

Tail Lights, Whelen LED Combinations , ILOS, Non FORD chassis SIDE MARKER LIGHTS: Side marker lights shall be Kinequip Model 112401RD (Red) and shall flash alternately with the rear turn lights. All lights shall be LED.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

Whelen 600 Series, Tail Lights

BRIGHT CHROME-LIKE FLANGES: The 600 series tail light group shall be embellished by bright trim flanges.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

TURN SIGNAL LIGHT: The turn signal light fixtures on the rear of the body shall be Whelen Brand series 600, Light Emitting Diode. The lights shall operate as left and right turn signal lights, and shall be amber arrow when illuminated.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BACK UP SIGNAL LIGHT: The back up signal light fixtures on the rear of the body shall be Whelen Brand series 600, halogen light to operate as left and right back up signal lights and shall be clear when illuminated.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

THIRD BRAKE LIGHT: A third brake light shall be located centered above the rear access doors. The light/lens shall measure at least 15 square inches. The light is to be a Kinequip, model KFL-3BLO1 fixture.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

THIRD BRAKE LIGHT: When the brake is applied the light will steady burn.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

EXTERIOR FLOOD and LOAD LIGHTING:

LEFT SCENE LIGHTS: Two scene lights shall be provided on the left side of the module. The lights shall be Whelen LED-24, 900 series. The scene light group shall meet or exceed the present revision of the Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SCENE LIGHT SWITCHING: The scene lights shall come on with two separate rocker switches labeled Right Flood and Left Flood, located in the center cab console controlled by the master switch. The right (curb side) scene lights shall also come on when the side entry door is opened.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RIGHT SCENE LIGHTS: Two scene lights shall be provided on the right side of the module. The lights shall be Whelen LED-24, 900 series. The scene light group shall meet or exceed current revision of the Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REAR LOAD LIGHTS: Two rear load lights shall be provided on the rear of the module, above the rear access doors. The lights shall be Whelen LED-24, 900 series. The scene light group shall meet or exceed current Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REAR LOAD LIGHT SWITCHING: The rear load lights shall come on with a separate rocker switch located in the cab console controlled by a master switch. The switch shall be labeled "Rear Flood" and shall control both rear load lights on the rear of the body and above the rear access doors. The rear load lights will come on when rear doors are opened.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

INTAKE AND EXHAUST SYSTEM: There shall be two twelve volt DC powered fans for air circulation in the patient area. One four inch in diameter marine style fan with internal impeller shall be installed in the forward section of the patient area. A dedicated interior vent shall be provided for the powered intake ventilation. One four-inch in diameter marine style fan with internal impeller shall be installed in the rearward section of the patient area as dictated by the cabinet design. The exhaust fan shall also have a dedicated movable vent over the intake. Both fans shall be connected to the same switching source at the patient area and labeled as "EXHAUST FAN" or similar. The patient exhaust shall have one speed.05ha

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

A/C UNIT SYSTEM: The patient area HVAC system shall be above the center overhead walk-thru of the module. The HVAC delivery will have an insulated plenum system in the ceiling with eight (8) adjustable vents. There shall be two additional adjustable vents above and behind the attendant seat.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

WATER PUMP: There shall be an inline water pump to assist the water from the OEM chassis to the patient area heating system. This pump is to allow the vehicle to meet the KKK requirements for heating from a Cold Soak situation.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HEPA FILTER: The return air grille shall be supplied with a HEPA filter that is designed to fit the slot within the grille. It shall be installed and shall not rattle. The filter shall be replaceable by this department's fleet maintenance in the field.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

AIR CONDITIONING COMPRESSOR: There shall be installed an additional compressor onto the chassis to support the HVAC needs of the ambulance section.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RETURN AIR GRILLE: Installed around the Heat/AC unit shall be a perforated 13 gauge steel grille. The grille shall allow 156 inches of return air flow to the Heat/AC unit. The grille shall provide complete access to the Heat/AC unit. The grille to have a black powder coat finish.

There shall be two quarter turn locks supplied and installed on the grille. The locks shall have a black powder coated finish. Lock pawl activation shall be enabled with a round bitted key.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CEILING DUCTED INSULATED AIR CONDITIONING DELIVERY: One duct shall route over the primary patient and attendant, and one shall run over the lap area of squad bench. Each duct shall contain four spherically adjustable registers, evenly spaced, total of 8. There shall also be two registers located directly behind the attendants seat.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REAR AIR CONDITIONING EVAPORATOR: Air Conditioning is hereinafter referred to as A/C. The module shall have an additional, self contained A/C evaporator unit complete with a dual blower motor driven, high output fan. The fan shall be three speed and shall move 650 cubic feet of air per minute on high. The A/C unit shall also incorporate a hot water heater core for heat. The valves shall operate with the heater/defrost controls. The unit shall be rated at least 32,000 British Thermal Units (BTU) in A/C Mode and 35,000 BTU in Heater Mode. The Vehicle A/C Heater system must meet or exceed current Federal specification

CONDENSATION DRAIN PAN: A condensation pan shall be provided to collect water condensation from the evaporator coil. The drain pan shall be formed from 1/8 ABS plastic sheet and shall be listed (tilted) toward the drain fitting. The Evaporator unit shall be mounted so that the weight of the coil, case and blower assembly does not rest on the pan. Additionally the entire evaporator shall list toward the condensation drain fitting to enhance water flow to the drain hose. The drain hose shall be ½ I. D., collapse resistant and fiber reinforced poly-tubing. The hose shall be routed from the condensation pan to the street.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HEATER HOSES: Heater hoses for the cab shall remain OEM. 5/8 inside diameter, EPDM Nomex rubber hoses shall route from the OEM tie in point to the rear heater core.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

AIR CONDITIONING HOSES: All A/C Hoses shall meet Society of Automotive Engineers (SAE) J-2064. The discharge (High side) hoses shall not be less than 5/16 inside diameter (Size 6). The suction (Low side) hoses shall not be less than ½ inside diameter (Size 10). All hoses shall be A.S.T.M. Type D, with a thermoplastic inner liner (Nylon) that is protected by two textile reinforced braided electrometric outer jacket.

The hose shall be qualified for use with R-134A, R-404 and R-407. The hose specified herein shall be subjected to a battery of tests per A.S.T.M. D-380. The results shall be supplied by the hose manufacturer. The flexible hoses shall connect to the metal end connections using the Burgaclip connection system and specialized tools, following the vendor's instructions.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RETURN AIR GRILLE: Installed around the Heat/AC unit shall be a perforated 13 gauge steel grille. The grille shall allow 156 inches of return air flow to the Heat/AC unit. The grille shall provide complete access to the Heat/AC unit. The grille to have a black powder coat finish.

There shall be two quarter turn locks supplied and installed on the grille. The locks shall have a black powder coated finish. Lock pawl activation shall be enabled with a round bitted key.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CARBON FILTER: The return air grille shall be supplied with a pre carbon filter that is designed to fit the slot within the grille. It shall be installed and shall not rattle. The filter shall be replaceable and/or cleanable by this department's fleet maintenance in the field.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

DUAL AC CONTROL / THERMOSTAT: The air conditioning and heat for the patient cabin shall be controlled by a set of controls in the action area with a multiplexed temperature probe for the patient area. Controls in the front chassis cab through the multiplexed system shall also be installed. A digital display shall indicate the patient cabin temperature on both displays.

LINER PANELS: The patient cabin head liner substrate material shall be one quarter inch thick, composite metal with powder coated finish laminated to center plastic material. An upholstered center panels shall provide access to ceiling wiring and be covered in the same upholstery type as the seat and back rest pads found on the squad bench and/or CPR seat.

{Bidder Comply}

PATIENT CABIN DOME LIGHTS: The patient cabin shall have eight dual intensity, Kinequip LED dome lights in the ceiling. The domes centers shall be aligned along two, four light banks.

The left bank shall

provide light directly over the patient: the right bank shall provide light directly over the aisle/squad bench.

The dome lights and configuration shall meet current Federal Specifications KKK-A-1822.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CHECK OUT LIGHT SWITCH: There shall be a switch installed designed to defeat/enable power to prescribed interior dome lighting. The location of the switch shall be noted in the shop order after determination at the pre-build conference.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

INTERIOR CHECKOUT TIMER: A programmable timer circuit shall be included as part of the AEV MX1 Multiplexed electrical system. It shall be activated with the opening of either the Curbside or Rear Access Doors. The circuit shall be constant hot and only operate with the Battery Switch in the off position.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

INTERIOR CHECKOUT TIME FRAME: The light circuit shall stay on for a period of 15 minutes.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

LIGHTS POWERED BY TIMER: The aforementioned timer shall power the street side (Left side) bank of dome lights on the high intensity setting. The duration of the light shall vary with the setting of the timer.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

I. V. BAG HANGING HARDWARE, No 1: One self contained recessed I. V. Hook assembly shall be installed in the ceiling. The I. V. Hook assembly shall fold and stow recessed in a cast aluminum housing. The hooks are to be spiral shaped to preclude I.V. Bag from falling off with push button release for each fluid bag. The I. V. Hook assembly shall hold (2) two bags of fluid. A rubber with Velcro anti-sway device shall be included for IV retention, without depending on adjacent cabinetry.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: Located of the Primary patient, in the close proximity to the Head/Chest area of the patient.

I. V. BAG HANGING HARDWARE, No 2: One self contained recessed I. V. Hook assembly shall be installed in the ceiling. The I. V. Hook assembly shall fold and stow recessed in a cast aluminum housing. The hooks are to be spiral shaped to preclude I.V. Bag from falling off with push button release for each fluid bag. The I. V. Hook assembly shall hold (2) two bags of fluid. A rubber with Velcro anti-sway device shall be included for I. V. retention, without depending on adjacent cabinetry.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: Located of the Secondary patient, in the close proximity to the Knee/Waist area of the patient.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

IV HOOK No 3: One chrome plated, surface mounted IV hook, with a spring-loaded retention gate, shall be supplied in the ceiling of the patient cabin. The hook shall feature an anti-swing strap next to the hook.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: Located of the Primary patient, in the close proximity to the Knee/Waist area of the patient.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

IV HOOK No 4: One chrome plated, surface mounted IV hook, with a spring-loaded retention gate, shall be supplied in the ceiling of the patient cabin. The hook shall feature an anti-swing strap next to the hook.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: Located of the Secondary patient, in the close proximity to the Knee/Waist area of the patient.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RECESSED CURB SIDE OVER HEAD ASSIST RAIL: The rail shall exceed the current revision of current Federal specification KKK-A-1822. The rail shall be 1 ¼ diameter, 100% stainless steel with gray anti-microbial coating and 72 inches long. All rail fittings shall be TIG

welded to the main rail. The rail shall be recessed in an ABS pan 1.5", located curbside of center pad.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

**MODULE INSULATION:** The module insulation, except the under the floor shall consist of material having the following characteristics, 8mm thick nonabsorbent, reflective and shall have an air cell core. The air cell core shall consist of one layer of polyethylene bubble film that is sandwiched between one (1) layer of 99 percent pure aluminum foil and white colored polyethylene film. The insulation shall be installed with at least ½ air space from exterior skins, exposed to direct sun light. The insulation thermal rate testing shall be conducted in accordance with A.S.T.M. E84-89A, ANSI 2.5, NFPA 255, UBC 42-1, and U. L. 723. The insulation shall have a NFPA Class A and a UBC Class 1 fire rating with a flame spread index of 20 and a smoke developed index of 30. The application shall include a single layer of the insulation on all four walls, doors, compartments, and ceiling.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

**SOUND BLOCK:** There is to be Sound Block, sound deadening installed prior to the 1/2" subfloor. It shall be adhered directly to the vapor barrier and shall also include the interior of the body over the wheel well housings for a complete floor sound block. The material shall be less than 1/4" thick so as not to impede on the interior headroom. This sound deadening material has an additional insulation value of R-3 measured vertically. This DBMAX material in combination with other mounted substrates can produce a decibel reduction on average of 47 decibels for frequencies 250 - 5000 HZ.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

**FRONT LIGHT BAR:** The front light bar shall be a Whelen 4500 series surface mounted light bar, located directly under the module drip rail. The universally designed bar shall feature an aluminum extrusion body designed to mount the bar, accommodate lenses and accommodate interchangeable light heads. All devices specified herein shall operate from 12.8 volts direct current, supplied by the vehicle's charging/battery system.

The light bar shall measure 4-1/8" high by 86" Long and protrude out from the body 5-1/8". The bar shall accommodate up to tene devices. The Configuration shall be Red LED/white LED/ Red LED/ Red LED/White LED//White LED/ Red LED/ Red LED/ White LED/Red LED. The lens shall all be clear.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

**LIGHT BAR LOCATION:** The aforementioned light bar shall be through bolted to the face of the module front. T-slot bolts shall be supplied by the light bar manufacturer and shall slide along a T-shaped feature that is extruded into the main light bar body. All attachment nuts shall be Nylock type to preclude loosening due to vibration. All fastener sites shall be sealed with silicone to prevent water intrusion. The body skin shall be reinforced by 0.250 inch (1/4") thick aluminum plate to prevent skin pull through should the light bar be struck by low height tree branches.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FRONT LIGHT BAR SWITCH: The aforementioned light bar shall be controlled by the following light bar switches. All switches shall be located in the cab console per the vehicle switch configuration specified in the cab console section of this specification.

