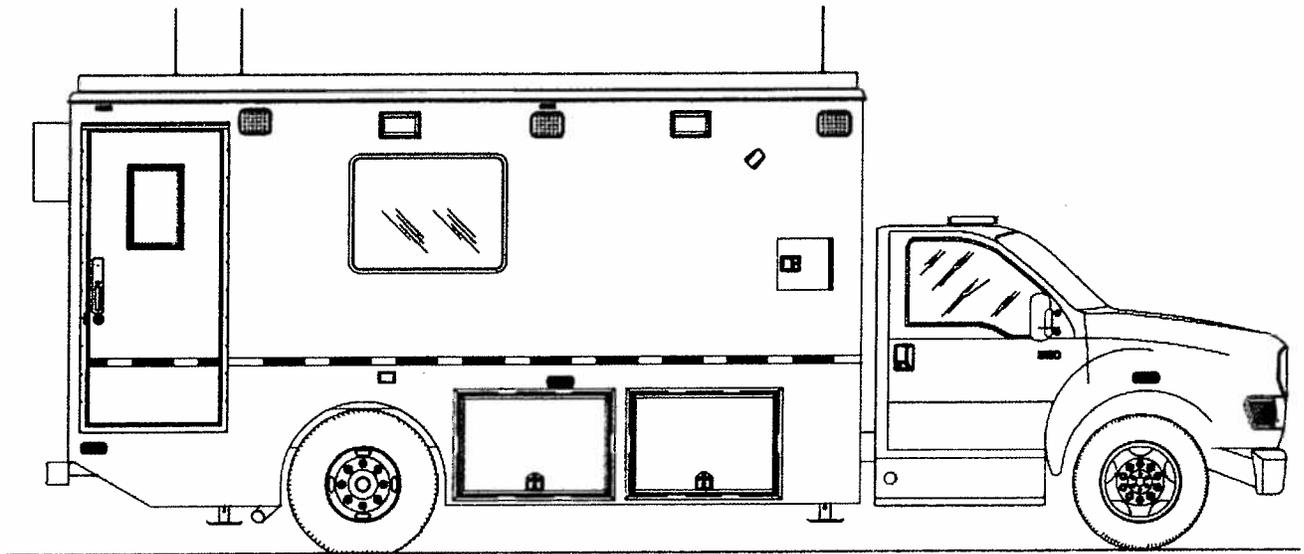
Proposal

TO: Mr. Ed Ebertsch

FOR: C-28 Mobile Hazmat Lab Vehicle

**SUBMITTED BY: Randy Hardwick
Regional Sales Manager**

DATE: June 14, 2006



1. PURPOSE AND SCOPE

1.1. Introduction

The purpose of this requirements document is to define the minimum operational performance standards and equipment required. This document considers a self-propelled vehicle configuration with an aft area.

Compliance with this document is a means of assuring that the vehicle will perform its intended function(s) satisfactorily under all conditions normally encountered in operations. Any regulatory operation of this vehicle is the sole responsibility of user.

Section 1.0 of this document provides information needed to understand the rationale for the vehicle's operational performance and equipment requirements. It describes typical vehicle applications and operational goals, as envisioned by the proposal team and establishes the basis for the standards stated in Section 2.0 through 3.0. Definitions and assumptions essential to proper understanding of this document are also provided in this section.

Section 2.0 contains the minimum performance standards required for the vehicle's chassis. These standards specify the required performance under standard and environmental conditions. Also included are recommended road test procedures necessary to demonstrate vehicle compliance with the minimum requirements.

Section 3.0 describes the vehicle aft body area and accessory equipment requirements. Operational equipment characteristics are defined and as well as conditions that will assure the equipment user that operations can be conducted safely and reliably in the expected operational environment.

Note: The word "equipment" as used in this document includes all components and units necessary for the vehicle to properly perform its intended function(s). For example, the "equipment" may include the Shore Power Panel. In the case of this example, all of the foregoing components and units comprise "equipment." It should not be inferred from the example that each Shore Power Panel equipment design will necessarily include all of the foregoing components or units. This will depend on the specific design chosen by the manufacture.

The terms "user" and "buyer" maybe used interchangeably within this document.

1.2. System Overview

The mission of the Mobile Hazmat Lab Vehicle is to support the operating authority in coordination of dispatched crews in an emergency or disaster situations.

The Mobile Hazmat Lab Vehicle shall be a self-propelled truck-body vehicle with an enclosed aft body area (figure 1). Access to the enclosed aft area shall be gained by way of a street side entry door. Emergency egress shall be possible by the same entrance or emergency windows.

