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| **General Order Number:** 02-27 | **Effective Date:** January 11, 2024 |
| **Division:** Apparatus and Equipment | |
| **Chapter:** Procedure for Replacements/Additions/Changes to the Fire/EMS Department Fleet | |
| **By Order of the Fire Chief:** Tiffany D. Green | **Prior Revision:** August 24, 2020 |

## POLICY

This General Order shall outline the requirements and process for the replacement of existing apparatus and/or the addition of apparatus to the Prince George's County Fire/Emergency Medical Services (EMS) Department fleet with a new or used vehicle.

## SCOPE

The scope of this General Order is for all career, volunteer, and civilian members of the Fire/EMS Department.

## DEFINITIONS

**Apparatus Specifications –** Specifications for new or used apparatus, to include watercraft, off-road vehicles, and trailers, to operate within the fleet of the Prince George's County Fire/EMS Department, shall be in accordance with standards established by the Fire Chief.

**Existing Vehicles –** Any apparatus that is currently under County maintenance or authorized to operate on incidents; such apparatus shall be considered "Grandfathered" into compliance with the specifications in this General Order.

**Fleet –** Group of vehicles that are maintained, fueled, authorized to operate on incidents, and/or insured by the Prince George's County Fire/EMS Department.

**KKK-A-1822** – Federal Specification for the Star-of-Life Ambulance.

**M Number –** The nine-digit number that is assigned to a vehicle when it is introduced into the Fire/EMS Department fleet and remains with the vehicle until it is removed from the fleet. All vehicles that are authorized to operate or respond to emergency and non-emergency incidents shall have an M number, regardless of fuel, maintenance, insurance, and ownership responsibilities.

**MVA Form VR-26 –** Application for Approval of Emergency Vehicles or Service Vehicles obtained from the Maryland Motor Vehicle Administration.

**NFPA 1901 –** National Fire Protection Association Standard for Automotive Fire Apparatus.

**NFPA 1911 –** National Fire Protection Association Standard for Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles.

**NFPA 1912** – National Fire Protection Association Standard for Fire Apparatus Refurbishing.

**NFPA 1914 –** National Fire Protection Association Standard for Testing Fire Department Aerial Devices.

**NFPA 1917** – National Fire Protection Association Standard for Automotive Ambulances.

**NFPA 1932 –** National Fire Protection Association Standard on Use, Maintenance, and Service Testing of Fire Department Ground Ladders.

**Removal from the Fleet –** When County Fleet Management is directed by Fire/EMS Department Apparatus Maintenance (AMD) to remove a vehicle (M number) from all vehicle maintenance services, fuel services, and (when applicable), insurance coverage. This action shall normally be as a result of the vehicle being permanently placed out-of-service by the owner, determined to be beyond reasonable repair, or at the discretion of the Fire Chief or his/her designee.

**Transfer of Ownership –** When a vehicle, which is part of the fleet owned by one entity within the Fire/EMS Department, is sold to another entity within the Department.

**Vehicles Operating Under the Authority of the Prince George's County Fire/EMS Department –** Any vehicle operating and/or responding to emergency Fire/EMS Department incidents dispatched by Prince George's County Public Safety Communications.

## PROCEDURES / RESPONSIBILITIES

### I. Introduction of New Services or Changes in Vehicle Use

A. All requests to introduce a vehicle to the fleet that will provide a service not currently provided by a station or a change in vehicle use (i.e., converting an engine to a rescue engine) must be approved in advance by the Fire Chief before initiating this application process. All requests must clearly demonstrate the need for such apparatus. Once approved, the process for Application for Introducing a Vehicle into the Fleet can begin.

### II. Existing Vehicles

A. Existing vehicles in the fleet as of the effective date of this General Order are subsumed into the existing fleet and considered compliant with current vehicle specification requirements. When an existing vehicle is removed from the fleet, the vehicle must comply with the specifications for used apparatus, if authorized, before being returned to the fleet.

### III. Requests for Vehicle Replacements, Additions, or Changes to the Fleet

A. It shall be the responsibility of the Volunteer Chief/President to submit an "Application for Introducing a Vehicle into the Fleet" (Attachment A) to the Fire Chief before any purchases

are made by the volunteer corporations. The Fire Chief will review the application and issue a determination within 14 days of receipt.

B. The Application must designate who is insuring the vehicle/apparatus and who is responsible for fuel and maintenance.

C. Once the approval is made by the Fire Chief for the corporation to purchase the vehicle/ apparatus, the "Application for Introducing a Vehicle into the Fleet" will be sent to the Fire Apparatus Manager. With the application, a copy of all specifications for the vehicle/apparatus will be provided to Apparatus Maintenance.

D. The Fire Apparatus Manager will review the specification to ensure compliance with Department standards, General Orders, applicable NFPA standards, and Federal Ambulance Specifications (KKK-A-1822). Apparatus Maintenance will review the specifications within 21 days and work in conjunction with the volunteer corporations to ensure this compliance.

E. Once this review is complete, the application will be sent to the following for approval within seven (7) days of receipt:
   1. Fire Commission
   2. Support Services Command
   3. Emergency Services Command

F. If the application is <u>not</u> approved by the Fire Chief or Apparatus Maintenance, it shall be returned to the respective Volunteer Chief/President with an explanation for the denial.

