



## CAAS GVS 2015 Section Changes – Comment Draft I

### Section A

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#### A.1

- (Bullet 2) **ADD** “Stretcher Vans”
- (Bullet 5) **REPLACE** with “Fire Suppression Apparatus”

#### A.2

- (Last Line) **ADD** “standardization and for the safety, comfort, and avoidance of aggravation of the patient’s injury or illness.”

#### A.4.1

- (Bullet 3) **ADD** “Accommodation for storage of...”
- (Bullet 4/5) **REMOVE ALL / REPLACE WITH** “Accommodation for installation of communication systems.”

### Section B

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#### B.1

- **REMOVE** “AMD Standard 002 - Body Door Retention Components Test”
- **REMOVE** “AMD Standard 003 - Oxygen Tank Retention System”

#### B.2

- **ADD** “Tire and Rim Association – 2015 Year Book”

### Section C

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#### C.1.3

- **REPLACE** “8,000” with “8,501”

#### C.1.5

- **REMOVE** “Primary cot shall be loaded to position the patient’s head forward in the ambulance.”

#### C.3

- (Second Line) **ADD** “not”

#### C.4.1.1

- **REMOVE** “Exterior” / **ADD** “Environmental Conditions”

#### C.4.1.2

- **REMOVE ENTIRE SECTION**

#### C.4.4

- (Second Line) **ADD** “not less than” / **REMOVE** “under normal ambient conditions”
- (Third Line) **ADD** “in accordance with AMD Standard 017”

#### C.4.5

- (Second Line) **REMOVE** “under normal ambient conditions”



## C.4.7

- (Third Line) **ADD** “in accordance with AMD Standard 017”

## C.4.8.1

- (Second Line) **ADD** “(in accordance with test procedure SAE J1100 (*Motor Vehicle Dimensions*))”

## C.4.8.3

- **REMOVE** “finished” / **ADD** “load”

## C.5.2

- **REMOVE** “The ambulance shall not be operated in an overloaded condition. EMSPs should determine that the actual load, to be placed on the vehicle, does not exceed the total usable payload as manufactured. Any additional items attached to, or carried on the vehicle by the EMSP will reduce the combined weight of occupants and Cargo/Equipment that comprise the total usable payload. Additional weight added, resulting from specified options, will reduce the available payload per vehicle.”

Occupant weight shall be accommodated at 171 lbs. for each designated patient and seating position.”

## C.5.6

- **REMOVE ENTIRE SECTION**

## C.6.3.1

- **ADD** “Alternative Fuel systems (for systems such as LPG and CNG) are permitted so long as they are approved by the OEM.”

## C.6.5.3

- **REMOVE ENTIRE SECTION**

## C.6.5.4

- **RE-LABEL** “C.6.5.3”

## C.6.5.5

- **RE-LABEL** “C.6.5.4”
- (Second Line) **ADD** “or electronic traction control” / **REMOVE** “unless not furnished with the OEM’s AVSC system”

## C.6.5.6

- **RE-LABEL** “C.6.5.5”
- (First Line) **REMOVE** “spring, torsion, or air”

## C.6.5.7

- **RE-LABEL** “C.6.5.6”

## C.6.5.8

- **REMOVE ENTIRE SECTION**



C.6.7

- **REMOVE** “Types I, II & III ambulances shall be equipped with dual rear wheels and single front wheels. Type II ambulances shall be equipped with single, front and rear wheels.”

C.6.10

- **REMOVE** “OEM”

C.6.11

- (Title) **REPLACE** “S” *with* “(S)”
- **REMOVE** “The OEM’s dual”

C.7.1

- **REMOVE BULLET 4**
- (Bullet 8) **ADD** “(Refer to SAE J551(*Performance Levels and Methods of Measurement of Electromagnetic Compatibility of Vehicles, Boats, and Machines*))”

C.7.1.1

- (Bullet 1) **ADD** “installed by the FSAM”
- **REMOVE BULLET 2 & 3**

C.7.2

- (Bullet 3) **ADD** “(Refer to SAE J1128 (*Low Voltage Primary Cable*))”

C.7.2.2

- (Title) **REMOVE** “Printed Circuits” / **ADD** “Ambulance Conversion Electrical System – Printed Circuit Boards”
- (First Line) **REMOVE** “Patient compartment controls” / **ADD** “Printed circuit boards, which control the ambulance conversion, and installed by the FSAM, shall”

C.7.3.1

- (First Line) **REMOVE** “FSAM to provide radio frequency (RF) grounding and minimize potential interference with OEM’s computers”

C.7.4

- (First Line) **REMOVE** “when available from the OEM”
- (Nineteenth Line) **ADD** “voltage”

C.7.4.1

- (Seventh Line) **ADD** “and parking brake applied” / **REMOVE** “The parking brake shall be applied at all times when the engine high-idle speed control is in use.”