1.3. Operational Application

The Mobile Hazmat Lab Vehicle primary application will be as a deployable remote lab site.

1.4. Intended Functions

The intended function of Mobile Hazmat Lab is to provide a mobile-ready lab vehicle for emergency or disaster situations.

1.4.1. Cab Area Operational Goal

The operational goal of the Cab Area shall be used as the vehicle driver's station area. Design and operation of the vehicle within the cab area must comply with State and Federal Transportation Agencies.

2. VEHICLE REQUIREMENTS

2.1. Vehicle Design Requirements

The vehicle's mobile deployment goal defines the design and minimum chassis performance standard requirements. As mentioned, the vehicle shall be a self-propelled truck-body vehicle with an enclosed aft body area (defined in section 3). Furthermore, due to quick maintenance turn-around, locally experienced maintenance mechanics, and availability of replacement parts, preference is given to a vehicle that is manufactured in the United States. With this in mind, the sub-sections below define the vehicle's design and performance requirements.

2.2 General Chassis Specification

212 Wheelbase/138" CA/81" AF/332" OAL
Single Channel-Straight "C" 14.18 SM, 120,000 PSI
Two Hooks, Front (2) Inside Rail, Frame Mounted
I-Beam Type 10,000 lbs Cap I-100SG
Taper Leaf Springs, Parabolic - 10,000 Capacity
19,000 lb Single Speed - Spicer 19060S
Air Suspension 20,000 lb Capacity
6.17 Axle Ratio
Air Brakes - Straight Truck with 16.5 x 7.0 Rear Brakes
Air Dryer, Bendix AD/IP w/ Heater, Standard Position
Caterpillar (7.2L) C7 275HP @ 2200 RPM Governed @ 2400 RPM
Fuel / Water Separator - Racor
Anti-Freeze Red, Extended Life Coolant
Allison 3000 5 speed, EVS Series
Allison Programming I/O Emergency Vehicle Series - Rescue, Ambulance
Single Horizontal Muffler and Exhaust Pipe
Body Builder Wiring - To End of Frame
270 A Leece-Neville, Brush Type, 12Volt, Pad Mtd, Alternator
Jump Start Single Stud - Remote Mounted on Battery Box
12-Volt, Motorcraft, Two-900 CCA, 1800 CCA Total Battery
Tank - Steel 50 US Gal Dual Total Capacity 100 US Gallons (located under the stairs.)
22 Gal Dual Tank Fuel Fill
Driver Captains Chair, 40% Reclining, G-Grain Vinyl w/ G-Grain Vinyl Insert
Passenger Captains Chair, 40% Reclining, G-Grain Vinyl w/G-Grain Vinyl Insert
XL Trim Package
Mirrors, Dual Stainless Steel - Rect. 7-1/2" x 16-1/2"
Mirrors, 2 Auxillary Convex - Stainless Steel
Radio AM/FM Stereo - Visteon w/Clock
Wheels, Front 22.5 x 8.25 Painted Steel Disc, 10 Hole
Tires, Front Two 275/80R22.5G Michelin XZE (517 rev/mile)
Wheels, Rear 22.5 x 8.25 Paint Steel Disc, 10 Hole
Tires, Rear Four 275/80R22.5G Michellin XDA-HT (510 rev/mile)
All Keys Coded Alike (Two units)
Gray Interior

Oxford White Primary Color
Engine Hour Meter
Oil Temp Gauge
Install Temp Gauge
Auto Reset Circuit Breakers
Fuel Tank Modification
Lighted & Heated Mirrors
Spare Tire

CAB RADIO CONSOLE

A Gamber Johnson radio console for fire radio and MDC located on the floor between the driver and passenger seating positions.

CAB CONTROL CONSOLE

A control console shall be placed on the floor between the driver and passenger seating positions. The console shall provide a means for mounting the siren control console, and contain the following controls:

1. Emergency Light Bar Switch
2. Upper Emergency Lights
3. Lower Emergency Lights
4. Left Side Scene Lights
5. Right Side Scene Lights
6. DC Truck Power Solenoid
7. DC Aux Power Solenoid
8. Door Ajar Light (for aft body doors)

2.3. Operation and Accessibility of Controls

The operation and accessibility of controls shall be within the physical means and the ergonomic ability of a human of average stature. The vehicle shall not be required to meet handicapped driver requirements.

2.4. Road Test Procedures

The Road Test Procedures shall not be required if the vehicle has been delivered under its own power at a distance of not less than 200 miles. If the vehicle has been delivered by flat bed trailer or any other means, a factory road trip of not less than 50 miles is required before being loaded for delivery to end customer.