SWITCH FOR OUTER FLASHING LIGHTS: The outer flashing lights shall be switched to the Primary AND to the secondary output legs of the PRIMARY / SECONDARY Switch. The flash sequence of these lights shall comply to the Federal Specification KKK-A-1822\*. The revision level is specified under the flasher specification within this document.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SWITCH FOR CENTER FLASHING LIGHT: The center flashing light shall be switched to the PRIMARY output leg of the PRIMARY / SECONDARY switch. The flash sequence of these lights shall comply to the Federal Specification KKK-A-1822\*. The revision level is specified under the flasher specification within this document. This light shall NOT flash in "SECONDARY" mode.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SWITCH FOR CENTER FLASHING LIGHT: The center flashing light shall be switched to the PRIMARY output leg of the PRIMARY / SECONDARY switch. The flash sequence of these lights shall comply to the Federal Specification KKK-A-1822\*. The revision level is specified under the flasher specification within this document. This light shall NOT flash in "SECONDARY" mode.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

WARNING LIGHT FLASHER: There is not to be an external flasher unit. The LED warning lights shall each flash independently of each other. There shall be no preset flash pattern and it will not comply with the present revision of KKK-A-1822. This agency chooses to have this flash pattern as we feel that it is as effective as the required flash pattern incorporated within the verbiage of the present revision of KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

PRIMARY / SECONDARY SWITCH: The warning light system shall be controlled with a switch(es) located in the cab console. The switch(es) shall allow for "Off" position, "Primary" position, and "Secondary" position. Each output of the switch shall be indicated with a small red lamp, integrated in the switch legend area. The switch shall have an engraved, illuminated legend that clearly defines the function of the switch.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

GRILLE LIGHTS: Two pairs of warning lights shall be installed on the chassis grille to warn oncoming traffic. The lights shall not block significant air flow to the radiator.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

Flanges: (2) 700-Chrome Flange for lights above

WARNING LIGHT: The light shall be two Whelen 700 Series Super LED light with White LED diodes and clear lens. The light shall feature an internal flasher.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

WARNING LIGHT: The light shall be two Whelen 700 Series Super LED light with RED LED diodes and clear lens. The light shall feature an internal flasher.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

FRONT INTERSECTION LIGHTS: A set of warning lights shall be installed on the chassis front fender to warn oncoming intersection traffic.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

Flanges: (2) 700-Chrome Flange for lights above

WARNING LIGHT: The light shall be two Whelen 700 Series Super LED light with RED LED diodes and clear lens. The light shall feature an internal flasher.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

MODULE SIDE WARNING LIGHTS: There shall be four Whelen 900 series Super LED lights in the upper outermost positions.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

FLANGES: The above lights shall have Whelen's optional bright trim bezel (Flange), to embellish the light head.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

WARNING LIGHT: There shall be installed a Whelen 900 Series White LED lights with Clear lens. The light is programmable and has a installed flasher for operation.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

ADDITIONAL WARNING LIGHTS: There shall be additional warning lights installed on the mid side of the ambulance module toward the rear.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_

FLANGES: The above lights shall have Whelen's optional bright trim bezel (Flange), to embellish the light head.

Bidder Complies YES\_\_\_\_\_ NO \_\_\_\_\_



LOCATION: On the side of the module, over each rear wheel well opening on the ambulance body.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

WARNING LIGHT: There shall be installed a Whelen 700 series Super LED light with Red LED diodes and clear lens. The light shall feature an integrated flasher.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

WARNING LIGHT SWITCHING: The above mentioned lights shall be wired to activate in Primary and Secondary modes.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

REAR UPPER WARNING LIGHT ZONE: There shall (2) Rear Upper Body Lights: 900 Series LED

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

LOCATION: On the rear of the module, one in each upper outer corner inside of the structural corner post.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

WARNING LIGHT: There shall be installed a Whelen 900 Series White LED lights with Clear lens. The light is programmable and has a installed flasher for operation.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

ADDITIONAL REAR WARNING LIGHTS: There shall be installed (2) Whelen 900 Series LED warning lights.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

LOCATION: On the rear of the module, aligned with each upper window in the access doors. The light shall flash through the window when the doors are opened.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

WARNING LIGHT: There shall be installed a Whelen 900 Series Red LED lights with Clear lens. The light is programmable and has a installed flasher for operation.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

REAR UPPER ZONE WARNING LIGHT: There shall be installed one warning light in the upper rear center of the module zone.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FLANGES: The above lights shall have Whelen's optional bright trim bezel (Flange), to embellish the light head.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

WARNING LIGHT: There shall be installed (1) Whelen 600 Super LED Amber LED lights with Clear lens. This light shall feature a built in programmable flasher.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

The above LED light(s) shall be programmable to flash without an external flasher.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

PROGRAM SWITCH WIRING: The emergency lighting harness shall include cabling for light program changing from the circuit board. Each light head location shall have a cable routed from the light head location to the circuit board area. The cable shall be minimum shielded, 18 awg, cable with a polyvinyl chloride (PVC) jacket.

All aforementioned cables shall have six inch service loop on each end to allow for future connections.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

Headlight Flasher: The manufacturer shall ensure that the chassis programming is activated for headlight flashing when triggered by the installed conversion electrical system. This headlight flasher is a warning device for emergency usage. The corresponding switch or icon shall activate this activity. The chassis program shall engage when the headlights are turned on.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RECHARGEABLE FLASH LIGHT: (2) StreamLight "E-Flood" rechargeable flash lights shall be supplied and installed by the ambulance manufacturer. The lights shall have a polymer case, unbreakable lens and a run time of one and one half hours (Between charges). The lights shall charge back to 100% in twelve to fourteen hours.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FLASH LIGHT LOCATION: The aforementioned flash light shall be located (1) in M2 on wall #1 and (1) in M7 on wall #3. Each by the fire extinguishers.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FLASH LIGHT POWER: The aforementioned flash light shall be Constant Hot.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BATTERY SWITCH: A conversion disconnect switch shall be supplied. Constant battery power shall be supplied for device memories. None of the chassis functions shall be effected by this switch per Fords Qualified Vehicle Modifiers program, bulletin No 63. An indicator light shall illuminate on the cab console panel.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POWER MODULE DOOR LOCKS: Each compartment and/or entry doors listed below shall Lock or Unlock with a single depression of a momentary switch. Each door shall be fitted with a bidirectional, momentary electric solenoid designed to operate a mechanical rod in a linear fashion. The rod shall mechanically interface with the door lock mechanism inside the door. All rod connections shall be designed for high cycle operation without mechanical disconnection. The battery compartment shall NOT have the power lock/unlock feature. This compartment shall remain key operated.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DOOR LOCK SWITCH: The aforementioned door lock(s), shall be wired to activate with the OEM cab door locks and their switches in the cab.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

KEY FOB OPTION: The aforementioned door lock(s), shall be wired to activate with the OEM cab door locks and their switches in the cab as well as the remote key fob activator.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DOOR LOCK SWITCH: A momentary single pole, double throw rocker switch shall be supplied in a switch panel and located in the rear action area. The panel shall include an engraved legend that describes the function of the switch. The legend shall illuminate with the battery switch.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DOOR LOCK SWITCHES: The module entry doors shall have internal integrated electric door lock activation switches.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ONLY the following doors shall have power door locks:

POWER DOOR LOCK (M1): There shall be installed an electric solenoid powered actuator for the compartment door lock.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POWER DOOR LOCK (M2): There shall be installed an electric solenoid powered actuator for the compartment door lock.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

POWER DOOR LOCK (M-3): There shall be installed an electric solenoid powered actuator for the compartment door lock.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

POWER DOOR LOCK (Rear Module Entry): There shall be installed an electric solenoid powered actuator for the module door lock.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

POWER DOOR LOCK (M-5): There shall be installed an electric solenoid powered actuator for the compartment door lock.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

POWER DOOR LOCK (M6): There shall be installed an electric solenoid powered actuator for the compartment door lock.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

POWER DOOR LOCK (Curbside Entry Door): There shall be installed an electric solenoid powered actuator for the module entry door lock.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

POWER DOOR LOCK (M7): There shall be installed an electric solenoid powered actuator for the compartment door lock.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

HIDDEN DOOR LOCK/UNLOCK SWITCH: A weather proof momentary switch shall be installed, concealed from view. Installation of Remote Door Lock/Unlock Switch feature may increase likelihood of unauthorized entry into vehicle. By checking this option, purchaser further agrees to hold AEV or chassis manufacturer harmless for any loss of vehicle or contents caused by unlawful access.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

LOCATION: The switch shall be located under the shoreline inlets.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CAMERA #1: There shall be a camera mounted on the rear of ambulance body to allow the driver to view as they are backing up. Unless otherwise specified, the camera shall be mounted over the rear doors as close to the centerline of the vehicle as possible. The system shall include all the necessary cables and adapters to connect the system together with power as needed. The monitor shall automatically be tied in so that when the vehicle is placed in reverse, it will automatically illuminate the monitor and through the monitor controls shall allow for the monitor to be illuminated when the vehicle is in any gear.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CAMERA COLOR: The casing and bracket of the above mentioned camera shall be White.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

MIRROR MONITOR: There shall be installed at the windshield of the chassis a reflective glass rearview mirror with built in backup monitor. The viewing surface is seven inches diagonal via a TFT LCD display. There are on screen manual push buttons or automatic triggers for source selections. The aspect ratio is 16:9. The monitor shall be installed utilizing the supplied arm to the windshield glue disc.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

BACK UP ALARM: The apparatus shall include a 97 to 107 decibel back up alarm, activated by shifting into reverse. There shall be a manual momentary cancel switch/Icon in the main electrical system for the temporary cancelation by the driver of this alarm.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CUT-OFF SWITCH, BACK UP ALARM: The back up alarm shall include a momentary type cut off switch to silence the alarm. The alarm enable circuit shall automatically reset when the transmission is shifted out of REVERSE, hence the back up alarm will sound when the vehicle is placed in REVERSE again.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

#### MAIN ELECTRICAL DISTRIBUTION:

##### Electrical System:

The electrical system shall be a custom made LX1 system utilizing Class 1 Inc. ES-Key™ technology and UltraView™ displays. The minimum system components include an UltraView™ 700 display, an UltraView 450 display, a Super node II™ with integrated climate control capability, and other ES-Key™ components as necessary.

UltraView™ 700 display: The UltraView™ 700 display (UV700) is a custom programmed, 7 inch, full color LCD ES-Key display. It is a 14 button, touch screen capable display. The LCD is bonded for direct sunlight view ability. The UV700 is sealed to IP67 and allows for flexible mounting options (flush, pedestal or rear). The UV700 has 3 J1939 CAN Bus connections and 3 NTSC/PAL Video inputs.

The UV700 is switches are configured to allow for the control of emergency master and non-emergency master functions and are completely configurable VIA the ES-Key™ Professional software. Switches may be set to act as momentary, maintained or 3 way switches without any physical hardware change. All switches and or indicators may be configured as touch screen inputs into the ES-Key™ system. The 14 buttons are LED backlit.

The UV700 display contains ES-Key™ diagnostics, allows viewing of vehicle voltage, current draw, oxygen remaining, date and time, climate control status, temperature and control, elapsed time counter, and warning messages.

##### UltraView™ 450:

The UltraView™ 450 display (UV450) is a custom programmed, 4.3 inch, full color LCD ES-Key display. It is a 8 button, touch screen capable display. The LCD is bonded for direct sunlight view ability. The UV450 is sealed to IP67 and allows for flexible mounting options (flush, pedestal or rear). The UV450 has 2 J1939 CAN Bus connections and 2 NTSC/PAL Video inputs. The UV450 switches are configured to allow for the control of emergency master and non-emergency master

functions and are completely configurable VIA the ES-Key™ Professional software. Switches may be set to act as momentary, maintained or 3 way switches without any physical hardware change. All switches and or indicators may be configured as touch screen inputs into the ES-Key™ system. The 8 buttons are LED backlit.

The UV450 display contains ES-Key™ diagnostics, allows viewing of vehicle voltage, current draw, oxygen remaining, date and time, climate control status, temperature and control, elapsed time counter, and warning messages.

#### Super node II™:

The Super node II™ is a high density input output node that is part of the Class 1 Inc. ES-Key™ system. The Super node II™ has 24 inputs (8 positive/8 negative), 24 outputs, a Universal System Manager, a Data logger, programmable special utilities, and select J1939 engine and drive train message reception with ES-Key™ I/O

association. There are 18 positive and 6 negative outputs in the Super node™. Each positive output is capable of 13 amps continuous duty. The negative outputs are capable of 2 amps continuous duty. There is an LED associated with each input and output to indicate the inputs and outputs are physically on. Super node II™ outputs contain features such as digital circuit breaker, flash capability, PWM capability and open load detection.

Each positive output has a digital circuit breaker feature. The "digital circuit breaker" feature will automatically turn OFF an output within 0.5 seconds when the source current exceeds 14 Amps.

The Super node II™ will

attempt to reconnect the output to the load twice more at 5 second intervals, if the output is still overloaded the Super Node will maintain the output OFF.

Outputs 0 7 have a "digital circuit breaker - slow blow" which dynamically adjusts the time frame the output stays active when the load exceeds 13 Amps. This feature synthesizes the opening of a standard fuse when reacting to overload conditions. A load of 13.5 Amps will automatically turn off after approximately 12 seconds, and a load of 26 Amps will automatically turn off after approximately 3 seconds. The "digital circuit breaker" feature can be reset (or reinitialized) by de-activating the output through the ES-Key™ network. When the output is turned back ON, the over current tests will be initiated. When an output switch is in an over current situation, a fault is logged to the USM and data logger functions of the Super Node.

Outputs 0 through 17 are flash capable at 2 different rates and pulses (allowing for alternating synchronized flash patterns). Additionally any output in the ES-Key™ network may be flashed at intervals of .25 seconds utilizing Super node™ special utility functions.

Outputs 10 through 17 may be pulse width modulated (PWM) to control loads at a reduced power. PWM may be used as a light dimming feature. An output set to its PWM state will drive its load at 60% duty cycle at 400HZ. Outputs 0 through 9 have open load detection circuitry. When an open load is detected a network message is

generated. This message may be utilized as a diagnostic feature or to display a message in the information center in the front switch panel.

The Super node II™ special utility functions that include timers (delay on/off and one shot), counters, bi-stable switches, and select J1939 broadcast messages.