C.7.6.1

- (Fourth Line) **REMOVE** “with the following: *THIS CONNECTION IS FOR 125-VOLT AC, 60 Hz, 15-AMPERE SUPPLY WHEN VEHICLE IS NOT IN USE.*” / **ADD** “with the proper voltage and amperage rating.”



## C.7.6.3

- **REMOVE BULLET 3 & 4**

## C.7.7

- (Second Line) **REMOVE** "normal" / **ADD** "purchaser"

## C.7.8

- (Full Paragraph) **REPLACE** "The patient compartment controls, switches, and instruments shall be panel mounted and located within normal reach of the seated EMSP." **with** "The purchaser-specified patient compartment controls, switches, and instruments shall be mounted and located within reach of the primary seated and restrained EMSP."

## C.7.9

- (Third Line) **REPLACE** "8" **with** "10"

## C.8.1

- (First Line) **REMOVE** "when available from the OEM"

## C.8.2.1

- (Seventh Line) **REMOVE** "are" / **ADD** "shall be either"

## C.8.3

- (Fifth Line) **REMOVE** "A light switch will be located inside by the rear door and to activate the rear load lights. A light switch will be located inside by the patient compartment side door to activate the curbside load lights." / **ADD** "Rear or side floodlights shall active when the respective patient compartment access door is opened."

## C.8.4

- (Third Line) **REMOVE** "Lighting shall be designed and located so that no glare is reflected into the driver's eyes or his line of vision, from switch control panels or other areas that are illuminated while the vehicle is in motion."

## C.8.4.1

- (Second Line) **REPLACE** "35" **with** "50"

## C.9.1

- (Third Line) **REMOVE** "There shall be a console convenient to the driver in the drivers cab, which contains all added switches for operation of the ambulance."

## C.9.1.1

- (Third Line) **ADD** "any after-market"

## C.9.2

- (Second Line) **ADD** "at a minimum"
- **REMOVE BULLET 3, 8 & 14**
- (Bullet 8, 9 & 10) **REPLACE** "Gauge" **with** "Indicator"



## C.9.5

- (First Line) **ADD** "power"
- (Third Line) **ADD** "The driver and passenger side door mirror shall be adjustable from the interior of the vehicle by an electric switch, which can modify the angle of the mirror surface."
- (Recommended Enhancement) **REPLACE** "*POWER MIRRORS: Power mirrors may be furnished. The driver and passenger side door mirror shall be adjustable from the interior of the vehicle by an electric switch, which can modify the angle of the mirror surface.*" **with** "*Backup Camera: Power rear view backing camera.*"

## C.10.2

- (Line Five) **REMOVE** "shall be latching and contain a locking mechanism from the cab side and..."

## C.10.3

- **ADD** "The seating location(s) shall be specified by the purchaser."

## C.10.4

- (Recommended Enhancement) **REPLACE** "*Twelve inches (12") of clear aisle walkway space may be provided on each side of the cot.*" **with** "*Twelve inches (12") of clear aisle walkway space should be provided on the side where the primary EMSP is operating.*"

## C.10.5

- (Second Line) **REMOVE** "The exterior of the body shall be finished smooth with symmetrically radius corners and edges, and shall include doors and windows specified herein."

## C.10.6

- (Fourth Line) **REMOVE** "welded" and "and must conform to AMD Standard 004 (*Litter Retention System*)" / **ADD** "attached"

## C.10.10

- (Bullet 5) **ADD** "and shall conform to AMD Standard 012 (*Interior Climate Control Test*)"

## C.10.14

- (First Paragraph) **REPLACE** "The interior of the body shall be free of all sharp projections. All hangers or supports for equipment and devices (these include, but not limited to: Grab Bar, IV hooks, Outlets, Control panels, O2 mount, lights, cabinetry hardware, switches, door/drawer latches) shall be mounted flush as flush as possible with the surrounding surface. Interior body lining and cabinetry materials, excluding the cab compartment, shall be selected to minimize dead weight." **with** "The interior of the body shall be free of all sharp projections. All hangers or supports (these include, but not limited to: Grab Bar, IV hooks, Outlets, Control panels, O2 port, lights, cabinetry hardware, switches, door/drawer latches) shall be mounted flush as flush as possible with the surrounding surface. If flush mounting is not possible, a maximum of 1" from the surface is permitted. Interior body lining and cabinetry materials, excluding the cab compartment, shall be selected to minimize dead weight. Swing down hangers/bracket with rigid support arms that can cause injury shall not be specified or furnished."