2.5. Vehicle Design Assurance, Safety, and Fire Protection Equipment

The vehicle shall comply with all State and Federal Transportation Agencies. The vehicle shall include in the cab area one 2.75lb fire extinguisher.

3. VEHICLE BODY AREA REQUIRMENTS

3.1. Vehicle Body Area

The vehicle's mission goal of providing a self-contained mobile unit defines the design and minimum performance standard requirements of the aft body area. The body area shall be a self-contained/self-supporting platform consisting of a single section.

3.2.1. Body

The Aft Custom Body will be completely designed and manufactured in-house, and will be an all-aluminum body manufactured utilizing aluminum alloys capable of carrying the maximum payload allowed by the chassis. All framing and structural supports will be welded in accordance with the current standards as set forth in the American Welding Society Code. The Body shall have a seamless finish with no exposed fasteners. The body shall be attached to the chassis with hardened steel "U" bolts fastened to the chassis and body mounting rails. A neoprene-mounting cushion shall be installed between the modular body and the chassis frame. The body shall be designed and constructed to insure a life expectancy of more than ten years with normal use.

The Body should also include the following features:

- Aluminum Wheel Wells with mud flaps
- All body trim pieces, hinges, and handles shall be stainless steel or other non-corrosive material.
- Full width heavy duty step bumper mounted to chassis frame
- Upon completion, the entire vehicle should be undercoated with a commercial undercoating material
- The chassis and body shall be painted with a two color paint scheme: gloss black (Dupont Imron or PPG equivalent) at top of mark line and red (Dupont Imron 7210A or PPG equivalent) below mark line. Customer to identify mark line height at time of factory inspection.

3.2.2. Roof

3.2.2.1. Roof Structure

Roof structure shall be constructed from 2" x 2" x 0.125" aluminum tube of 12" maximum centers.

3.2.2.2. Roof Skin

All seams and perimeter shall be continuously welded to insure watertight integrity.

3.2.3. Walls

3.2.3.1. Wall Structure

The wall structure shall be a minimum 2" x 2" x 0.125" aluminum tube on 12" maximum centers. Tubes shall be welded together and to the frame rails to produce a strong and rigid frame.

3.2.3.2. Wall Skin

The wall skin shall be seamless, and will be manufactured with 0.125" finished aluminum sheet bonded to wall structure.

3.2.4. Floor

3.2.4.1. Floor Structure

The floor structure shall be 2" x 2" x 0.19" aluminum tubing on 12" maximum centers. The cross section of the floor is as follows:

- a. ½" Neoprene spacer on top of chassis frame rails
- b. 3" x 4" Aluminum I-beam support for body mounting
- c. 0.063 Aluminum sheeting on bottom of floor structure of body
- d. Minimum 2" insulating foam
- e. 0.063 Aluminum sheeting on top of floor structure of body
- f. ¾" plywood sub-flooring
- g. Commercial grade non-static black rubber flooring.

3.2.4.2. Moisture Barrier

The under side of the floor tubes shall be covered with 0.063 mil finished aluminum sheet. All seams shall be caulked with vinyl sealant to insure watertight integrity.

3.2.5. Entrance Door

3.2.5.1. Doors

The entrance doors shall be fabricated by design of the vendor. They should be individually hand made on a fixture to ensure perfect square and fit. Doors are to be installed with 3/16" continuous stainless steel hinges. All door hardware shall be fully adjustable to maintain a perfect alignment throughout the life of the vehicle. Each door shall have a minimum width of 29" with a minimum height of 6 feet.

Personnel doors will include heavy-duty door closure devices to keep the door open or closed as required.

All doors will feature custom recessed gaskets around the perimeter that mate with the neoprene gasket around the doorframe on the body. When the door is closed, this forms a tight seal against the elements. There shall be no interruptions in the gasket for door locks, latches, or hinges. Gaskets shall be miter cut at the corners and sealed with weather strip adhesive.

3.2.5.2. Door Frame

The doorframe extrusions shall be able to accept a 0.125" aluminum sheet for an exterior skin. A rotary deadbolt shall be installed in the frame of each entry door.

3.2.5.3. Door Jamb

The doorjamb extrusion shall be welded to the body wall structure. Two striker pins shall be installed in each entry doorjamb.

3.2.5.4. Door Handles

The door handle shall be stainless steel or other non-corrosive materials that are locking, pull type handle.

3.2.5.5 Hinges

All exterior hinges used for entry and compartment doors shall be stainless steel, continuous, (piano type), hinge. Hinge mounting holes shall be slotted to allow door adjustment in two planes. Holes shall be drilled and tapped in door and jamb extrusions to accept stainless steel fasteners.