G. Once approved by all necessary participants, the application will be filed in the Apparatus Maintenance vehicle file.

## IV. Addition/Replacement with New Apparatus

A. The vehicle specifications for new apparatus being proposed for inclusion in the fleet must be submitted to the Fire/EMS Department's Fire Apparatus Manager to be reviewed for compliance with County requirements for new apparatus prior to any purchase.

B. The vehicle must comply with the most current standards established by the Fire Chief, as attached (see Attachments B-K). These checklists should be used when developing specifications for bid to ensure compliance when the vehicle is reviewed for final acceptance.

C. An inspection by Apparatus Maintenance must be requested when the vehicle is considered ready for service.

D. A copy of a stamped Maryland Motor Vehicle Administration Form #VR-26, approving the vehicle as an emergency vehicle, must be provided when the vehicle is inspected for final acceptance.

E. A copy of the MVA vehicle registration shall be provided to Apparatus Maintenance.

F. A copy of the current vehicle insurance card shall be provided to Apparatus Maintenance.

G. A copy of the Summary build sheet shall be provided to Apparatus Maintenance.
H. A hard copy and an electronic copy of the As-Built Wiring diagrams for fire apparatus shall be provided to Apparatus Maintenance before a unit is approved for service.

I. Any exemption taken by the Department or a volunteer corporation to NFPA 1901 shall be approved by the Fire Apparatus Manager prior to acceptance into the fleet.

J. As the Department moves to standardized apparatus, ambulances, and equipment, reviews and approvals of specifications may require volunteer corporations to change items to meet the current Department standards for parts, pieces, and equipment.

## V. Addition/Replacement with Used Apparatus

A. All additions/replacements to the fleet with used apparatus shall be approved by the Fire Chief before purchasing. An "Application for Introducing a Vehicle into the Fleet" must be prepared by the volunteer corporation and sent to the Fire Chief for review.

B. All additions/replacements to the fleet with used apparatus shall be inspected by Apparatus Maintenance prior to purchase, repair, or refurbishment. The inspection shall include a preliminary review of the vehicle's compliance using the Used Apparatus Specifications Checklist (Attachment K) and all applicable NFPA standards.

C. A second inspection by Apparatus Maintenance must be conducted when the vehicle is considered ready for service. If an issue arises in determining the vehicle's compliance with the Used Apparatus requirements, the Fire Apparatus Manager and Fire Chief shall make a final determination.

D. A copy of a stamped Maryland Motor Vehicle Administration Form #VR-26, approving the vehicle as an emergency vehicle, must be provided when the vehicle is inspected for final acceptance.

E. A successful result of the oil analysis of the engine, drive-line components, and any associated hydraulics within the past three (3) years must be provided when the vehicle is inspected for final acceptance.

## VI. General Provisions

A. All vehicles, to include watercraft, off-road vehicles, and trailers, which are designated as part of the Prince George's County Fire/EMS Department's fleet, will be assigned an M number by Apparatus Maintenance for tracking and accountability. This includes vehicles

or units obtained by volunteer organizations that are bought and/or maintained by the volunteer organization.

B. A copy of the vehicle registration for all EMS vehicles shall be sent to the EMS Billing Office by the Apparatus Maintenance.

C. The vehicle's M number will be referred to for fuel, maintenance, repair, and insurance issues.

D. All vehicles that are part of the fleet are expected to be kept in compliance with all applicable County and Departmental Orders, Procedures, and Directives. Failure to comply may result in the removal of the vehicle from the fleet.

E. A vehicle which has been determined to be a total loss as a result of an accident, or beyond economical repair, will be removed from the fleet.

F. Any vehicle that has its M number removed from the County vehicle inventory is no longer considered to be a part of the fleet.

## VII. Transfer of Ownership of a Vehicle within the County

A. Any vehicle which has a current M number and is sold to another entity within the County will be considered an "existing vehicle," and therefore can be subsumed into the fleet and considered compliant with apparatus requirements. Apparatus Maintenance must thoroughly inspect such vehicle before it will be approved for service with another corporation or the Department.

B. An inspection by Apparatus Maintenance must be requested when the vehicle is considered ready for service by the new entity. Apparatus Maintenance will weigh the vehicle to record the in-service weight.

C. A copy of a stamped Maryland Motor Vehicle Administration Form #VR-26, approving the vehicle as an emergency vehicle, must be provided to Apparatus Maintenance.

D. A copy of the State of Maryland Vehicle Inspection must be provided to Apparatus Maintenance.

E. If the vehicle does not have a current M number, all requirements for Used Apparatus (Attachment K) must be met.

## VIII. Non-Fleet Vehicles

A. No individual or entity within the Fire/EMS Department shall place a unit in service within the service area of Prince George's County, or otherwise identify a vehicle as part of the fleet by its markings or other representation, without the express permission of the Fire Chief, or his/her designee.