## C.11



- **ADD** "Equipment, supplies, devices, tools, etc., shall be stored in enclosed compartments, cabinets, drawers or appropriate mounts designed to accommodate the respective items."

## C.11.1

- **REMOVE** "cabinetry, compartment space, and shelf space which shall be conveniently located for medical supplies, devices, and installed systems as applicable for the service intended. Volume of interior storage accommodations shall be determined using AMD Standard 019 (*Measuring Guidelines: Cabinets and Compartments*). Enclosed compartments and spaces shall be located at, in, or on the partition, sidewalls, overhead, seating areas, and doors. "

## C.11.1.1

- (Title) **ADD** "Mounting And"
- **ADD** "For any equipment and materials over 3 lbs, not otherwise stowed in a cabinet, equipment mounts or retention devices shall be utilized. These mounts shall be tested in accordance with the requirements of SAE J3043 (*Ambulance Equipment Mount Device or Systems*). The mounts or retention devices shall be installed according to the mount or retention device manufacturer's directions.

The purchaser shall specify to the manufacturer the desired location and structural requirements for mounting equipment. The manufacturer shall place an appropriate structure in the vehicle to provide support for such an installation."

## C.11.1.2

- (Second Line) **REMOVE** "with 12 spare liners".
- (Fifth Line) **ADD** "The sharps container must have a locking system that will remain closed in a crash. Any sharps container mounted alone (ie. outside of a cabinet) must be tested in accordance with SAE J3043 (*Ambulance Equipment Mount Device or Systems*)."

## C.11.2

- (Fourth Line) **REMOVE** "and shall be keyed alike"

## C.11.3

- (Bullet 1) **ADD** "not to exceed 1 inch of intrusion"
- (Bullet 6) **ADD** "Open" / **REMOVE** "Tops of the cabinets and" / **REMOVE** "covered in a soft, pliable molding"
- (Bullet 9) **ADD** "main"

## C.11.4

- (Fifth Line) **ADD** "All patient compartment seating shall have no less than a Type II belt (3-point restraint system) installed at each seating location and shall meet the requirements of SAE J3026 (*Ambulance Patient Compartment Seating Integrity and Occupant Restraint*)."
- (Eleventh Line) **ADD** "This shall comply with OSHA 29 CFR 1910.1030"

## C.11.4.1

- (Title) **ADD** "Compartment"
- (Fifth Line) **REMOVE** "by 7" tall"



- (Eighth Line) **ADD** "All seating and restraint systems shall be tested in accordance with the requirements specified in SAE J3026 (*Ambulance Patient Compartment Seating Integrity and Occupant Restraint*)."

C.11.6

- (Ninth Line) **ADD** "The litter attachment will be tested in accordance with AMD 004 (*Litter Retention System*)."

C.11.7

- (First Line) **ADD** "IV" / **REMOVE** "ceiling" / **REMOVE** "...ed "hook" style device"
- (Fifth Line) **REMOVE** "that can cause injury"

C.11.8

- **REMOVE SECTION**

C.12.2

- (Bullet 7) **ADD** "If the device is 3 lb. or greater, including the weight of the volume of the container/contents, mount system must meet the requirements of SAE J3043 (*Ambulance Equipment Mount Device or Systems*)."

C.13.3

- (Recommended Enhancement) **REMOVE** "Vehicle design should follow requirements outlined in United States Pharmacopeial Convention Inc. (USP) *USP32–NF27* related to temperature monitoring devices to ensure conformance to controlled room temperature storage."

C.15.1

- (Bullet 1) **ADD** "This shall meet the requirements of SAE J3043 (*Ambulance Equipment Mount Device or Systems*)."

C.16

- **ADD** "Body" / **REMOVE** "Color and Markings"

C.16.1

- (Title) **ADD** "Body"

C.16.2

- **REMOVE SECTION**

C.16.3

- **RENAME** "C.16.2"

C.18

- (Bullet 15) **ADD** "Certification for components meeting SAE J3026, SAE J3027, and SAE J3043"

**Section D**

D.6.1

- (Second Line) **ADD** "and FMVSS 207 and 210"

**Commented [IW1]:** Technical Committee to Review Section



**Section E**

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E.1

- (Eighth Line) **ADD** "within 60 days"

E.2

- (Ninth Line) **REMOVE** "by the Board of Directors"
- (Tenth Line) **ADD** "within 3 business days"

**Commented [IW2]:** Check with ANSI/CAAS requirements.

**Appendix 2**

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2.C

- (Bullet 2) **ADD** "and the mount footprint or attachment or pattern."