3.2.5.6 Gaskets

Door gaskets shall be designed to match the doorjamb extrusions, and shall be extruded with material to satisfy ambient temperature extremes. There shall be no interruptions in the gasket for door locks, latches or hinges. Gaskets shall be miter cut at the corners and sealed with weather strip adhesive.

3.2.5.7 Door Window

Each entry door shall have a minimum 12" wide x 15" high non-opening window.

3.2.6 Windows

Windows shall be fixed and have a means for emergency egress. Windows are located on each side of the body as shown in the Interior Layout section, Figure 1. Windows' minimum opening is 30" high x 40" wide.

3.2.7 Entry Steps

Entrance steps shall be designed to attach to the body immediately below the door.

3.2.8 Compartments

3.2.8.1 Generator Compartment

The generator compartment shall be located curb side and be constructed from 0.125" aluminum sheet, continuously welded to prevent carbon monoxide intrusion into the user area of the vehicle. The compartment door shall be equipped with a grille, with an open area exceeding the specification of the required generator. The compartment shall be lined with thermal and acoustical insulation to minimize thermal and audible intrusion into the user area.

3.2.8.2 Battery Compartment

The battery compartment shall be located curb side and be constructed from 0.125" aluminum sheet, continuously welded to prevent battery gas intrusion into the user area of the vehicle. Vent fittings shall be installed on the inboard side of the compartment. This vent system shall allow for air circulation around the batteries. The vehicle batteries shall also be located in the battery compartment.

3.2.8.3 Storage Compartments

Storage Compartments shall be installed on the street and curbsides of the aft area body, and shall be a continuously welded all-aluminum design. The compartments shall be fabricated from 0.125" aluminum sheet. These compartments will offer quick access for easy service and maintenance from the exterior of the vehicle. All compartments have weather strip gaskets around the full perimeter of the doors, and non-skid material installed on the sills.

All compartments include door handles which are stainless steel or other non-corrosive material and are Trimark brand with pull type handles and removeable tumblers. Compartment doors shall all include gas springs for operator convenience.

Compartments will be made of smooth aluminum. All storage compartments will have a small circular filtered air vent in the upper rear corner to allow moisture to escape.

3.2.8.4 Air Compressor Compartment

A compartment shall be installed on the aft body that is used for the air compressor if required. The compartment shall be fabricated from 0.125" aluminum sheet.

3.2.8.5 Input/Output Panel

An Input/Output (I/O) panel shall be installed in the vehicle. This panel shall have the appropriate number and type of connections for interfacing with the Hazmat Support Vehicle.

3.2.8.6 Fasteners

All exterior fasteners such as machine screws, bolts and sheet metal screws shall be stainless steel.

3.2.9 Drip Rails

An integrated aluminum drip rail shall be installed at the roofline on all sides of the body section.

3.2.10 Electrical

3.2.10.1 12-VDC Wiring

Proper wire sizes shall be determined for each circuit. All 12 VDC wiring shall be labeled and routed.

3.2.10.2 Battery System

The aft body shall be equipped with a dual battery system. The vehicle starting battery is discussed in the chassis portion of these specifications. Two Group 31 batteries are used to support the conversion load. The batteries shall be charged through a minimum of a Progressive Dynamics Intelli-Power PD9180 80-amp converter. The system batteries are protected a 100 amp breaker. The vehicle and aft body system batteries shall all be located in the aft body battery storage compartment.

3.2.10.3 Battery Paralleling

A dash-controlled system shall be provided to parallel the chassis and system batteries for increased engine cranking capability.

3.2.10.4 Power Converter

One 120 VAC to 12 VDC Progressive Dynamics Intelli-Power PD9180-80 power converter shall be provided to support the 12 VDC electrical load and charge the batteries during generator or shore power operations. The minimum rating for the converter shall be 80 Amps.

3.2.10.5 120 VAC Wiring

Wire sizes shall be determined per circuit requirement. All 120 VAC wiring shall be routed through cable raceways. All wiring shall be installed in accordance with the National Electrical Code.

3.2.10.6 Power Distribution Panel

The Power Distribution Panel shall be equipped with 120/240 – Volt, 100 A, single-phase, three-wire AC service entrance system that has appropriately sized circuit breakers for 120 and/or 240 VAC applications. Other appropriately sized circuit breakers shall be installed for 12 VDC applications. AC power to the service entrance shall be controlled by an automatic transfer switch that will allow the power to be provided by a shore power input connector or the on board generator.