B. Vehicles with a gross vehicle weight rating (GVWR) exceeding 10,000 pounds, which are operating under the auspices of the Prince George's County Fire/EMS Department and not maintained by the County, are required to have a Department of Transportation (DOT) safety inspection performed on an annual basis, as outlined in the Annotated Code of Maryland Transportation Article, Title 23, Subtitle 3. A copy of the completed DOT inspection form must be provided to Apparatus Maintenance within 30 days of the completion of the inspection. Any rejections discovered during the inspection must be resolved prior to the vehicle being placed back in service. Additionally, these vehicles are to be maintained and kept in compliance with all applicable County and Departmental Orders, Procedures, and Directives. Failure to comply will result in said vehicle being prohibited from providing emergency response services within Prince George's County.

C. Those vehicles not in compliance with these standards or approved by the Fire Chief will not receive funds from the Fire/EMS Department budget for maintenance, fuel, and insurance. In addition, no County funds, including Station Management Funds, Ambulance Billing revenue, etc., will be used to support vehicles not in compliance.

## IX. Apparatus Work Group

A. The apparatus work group will conduct a quarterly review of the apparatus checklists to ensure compliance with current standards, the relevance of minimum inventories, and the continued applicability of all requirements as they pertain to the needs of the Department.

## REFERENCES

KKK-A-1822 – Federal Specification for the Star-of-Life Ambulance

MVA Form VR-26 – Application for Approval of Emergency Vehicles or Service Vehicles obtained from the Maryland Motor Vehicle Administration

NFPA 1901 – National Fire Protection Association Standard for Automotive Fire Apparatus

NFPA 1911 – National Fire Protection Association Standard for Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles

NFPA 1912 – National Fire Protection Association Standard for Fire Apparatus Refurbishing

NFPA 1914 – National Fire Protection Association Standard for Testing Fire Department Aerial Devices

NFPA 1917 – National Fire Protection Association Standard for Automotive Ambulances

NFPA 1932 – National Fire Protection Association Standard on Use, Maintenance, and Service Testing of Fire Department Ground Ladders

## FORMS / ATTACHMENTS

Attachment A – Application for Introducing a Vehicle into the Fleet 2018

Attachment B – Engine Apparatus Specifications Checklist 2022

Attachment C – Aerial Apparatus Specifications Checklist 2022

Attachment D – Initial Attack Apparatus (Mini-Pumper) Specifications Checklist 2022

Attachment E – Rescue Squad/Special Services Fire Apparatus Specifications Checklist 2022

Attachment F – Mobile Water Supply Fire Apparatus Specifications Checklist 2022

Attachment G – Ambulance Specifications Checklist 2022

Attachment H – Brush Truck Specifications Checklist (Future)

Attachment I – Fireboat Specifications Checklist (Future)

Attachment J – Rescue Boat Specifications Checklist (Future)

Attachment K – Used Apparatus Requirements Checklist 2022

Attachment L – Application Flow Chart

Attachment A

# PRINCE GEORGE'S COUNTY FIRE/EMS DEPARTMENT

*APPLICATION FOR INTRODUCING A VEHICLE INTO THE FLEET*

STATION _____ FIRE CHIEF / FLEET MANAGER / VOLUNTEER CHIEF / PRESIDENT SIGNATURE _____ SUBMISSION DATE TO FIRE COMMISSION _____

PROJECT CONTACT PERSON _____ PHONE # _____ EMAIL ADDRESS _____

**TYPE OF VEHICLE:**

☐ SUPPORT VEH. ☐ AMB. ☐ ENG. ☐ TRUCK ☐ RESCUE SQUAD ☐ OTHER _____

**PURCHASING:** ☐ NEW ☐ USED

**COMMUNICATIONS EQUIPMENT:**

MOBILE RADIO(S) ☐ TRANSFER ☐ REQUEST _____ QTY

PORTABLE RADIO(S) ☐ TRANSFER ☐ REQUEST _____ QTY

MOBILE DATA COMPUTER ☐ TRANSFER ☐ PURCHASE _____ QTY

**THIS VEHICLE IS:** ☐ A REPLACEMENT FOR M☐☐☐☐☐

**ALL SIGNATURES REQUIRED**

☐ AN ADDITION TO THE FLEET *(JUSTIFICATION MUST BE ATTACHED)* ☐ REPLACE EXISTING VEHICLE IN FLEET *(JUSTIFICATION MUST BE ATTACHED)*

| | | | | |
|---|---|---|---|---|
| 1 | FIRE CHIEF | ☐ APPROVED | ☐ DENIED | _____ SIGNATURE / DATE |
| 2 | AMD FLEET MANAGER | ☐ APPROVED | ☐ DENIED | _____ SIGNATURE / DATE |
| 3 | SSC DEPUTY FIRE CHIEF | ☐ APPROVED | ☐ DENIED | _____ SIGNATURE / DATE |
| 4 | ESC DEPUTY FIRE CHIEF | ☐ APPROVED | ☐ DENIED | _____ SIGNATURE / DATE |
| 5 | FIRE COMMISSION | ☐ APPROVED | ☐ DENIED | _____ SIGNATURE / DATE |