The Super node II™ has an integrated USB port. The USB port allows for direct connection to the ES-Key system without additional interface devices.

The Super node II™ has an integrated Load Manager: An integrated sequential switching of lamp loads is extremely important on this vehicle. An "Emergency Master" switch that simultaneously energizes a large number of lights can momentarily reduce the vehicle's voltage. Similarly the simultaneous removal of these loads can cause high alternator output voltage transients which may damage sensitive electronic equipment.

The LOAD MANAGER sequencer assures that loads are applied and removed gradually, thus eliminating the possibility of inducing failures in the vehicle's equipment.

The load manager shall be a precision, solid state controller which sequentially switches "ON" multiple circuits at 1/2 second intervals. Individual switches shall enable the user (Driver) to select output "ON or "OFF" status, at any time. The sequencer shall be initiated by the "Emergency Master" switch. The sequencer priority shall be set at the pre-build conference.

The aforementioned LOAD MANAGER shall monitor the vehicles battery voltage. When the electrical loads have exceeded the charging system output, the voltage falls. When the voltage falls to 11.5 volts, the LOAD MANAGER will begin to shed up to five loads. The load shed priority shall be set by the circuit significance, followed closely by circuit draw. The LOAD MANAGER will shed loads until the voltage level begins to rise. CAB CONSOLE: A ergonomically designed console with a A-A plywood substrate shall be contour matched to the cab floor. The console shall be a parallel wall design with a twelve and one half inch over all width. End panels and center console bulkhead panels shall add rigidity and square to the console. The substrate shall be laminated per the following finish specification.

The Super node II™ has an integrated Climate Control Module that controls the vehicles air conditioning clutch, heating valve, and fan motor speed with high current digital outputs based upon received J1939 CAN commands from the UV700 or UV450 displays. The Climate Control Module has two modes of operation: automatic and manual.

Rear Digital Thermostat/Control for A/C, includes front control in cab as well as Patient Action Area. Door Open 15, minute check out timer for 15 Oxygen Contents Gauge front control as well as Patient Area Alarm for low contents is not to activate

VOLTAGE MONITOR: A voltage monitor shall be built into the LX1 electrical system. It shall activate a warning light in the cab console, UV700 or UV450 display when the alternator output voltage falls below 11.5 volts. The warning light shall be a red back lighted, engraved legend stating Low Voltage.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

VOLTAGE MONITOR: A voltage monitor shall be built into the LX1 electrical system. It shall activate a warning light in the cab console when the alternator output voltage falls below 11.5 volts. The warning light shall be a red back lighted, engraved legend stating Low Voltage.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FIELD EFFECT TRANSISTORS: All conversion related circuits shall be protected with field effect transistors. The value of the threshold for each circuit shall not exceed 75% of the rated capacity of the weakest component in the circuit. The system shall try to reset three times before shutting down until the system is reset.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FRONT LX1 CONTROL PANEL: The manufacturer shall install the forward control panel for the multiplex key1 LX1 electrical system in the chassis cab. The control panel shall be connected to the main electrical system. The control panel shall feature touch screen controls along with tactile buttons on the perimeter. The install location shall be according to the following options.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SWITCH PANEL LOCATION: The front control panel shall be located in the chassis cab console.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

PATIENT AREA CONTROL PANEL LOCATION: Streetside Action Area panel.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SWITCH PANEL LOCATION: Streetside Action Area panel.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SWITCH PANEL MOUNTING: The Patient area monitor shall be mounted flat to the action wall.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOAD MANAGER: An integrated sequential switching of lamp loads is extremely important on this vehicle. An "Emergency Master" switch that simultaneously energizes a large number of lights can momentarily reduce the vehicle's voltage. Similarly the simultaneous removal of these loads can cause high alternator output voltage transients which may damage sensitive electronic equipment. The LOAD MANAGER sequencer assures that loads are applied and removed gradually, thus eliminating the possibility of inducing failures in the vehicle's equipment.

The load manager shall be a precision, solid state controller which sequentially switches "ON" multiple circuits at 1/2 second intervals. Individual switches shall enable the user (Driver) to select output "ON or

"OFF" status, at any time. The sequencer shall be initiated by the "Emergency Master" switch.

The sequencer priority shall be set at the pre-build conference.



The aforementioned LOAD MANAGER shall monitor the vehicles battery voltage. When the electrical loads have exceeded the charging system output, the voltage falls. When the voltage falls to 11.5 volts, the LOAD MANAGER will begin to shed up to five loads. The load shed priority shall be set by the circuit significance, followed closely by circuit draw. The LOAD MANAGER will shed loads until the voltage level begins to rise.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CAB CONSOLE: A ergonomically designed console with a A-A plywood substrate shall be contour matched to the cab floor. The console shall be a parallel wall design with a twelve and one half inch over all width. Endpanels and center console bulkhead panels shall add rigidity and square to the console. The substrate shall be laminated per the following finish specification.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SWITCH PANEL, CAB CONSOLE: A switch panel made from 3/16 thick, translucent, acrylic sheet. The acrylic material shall evenly disperse label, indicator illumination. The Sheet shall be coated with a black colored, rigid plastic film. A CNC router shall engrave, permanent switch legends, switch holes, meter holes, and indicator legends. The switches shall be organized in two rows. The top row shall start with an Emergency Master, followed by all of the emergency related switches. The bottom row shall start with a Master Switch, followed by all of the non-emergency related switches.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BATTERY MONITORING SYSTEM: This multiplexed electrical system shall include a digital display incorporated in the cab and action area switch panel displays. The digits on the meter shall be fully visible in bright daylight. The VOLTAGE measurement range shall be 0.5 to 20.0 volts. The AMPERAGE measurement range shall be -200.0 Amperes to +200.0 Amperes. The system shall be accurate to within one tenth of one volt and within one ampere. The display shall simultaneously show the amperage and the voltage.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

AUXILIARY CAB CONSOLE: A ergonomically designed extension console shall be contour matched to the Main ambulance conversion console. The extension shall be mounted inside the console. The console shall be a tapered design with a fourteen and one half inch width at the front of the console and a twelve inch width at the rear of the console. The height shall not exceed the height of the engine cover console measured at the rear. The length of the console, measured at the center, shall be at least twenty-one inches.

NOTE BOOK SLOT: The aforementioned extension console shall feature a six inch by full width slot specifically designed to hold note books and/or clipboards. The inside finish of the slot shall be of the same material as the outside laminate. The slot shall be located in the rearward most end of the extension console.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

The aforementioned "note book slot" shall feature two removable dividers that are evenly spaced in the slot. Extruded C-channels fastened to the sides shall be employed to secure the dividers into place.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

GLOVE STORAGE: There shall be glove storage at the rear of the cab. It shall be designed to hold (3) three boxes of gloves standing on end for easy access.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CAB CONSOLE FINISH: The console body shall be finished with a 20 mil Easy Grip film. The Easy Grip shall be a self adhesive as well as bonded to the substrate with high bond contact adhesive. All joints shall be inconspicuous and bonded along the edges.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

Customer Radio: Space for Customer installed Radio Heads

CAB CONSOLE FINISH: The console body shall be finished with a 20 mil Easy Grip film. The Easy Grip shall be a self adhesive as well as bonded to the substrate with high bond contact adhesive. All joints shall be inconspicuous and bonded along the edges.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

GROUND STRAPS: Four (4) 7/8" wide by 1/8" thick, fine strand, woven straps shall provide a ground path from the module body to the chassis frame. Woven straps filter out RFI noise originating from alternators, strobe power supplies and other devices, that may find their way into intercom, stereo and two-way communication radios. Each end of the ground straps shall be through bolted with 3/8" diameter, grade 5 or 8, hex head bolts and lock nuts. Each connection site shall be cleaned to the bare metal prior to fastening the strap. The connections shall have a di-electric anti corrosion spray applied.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

12 VOLT POWER INVERTER: A highly reliable Vanner 1050CUL electronic power conversion unit that utilizes MOSFET power semiconductors and a microprocessor controller shall be supplied, installed and wired to the outlets specified herein. A Built in 30A automatic transfer switch shall transfer all loads from the inverter to the shore line, when the shore line cord is plugged into 125 vac shoreline power. The device shall convert 12 volt DC battery power into 1,050 watts of precisely regulated modified sine wave 125 volt AC power. The device shall hold output power between 114 volts and 126 volts AT a frequency of 59.9 to 60.1 Hertz. The device

shall not consume more than 105 amperes at 12 volts direct current (DC). The device shall be certified by Underwriters Laboratories to the present revision of the Federal Specification KKK-A-1822. The location of the inverter is specified below.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POWER SOURCE FOR PORTABLE EQUIPMENT No 1: Power sources are located and included with a purchased inverter.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATIONS: The power sources shall be located with one in the chassis cab console and one behind the patient action area panel.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POWER SOURCE: The aforementioned power provision shall be fed off of the output of the ignition switch or when the battery charger/conditioner is connected to the shoreline.

Solar Panel charging not required

BATTERY CHARGER/CONDITIONER: When the system is connected to shore/utility power, the battery charger (built into the aforementioned inverter) will automatically charge the batteries, then keep them fully charged. The system's microprocessor controls the charging sequence, starting with the high charger (55 Amp) mode. When the batteries are fully charged, it switches to the ready/maintenance mode to keep the battery "topped up". The battery charger shall be designed to charge either lead acid flooded (wet) or gel type batteries.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BUILT-IN BATTERY CHARGER: The aforementioned built in battery charger shall be wired to the vehicle batteries to allow charging/conditioning when the shoreline is energized.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

The power inverter shall reside in the left front middle compartment on shelf.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

The power inverter shall reside in the left front middle compartment.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

COVER: There shall be a Lexan Cover over the inverter for protection.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOW VOLTAGE BUZZER: There will be a buzzer located in the cab console giving an alert warning in addition to the Indicator light.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

## **COMMUNICATIONS RADIO(S) RELATED:**

### **RADIO POWER**

POWER SOURCE FOR COMMUNICATION RADIO(S) No 1: Positive and Negative polarity ten gauge wires shall be supplied and installed for subsequent installation of communications radio(s). The wires shall be barreled off and protected by a thirty (30) ampere automatic reset circuit breaker.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POWER SOURCE: The power provision shall be fed off of the output of the conversion main power (Battery) switch.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: The aforementioned power source shall be located in the center console, in the cab.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POWER SOURCE FOR COMMUNICATION RADIO(S) No 2: Positive and Negative polarity ten gauge wires shall be supplied and installed for subsequent installation of communications radio(s). The wires shall be barreled off and protected by a thirty (30) ampere automatic reset circuit breaker.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POWER SOURCE: The power provision shall be fed off of the output of the conversion main power (Battery) switch.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: The power source shall be located behind the Action area control panel in the patient cabin.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

### **ANTENNA LEADS**

COMMUNICATIONS RADIO ANTENNA PRE-COAX No 1: This coaxial cable shall be RG58-U type. There shall be an 18 inch service loop at the mod roof and a 36 inch tail at the interior termination point. A tag shall specify the other termination point for each coax provided.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ORIGINATION POINT: The Coaxial cable shall originate on the module roof. The port location shall be centered side to side and approximately 36" back from the front edge of the module roof.

TERMINATION POINT: The Coaxial cable shall terminate in the cab / drivers' cabin in the center console.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

### **125V SHORE LINE AND OUTLETS**

SHORE LINE INLET No 1: The primary 125 Volt shore line inlet, rated at 20 Amperes shall be supplied. The plug style shall be a straight blade (NEMA 5-20P) style with a U-shaped ground. The inlet shall automatically eject the shore line connector when the vehicle ignition switch is placed in the START position. The shore line inlet shall employ a novel internal switch that closes and opens the 125 Volt circuit after the mating connector is inserted and before the connector is removed to eliminate arcing at the connector contacts. This will prolong the life of the inlet and the shore line connector. The inlet shall be protected with a weather proof cover. Shoreline dedicated for inverter/converter.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

INLET LOCATION: Front of module by driver's door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHORELINE INDICATOR LIGHT: There shall be a green indicator light to power to the shoreline system within the ambulance body. The light shall be an LED 130v light fixture that is shock and vibration proof. The light fixture shall have a 100,000 hour life for long lasting service in the field. Being LED technology, the

fixture shall have a very low heat generation. The LED indicator light fixture shall be located above the

shoreline inlet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHORE LINE COVER: The shoreline inlet shall be protected with a Yellow weather proof cover.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHORELINE EJECT TIMER: The shoreline timer shall be an Inpower VCM-05-01SF to allow the auto eject to be wired to the ignition switch ILO splicing into the OEM starter circuit

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHORE LINE INLET No 2: A second 125 Volt shore line inlet, rated at 20 Amperes shall be supplied. The plug style shall be a straight blade (NEMA 5-20P) style with a U-shaped ground. The inlet shall automatically eject the shore line connector when the vehicle ignition switch is placed in the START position. The shore line inlet shall employ a novel internal switch that closes and opens the 125 Volt circuit after the mating connector is inserted and before the connector is removed to eliminate arcing at the connector contacts. This will prolong the life of the inlet and the shore line connector. The inlet shall be protected with a weather proof cover. Shoreline dedicated for temperature controlled cabinets.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SECONDARY SHORE LINE INLET LOCATION: Front of module by driver's door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHORELINE INDICATOR LIGHT: There shall be a green indicator light to power to the shoreline system within the ambulance body. The light shall be an LED 130v light fixture that is shock and vibration proof. The light fixture shall have a 100,000 hour life for long lasting service in the field. Being LED technology, the fixture shall have a very low heat generation. The LED indicator light fixture shall be located above the shoreline inlet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