3.2.10.7 External Power

There will be an external power input panel rated for 100 amps. Interconnected (via 50ft of multi-conductor shore line cable) to the vehicle external power input panel will be circuit breaker protected transfer box. With the circuit breaker in the "off" position, the operator will connect the external power source to the transfer box. Once connected, he will switch the circuit breaker in the "on" position. (Average power requirement is 240 VAC, 60Hz, 100 amps.)

3.2.10.8 External Shore Power Input Connector(s)

The external shore power input connectors shall interface to two (2) 20A Kussmaul Auto Eject units. These inputs shall provide 120 VAC power for charging the truck and aft body batteries while the vehicle is parked. Interlocking contactors are provided to drop the Night Service feature should the shoreline power or generator power becomes live.

3.2.10.9 120VAC Outlets

Front side: Three (3) 120VAC-20 Amp duplex outlets located along the wall raceway.

Street side: Four (4) 120VAC-20 Amp duplex outlets located along the wall raceway.

Curb side: Four (4) 120VAC-20 Amp duplex outlets located along the wall raceway.

Robot Storage Bulkhead: Two (2) 120VAC-20 Amp duplex outlets located along the wall raceway.

Two (2) 120VAC GFCI duplex, 3 prong twist lock outlets with weatherproof covers shall be installed on the exterior of the body; one (1) streetside and one (1) curbside each on a separate circuit.

3.2.10.10 12 VDC Cigarette Lighter Style Adapters

Street side: Two (2) 12-Volt cigarette lighter style adapters located along the wall raceway.

Curb side: Two (2) 12-Volt cigarette lighter style adapters located along the wall raceway.

3.2.10.11 12 VDC Lighting (Interior)

Eight (8) 12-volt fluorescent thin light fixtures shall be installed in the ceiling of the aft areas. One (1) 120VAC dimmable halogen spotlight shall be installed at each of the three (3) workstation areas.

3.2.10.12 12VDC Emergency Lighting and Siren Package (Exterior)

The 12VDC emergency lighting, scene lighting and siren package shall consist of the following:

Front

- a) One (1) Code 3 LED Model 2158ACFD06A Light bar mounted on the cab roof.
- b) Two (2) Code 3 Model 45 units (with bezel) mounted on vehicle grille. (Red lenses)

- c) One (1) Federal Signal 200W speaker compatible with Federal Signal E2QB siren controls in the cab area.
- d) Two (2) FHL2 wig-wag flashers.
- e) Two (2) Code 3 Model 45 units (without bezel) mounted on fender. (Red lenses)

Sides

- a) Six (6) Code 3 Model 85 mounted at middle and edges on upper portion of body. (3 per side) (Red lenses)
- b) Four (4) Code 3 Model 45 (with bezel) mounted at middle and rear edge on lower portion of body. (2 per side) (Red lenses)
- c) Four (4) Weldon 3010-2600-30 Clear Halogen Scene Lights mounted between the top Code 3 Model 85 lights. (2 per side)

Rear

- a) Four (4) Code Model 85 mounted at upper and lower edges of body.
- b) Two (2) Weldon 4" x 6" LED Series Dual Stop, Tail, Turn signal.

3.2.10.13 LED Lighting

The tail, stop, turn indicators, and marker lights mounted on the body utilize LED lighting to ensure compliance with federal and state regulations and codes. The LED lights also provide extended life and reliability.

3.2.11 Generator

3.2.11.1 Generator Description

One (1) 12 kW, 240VAC 60 Hz liquid-cooled diesel powered Onan CMQD 12,000 generator shall be provided. The entire compartment will be soundproofed to attenuate noise to the maximum degree possible. The muffler shall be mounted in a manner to allow the generator exhaust to be directed to the street side of the vehicle.

3.2.11.2 Shutdown System

The generator shall be equipped with sensors that will activate the generator shut down system on low oil pressure and high water temperature.

3.2.11.3 Block Heater

The generator shall be equipped with engine block if available from the generator manufacturer as an OEM feature.

3.2.11.4 Start/Stop

The generator shall include a Start/Stop preheat switch and hour meter located on the generator.

3.2.11.5 Fuel Supply

Fuel supply for the generator shall be from the chassis fuel tank. The system shall be designed and installed to leave a minimum of 10% of fuel in the tank when the generator runs out of fuel.

3.2.11.6 12VDC Alternator

The generator shall be equipped with a 12VDC alternator that will be wired to charge the auxiliary battery as well as satisfy all 12VDC systems of the generator.

3.2.11.7 Night Service

A "Night Service" 120 VAC auxiliary AC input allows connection of chassis and generator block heaters, and battery charger/converter. This circuit is used when the vehicle is on the road and external power is not available overnight. Interlocking contactors are provided to drop the Night Service feature should the shoreline power or generator power becomes live.