## NEW VEHICLES

1 SPECIFICATIONS & GRAPHICS REVIEWED/APPROVED BY APPARATUS MAINTENANCE: _____ SIGNATURE / DATE

2 REQUIRED: FINAL APPARATUS INSPECTION BY APPARATUS MAINTENANCE: _____ SIGNATURE / DATE

3 APPROVED MARYLAND MOTOR VEHICLE ADMINISTRATION (MVA FORM VR-026) _____ SIGNATURE / DATE

## USED VEHICLES

☐ MARYLAND STATE INSPECTION CERTIFICATE PROVIDED (COPY)

☐ THIRD PARTY CERTIFICATION WITHIN PAST SIX MONTHS AS APPLICABLE

☐ PUMP ☐ AERIAL DEVICE ☐ GROUND LADDERS ☐ OIL SAMPLES

☐ GRAPHICS APPROVED IN ACCORDANCE TO GENERAL ORDER 02-18 _____ SIGNATURE / DATE

☐ USED APPARATUS REQUIREMENT INSPECTION BY APPARATUS MAINT. _____ SIGNATURE / DATE

APPROVED MARYLAND MOTOR VEHICLE ADMINISTRATION (MVA FORM VR-026) _____ SIGNATURE / DATE

**FUEL:** ☐ COUNTY ☐ VOLUNTEER

**INSURANCE:** ☐ COUNTY ☐ VOLUNTEER

**MAINTENANCE:** ☐ FLEET ☐ AMD ☐ VOLUNTEER

**M# ASSIGNED:** ☐☐☐☐☐ ☐ 5100 ☐ 5178 16☐☐

**FINAL APPROVAL TO BE PLACED IN SERVICE:** _____ SIGNATURE / DATE

**ATTACHMENT B**

# Prince George's County Fire/EMS Department

## Engine Apparatus Specifications Checklist

### UNIT INFORMATION

Station: _____ Date: _____

Unit: _____ M#: _____

Reviewer: _____ Fleet Manager: _____

### Definition

Fire apparatus with a permanently mounted fire pump, water tank and hose body that meets or exceeds NFPA 1901 standard. The primary purpose of this type of apparatus is to combat structural and associated fires.

### General

☐ Must be in compliance with the current NFPA 1901 standard as adopted by Prince George's County Fire/EMS Department and Prince George's County Volunteer Fire and Rescue Association standards.

☐ Must provide a copy of either a certification that the apparatus fully complies with the current NFPA 1901 or a Statement of Exceptions from the manufacturer.

☐ ALL NFPA Exceptions shall be approved by AMD.

☐ Dealer/Manufacturer must be registered with the State of Maryland.

☐ Parts, Service and Operation manuals for the unit shall be provided to the Apparatus Maintenance Division preferably in electronic format.

☐ Must provide a copy of the 3rd party certifications where applicable:

- ☐ Aerial Devices
- ☐ Air hose reels
- ☐ SCBA Fill Stations
- ☐ Fire Pumps
- ☐ Water tanks
- ☐ Foam proportioning system
- ☐ Low voltage electrical systems & warning devices

### Cab and Chassis

☐ Must provide a copy of the load distribution plan

☐ Sound – noise level must not exceed 85dba in the non-response mode at all seated positions

☐ A voice-activated intercom system (similar to David Clark, FireCom etc.) shall be provided with headsets at each seated position. The system shall not be hooked up to any am/fm radio.

☐ Speed Limits

- Vehicles shall not be capable of exceeding 68 mph.

☐ In addition to the requirements outlined in NFPA 1901, 4.13.3 Load distribution, the apparatus must have a 3% buffer between the in-service weights and the gross axle weight ratings (GAWR), the overall gross vehicle weight rating (GVWR) and the chassis manufacturer's load balance guidelines. The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.

☐ The engine must be diesel

☐ The engine coolant shall be OATS coolant and approved by AMD

☐ The radiator and coolant overflow tank shall be marked "OATS".

☐ All coolant and radiator hoses shall be silicone and have a rating of at least 500 degrees.

☐ The transmission must be automatic.

☐ Radiator must be equipped with a sight gauge or translucent tank and low coolant level alarm.

☐ Brakes must be air actuated disc-type brakes with automatic slack adjusters, if applicable

☐ An anti-lock brake system shall be provided

☐ The vehicle shall have Electronic Stability Control (ESC)

☐ The parking brake release shall have a guard to prevent accidental release

☐ All wiring must be numbered and function coded.

☐ All vehicles shall have a complete as-built wiring schematic provided to AMD prior to final approval of engine.

☐ As built engineering drawings shall be provided to the Apparatus Maintenance Division.

☐ If offered by the chosen manufacturer, the apparatus shall use a complete Multi-Plex wiring system.

☐ Software for the Multi-Plex diagnostic system shall be provided, along with training on the software if required by AMD.

☐ A back-up camera shall be installed for a rear view of the apparatus and area surrounding the apparatus. The screen for the camera must be easily viewable for the driver. Rear camera shall be wired into ROSCO Camera system.

☐ In addition to the vehicles Vehicle Data Recorder, an event recording camera meeting the County specifications (ROSCO) must be provided. (Contact Apparatus Maintenance for specific ordering instructions)

☐ The front bumper must be reinforced the full height and width resulting in the total thickness being at least ½". If possible supports shall run from the chassis frame to the outer end of the bumper on each side.