## **125 VAC OUTLETS**

125 VAC OUTLET No. 1: The following outlets shall be UL listed, 125 Volt, Hospital grade, Straight blade NEMA 5-15R outlets. Each outlet shall be installed in a UL listed, recessed, fiberglass back box with a minimum of one and three quarter inch of box depth. The outlet cover shall be stainless steel. The outlet must be grounded and protected by a GFI (Ground Fault Interrupted) Breaker. Each outlet body must illuminate when power is applied to the outlet. Each Outlet shall be clearly labeled with a permanent RED colored decal defining the outlet voltage.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

OUTLET LOCATION: This 125 Volt outlet shall be located in the patient cabin's, main "Action Area", with location as shown on the approval drawings.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

125 VAC OUTLET No. 2: OUTLET LOCATION: This 125 Volt outlet shall be located inside of the right front ALS Cabinet. The outlet shall be mounted on the back wall of the cabinet

(related to inside access) in the upper right corner. The location of the outlet shall be defined on the proposal drawings.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

125 VAC OUTLET No. 3: OUTLET LOCATION: This 125 Volt outlet shall be located in the patient cabin's, telemetry area that is located just aft of the street side CPR side seat. The outlet shall be mounted on the back wall so that the depth of the back box does not protrude into adjacent cabinets. The location of the outlet shall be defined on the proposal drawings.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

125 VAC OUTLET No. 4: OUTLET LOCATION: This 125 Volt outlet shall be located in the patient cabin's, telemetry area that is located just aft of the street side CPR side seat. The outlet shall be mounted on the back wall so that the depth of the back box does not protrude into adjacent cabinets. The location of the outlet shall be for Cabinet E in weather proof box in M3.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

125 VAC Outlet, No 5: 15A, Hospital Grade, IVORY OUTLET LOCATION: Inside the cab console.

#### INTERIOR 12 Volt Direct Current (DC) OUTLETS:

12 VOLT OUTLET No 1: This outlet shall be a, 12 volt, direct current, 20 Ampere, automotive "cigar" lighter size commercial outlet. This outlet shall be located and wired as specified below. The outlet shall be separately protected and shall be electrically isolated from other electrical functions on the vehicle. This outlet shall be wired per current Federal specification KKK-A-1822.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

OUTLET LOCATION: This 12 Volt outlet shall be located in the patient cabin's, main "Action Area", on the back wall.

POWER SOURCE: The input for the aforementioned outlet shall be wired directly to the vehicle batteries.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

12 VOLT OUTLET No 3: This outlet shall be wired the same as outlet #1.

OUTLET LOCATION: This 12 Volt outlet shall be located inside of the right front ALS Cabinet. The outlet shall be mounted on the back wall of the cabinet (related to inside access) in the upper right corner. The location of the outlet shall be on the bulkhead.

POWER SOURCE: The input for the outlet shall be wired exactly like outlet Number One.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

12 VOLT OUTLET No 4: This outlet shall be wired the same as outlet #1..

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

OUTLET LOCATION: This 12 Volt outlet shall be located inside of the right front ALS Cabinet. The outlet

shall be mounted on the back wall of the cabinet (related to inside access) in the upper right corner. The location of the outlet shall be defined on the proposal drawings.

POWER SOURCE: The input for the outlet shall be wired exactly like outlet Number One.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

ELECTRONIC SIREN: The siren control head shall feature a rocker type power switch, rotary function/Mode switch, a Manual momentary button switch, Diagnostic indicator lights a hardwired microphone and a microphone volume control potentiometer. The eight-position rotary switch shall feature the following modes:

The siren hardware shall consist of an amplifier with control head, Whelen 295SLSA1. The two channel siren amplifier shall operate two 100 watt RMS speaker drivers: RAD, PA, MAN, HF, WAIL, YELP, PIER.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

SIREN SPEAKER: There shall be a pair of 200 Watt siren speaker installed in the front bumper (recessed) outer wings, model Federal BP200 EF. The cast horns shall fit tight and be aesthetically pleasing. The edges of each hole, in the bumper, shall be clean and shall have rust preventative treatment, prior to final installation of the speakers. The siren and speakers shall meet or exceed current Federal KKK-A-1822.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

SIREN OR HORN SELECTOR SWITCH: The OEM horn ring shall control the OEM electric horn and the siren's manual momentary input controls. A switch shall connect the horn ring to



either the OEM HORN or to the SIREN. The switch shall be located in the cab console's switch panel. The switch legend, that clearly defines the switch function shall be engraved in the switch panel. The legend shall be illuminated when the head light switch is on.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ADDITIONAL ELECTRONIC SIREN: There shall be an additional siren, it shall be an electronic siren provided herein shall be a precision built, efficient and full featured siren of advanced design. The internal design of the siren shall utilize integrated circuits and silicon output transformers. The Federal Electronic EQ2B siren shall provide the tones as specified in their specifications.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SIREN OR HORN SELECTOR SWITCH: The OEM horn ring shall control the OEM electric horn and the siren's manual momentary input controls. A switch shall connect the horn ring to either the OEM HORN or to the SIREN. The switch shall be located in the cab console's switch panel. The switch legend, that clearly defines the switch function shall be engraved in the switch panel. The legend shall be illuminated when the head light switch is on.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

## GENERAL CABINET CONSTRUCTION

SUBSTRATES: The interior cabinets and components shall be constructed of exterior water boil proof resin (WBP). The glue line between layers shall be of similar chemical makeup as the phenolic resin used in marine Grade plywood, as designated by the APA (American Plywood Association). Phenolic resins are designed to eliminate formaldehyde off gassing often associated with most hardwood plywood. The exposed layers of the substrate shall be hard wood on both sides of the sheet, these layers shall be 99% void free. Cabinet cases are to be made from at least 12mm thick, minimum 5 ply. Bench Lids and Doors shall be made from at least 18 mm thick, minimum 7 ply.

CABINET INTERIOR FINISH: Cabinet interior shall be laminated with white colored, high impact, abrasion resistant laminate. The contact adhesive shall be a high bond contact adhesive, specifically designed to bond plywood to laminate. The laminate shall be at least 28 mills thick.

LAMINATE: A high impact, phenolic backed, high impact, and abrasion resistant laminate shall be used. The laminate shall be at least 45 mills thick. This material as well as all interior components shall meet or exceed FMVSS #302 (Burn rate of interior components). Color selection shall be specified at the pre-build conference.

CABINET ASSEMBLY: To maximize fastener bite, cabinet substrate parts shall be stapled with pneumatic fired equipment. The length of the fastener shall be at least 2.25 times the thickness of the material being pierced through. In addition to staples, the entire cabinet assembly must be

screwed together with a minimum #8 screw size and a length not less than 2.25 times the thickness of the pierced substrate. Screw heads shall be countersink type and driven flush. Reinforcement cleats shall be bonded to the inside corners where the backside of the face of the cabinet meets the case of the cabinet. The glue used shall be, yellow colored water proof resin type.

**CABINET TRIM:** All trim through out the interior conversion shall be anodized aluminum or formed stainless steel. All exposed corners within the patient compartment shall have padded or rounded corners. Rounded corners shall be at least .250 inch radius. Rounded corners shall not compromise maximum cabinet assembly strength. The trim shall be bonded with a high strength adhesive.

**FIT AND FINISH:** Mitered joints through out the interior conversion shall have a gap-less, hairline fit. Sliding polycarbonate door assemblies shall be scratch free and all edges shall be smooth and free of saw marks and sharp edges. Cabinet to cabinet joints shall not require more than 7/32 diameter welting to created a finished/well-fit look. Cabinets shall fit tightly against the ceiling as well.

## CABINET DOORS

**SLIDING POLYCARBONATE DOORS:** Polycarbonate shall hereinafter be identified as Lexan. Unless specified otherwise, all cabinets along the street and curb side of the vehicle shall have a mitered framed, sliding transparent Lexan door assembly. The polycarbonate shall be at least 3/16 inch thick. Each door shall be fitted with a full length, extruded aluminum door handle. The door pull extrusion shall also add bend resistance to the door. The door track/Frame extrusion shall incorporate a flocked natural rubber track insert to prevent the doors from sliding free during transit. The corners of the assembly shall have drive-in corner spline. Each spline shall be riveted into place. All extrusions shall be anodized.

**HINGED POLYCARBONATE DOORS:** Polycarbonate shall hereinafter be identified as Lexan. The polycarbonate shall be at least 3/16 inch thick. The desired thickness shall be noted within this specification at each door location. The door orientation, hinge style and latch shall also be noted at each door location as well. The door edges shall be rounded and smooth since it will be the finished edge that will be visible.

**SOLID HINGED DOOR:** When a solid door is specified, a 3/4" (19mm) thick door shall be supplied on the cabinet. The substrate shall be 7-ply, A-A (Cabinet grade), hardwood plywood. The door shall be flush fitted to the opening and have uniform gap spacing around the perimeter of the door. The door shall be hung on a continuous, stainless steel piano hinge with mounting screws, spaced every two inches along the full length of the pre-punched hinge. The door shall

be finished on both sides with white cabinet liner laminate on the inside and the same colored mica as the cabinet fascia on the outside.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

MICA COLORS: The mica color selection shall be two tone. The upper two thirds of the cabinetry shall be Light Gray with a Matte finish. The lower third of the cabinetry shall be genuine stainless steel with a brushed finish. The parting line between colors shall be straight, tight and clean. Mica edge shall be router clean, back filed and dry fitted prior to final lamination to the cabinet face. Seam quality showing evidence of using the "Factory Edge" shall be rejected. A sample of the subject mica color and stainless steel finish shall be supplied at the post award conference.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

STAINLESS STEEL APPLICATION: The lower section of the squad bench face under the lid shall be applied with the stainless steel laminate as well as the same height on the rear filler panel between the squad bench and the rear doors.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

STAINLESS STEEL APPLICATION: The lower section of the wall cabinet face at approximately the same height as the attendant seat cushion.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

POLYCARBONATE COLOR: The polycarbonate through out the vehicle shall be transparent and without tint. All doors shall be at least one quarter of one inch thick (1/4"), shatter proof and scratch resistant. The edges of the doors shall be worked and burned smooth. The material shall be flexible enough to be cold formed (Bent) at ninety degrees, without fracturing the material. Brittle material is not acceptable.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HANDLES, LEXAN WINDOW DOORS: Full height, anodized aluminum, extruded drive on handles shall be supplied on each 3/16" door. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ATTENDANT SEAT: There shall be a high back captain's seat mounted in the patient area. The seat shall have an integrated child safety seat with a pull down backrest and concealed 4-point child restraint. The seat shall be mounted per the requirements in the latest revision of KKK-A-1822. The seatbelt on the main part of the seat shall be an integrated, 4-point that is supplied and tested by the seat manufacturer as a complete package. The color of the seat shall be Dove.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SEAT BASE: There shall be a powder coated metal seat that is tested to be utilized with the WISE seat picked. The metal base shall be mounted to the ambulance floor and secured to modular body sub-structure according to the manufacturer's guidelines.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

AIR CONDITIONING EVAPORATOR CABINET: The patient cabin shall be equipped with a rear air conditioning and heat unit. AC Unit to be located on the floor behind the Attendant seat facing the rear of the ambulance. The design shall provide adequate air return to meet or exceed the current revision of the Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET J: The cabinet will be installed on Bulkhead Wall, under Talk Thru window. This cabinet shall meet current Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BULKHEAD UPPER AND CIRCUIT BOARD CABINET: This cabinet shall be located behind the seated attendant. Access to the main circuit board shall be provided through the cabinet back. The access door shall be hinged along the bottom with a non-locking lever type latch at the top. The door shall be hung on a continuous, stainless steel piano hinge with mounting screws, spaced every two inches along the full length of the pre-punched hinge. The door shall be finished on both sides with white cabinet liner on the inside and with the same colored mica as the cabinet face on the outside of the door. The door shall open without interference with other cabinet doors or hardware. Screw on panels over the main circuit board is not acceptable.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BULKHEAD UPPER CABINET: This cabinet shall be located behind and over the seated attendant. The access door shall be hinged along the top with a "C" shaped handle at the bottom. The hinges to be reel torque style and there shall be an adjustable roller ball grabber catch to hold the door in the closed and latched position.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SINGLE FLIP UP POLYCARBONATE DOOR: A Single 3/8" (0.375 in) thick, overlay flip up door shall be supplied on the cabinet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

STOWAGE LABEL: A label shall be applied for any door, drawer, or other stowage area secured by a Round Southco latch, indicating its ability to restrain 10 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ADJUSTABLE SHELF: A shelf shall be supplied in the cabinet. The shelf shall be finished in white colored laminate. Upper, lower and aisle side surfaces of the shelf shall be laminated. The shelf shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge. Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CURBSIDE UPPER CABINET: The curbside upper cabinet is located on the curbside (right side) of the patient cabin, over the squad bench. The cabinet length shall be maximized and start within two inches of the curbside entry door opening and mate against the rear wall of the patient cabin. A three box glove dispenser shall be built into the head end of this cabinet with a fixed partition between each box of gloves. The gloves shall dispense through oblong slots cut into the 3/8-inch thick Lexan door. One door shall cover all three glove box bays, hinge across the top and feature a brass bodied, roller bearing type catch at the bottom. Gloves to be horizontal.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET "K": An interior cabinet shall be provided above the squad bench, on the curb side of the vehicle. This multipurpose cabinet interior shall be finished in high impact, white colored mica that is impervious to disinfectants and cleaners. The cabinet shall have a single opening and one fixed divider, set back for door operation.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SINGLE FLIP UP POLYCARBONATE DOOR: A Single 3/8" (0.375 in) thick, overlay flip up door shall be supplied on the cabinet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