3.2.12 Alarms

3.2.12.1 Smoke and CO Detectors

The aft body shall be provided with a smoke and CO detector powered by the 120 volt AC system.

3.2.13 HVAC

3.2.13.1 HVAC

One (1) split Klimaire air conditioning with condenser unit mounted on the vehicle exterior rear wall. The evaporator unit will be mounted on a wall surface in the aft area. The unit will provide 12,000 BTU of conditioned air and 13,000 BTU of heat. Additional unit features: quiet operation; removable and washable panes; multifunction infrared remote control; auto swing louver with multi-position adjustment; 3 fan speed selection.

3.2.13.2 HVAC Grilles

The evaporator units have supply and return grilles built with adjustable louvers.

3.2.14 Interior

3.2.14.1 Interior Layout

The Interior Layout of the Mobile Command Vehicle is shown below in figure 1.

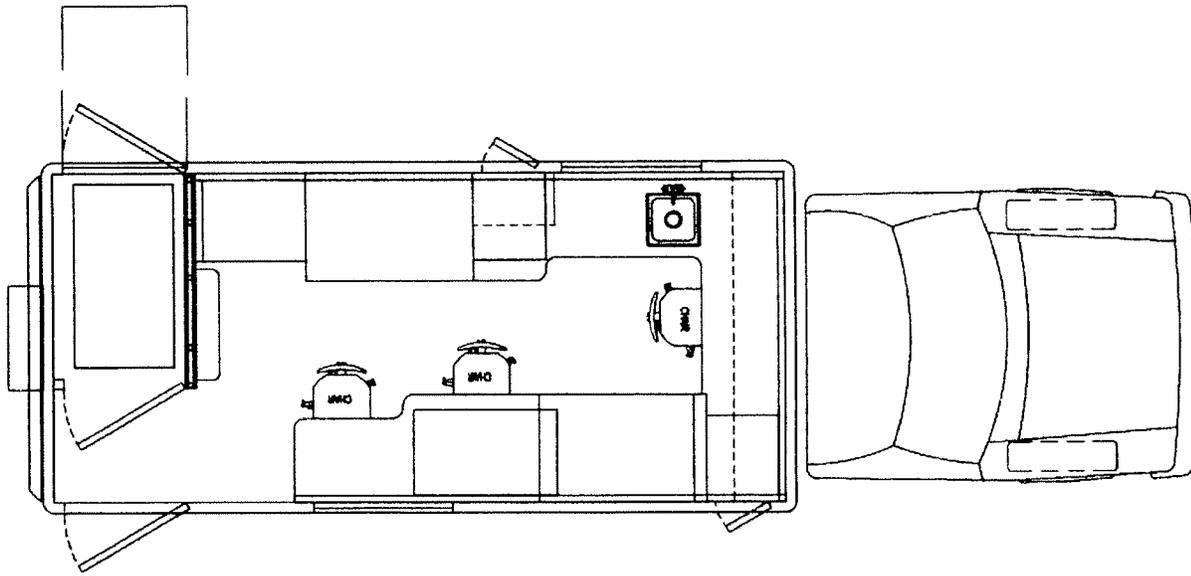


Figure 1: C-28 Hazmat Mobile Lab reference drawing

3.2.14.2 Walls

The walls shall be insulated with foam or foil-bubble-bubble foil insulation. The insulation will be covered with 3/8" furring and screwed to the aluminum wall structure. The walls shall be finished with Kemlite or washable walls.

3.2.14.3 Floor

The floor shall be insulated. The insulation will be covered with 3/4" plywood and screwed to the aluminum floor tubes. The floor shall be finished with commercial grade tile.

3.2.14.4 Ceiling

The roof shall be insulated with foam or foil-bubble-bubble-foil insulation. 3/8" furring shall be applied to the bottom of the roof structure and finished with Kemlite or washable walls.

3.2.15 Cabinet Construction

Interior cabinets shall be constructed of 3/4" thick plywood. All cabinet interiors shall be finished with white laminate cabinet liner. Positive Latches shall be installed on all cabinet doors. Customer can choose from a wide variety of standard colors for the exterior cabinet and doors.

3.2.16 Workstation Area

Storage cabinets and workstations per the drawing will be provided. Overhead storage cabinets shall be installed above the base cabinets. Three (3) rolling H.O. Bostrom Office desk chairs will be provided. Chairs will be secured with bungee cords while vehicle is in transit.

3.2.17 Lab Work Space

Sufficient counter space shall be provided for performing the necessary lab work. The following equipment will be provided:

- a) Corian countertop
- b) 12VDC/120VAC Norcold DE490 refrigerator
- c) Small Sink with Eye wash station
- d) Sufficient counter space for 2 glove boxes
- e) Two (2) outside passageway doors for bringing samples into the isolation chamber.
- f) Sufficient storage space for storing lab test equipment.