☐ Must provide all hardware necessary to activate the station exhaust system

☐ Must provide an air compressor/battery conditioner

☐ The vehicle must be capable of being towed from the front with no obstructions and provide front accessible glad hands for hooking up brakes while in tow.

☐ Must specify DAVCO fuel water separator

☐ Wheels – Aluminum disc-type construction, tubeless design

☐ All tilt cab apparatus shall be able to be jump started without the need to raise or tilt the cab

☐ The DEF fill cap should have a protective cover isolating it from the fuel fill. Also a locking cap for the DEF tank is highly recommended.

☐ 12 volt wiring shall be provided for the power supply for a mobile radio and mobile data terminal in the front of the cab. The installation of the radios, MDT and associated antennas is the responsibility of the corporation.

☐ Mobile radios will be provided for vehicle/apparatus purchases. Please contact Apparatus Maintenance for assistance in receiving a radio.

☐ There shall be an MDC docking station supplied with the vehicle/apparatus bought by the department making the purchase. (Contact AMD for current model required).

☐The mobile radio shall be mounted in such a way that it is reachable by the officer while staying seated and belted in their respective seat.

☐ The apparatus shall have an MDT. This MDT purchase is the responsibility of the department or corporation making the purchase. MDT must be purchased to current specifications set by the radio shop.

☐ There shall be a system, or access panel for the checking of the vital fluids without tilting or raising the cab.

☐ There shall be at least one 24' two-section Duo-Safety 900A ladder or longer, one Duo-Safety 775-DR 16' roof ladder, and one Duo-Safety 585A 9' folding attic ladder stored on the apparatus.

☐ The ground ladders bottom beam stored, shall be as low as possible to allow for easy removal by all firefighters. Engineering this with chosen manufacturer will need to be reviewed by AMD.

☐ The rear hose bed shall be engineered to be as low as possible to provide an ergonomic platform for the ease of reaching all the supply lines and attack lines. Engineering this with chosen manufacturer will need to be reviewed by AMD.

☐ Seatbelt sensors and Seat pressure sensors shall be wired in case of either one becoming un-plugged or a wire chaffed or cut. That an alarm will sound and there is an indicator light when the parking brake is disengaged, indicating there is an issue with the system.

☐ Front collision airbags and side roll protection airbags shall be supplied in the front cab area, along with the crew area directly behind the driver and officers seats.

☐ Rear suspension shall be air ride per PGFD specifications.

☐ A HAAS collision system shall be installed on the apparatus and fully operating for the life of the apparatus..

☐ An OPTICOM shall be provided. It will be wired so that it will only activate when the parking brake is released and emergency lights are activated.

## Fire Pump and Tank

☐ Fire pump rated 1500 gallons per minute, as a minimum.

☐ Fire Pump should be a Hale Fire Pump QMAX.

☐ All valves in the fire pump and associated piping shall be Akron valves

☐ The intake relief valve shall be Elkhart brand for ease of maintenance.

☐ All pump piping shall be stainless steel

☐ Fire pump should be single stage unless engine is part of the water supply companies

☐ Must provide sacrificial anodes on the pump

☐ Booster tank – must be constructed of polypropylene

☐ Booster tank – minimum capacity 500 gallons

☐ Pump discharge - incorporate one (1) discharge for 4" or 5" hose with Storz couplings. If a 4" discharge is provided, a 4" to 5" adapter shall be provided. If a 5" discharge is provided, a 5" to 4" adapter shall be provided. The minimum size piping and valve for this discharge shall be a minimum 3".

☐ Pump intake – the master intake of the pump must be capable of connecting to a 4" or 5" Stortz LDH coupling

☐ A minimum of 20 feet of suction hose shall be provided, and carried on the apparatus

☐ Pump access panels shall be on both sides of the pump panels, these should be hinged panels. There shall also be a removeable panel in the area over the fire pump, and access at the front of the pump house when the cab is in the tilted-up position.

## Lighting and Misc. Equipment

☐ Permit the County to install 1-1/2 lettering to denote the assigned M number in a contrasting color on the interior of the driver's door.
☐ Numbers on the apparatus denoting the company station number shall be consistent with the COG numbering system. (ex. E841, TW839)
☐ Apparatus color and graphics shall follow General Order 2-18.
☐ All emergency lighting shall be LED. Whelen is the preferred manufacturer.
☐ There shall be LED scene lighting on all four sides of the apparatus.

## Supply Line, Attack Lines and Nozzle Minimums

☐At a minimum, the supply line configuration shall consist of the following:
- 1000' of 4" fabric supply line
- 600' of 3" fabric supply line

☐ At a minimum, the apparatus shall have the following size and length attack lines:
- 400' of 1.75" fabric attack line
- 300' of 1.75" fabric attack line
- 200' of 1.75" fabric attack line
- 250' of 2" fabric attack line

☐ High Rise Packs shall be 2- 100ft packs of 2" fabric attack line and carried on the apparatus. The nozzle shall be a smooth bore 1-1/16"

☐ Nozzles for attack lines shall be 50psi/150 gpm fog nozzles with an integrated 15/16th slug.

Exceptions to the hose line compliment/configuration can be made based on specific need, subject to the approval of the Fire Chief.