STOWAGE LABEL: A label shall be applied for any door, drawer, or other stowage area secured by a Round Southco latch, indicating its ability to restrain 10 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET "L": Cabinet "L" shall accommodate four (3) disposable glove boxes. The cabinet shall feature two fixed set back dividers to keep the glove boxes in position during transit. Dimensions shall be 10"Wx5.25"Hx3.5"D. The dispenser shall be located at the forward end of the aforementioned "Curb side Upper". The dispense through door shall be 3/8" Lexan with machined oblong slotted holes designed and aligned specifically to remove gloves without having to open the door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HINGED POLYCARBONATE DOOR: A 3/8" (0.375 in) thick, overlay hinged door with three oblong, dispense through holes shall be supplied on the aforementioned cabinet. The outer door edges and the oblong hole edges in the door shall be router semi-round and burned smooth. Each oblong hole shall align with the center of each divided cabinet cell. The design intent for the oblong holes is to be capable of dispensing gloves through the door, directly from the box.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

STOWAGE LABEL: A label shall be applied for any door, drawer, or other stowage area secured by a Round Southco latch, indicating its ability to restrain 10 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LEFT FRONT CABINET "H": Cabinet "H" is the electrical cabinet behind the attendant seat on top of the AC

Unit facing rear of ambulance. This cabinet will house the modular electrical components to include two air

vents in the door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

PLASTIC VENT: A fifteen square inch free air flow ventilation hole be cut into the above door. The edges of the cut out shall be banded. The hole shall be covered with an aesthetically appealing, molded plastic louver cover. The louver cover shall be black in color and secured with at least one No 8 screw in each corner.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SOLID HINGED DOOR: A 3/4" (19mm) thick door shall be supplied on the aforementioned cabinet. The door shall be flush fitted to the opening and have uniform gap spacing around the perimeter of the door. The door shall be hung on a continuous, stainless steel piano hinge with mounting screws, spaced every two inches along the full length of the pre-punched hinge. The door shall be finished with white cabinet liner laminate on the inside and the same colored mica as the cabinet face on the outside.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DOOR EDGE FINISH: The edges of the aforementioned door(s) shall be covered with anodized aluminum, U-shaped trim. The trim shall be miter cut and wrapped around the perimeter of the door (On ALL four sides), including the hinged side. The trim shall be bonded to the door edge and clamped. No screws or other mechanical fastener shall be used to fasten the trim work to the door(s). The corners of the doors shall be broken (rounded) after application. Vinyl "Iron on" or mica edge banding is not acceptable.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HINGE ORIENTATION: The aforementioned door shall be hinged along the right edge of the door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

NON-LOCKING LATCH: A black positive latch shall be supplied and installed on the cabinet door. A small "preload" on the latch shall be imposed to prevent the door from rattling.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RIGHT FRONT CABINET: The right-front cabinet is hereinafter known as ALS cabinet. All fixed and adjustable shelf surfaces shall be covered in Easy Grip material. All fixed and adjustable shelf lips shall be covered with anodized aluminum trim. All shelves shall have a 3/4 lip.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET I-2: The middle section of the ALS (cabinet I) shall be nearly 40" or greater in height dependent upon 72" of headroom and I-3 and M-7 remaining standard height. Final height of I-2 shall be reflected on the sales approval drawings.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RESTOCKING FEATURE: The uppermost cabinets, shall have sliding polycarbonate doors. The entire framed assembly shall hinge upward 90 degrees to provide 100% access for the

purpose of restocking the cabinet. The assembly shall be supported by a gas piston spring on each side and latched with two positive, slam action latches that are blind mounted behind each end of the window frame. The use of plywood in this assembly is not acceptable, due to lost access area.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention. Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

Section 3.11.3 of KKK-A-1822F as revised July 1, 2017 (Change Notice 10), requires

- 1) All Interior enclosed stowage devices shall be tested to their rated weight capacity in accordance with the requirements of SAE J3058.
- 2) Stowage devices shall not come open in transit.
- 3) Storage for the main oxygen cylinder shall be accessible for replacement from an outside position.
- 4) The oxygen compartment shall be provided with at least 9 sq. in. of open vent to dissipate/vent leaking oxygen to the outside of the ambulance.
- 5) Oxygen cylinder compartment shall not be utilized for storage of any other equipment.
- 6) All interior enclosed stowage devices shall be labeled with their rated weight capacity. Individual requirements for your State may also be applicable, and should be reviewed.

(Cabinet I) OUTSIDE ACCESS DELETION: This cabinet level shall NOT have outside access through the right front compartment door. This level shall be blocked off from outside access for security.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DOUBLE SOLID HINGED DOORS WITH POLYCARBONATE INSERT: Two oppositely hinged, 3/4" (19mm) thick door frames, with a 3/16" (0.188) thick transparent inserts shall be supplied on the aforementioned cabinet. The door frames shall be drop cut from one piece of material, laminated on both sides and mated to the polycarbonate inserts secured on the backside of the door. The doors shall be flush fitted to the opening and have uniform gap spacing around the perimeter of the doors. Each door shall be finished with white cabinet liner laminate on the inside and the same colored mica as the cabinet face on the outside.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HINGE ORIENTATION: The doors shall be hinged along the outside edge of each door.



Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCKING LATCH: A positive latch shall be supplied and installed on the aforementioned cabinet door. The latch shall be powder coated black and be near flush when in the "Closed" position. The latch shall be fitted with a cylinder type lock that prevents door latch activation, when locked. Door latch activation shall be triggered by depressing a flush fitted release button that unlatches a lever. The spring loaded lever shall rotate about an axis near the surface of the door panel and extended a rotating pawl behind the latch side door frame. The depth of the pawl shall be adjustable to the CONT: latch side door frame. A small "preload" on the latch shall be imposed to prevent the door from rattling.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

STOWAGE LABEL: A label shall be applied for any door, drawer, or other stowage area secured by a black lever latch, indicating its ability to restrain 8 pounds of contents within the stowage area. This latch has been tested and is compliant within the requirements of SAE J3058 as required under Federal specification KKK-A-1822F section 3.11.3.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RIGHT FRONT CABINET OUTSIDE ACCESS: The right front cabinet of the module shall have outside access through the right front (M-7) compartment door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RIGHT REAR COMPARTMENT COVER: All exposed surfaces of this patient area side of the M5 compartment shall be fully laminated with color keyed laminate. The vertical outer corner shall feature a radius anodized aluminum trim. The trim shall originate from the top of the mated squad bench and terminate into the ceiling.

UPHOLSTERY PAD: An upholstered pad covering the entire forward facing wall, over the squad bench shall be provided to protect occupants sitting on the squad bench. The pad shall include at least 1/2" thick foam padding covered in the same heavy duty vinyl covering specified for the squad bench cushions and the remaining upholstery package.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SQUAD BENCH: A squad bench shall be installed on the curbside of the patient compartment. The number of seating locations shall be installed as described in the options following this general heading specification. All seat belts and anchorage shall comply with FMVSS. 209 and 210. The Squad Bench shall comply with current KKK-A-1822. A back and head rest shall be supplied for all seated personnel along the squad bench. There shall be a recess/footrest built into the squad bench base like on our existing units.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BIO-WASTE RECEPTACLE: A biological waste receptacle shall be supplied and installed in the squad bench. The receptacle shall accommodate a sharps container and a solid waste container per the following paragraphs. Both the sharps and the solid waste containers shall be

enclosed and secured in a molded enclosure, free of crevices. The molded enclosure shall be covered with a red Lexan hinged door, inset a molded in perimeter rim. The door pull shall be full length. A white colored "Bio-waste" symbol and legend shall be applied to the door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

WASTE CONTAINER: One eight quart (462 cubic inch), rimmed plastic waste container shall be supplied and fitted into the "Bio-waste" enclosure.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHARPS CONTAINER: A puncture proof, disposable sharps container located at the head of the squad bench with a 3.3 gallon capacity shall be supplied for safe disposal of used/contaminated syringes. .

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

UNDER LID STOWAGE: The squad bench shall provide storage under the access lids. This multipurpose storage area shall be finished in high impact, white colored laminate. Must meet current Federal specification current KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SQUAD BENCH LIDS: Two (Split) squad bench lids shall be supplied over the squad bench storage area.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HINGE, SQUAD BENCH LID(S): All squad bench lids shall be installed with butt style, hinges. The hinges shall be through bolted for longevity of the vehicle. There shall be a minimum of two hinges per lid.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LID CHECKS: Each squad bench lid shall have a bi-directional gas spring lid check (Hold open). The force value selected and ball stud locations shall provide lift assistance after twenty degrees of bench lid lift angle. The ball stud mounts shall be at least 10 millimeter.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LID LATCH: One latch to hold each lid down shall be supplied. The lid latch shall be stamped stainless steel construction and latches automatically by simply closing the bench lid. There shall be a slot milled into the underside of the bench lid to accept an manufactured keeper that will prevent the lid from pulling away from the latch. The paddle latch will be through bolted to the keeper with the retaining nuts on the backside of the keeper as a complete assembly. This assembly has been tested to SAE J3058 standards and passed with the ability to contain 80 pounds in the entire area of the squad bench. A label shall be affixed to the squad bench area.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

EDGE TRIM: The edge of the squad bench lid shall be finished with aluminum anodized "J" trim. The trim is to be supplied with countersunk holes to allow for screws to be installed flush so the screw head does not catch anything.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RESTRAINT NET: A detachable net shall be installed at the head of the squad bench. In the event of sudden stop or frontal accident, the design intent of the net is to minimize injuries to unbelted personnel seated on the squad bench. The net is a safety barrier between the occupant/personnel and the bulkhead cabinetry. The net shall be a grid of 2 wide safety web, spaced on maximum centers of 8 inches. The net shall be secured at six points. All points must be secured to 0.250 inch thick Aluminum tapping plates: or body structure with wall thickness of 0.250 inch: or through bolted to cabinet interface reinforcement brackets that are bolted to 0.250 thick welded body structure. The net shall be tightly stretched and attached to the following surfaces:

One point on the ambulance floor on the aisle side of the squad bench.

One point at the top of the squad bench near the curb side wall.

Two points at the curb side wall, near the side entry door.

Three points in the ceiling.

All Restraint Net attachment devices shall be aviation quality and pull strength tested. Tested to 2,000 pound force applied in shear (Horizontally). Detachment of the net shall be done without the need for a removal or installation tool(s). Each device shall feature a cadmium plated steel attachment ring that is forged in one continuous ring, without a split or seam. Each device shall be sewn onto the net webbing with a 1 ¾ inch square shaped thread path and diagonal X-shaped thread path to assure web to ring security.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RESTOCKING FEATURE: The uppermost cabinets, shall have sliding polycarbonate doors. The entire framed assembly shall hinge upward 90 degrees to provide 100% access for the purpose of restocking the cabinet. The assembly shall be supported by a gas piston spring on each side and latched with two positive, slam action latches that are blind mounted behind each end of the window frame. The use of plywood in this assembly is not acceptable, due to lost access area.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind

mounting teeth designed to be driven on. This additional CONT: handle is supplied to provide additional rigidity to the sliding window design to increase content retention.

SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum,

C-shaped shelf standards.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ADJUSTABLE SHELF: A shelf shall be supplied in the cabinet. The shelf shall be finished in white colored laminate. Upper, lower and aisle side surfaces of the shelf shall be laminated. The shelf shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET "B": An upper, interior cabinet shall be provided directly over the "Action Area". This multi-purpose cabinet interior shall be finished in high impact, white colored laminate. Must meet current Federal specification KKK-A-1822. Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ADJUSTABLE SHELVES: Two shelves shall be supplied in the cabinet, One shelf on each side of the center divider in cabinet. The shelf shall be made of 1/2" thick substrate and finished in white colored laminate. Both sides of the shelves shall be laminated. The shelves shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SLIDING POLYCARBONATE DOORS: The cabinet shall be equipped with two sliding 3/16" polycarbonate doors within a closed anodized aluminum track/frame. The sliding polycarbonate door track shall be an extruded, anodized aluminum shape designed to accommodate a flocked, felt type track for the doors to slide in and lightly resist movement. The mitered corners shall be spline together and riveted. The extrusion shape shall cover one half of one inch of cabinet fascia around the perimeter of the track frame.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HANDLES, LEXAN WINDOW DOORS: Full height, anodized aluminum, extruded drive on handles shall be supplied on each 3/16" door. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET "CPR": An upper, interior cabinet shall be provided directly over the CPR side seat in the Base wall cabinet. This multipurpose cabinet interior shall be finished in high impact, white colored mica that is impervious to disinfectants and cleaners.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET "CPR" CONT:

SINGLE FLIP UP POLYCARBONATE DOOR: A Single 3/8" (0.375 in) thick, overlay flip up door shall be supplied on the cabinet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

NON-LOCKING LATCH: A round pull style chrome positive latch shall be supplied and installed on the cabinet door. A small "pre-load" on the latch shall be imposed to prevent the door from rattling.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BASE WALL CABINET: The base wall cabinet is located on the Street side (Left side) of the patient cabin. The over all height of the Base Wall Cabinet shall be approximately 75% of the over all head room. This cabinet shall be built in ONE piece. The laminate along the face shall be ONE piece on single color laminate selections. A CPR Side Seat shall be provided on the street side aligned with the primary patient abdomen.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ACTION AREA: The action area is a work surface located on the forward end of the Base Wall Cabinet and adjacent to the attendant seat. The work surface shall be at least 5.5 square feet. The work area height shall be 24 inches to 29 inches. The work surface shall have a three quarter inch (3/4") high lip.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BIO-WASTE RECEPTACLE: A biological waste receptacle shall be supplied and installed in the action area. The receptacle shall accommodate a sharps container and a solid waste container per the following paragraphs. Both the sharps and the solid waste containers shall be enclosed and secured in a molded enclosure, free of crevices. The molded enclosure shall be covered with a red Lexan hinged door, inset a molded in perimeter rim. The door pull shall be full length. A white colored "Bio-waste" symbol and legend shall be applied to the door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

WASTE CONTAINER: One eight 1/8 quart (462 cubic inch), rimmed plastic waste container shall be supplied and fitted to the aforementioned "Bio-waste" enclosure. The waste container shall accommodate solid waste into disposable, red colored "Biological waste" liners. The "waste" and the "Sharp object disposal (Sharps)" containers shall be two separate receptacles, located adjacent to the other. The waste containers' material shall withstand strong disinfectant cleaners.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHARPS CONTAINER: A puncture proof, disposable sharps container located at the head of the squad bench with a 3.3 gallon capacity shall be supplied for safe disposal of used/contaminated syringes. .