3.2.18 Communication Wiring

Dual cable duct system will be run above the counter, below the counter and around the perimeter of the aft body to provide communications cable throughout the aft body interior. Category 5E rated cable will be used throughout the vehicle for data and communication cabling. All communications wiring will terminate at a patch panel.

Connector count is given below:

Front side: Three (3) 9 pin VGA Connectors, Nine (9) RJ45 Connectors, and Three (3) RJ11 Connectors located along the wall raceway.

Street side: Two (2) 9 pin VGA Connectors, Six (6) RJ45 Connectors, and Two (2) RJ11 Connectors located along the wall raceway.

Curb side: Two (2) 9 pin VGA Connectors, Six (6) RJ45 Connectors, and Two (2) RJ11 Connectors located along the wall raceway.

Rear side: One (1) 9 pin VGA Connectors, Three (3) RJ45 Connectors, and One (1) RJ11 Connectors located along the wall raceway.

3.2.19 Securing the Interior

Positive lock closures for securing all drawers, chairs, doors, or other items within the interior of the unit shall be installed.

3.2.20 Miscellaneous Requirements

- a) One (1) 2.75 lb pound fire extinguishers strategically located in the aft body.
- b) Chassis and component operator and repair manuals
- c) One (1) Magnetic Whiteboards: One (1) 2ft x 3ft
- d) Provisions for mounting a .74 m Magellan Satellite System. Satellite package by Customer.
- e) Provisions for mounting a Camera and Mast. Quoted as an option is the following package:
 - Will-Burt TMD 7-42 Telescoping Mast
 - Will Burt C-267 Pnuematic System (115VAC)
 - Will Burt 810988 70ft ¾" NYCOIL
 - Will Burt 902547 Shelf Bracket
 - Pelco ES31C16-2N Espirit System with wiper
 - Pelco KDB300A Controller
 - Pelco KBDKIT Power Supply
- f) See Attachment A for Hazmat Equipment List.

3.3. Stabilizing Jacks

A set of four (4) Big Foot Auto Leveling hydraulic stabilizing jacks (2 on the front, and 2 on the rear) with controls shall be installed. These jacks shall be attached to the chassis frame rails with grade 8 fasteners. The controls for the jacks shall be located on the I/O panel.

3.4. Roadworthiness of the Aft Body Area

An underlining objective of Section 2 and 3 is to specify requirements that insure a high degree of roadworthiness of the final vehicle design. Such is also reinforced by the requirement that the vehicle shall meet State and Federal guidelines, code and compliances, and safety regulations. The body area shall be designed as to equally distribute the curbside-to-streetside payload to the maximum degree possible. Payload distribution with respect to the front and rear axles shall be arranged as to not to exceed the load of either axle. The Aft body shall also be designed as to not be top-heavy.

ATTACHMENT A MOBILE HAZMAT EQUIPMENT**Equipment provided by the Fire Department:**

1. Quantity (1) RAPID (Ruggedized Advanced Pathogen Identification Device)
2. Quantity (1) ResponderR RCI (Raman Chemical Identifier)
3. Quantity (3) AREA RAE RDK and control kit (Assessment of Gaseous Threats)
4. Quantity (2) Weather Pak Weather System (1 on tripod and 1 pole mount on side of vehicle)
5. Quantity (1) Andros Robot with Control System

Equipment provided by AKSV:

1. Quantity (1) Smith Detection Hazmat ID System
2. Quantity (1) Smith Detection Gas ID System
3. Quantity (3) IdentiFinder Isotope Handheld Identifiers
4. Quantity (2) Sabre 4000 Handheld Nitrate (explosive) detector
5. Quantity (3) Tellular Phonecell SX5T-535C fixed cellular terminals for Verizon Service
6. Quantity (4) Toughbook CF-29LAQCPBM PC Notebooks
7. Quantity (4) DVD-ROM and CD-R/RW drive pack
8. Quantity (1) HP Officejet 7410 All-in-One (FAX, Copy, Print)
9. Quantity (1) Cab mounted VHF XTL 5000 radio
10. Quantity (1) Aft mounted VHF XTL 5000 radio
11. Quantity (1) Aft mounted UHF XTL 5000 radio with Repeater Access feature
12. Quantity (1) Norcold DE 490 AC/DC refrigerator
13. Quantity (2) Plas-Labs #999-AK-106 Glove Box with Double HEPA / Carbon Filtration System