## Minimum Equipment Standard

- 10lb Dry Chemical Fire Extinguisher
- 2.5 Gallon Water Extinguisher
- Car Lock-out Kit
- 2 – 30" Halligan Bars
- 1 – Hydra Ram
- 4 – Spanner wrenches
- 3 – hydrant wrenches
- 2 – Rubber connection mallets
- 1 – Hydrant gate 2.5" female to 2.5" male
- 3 – Double Female adaptors
- 4 – Double Male adaptors
- 2 – 2.5 to 1.5 rigid reducers
- 1 – 6" NST to 4.5" Female NST
- 1 – 4" Stortz to 2.5" male reducer
- 2 – 4" Stortz to 2.5" female reducer
- 1 – 125gpm foam eductor
- 1 – 4" Stortz to 4.5" female swivel

- 1 – 4” Stortz to 5” Stortz
- 1 – 4” Stortz to 6” NST male
- 30” Bolt cutters
- 1 – Flat head axe
- 1 – Pick head axe
- 1 – 8lb sledge hammer
- 1 – brush rake
- 1 – 27” scoop shovel
- 1 – Round point shovel
- 1 – 10” pipe wrench
- 1 – 24” pipe wrench
- 1 – Suction Siamese 6” female to 2 – gated 2.5” female
- 1 – Gated suction intake 6” female to 4” stortz
- 1 – Elkhart Ram monitor or similar
- 1 – 6” barrel strainer
- 1 – Gated Y 2.5” to 2-1.5”
- 1 – Bullard Thermal Imaging camera to county spec
- 1 - Hi-Rise bag
    - 45 degree elbow (Elkhart 105A)
    - 2.5” in-line pressure gauge (Elkhart 228A)
    - Gate valve 2.5” female to 2.5” male (Elkhart X-86A)
    - 2 Spanner wrenches
- EMS equipment based on county standard
- 5 – handlights
- 1 – 6ft NY roof Hook
- 1 – 4ft pike pole
- Minimum of 5 County supplied SCBA with spare cylinders for each

**ATTACHMENT C**

# Prince George's County Fire/EMS Department

## Aerial Apparatus Specifications Checklist

### UNIT INFORMATION

| | | | |
|---|---|---|---|
| Station: | | Date: | |
| Unit: | | M#: | |
| Reviewer: | | Fleet Manager: | |

### Definition

A vehicle equipped with an aerial ladder, elevating platform, or water tower that is designed and equipped to support firefighting and rescue operations by positioning personnel, handling materials, providing continuous egress, or discharging water at positions elevated from the ground.

### General

☐ Must be in compliance with the current NFPA 1901 standard as adopted by Prince George's County Fire/EMS Department and Prince George's County Volunteer Fire and Rescue Association standards.

☐ Must provide a copy of either a certification that the apparatus fully complies with the current NFPA 1901 or a Statement of Exceptions from the manufacturer.

☐ ALL NFPA Exceptions shall be approved by AMD.

☐ Dealer/Manufacturer must be registered with the State of Maryland.

☐ Parts, Service and Operation manuals for the unit shall be provided to the Apparatus Maintenance Division preferably in electronic format.

☐ Must provide a copy of the 3rd party certifications where applicable:

- ☐ Aerial Devices
- ☐ Air hose reels
- ☐ SCBA Fill Stations
- ☐ Fire Pumps
- ☐ Water tanks
- ☐ Foam proportioning system
- ☐ Low voltage electrical systems & warning devices

### Cab and Chassis

☐ Must provide a copy of the load distribution plan.

☐ Sound – noise level must not exceed 85dba in the non-response mode at all seated positions.

☐ A voice-activated intercom system (similar to David Clark, FireCom etc.) shall be provided with headsets at each seated position. The system shall not be hooked up to any am/fm radio.

☐ Speed Limits

- Vehicles shall not be capable of exceeding 65 mph.

☐ In addition to the requirements outlined in NFPA 1901, 4.13.3 Load distribution, the apparatus must have a 3% buffer between the in-service weights and the gross axle weight ratings (GAWR), the overall gross vehicle weight rating (GVWR) and the chassis manufacturer's load balance guidelines. The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.

☐ The engine must be diesel.

☐ The engine coolant shall be OATS coolant and approved by AMD.

☐ The radiator and coolant overflow tank shall be marked "OATS".

☐ All coolant and radiator hoses shall be silicone and have a rating of at least 500 degrees.

☐ The transmission must be automatic.

☐ Radiator must be equipped with a sight gauge or translucent tank and low coolant level alarm.

☐ Brakes must be air actuated disc-type brakes with automatic slack adjusters, if applicable.

☐ An anti-lock brake system shall be provided.

☐ The vehicle must have Electronic Stability Control (ESC) if applicable for aerial device.

☐ The parking brake release shall have a guard to prevent accidental release.

☐ All wiring must be numbered and function coded.

☐ All vehicles shall have a complete as-built wiring schematic provided to AMD prior to final approval of engine.

☐ As built engineering drawings shall be provided to the Apparatus Maintenance Division.

☐ If offered by the chosen manufacturer, the apparatus shall use a complete Multi-Plex wiring system.

☐ Software for the Multi-Plex diagnostic system shall be provided, along with training on the software if required by AMD.