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ACTION AREA BOARD: There shall be a single board containing the basic electrical and oxygen control systems of the patient area. This board shall be covered in black secure grip material. Proper spacing shall be maintained between electrical and oxygen connections. The board shall be hinged by dual action concealead hinges and secured by quarter turn captive head bolts. The use of hinges and bolts allows for inspection of the connections during routine maintenance procedures.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET "C": An interior cabinet shall be provided at the rear end of the base cabinet on the street side. This cabinet interior shall be finished in high impact, white colored laminate. Must meet current Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

RESTOCKING FEATURE: The uppermost cabinets, shall have sliding polycarbonate doors. The entire framed assembly shall hinge bottom, with a cable installed to hold door open at 90 degrees. There shall be (2) slam action latches with decal "Latch Here" Labels. The opening shall provide 100% access for the purpose of restocking the cabinet. The assembly shall be supported by a gas piston spring on each side and latched with two positive, slam action latches that are blind mounted behind each end of the window frame. The use of plywood in this assembly is not acceptable, due to lost access area.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

COMPARTMENT INTERIOR ACCESS: The compartment shall not be accessible through the INSIDE of the module.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CABINET "D": An interior cabinet shall be provided directly over the rearward "Telemetry Area just aft of the CPR side seat within the base cabinet on the street side. This multipurpose cabinet interior shall be finished in high impact, white colored laminate. The cabinet shall be ergonomically angled toward the CPR seat.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

ADJUSTABLE SHELF: A shelf shall be supplied in the cabinet. The shelf shall be finished in white colored laminate. Upper, lower and aisle side surfaces of the shelf shall be laminated. The shelf shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

RESTOCKING FEATURE: The uppermost cabinets, shall have sliding polycarbonate doors. The entire framed assembly shall hinge left with a 90 degrees to provide 100% access for the purpose of restocking the cabinet. The assembly shall be supported by a gas piston spring on each side and latched with two positive, slam action latches that are blind mounted behind each end of the window frame. The use of plywood in this assembly is not acceptable, due to lost access area.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle

shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional handle is supplied to provide additional rigidity to the sliding window design to increase content retention.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET "E": An interior access opening, leading into the left rear compartment shall be provided low and at the rear of base cabinet on the street side. This multipurpose interior access opening shall be least 2.3 square feet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SLIDING POLYCARBONATE DOORS: The cabinet shall be equipped with two sliding 3/16" polycarbonate doors within a closed anodized aluminum track/frame. The sliding polycarbonate door track shall be an extruded, anodized aluminum shape designed to accommodate a flocked, felt type track for the doors to slide in and lightly resist movement. The mitered corners shall be spline together and riveted. The extrusion shape shall cover one half of one inch of cabinet fascia around the perimeter of the track frame.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HANDLES, LEXAN WINDOW DOORS: Full height, anodized aluminum, extruded drive on handles shall be supplied on each 3/16" door. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HANDLE, LEXAN WINDOW DOORS: A full height anodized aluminum, extruded drive on handle shall be supplied at the leading edge of the facing door on each 3/16" door. This handle is in addition to the handle on the trailing edge that interacts with the window frame. The handle shall wrap around the leading edge of each door and mount with one way angular, blind mounting teeth designed to be driven on. This additional CONT: handle is supplied to provide additional rigidity to the sliding window design to increase content retention.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DRAWER "F-1&2": Two interior drawers shall be provided directly below the rearward "Telemetry" Area just aft of the CPR side seat within the base cabinet on the street side. This multipurpose drawer interior shall be finished in high impact, white colored mica that is impervious to disinfectants and cleaners. Each drawer shall be approximately 7.25" H x 17.5" W x 13"D inside. Drawers and telemetry recessed in wall for clearance. The cabinet shall add at least 1.0 cubic feet of interior stowage accommodations described in Federal specification KKK-A-1822E 3.11.1.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET - DRAWER: The aforementioned cabinets shall be fitted with a rollout drawer. The drawer bodies shall be constructed of 12mm (1/2") thick A-A cabinet grade plywood. This includes both sides back and bottom. The drawer bodies shall be laminated on ALL surfaces



inside, outside and on all edges. (Including the bottom). The laminate shall be 28 mil white colored mica. The laminate shall be bonded to the drawer body with high bond contact adhesive specifically formulated for this application. The drawer bodies shall maximize the interior cabinet volume. The drawer body heights shall be the height of the cabinet opening less one and one-half (1 1/2").

Vinyl or pressed particle board drawer bodies are unacceptable due to weight and durability constraints.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

**DRAWER FRONT:** A 3/4" (19mm) thick drawer front shall be fitted on the aforementioned drawer. The drawer front shall be flush fitted to the opening and have uniform gap spacing around the perimeter. The drawer front shall be finished with white cabinet liner laminate on the inside and the same colored mica as the cabinet face on the outside.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

**DOOR EDGE FINISH:** The edges of the aforementioned door(s) shall be covered with anodized aluminum, U-shaped trim. The trim shall be miter cut and wrapped around the perimeter of the door (On ALL four sides), including the hinged side. The trim shall be bonded to the door edge and clamped. No screws or other mechanical fastener shall be used to fasten the trim work to the door(s). The corners of the doors shall be broken (rounded) after application. Vinyl "Iron on" or mica edge banding is not acceptable.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

**LOCKING LATCH:** A positive latch shall be supplied and installed on the aforementioned cabinet door. The latch shall be powder coated black and be near flush when in the "Closed" position. The latch shall be fitted with a cylinder type lock that prevents door latch activation, when locked. Door latch activation shall be triggered by depressing a flush fitted release button that unlatches a lever. The spring loaded lever shall rotate about an axis near the surface of the door panel and extended a rotating pawl behind the latch side door frame. The depth of the pawl shall be adjustable to the latch side door frame. A small "preload" on the latch shall be imposed to prevent the door from rattling.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

**DRAWER SLIDES:** The aforementioned drawer shall be equipped with ball bearing, full extension drawer slides rated at one hundred and thirty pounds at an eighteen inch length, per pair. The length of the slide shall be at least the length of the drawer body and shall travel at least the length of the slide plus one inch over travel. The slides shall be mounted to the side of the drawer body and cabinet case. The slide sectional envelope shall not exceed one half inch wide

by two and three eighth inches high. In order to thoroughly clean the drawer and the case, the drawer slides shall feature a quick detach lever in each slide, to allow the drawer to be removed from the case without tools.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CABINET O1: This cabinet shall be located in the forward action area for storage of medical tubing, air ways, ventilation face masks, and/or miscellaneous items. Must meet current Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SHELF STANDARDS: The aforementioned cabinet shall be equipped with non incremental, aluminum, C-shaped shelf standards.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ADJUSTABLE SHELVES: Two shelves shall be supplied in the cabinet, One shelf on each side of the center divider in cabinet. The shelf shall be made of 1/2" thick substrate and finished in white colored laminate. Both sides of the shelves shall be laminated. The shelves shall be secured to four shelf clips with Phillips head wood screws, from the bottom of the shelf. An anodized aluminum angle shall be securely fastened to the front edge of the shelf. The vertical leg of the angle shall provide a lip along the front edge.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

O1 CABINET SINGLE HINGED POLYCARBONATE DOOR: A 3/8" (0.375 in) thick, overlay hinged door shall be supplied on the aforementioned cabinet. The edges of the door shall be router semi-round and burned smooth.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

C-HANDLES: The door shall be fitted with a four inch wire pull with a brushed chrome finish.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DOOR CATCH: An opposing ball bearing catch shall be supplied and installed on the cabinet door. The catch body shall be made of brass with Built in tension adjustment to relax or intensify the "grip" on the door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CPR SEAT: A left side "CPR" side seat shall be provided on the street side and aligned with the primary patient's abdomen. The seat shall be at least twenty four (24") inches wide and normal squad bench seat height. Upholstered seat pads shall be located within the seat area for the seat, back, both arms and hips. The CPR seat area shall have rounded corners. There shall be a Recess seat and telemetry area 6" for feet clearance. The cabinet configuration and dimensions shall comply with the drawings attached in appendix A.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CPR SEAT STOWAGE: The under CPR seat stowage cabinet shall add at least 1.5 cubic feet of interior stowage accommodations described in Federal specification KKK-A-1822E 3.11.1. An access lid from the top shall provide entry into the cabinet with a recessed paddle latch.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

HINGE, SQUAD BENCH LID(S): All squad bench lids shall be installed with butt style, hinges. The hinges shall be through bolted for longevity of the vehicle. There shall be a minimum of two hinges per lid.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

BACK REST: The CPR side seat shall feature a padded, fixed back rest with chamfered upper corners.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

TELEMETRY AREA SURFACE TYPE: The "Telemetry area" shall be finished with the primary color laminate.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

RESTRAINT SYSTEM(S): There shall be installed a REV Per4Max restraint system harness at each seating location declared. This seating harness system shall incorporate a four point harness of two shoulder belts with retractors and two stationary lap belts that intersect to a single high function ergonomic latch. The harness shoulder belts shall incorporate innovative technology through patent pending controlled deceleration technology which softens the impact of a crash on the EMSP user. The seat belt harness also incorporates an indicator that alerts the operator when it requires replacement. The color of the seat belt system shall be black.

This seat belt system shall meet current FMVSS safety standards.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

SECONDARY PATIENT RESTRAINT SYSTEM: There shall be a location for a secondary patient on top of the squad bench located on the curbside interior of the patient area of the ambulance. To secure the patient there shall be three inertia style retractable straps that match up to three 9" sleeved buckles on the face of the squad bench and 5" sleeved retractors by the squad bench lid hinge. The straps and buckles shall be mounted to comply with the pull test requirements in the present revision of KKK-A-1822.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

FLOOR AND SUBSTRATE: The floor of the module shall be (3/4) thick 7-Ply, Formaldehyde free, exterior grade, A-C plywood. The glue line between the layers shall be phenolic based. The

glue shall be of similar chemical make up to the phenolic glue used in Marine grade plywood, as designated by the A.P.A. (American Plywood Association).

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FLOOR COVERING: The floor substrate shall be free of dents, voids and moisture prior to application of the floor covering. The plywood substrate shall be 3/4" (19mm) 7-ply exterior grade plywood. The substrate sheet shall be cut from a 60 inch wide by 144 inch long oversized sheet. No substrate seams are allowed in high foot traffic areas. This means NO SEAMS are permitted within 132" of the rear access doors or near the side access door. On longer bodies, the only ONE seam is permitted as long as the full length of the seam is located directly over the center of a 0.250 x 2 x 3 box tube floor member AND the seam does not fall in the aforementioned "High Traffic" areas.

The floor covering shall be one piece through out the patient cabin regardless of the body length. The flooring material shall be commercial grade sheet floor with diamond plate like impression on the surface. The floor covering shall be Lonseal Lonplate II No 424 "Gun Metal" (Dark Gray).

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FLOORING MAIN EDGE: The one-piece patient cabin floor covering material shall run the full width of the aisle space plus roll up (3") three inches along the Base wall cabinet, squad bench and the right rear cabinet (when applicable). Both roll-up areas shall be recessed approximately 1/2" into the face of the cabinets.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REAR THRESHOLD: The rear threshold shall be made of 16 gauge brushed stainless steel sheet. The threshold shall conceal the end of the vapor sheet, sub floor, and flooring. The threshold shall mate to the top of the rear access door jamb and cover at least six inches of flooring. Installed over the stainless steel threshold shall be two 2.5" wide "nonskid" tape, strips applied. The color of the tape shall be safety yellow with black diagonal stripes.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

C/S THRESHOLD: The C/S threshold shall be made of .100 polished aluminum diamond plate.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

#### COT MOUNT HARDWARE

PRIMARY COT MOUNT: The main cot mount shall be a dual position, Stryker model No 6377. The mounts shall be set in the center of aisle and seven inches (7) left of center position.

COT FASTENER MOUNTING METHOD: All mounting bolts shall be 3/8" diameter, socket head cap screws with at least 16 threads per inch. All mounting blocks shall be supplied and manufactured by the cot mount manufacturer. The mounting blocks may protrude above the

flooring surface by up to 3/16", as long as all of the edges are chamfered. The aforementioned cap screws shall not protrude above the upper surface of the mounting block.

All cap screws shall be through bolted through 1/2 (.500) inch thick, 6061-T-6 Aluminum plate structure. One and one half (1-1/2) inch x six (6) inch thick plates shall either be MIG welded or Chuck structurally fastened to the floor grid for both cot mount and attendant seat fastening locations. All fastening hardware shall be either through bolted or tapped depending on under floor clearances due to chassis installed components. Mounting bolts shall not point toward fuel filler or fuel vent hoses, in accordance with good engineering practices set forth by the Society of Automotive Engineers and Ford's Qualified Vehicle Modifiers' program.