Appendix

4.1. Acronyms, Abbreviations, Definitions, and Symbols

Acronyms

CCA	Cold Cranking Amps
CFM	Cubic Feet per Minute
CO	Carbon Monoxide
EADI	Electronic Attitude Director Indicator
EGPWS	Enhanced Ground Proximity Warning System
F	Fahrenheit
FDI	Failure Detection and Isolation
FM	Frequency Modulated
FMVSS	Federal Motor Vehicle Safety Standards
Ft	Foot
GFCI	Ground Fault Circuit Interrupt
GTM	Generic Transport Model
GUI	Graphical User Interface
HVAC	Heating Ventilation Air Conditioning
I/O	Input/Output
Lb	Pounds
lbs.	Pounds
LAN	Local Area Network
LF	Left Hand
MCV	Mobile Command Vehicle
MF	Maintenance Free
MPH	Miles per Hour
MOS	Mobile Operations Station
ND	Navigation Display
PI	Principal Investigator
R/C	Radio Controlled
RH	Right Hand
RPM	Revolution per Minute
SAE	Society of Automotive Engineering
TM	Telemetry
TSS	Tracking System Station
UHMW	
UPS	Uninterruptible Power Supply
US or U.S.	United States
V	Volts
VAC	Volts Alternating Current
VDC	Volts Direct Current

Symbols

'	Foot
"	Inches
°	Degrees
-	Negative

**CITY OF CHICAGO
 PURCHASE REQUISITION**

Copy (Department)

DELIVER TO: 336 FINANCE AND FISCAL MANAGEMENT 10 W. 35TH STREET 14TH FLOOR CHICAGO, IL 60616	REQUISITION: 28613 PAGE: 1 DEPARTMENT: 59 - FIRE DEPARTMENT PREPARER: Karen L Sanger NEEDED: APPROVED: 6/27/2006
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REQUISITION DESCRIPTION

CONTAINMENT MODULE FOR MOBILE LAB PROJECT
 SPECIFICATION NUMBER: 48637

COMMODITY INFORMATION

LINE	ITEM	QUANTITY	UOM	UNIT COST	TOTAL COST						
1	07053 CONTAINMENT MODULE FOR MOBILE LAB PROJECT	725,405.80	USD	1.00	725,405.80						
SUGGESTED VENDOR:		REQUESTED BY: Karen L Sanger									
DIST	BFY	FUND	COST CTR	APPR	ACCNT	ACTV	PROJECT	RPT CAT	GENRL	FUTR	Dist. Amt.
1	003	0764	0592005	0450	220450	0100	00000000	03BI29	00000	0000	240,753.25
2	003	0764	0592005	0345	220345	0100	00000000	03BI28	00000	0000	284,652.55
3	003	0764	0592005	0450	220450	0200	00000000	03BI2A	00000	0000	200,000.00
LINE TOTAL:											725,405.80
REQUISITION TOTAL:											725,405.80

*Needs
 to
 be
 corrected!*

Where a commodity is for a particular or unique use other than standard quality, grades, color, size or other characteristics, give details of how it will be and for what purpose. Requisitions prepared incorrectly will be returned to the using department.



City of Chicago
Richard M. Daley, Mayor

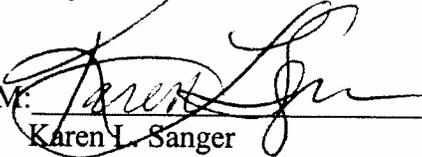
Chicago Fire Department

Raymond Orozco
Commissioner

14th Floor
10 West 35th Street
Chicago, Illinois 60616-3799
(312) 745-3705
<http://www.cityofchicago.org/fire>

FINANCE / PAYROLL

TO: Barbara Lumpkin
Chief Procurement Officer
Department of Procurement Services
City Hall Room 403

FROM: 
Karen L. Sanger
Contracts Coordinator
Chicago Fire Department

RE: SPECIFICATION: 48637
Requisition 28613
Sole Source request
UASI Grant funds
Containment Module for Mobile Lab
AK Specialty Vehicles

DATE: June 28, 2006

The Fire Department is requesting approval for a sole source purchase, for the above mentioned item. Attached please find:

- 1) One copy of FMPS requisition
- 2) One completed Sole Source form
- 3) Detailed specifications

We are asking that this requests be process as a priority. This department is holding requests that utilize grant funds that expire December 31, 2006 and for the vendor to meet the delivery deadline (for use of funds prior to expiration of the grant), the PO must be awarded by July 1, 2006.

Your assistance in this matter is appreciated. If you have any questions or require any further information please contact me at (312) 745-4196.



06 JUL 29 4:10:03