☐ A back-up camera with audio shall be installed for a rear view of the apparatus and area surrounding the apparatus. The screen for the camera must be easily viewable for the driver.

☐ In addition to the vehicles own NFPA required Vehicle Data Recorder, an event recording camera meeting the County specifications must be provided. (Contact Apparatus Maintenance for specific ordering instructions)

☐ The front bumper must be reinforced the full height and width resulting in the total thickness being at least ½". If possible supports shall run from the chassis frame to the outer end of the bumper on each side.

☐ Must provide all hardware necessary to activate the station exhaust system

☐ Must provide an air compressor/battery conditioner

☐ The vehicle must be capable of being towed from the front with no obstructions and provide front accessible glad hands for hooking up brakes while in tow.

☐ Must specify DAVCO fuel water separator

☐ Wheels – Aluminum disc-type construction, tubeless design

☐ All tilt cab apparatus shall be able to be jump started without the need to raise or tilt the cab

☐ The DEF fill cap should have a protective cover isolating it from the fuel fill. Also a locking cap for the DEF tank is highly recommended.

☐ 12 volt wiring shall be provided for the power supply for a mobile radio and mobile data terminal in the front of the cab. The installation of the radios, MDT and associated antennas is the responsibility of the corporation.

☐ Mobile radios will be provided for vehicle/apparatus purchases. Please contact Apparatus Maintenance for assistance in receiving a radio.

☐ There shall be an MDC docking station supplied with the vehicle/apparatus bought by the department making the purchase. (Contact AMD for current model required).

☐The mobile radio shall be mounted in such a way that it is reachable by the officer while staying seated and belted in their respective seat.

☐ The apparatus shall have an MDT. This MDT purchase is the responsibility of the department or corporation making the purchase. (Contact Apparatus Maintenance for direction on this purchase)

☐ There shall be a system, or access panel for the checking of the vital fluids without tilting or raising the cab.

☐ Seatbelt sensors and Seat pressure sensors shall be wired in case of either one becoming un-plugged or a wire chaffed or cut. That an alarm will sound and there is an indicator light when the parking brake is disengaged, indicating there is an issue with the system.

☐ Front collision airbags and side roll protection airbags shall be supplied in the front cab area, along with the crew area directly behind the driver and officers seats.

☐ Rear suspension shall be air ride per PGFD specifications.

☐ A HAAS collision system shall be installed on the apparatus and fully operating for the life of the apparatus.

☐ An OPTICOM shall be provided, it will be wired so that it will only activate when the parking brake is released and emergency lights are activated.

## Aerial and Ladders

☐ The hydraulic aerial ladder or tower must be at least 75' in length.

☐ The aerial ladder/tower shall have a way to provide an elevated master stream.

☐ Ground Ladder minimum compliment: All Ladders are to be to Duo-Safety.

- Two 35' ground ladder
- Two 28' ground ladders
- Two 16' ground/roof ladders w/ double rook hooks
- One 10' folding ladder

☐ The rated capacity of the aerial shall be a minimum of 500lb tip load at 0 degrees at full extension.

☐ The aerial ladder or tower shall have a multi-plex electrical system.

## Quint Aerial Apparatus Pump

- ☐ Fire pump rated 1000 gallons per minute, as a minimum.
- ☐ Fire pump should be a Hale Fire Pump QMAX.
- ☐ All valves in the fire pump and associated piping shall be Akron valves.
- ☐ All pump piping shall be stainless steel.
- ☐ Fire pump should be single stage unless justification is given for the need for the two-stage pump.
- ☐ Must provide sacrificial anodes on the pump.
- ☐ Booster tank – must be constructed of polypropylene.
- ☐ Booster tank – minimum capacity 300 gallons.
- ☐ Pump discharge - incorporate one (1) discharge for 4” or 5” hose with Stortz couplings. If a 4" discharge is provided, a 4" to 5" adapter shall be provided. If a 5" discharge is provided, a 5" to 4" adapter shall be provided. The minimum size piping and valve for this discharge shall be 3".
- ☐ Pump intake – the master intake of the pump must be capable of connecting to a 4” or 5” Stortz LDH coupling.

## Lighting and Misc. Equipment

- ☐ Permit the County to install 1-1/2 lettering to denote the assigned M number in a contrasting color on the interior of the driver’s door.
- ☐ All emergency lighting shall be LED. Whelen Lighting Company is the preferred manufacturer
- ☐ Numbers on the apparatus denoting the company station number shall be consistent with the COG numbering system. (Ex. E841, TW839)
- ☐ Apparatus color and graphics shall adhere to General Order 02-18.
- ☐ There shall be at least a 10kw generator installed on the apparatus.
- ☐ There shall be at least a two electric cord reels on the apparatus. These cord reels shall be at least 200’ in length with 10/4 wire.
- ☐ All 120-volt (AC) receptacles shall be National Electrical Manufacturers Association (NEMA) configuration L5-20R and all 120-volt (AC) plugs shall be NEMA configuration L5-20P.
- ☐ There shall be scene lighting (12-volt preferred) on all four sides of the apparatus. The lighting shall be LED.