Bidders shall meet or exceed mechanical strength described in the aforementioned minimum fastening method. Material thickness and/or through bolt criteria is mandatory even if the vendor has current certification to A.M.D. Standard 004 utilizing lesser materials. Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

COT POSITION No 1: This cot position shall be set up for a primary wheeled cot set centered laterally (side to side) in the aisle. The longitudinal location shall be set 30 inches measured from the backrest of the attendant's seat (set all the way toward the front of the patient cabin) to the head of the primary cot frame, per current KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

COT LOCATION No 2: This cot position shall be set up for a primary wheeled cot set approximately eight inches left of center laterally (side to side) in the aisle or as close to the left side wall cabinet as practical. The longitudinal location shall be set 30 inches measured from the backrest of the attendant's seat (set all the way toward the front of the patient cabin) to the head of the primary cot frame, per current Federal KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

COT HOOK: A Stryker manufactured ramped hook derived of solid aluminum shall be through bolted to the threshold at the rear access doors. The design intent is to prevent accidental cot roll off during loading and unloading a one man cot. The hook shall snag a tubular drag bar that is built in to the cot frame. The cot hook shall be placed in a position where the under carriage of the cot can be erected and locked into place before release of the drag bar.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

## OXYGEN, AIR and VACUUM SYSTEMS

OXYGEN HOSES: All oxygen system service hoses, fittings and devices shall be made of nonferrous materials. Hoses used to pipe Medical Oxygen shall be electrically non-conductive, ¼ inch inside diameter with an abrasion resistant, green colored outer jacket. The hose manufacturers name, part number, inside dimension and working pressure rating shall be permanently marked along the entire length of the hose. All hoses shall have a working pressure rating of at least 250 pounds per square inch, withstand a system test pressure of 150 PSI / 1033 kPa test prescribed in current Federal specification KKK-A-1822. Each ambulance shall be tested.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

OXYGEN OUTLETS - GENERAL: Each outlet shall be comprised of an "*Inlet Box*" and a "*Latch Plate*" as defined herein. The "*inlet box*" shall be a universal inlet service box with a 165 mm type "K" (3/8") OD Copper inlet pipe stub which is silver brazed to a brass, one piece, (1 5/16") inlet body. The "*inlet box*" shall be designed specifically for positive pressure gas service and feature a primary and secondary check valve.

Each check valve shall be rated at 1,379 kPa (200psi).

The "*Latch Plate*" shall insert into the universal "*Inlet Box*". The "*Latch Plate*" is comprised of the outer cover plate and latching mechanism that will define the adapter type/Brand that will ultimately connect the patient to the oxygen system. The outlet cover shall be color coded GREEN in addition to having a clear permanent legend that identifies the gas type. Dual gas specific safety pins shall be integrated in the face of the outlet

"*Latch Plate*" for safety. Outlet adapter types shall be easily changed by simply removing the "*Latch plate*" specifically designed for brand "A" to brand "B" without any further plumbing changes. As with all medical gas outlets specified herein, all outlets shall be hydrostatically tested and cleaned for oxygen service. All medical gas outlets specified herein shall be UL (Underwriters Laboratory) listed and CSA approved. All outlets will be subject to a line pressure

of 50 PSI And shall be leak tested at 150 PSI Per Federal specification KKK-A-1822. Pressure drop across the outlet shall be less than 2.0 PSI At normal working pressure.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

OXYGEN OUTLET No 1: This outlet latch shall be designed to accept (Ohio) style, quarter turn / quick release adapters. This Oxygen outlet shall be provided where specified below.

LOCATION: The Oxygen outlet shall be located in the primary action area switch and outlet console.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

OXYGEN OUTLET No 2: This outlet latch shall be designed to accept (Ohio) style, quarter turn / quick release adapters. This Oxygen outlet shall be provided where specified below.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: The aforementioned Oxygen outlet shall be located in ceiling panel over the primary patients' head/chest area. Access to the outlet shall be free of obstructions created by surrounding appliances.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

OXYGEN OUTLET No 3: This outlet latch shall be designed to accept (Ohio) style, quarter turn / quick release adapters. This Oxygen outlet shall be provided where specified below.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: The Oxygen outlet shall be located in curb side wall, over the squad bench and near the curbside entry door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

PORTABLE CYLINDER BRACKET: A crash worthy aluminum box shall be supplied and installed as described below. The box shall be open on one end and shall fit a single "D" size customer supplied cylinder. There shall be a retention system built in with a spring loaded release that is installed so it is user friendly to operate. The rack shall be through bolted to reinforced, structural members or brackets that tie in directly to structure within the ambulance. Shall be stored behind color keyed mica cabinet door.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CYLINDER RACK/LIFT: The high pressure cylinder, for the gas specified below, shall be restrained in an exterior compartment. The cylinder restraint system shall meet or exceed the National Truck Equipment Association (N.T.E.A.) Ambulance Manufacturers Division testing as described in standard 003. The cylinder rack shall accommodate a "M" sized (3,000 liter) cylinder AND shall raise or lower the cylinder into place with an electric actuator that is rated no less than one thousand pounds. The lift capacity rating of the QR-OTS-SP-L/R lift shall be at least two hundred and five (205) pounds. Current draw of the device shall not exceed 14 amperes. The compartment shall be sized to accommodate the operational/dimensional constraints set fourth by the cylinder lift manufacturer. The cylinder valve must remain in view AND accessible from the inside of the patient cabin per federal specification KKK-A-1822E 3.12.1. This Zico QR-OTS-XX retainer system was tested by Ziamatic to meet and exceed the static testing requirements of SAE J3053 Recommended practice to improve crashworthiness of emergency vehicles as of August 8, 2017.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ACTIVATION: The Zico Pendent controller unit with coil cord shall be provided and bracket mounted on the inside door panel in the same compartment as the Oxygen Lift.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

HOSE RETRACTOR: There shall be a Hubbell Tool Balancer included in the compartment at the ceiling to move with the power lift system to keep the Oxygen Hose away from the moving parts of the lift.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CYLINDER TYPE: This rack shall be for a MEDICAL OXYGEN cylinder. The oxygen system input hose shall be suspended over this rack. This input hose shall feature a nonferrous 9/16-18 RH bottle nut and regulator barb. This connection shall comply with the diameter index safety system (DISS) set forth by the Compressed Gas Association (CGA) for safety.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CYLINDER RACK LOCATION: The main oxygen cylinder shall be stored in the left front compartment. The cylinder rack shall be through bolted in the corner of the compartment, against the back AND right wall. The cylinder neck shall be visible and accessible through the viewing window.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_



OXYGEN REGULATOR: A fixed output medical regulator shall be supplied with the apparatus and installed at the time of the oxygen system pressure test. With the regulator set at 50 +/- 5PSI, a 100 LPM minimum flow rate shall be available at all oxygen outlets. The regulating valve with inlet filter shall have a line relief valve set at 200 PSI maximum. A manual guage shall be afixed to the regulator with scale graduated in not more than 100 PSI increments. The output of the regulator may vary as the tank pressure lowers or flow rate is changed. The regulator shall have a CGA 540 thread for the bottle and a 9/16- 18 tpi threaded male connector for the input hose to the system. This regulator shall perform as required at an inlet pressure range from 150 PSI to 2600 PSI tank pressure. The oxygen piping system prior to the regulator shall have a pressure sensor installed to read the tank perssure of the main oxygen cylinder and return results back to the main electrical system for display. This sensor reading capability shall not replace the manual dial readout at the tank.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

REGULATOR WRENCH: There shall be a cast aluminum main oxygen cylinder wrench installed in the compartment with the main oxygen cylinder rack. The wrench shall include a cable lanyard that secures the wrench to the compartment wall allowing enough length of cable to loosen and tighten the regulator fitting on the customer installed main oxygen cylinder. The wrench shall be stored in place with either a hat channel bracket or Velcro to keep it secured while the vehicle is in motion.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

VACUUM (SUCTION) PANEL: A variable vacuum regulator and gauge panel shall be installed in the action area control panel. The vacuum regulator shall vary vacuum delivered to a 1200 cubic-centimeter collection jar specified below. The Vacuum gauge shall not be mounted on the collection jar itself.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

COLLECTION JAR: The suction system shall be equipped with a shatter proof, graduated, 1200cc, transparent collection container. The container shall be regulated through the Sscor panel and installed per manufacturers recommendations. The collection jar shall be retained by a SSCOR retention clip. The retention bracket when

installed per directions is SAE J3043 retention testing compliant.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

COLLECTION JAR PLUMBING: The collection jar shall be connected directly to the regulator panel in the action area console.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SUCTION PUMP: The suction pump shall be installed in the left middle compartment, adjacent to the action area panel. The exhaust tube shall be routed to the outside of the vehicle. The pump shall be mounted on rubber vibration isolators to minimize any vibration noise emitted into the patient cabin. The pump shall provide a free air flow of at least 20 liters per minute and achieve a minimum of (11.81 in) Hg vacuum within four seconds after the suction tube is closed. This 49-state pump shall meet or exceed current Federal specification KKK-A-1822.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SUCTION PUMP LOCATION: The suction pump shall be installed in the left front middle compartment. The pump shall be mounted to the ceiling of this compartment on rubber vibration isolators.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

FIRE EXTINGUISHER: Two (10) TEN pound A-B-C type fire extinguisher shall be installed in customer specified location.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

EXTERIOR ENTRY AND COMPARTMENT DOOR HANDLES: Large chrome plated, die cast paddle handles shall be provided to open all module doors. Blind fasteners shall be used to fasten the handles to the door from the backside. Blind Stabilizer pins shall be incorporated on the backside of the handle for alignment purposes. Every paddle handle shall have an isolation gasket between the paddle body and the door skin. All door skin surfaces shall be painted prior to installation of the handle hardware. All paddles, on single hung and leading double doors shall be locking type and keyed the same(unless specified otherwise). Trailing doors shall: have non-locking paddle handles, mounted on the outside of the door. The Handle shall have a bright chrome like finish mounted into the bright chrome dish. When the door is in the locked position, the handle shall extend when pulled like an automotive handle (free floating) to show the operator that the door is locked and needs to be unlocked to be opened. Systems that utilize a handle that does not free float shall not be accepted as it could bind up the inner hardware and shorten the life of the door operation and timing.

INTERIOR ENTRY AND COMPARTMENT DOOR HANDLES: The interior handle shall be lever type. A Lock/Unlock lever shall be installed below the inside lever handle and be clearly marked Lock/Unlock. The inner chrome plated handle shall have a black powder coated cast aluminum bezel for strength.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

EMERGENCY INTERIOR LATCH RELEASE: There shall be a red tipped lever to activate a rotary latch at both the top and bottom interior of each patient access door. These shall be used should the door rods become unattached from either the handle or latch assembly. The mechanisms shall be at the point of latching to the

CONT: nader pin. An inserted rubber bezel shall be installed into the door panel around the release lever to provide an aesthetic trim to the opening.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ASSIST RAIL: This rail shall be naturally accessible to assist persons entering the rear of the module in maintaining their balance. The rail shall be 1 ¼ diameter, 100% stainless steel with gray anti-microbial coating and 18" long. All rail fittings shall be TIG welded to the main rail. The rail shall be located prior to order confirmation. Grab rails that utilize separate, setscrew rail fittings are not reliable and not acceptable.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

#### ENTRY DOOR PANELS / WINDOWS / HARDWARE

INTERIOR GRAB HANDLE COLOR: The interior grab handles listed below will be powder coated with anti microbial, gray in color.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CURB SIDE ENTRY DOOR GRAB HANDLES: The curbside side entry door shall be equipped with a three point, "L" Shaped 1 ¼ diameter, stainless steel with gray anti-microbial coating, handicap style grab handles to aid in door closure and entry assistance. The grab handle shall run horizontally, directly above the inside door latch and bend Ninety five degrees downward to create a banister (handrail) to aid in vehicle egress. The door handle shall be fastened directly to the horizontal door structure that is welded to the door assembly.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REAR ENTRY DOOR GRAB HANDLES: The rear entry doors shall be equipped with a three point, "L"

Shaped 1 ¼ diameter, stainless steel with gray anti-microbial coating, handicap style grab handles to aid in door closure and entry assistance. The grab handle shall run horizontally, directly above the inside door latch and bend Ninety degrees downward to create a banister (handrail) to aid in vehicle egress. The door handle shall be fastened directly to the horizontal door structure that is welded to the door assembly.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ADDITIONAL ASSIST RAIL: This rail shall be naturally accessible to assist working attendants in maintaining their balance. The rail shall be 1 ¼ diameter, 100% stainless steel with gray anti-microbial coating and 12" long. All rail fittings shall be TIG welded to the main rail. The rail shall be located prior to order confirmation. Located on ALS Cabinet. Grab rails that utilize separate, setscrew rail fittings are not reliable and not acceptable.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DOOR PANELS: The inside UPPER door panels shall be made of .080 aluminum diamond plate. The edges of the diamond plate shall be recessed into the door frame extrusion. The center panel shall be upholstery over a smooth aluminum substrate.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CURBSIDE LOWER DOOR PANEL: The inside door panel shall be made of .080 aluminum diamond plate.

The edges of the diamond plate shall be recessed into the door frame extrusion. The panels shall be fastened to the door frame with stainless steel, #10-32 UNF machine screws threaded into aircraft quality blind fasteners. Each screw shall have an neoprene lock washer.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REAR ENTRY DOOR WINDOWS: The rear entry doors shall have an automotive style window. The window will be recessed in a factory stamped opening. The windows will be near flush. They will be in a fixed position. Each window will have a nominal area of 320 square inches.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

SIDE ENTRY DOOR WINDOW: The curb side (Right) entry door shall be equipped with an automotive style window. The window will be recessed in a factory stamped opening. The window will be near flush. Window will be fixed position. All glass shall be tinted safety glass.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

TALK THROUGH WINDOW: The Cab to Module communications window shall be provided.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

PLASTIC VENTILATED COMPARTMENT TILE: A plastic black color ventilated tile shall be installed on all compartment floors and shelves. The tile is to be designed to keep equipment off the floor or shelf to promote drying of wet equipment.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

I. V. WARMER: A Smith Works Floor Mount model IV fluid warmer shall be supplied. This device shall be capable of heating and maintaining four liters of IV fluids at a comfortable body temperature of 98.6 degrees F. The device shall feature a pan type, stainless steel warming surface with a heating element fixed to the underside of the pan and wired through an electronic thermal controller. The controller shall be built into the base of the warming pan and installed as a single unit. This unit shall run on twelve volts, direct current.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

IV WARMER LOCATION: The IV warmer shall be located inside cabinet under the talk-through of the patient cabin.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

BLANKET WARMER: There shall be a Mermaid Manufacturing's 12v Mobile blanket Warmer 4 Blanket Holder installed in Bulkhead under talk through window.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

TEMPERATURE CONTROLLED CABINET: A 1.8 cu ft stainless steel enclosure unit shall be supplied and wired 12v to work off chassis batteries. There shall be a computer interface unit to allow the end user to down load the information as to temperature and date/time of open and closure of the unit. It shall include a medical key lock for operation. The unit shall heat and cool as needed to maintain a present temperature. The computer interface panel shall be included that allows for readout of temperature reading inside the cabinet and choice to desired temperature settings. It shall also include a USB port to allow this agency to download to an excel format the change in temperature readings and settings over a desired period of time with the software that is available on the vendors web site. The MK18 shall be ordered with a drain system. A drain hose shall be installed to the exterior of the module. Both MK18 cabinets shall be located in the right front ALS cabinet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

125 VAC to 12 VDC CONVERTER/BATTERY CHARGER No 1: A IOTA Engineering, LLC, Model DLS-45 Converter with a 45 ampere output capacity shall be supplied and installed. The device shall convert a 125 Volt, 60 Hertz Alternating current input into 13.4 to 13.6 Volt Direct current. The device shall provide clean, constant D.C. Power. When specified below this device shall be capable of serving as a battery charger that charges up to it's full output capacity and tapers back the output to a maintenance mode depending upon the need of the batteries.

This DLS series battery charger/power supply shall be designed with high quality components that have life span ratings of up to ten years of continuous use. This device shall feature self protection features

including:

- 1) AC Input Protection: protects against damaging spikes (up to 190 Volts) AC That may come from the line or generator.
- 2) Reverse Battery Polarity Protection: protects against incorrect wiring hook up with fuses that can be easily replaced.
- 3) Brown Out Input Protection: protects against input spikes created by temporary or intermittent loss of input power.
- 4) Over Current Protection: protects against supplying too much output current
- 5) Over Temperature Protection: protects against thermal damage with a unique proportional fan control circuit that turns on a whisper quiet when the unit reaches 35 degrees Fahrenheit (35 degrees Celsius).

Warranty: The device shall be covered by the manufacturer for a period of two years against defects in materials or workmanship from the date of retail delivery.

An alternate charger/Converter may be supplied provided the alternate is equal in function, warranty and the alternate device has been approved by the agency prior to production.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CONVERTER TO POWER: The aforementioned converter/charger shall power the Mermaid Temperature controlled cabinets specified within these specifications when the shoreline is connected and the aforementioned converter/charger has 110vac power.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

TEMPERATURE CABINET DRAWER WITH LOCK: Install a Mermaid slide out drawer with locking mechanism, in the aforementioned Mermaid Cabinet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

TEMPERATURE CABINET DRAWER WITH LOCK: Install a Mermaid slide out drawer with locking mechanism, in the aforementioned Mermaid Cabinet.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ACTION AREA LIGHTING: A 12 volt LED light shall be provided directly over the forward, street side work surface. A 18 inch swivel fixture shall be provided. The light shall have an on/off rocker switch on the body of the light housing.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

LOCATION: The light shall be mounted above the action area.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

UPHOLSTERY MATERIALS: All padding and upholstered seating shall be covered in 36 ounce vacuum form ready vinyl. Sewn seams in the seat covers and cushions shall be minimized. Upon request, the manufacturer shall be capable of supplying vacuum formed, seamless vinyl covered upholstery. The color shall be color keyed to the laminate color selections made.

SEAT / BACKREST CORE MATERIAL: The vinyl covered foam shall meet current Federal Specification KKK-A-1822. Seat cushions shall be ergonomically contoured. All core material shall be open cell, high resilience foam.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

UPHOLSTERY COLOR: All padding and upholstered seating shall be covered in 56 ounce vacuum form ready vinyl per the aforementioned specification. The color of the vinyl shall be Light Gray. A sample of the actual color shall be submitted with the bid for approval.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

TROUGH COVER: All upholstered pad that is built to cover the trough running down the center line of the vehicle separating the curbside and streetside of the patient compartment shall be manufactured of 1/4" luan non voided plywood with padding and covered with 36 ounce vinyl. The color of the vinyl shall be the same as the remainder of the upholstery in the patient area. The cover shall be fastened to the headliner using stainless steel screws with washers that will accept button covers that are color matched to the trough cover.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

UPHOLSTERY JOINERY TYPE: All padding and upholstered seating shall feature upholstery covered foam that eliminates sewn, visible seams. All cushion corners shall be vinyl wrapped. NO sewn seams are permitted, even at the corners. Seat cushion vinyl shall be pre-formed to the cushion shape to eliminate ALL visible seams. Seat cushions with welting/piping and sewn corner seams are not acceptable since blood and other liquid form biological discharge can penetrate the seam holes and reside in the foam. All vinyl surfaces shall be pulled tight against the foam, utilizing a hardwood plywood backing board. Loose fitting vinyl coverings are not acceptable.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

FULL CUSHIONS: The post and wheel cups normally placed on the squad bench for secondary stretchers shall be DELETED in favor of full seat cushions without cutouts. The seat cushions shall be the same size as the squad bench lid and WITHOUT cutouts. The user chooses to use a backboard in lieu of a stretcher for a secondary patient.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

HEAD PROTECTION - CURB SIDE ACCESS DOOR: A seamless pad specifically designed to protect the head during egress is required. The pad shall consist of a two-inch thick foam sheet over a hardwood plywood backing board and covered in seamless vinyl upholstery.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

HEAD PROTECTION - REAR ACCESS DOORS: A seamless pad specifically designed to protect the head during egress is required and shall comply with current Federal Specification KKK-A-1822. The pad shall consist of a two-inch thick foam sheet over a hardwood plywood backing board and covered in seamless vinyl upholstery.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

## **PAINT**

100% PAINT FILM COVERAGE: All stages of primer and paint shall cover all surfaces. Hinge mating surfaces on the doors and jambs shall be painted. Bare aluminum and primer only

preparation is not acceptable under door hinges. Doors shall be painted without actuation handles installed and doors removed from body.

Paint film thickness to be no less than 4.1 mil thickness.

**PAINT SYSTEM TYPE:** The paint shall be Poly-Urethane type electrostatic application process without exception.

An electrostatic paint spray system is a highly efficient technology for the application of paint to specific work pieces. Negatively charged atomized paint particles and a grounded work piece create an electrostatic field that draws the paint particle to the work piece, minimizing over spray.

For this technology, an ionizing electrode, typically located at the paint gun atomizer tip, causes paint particles to pick up additional electrons and become negatively charged. As the coating is deposited on the work piece, the charge dissipates through the ground and returns to the power supply, completing the circuit. The electrostatic field influences the path of the paint particles. Because the charged particles are attracted to the grounded work piece, over spray is significantly reduced. Paint particles that pass a work piece can be attracted to and deposited on the back of the piece. This phenomenon is known as "wrap."

**MECHANICAL ADHESION PROMOTER:** The entire module shall be degreased. Degreaser shall be applied to manufacturers recommendations. The module body is to be inspected for flaws and imperfections, and to assure built to order specifications. All surfaces shall be initial sanded with 180 grit paper and all imperfections repaired.

**CHEMICAL ADHESION PROMOTER:** The module shall be hot-water washed at (140 degrees or greater). Then the aluminum Body shall be treated with Alumiprep 33 acid etching followed by a complete De-ionized body rinse. To ensure all surfaces are cleaned, this step shall be repeated a second time. The entire unit shall be wet coated with Alodine 5700 conversion coating and de ionized water mixed. The module body is baked at 160 degrees to dry.

**PRIMER:** The module shall then have 2 coats of epoxy primer. The unit is then baked at 140 degree metal temperature for one hour. The module body will then undergo any bodywork or filler that is required at transition(s). A third coat of epoxy primer is applied and cured. The module body will then be final sanded prior to Paint color application. Primer shall be sanded with 320 grit paper to assure flat, orange peel free surface.

**TOP COAT (PAINT):** Entire module shall be degreased. Degreaser shall be applied to manufactures recommendations. Two coats of BTLV High Solids color shall be applied.

**CLEAR COAT:** The clear coat shall be manufactured by the same company as the primer and base coat. Two coats of "clear coat" polyurethane shall be applied per the manufacturer's instructions.



3M POLISHING SYSTEM: Prior to 100% paint cure, the paint on the ambulance body shall be sanded to 1200 grit and polished flat per 3Ms Perfect-It product program for smooth finish.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

CORROSION: Anti-electrolysis procedures include but are not limited to the following.

- 1) Ensure all bare substrate is dry and free from contamination.
- 2) If bare substrate is showing signs of corrosion/oxidation, sand and remove. Use 180 grit until area is removed.
- 3) Thoroughly blow off areas to remove sand dust and metal shavings.
- 4) Thoroughly degrease to be pre-primed using the wipe-on, wipe-off method with clean white rags.

(Use good quality automotive Degreaser)

- 5) Apply Wash primer CR using a brush to all mated surfaces. Allow to flash for 15 minutes at 70 deg

Fah. Mix wash primer CR 1:1 with wash-hardner.

- 6) Apply Urethane caulk to all mated surfaces before assembly to reduce the possibility of corrosion.

EXTERIOR FASTENERS: All screw sites require a replaceable nylon insert for the fastener to thread into. This will isolate the dissimilar metals. Each hole shall be treated with an Electrolysis Corrosion Control compound prior to installation of the nylon inserts. All exterior screws shall be stainless steel.

PAINT WARRANTY: The conversion paint shall be warranted to the original owner for a period of 7 years, 70,000 miles. The color shift shall be no greater than Delta E of 4.0 with minimum gloss retention of 60 gloss units at twenty-degree angle. Warranty to include a 36-month Corrosion coverage with no exclusions.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

UNDERCOATING: The bottoms side of the module shall be undercoated, with an exception to any area affected by exhaust system direct heat. Application standards for the undercoating shall be achieved or exceeded as directed by QVM or governing standards.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

REFLECTIVE TAPE: The module door frames shall have a three-quarter inch (3/4") wide white reflective tape applied to the door frame interior. The tape shall reflect direct light at night to illuminate the outline shape of the door when the door is opened.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

COMPARTMENT FINISH: Unless specified otherwise, all exterior compartment walls and backs shall be constructed of .100 polished aluminum diamond plate.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

PAINT/GRAPHICS: To match existing fleet. Will notify successful bidder of unit and VID numbers.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REFLECTIVE / PRISMATIC TAPE: The aforementioned center step shall have a bright, conspicuous prismatic, reflective tape strip applied the rearward facing edge of the step. The tape shall have alternating colors (Red and White). The tape color shall begin and end in Red, and each segment shall measure between seven and nine inches.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

ROOF PAINT: Color match to sides, top finish to exceed industry standard of 5 plus mill thickness.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

DRIP RAILS: A bright drip rail shall be provided over each compartment. Full height compartments are exempt because the perimeter roof rail drip rails will cover these compartments.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

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Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

OWNER'S MANUAL: There shall be shipped loose with each completed unit a card with USB flash data file with pertinent information from the build of the vehicle.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

AMBULANCE STRETCHER: The ambulance shall be supplied with a Stryker 6506 Power-Pro Cot:

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

CHARGING SYSTEM: Shall be Smart Chip 12v system.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

Cot Option: Stryker, IV Pole 3 Stage, Patient Right Side

Cot STD : Stryker, Trendelenburg Feature

Cot Option: Stryker, Head End Storage Flat 6500-128-000

Cot Option: Stryker, Mattress, Bolster

Cot Option: Stryker, Foot End O2 Bottle Holder 6500-240-000

PATIENT RESTRAINT PACKAGE:

STRYKER DUAL WHEEL LOCKS: The patient cot shall have stryker dual wheel locks on the trailing wheels installed by stryker. The wheel locks feature aluminum bridge mounts over the wheels attached to the caster assemblies with red ABS locks. Each wheel lock can be manual activated and de-activated as desired.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

Cot Option: Stryker Hook, "J" Hook

AMBULANCE MARKING PACKAGE: The vehicle shall be supplied with a lettering and "star of life" symbol decal package as described in current Federal specification KKK-A-1822. The "ambulance marking package" is to be shipped loose with the vehicle. The "star of life" symbols shall meet Figure 4 required by KKK-A-1822.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

AMBULANCE MARKING PACKAGE - ROOF STAR: A 32" roof star shall be included as a part of the lettering and "star of life" symbol decal package (as described in the current Federal specification KKK-A-1822).

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

SAFETY PLACARDS: There shall be installed in the chassis cab and patient area descriptive placards in durable materials to remind occupants to fasten seatbelts and to refrain from smoking.

Bidder Complies YES\_\_\_\_\_ NO\_\_\_\_\_

MANUFACTURER LOGOS: There shall be self-adhesive logos provided and installed for the unit.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REFLECTOR PACKAGE: Six reflectors shall be supplied on the outside of the module body. The reflectors shall be located at skirt line level and the area size shall be at least 3.75 square inches. Each side shall have one

AMBER forward reflector and one RED rearward reflector. The rear of the body shall have one RED reflector per side, located just above the diamond plate kick plate.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

REGULATOR: A fixed output medical regulator shall be supplied with the apparatus. The output shall be fixed a 50 psi. The regulator shall have a CGA 540 thread for the bottle and a 9/16- 18 tpi threaded male connector for the input hose to the system.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

#### CONVERSION WARRANTY

7 Year, 70,000 mile Mechanical & Electrical including Workmanship.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

7 Year, 70,000 mile Standard Paint Warranty.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

36 Month Paint Coatings Corrosion Warranty.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_

20 Year Body Structure Warranty.

Bidder Complies YES \_\_\_\_\_ NO \_\_\_\_\_