## Minimum Equipment Standard

- 4 – 30” Halligan Bars (one-piece)
- 2 – Flat Head Axes
- 2 – Pick Head Axes
- 1 – Hydra-Ram
- 1 – K Tool Kit
- 2 – 8lb Sledge Hammers
- 2 – 18” Bolt Cutters
- 2 – 36” Bolt Cutters
- 1 – Set of Elevator Keys
- 1 – Thermal Imager to PGFD Spec
- 2 – 2.5 Gallon Water Extinguishers
- 1 – 15lb Dry Chemical Extinguisher
- 1 – 10lb CO2 Extinguisher
- 1 – Big Easy Car Kit
- 2 – 6’ NY Roof Hooks
- 1 – 6’ Wall Ladder
- 1 – Stokes Basket
- 1 – Duck Bill Lock Breaker
- 1 – 6’ Dry Wall Hook
- 1 – 54” Jumbo Pro Bar
- 4 – Small Cord Electric Cord reels 100’ 10/3 Wire
- 4 – Battery Powered Fans to PGFD Spec
- 2 – 14” Rotary Saws to PGFD Spec
- 2 – 20” Chain Saws to PGFD Spec
- 2 – Spare blades for 14” Rotary saw
- 2 – Spare chains for 20” Chainsaws

- 1 – Gated “Y” 4” Stortz to two 2.5” inlets
- 1 – 4” to 5” Stortz Adaptor
- 1 – 4” Stortz 45 degree elbow to 4” Stortz
- 1 – Hydrant/Spanner Set
- 1 – Set of LDH Spanner Wrenches
- 1 – 15 Amp Sawsall
- 5 – Extra blades for sawsall
- 1 – 36” Pipe Wrench
- 1 – 18” Pipe Wrench
- 1 – At least 268 Piece Mechanics Tool Set
- 4 – Battery Powered Scene Lights to PGFD Spec.
- 4 – Spare batteries for Battery Powered Lights
- 4 – Chargers for Battery Powered Lights
- 4 – Large Salvage Covers
- 2 – At Least 10 gallon Salvage Buckets
- 4 – Scoop Shovels
- 2 – 27” Round Point Shovels
- 2 – 27” Square Shovels
- 1 – Water Key
- 4 - Ladder Belts Varying in sizes
- 1 – 200’ Search Rope
- 1 – Assortment of Electrical Pigtails
- 2 – Hard Wired Portable Scene Lighting

# Prince George's County Fire/EMS Department

## Initial Attack Apparatus (Mini-Pumper) Specifications Checklist

### UNIT INFORMATION

| | | | |
|---|---|---|---|
| Station: | | Date: | |
| Unit: | | M#: | |
| Reviewer: | | Fleet Manager: | |

### Definition

Fire apparatus with a fire pump of at least 250 gpm capacity, water tank, and hosebody whose primary purpose is to initiate a fire suppression attack on structural, vehicular, or vegetation fires, and to support associated fire department operations.

### General

- ☐ Must be in compliance with the current NFPA 1901, 1911 and 1912 standards as adopted by Prince George's County Fire/EMS Department and Prince George's County Volunteer Fire and Rescue Association standards.
- ☐ Must provide a copy of either a certification that the apparatus fully complies with the current NFPA 1901 or a Statement of Exceptions from the manufacturer.
- ☐ Dealer/Manufacturer must be registered with the State of Maryland.
- ☐ Parts, Service and Operation manuals for the unit shall be provided to the Apparatus Maintenance Division preferably in electronic format.
- ☐ Must provide a copy of the 3rd party certifications where applicable:
  - ☐ Aerial Devices
  - ☐ Air hose reels
  - ☐ SCBA Fill Stations
  - ☐ Fire Pumps
  - ☐ Water tanks
  - ☐ Foam proportioning system
  - ☐ Low voltage electrical systems & warning devices

### Cab and Chassis

- ☐ Must provide a copy of the load distribution plan.
- ☐ Sound – noise level must not exceed 85dba in the non-response mode at all seated positions.
- ☐ A voice-activated intercom system (similar to David Clark, FireCom etc.) shall be provided with headsets at each seated position. The system shall not be hooked up to any am/fm radio.
- ☐ Speed Limits
  - Vehicles shall not be capable of exceeding 68 mph.
- ☐ In addition to the requirements outlined in NFPA 1901, 4.13.3 Load distribution, the apparatus must have a 5% buffer between the in-service weights and the gross axle weight ratings (GAWR), the overall gross vehicle weight rating (GVWR) and the chassis manufacturer's load balance guidelines. (Example: If the rear axles' in-service weight is 22,000 pounds, we will add 5%, which would be 1,100 pounds, the rear GAWR must be at least 23,100 pounds). The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.
- ☐ The engine must be diesel.
- ☐ The engine coolant shall be OATS coolant and approved by AMD.
- ☐ The transmission must be automatic.
- ☐ Radiator must be equipped with a sight gauge or translucent tank and low coolant level alarm.
- ☐ Brakes must be air actuated disc-type brakes with automatic slack adjusters, if applicable.
- ☐ An anti-lock brake system shall be provided.
- ☐ The vehicle must have Electronic Stability Control (ESC), if available in model chassis chosen.
- ☐ The parking brake release shall have a guard to prevent accidental release, if applicable.
- ☐ All wiring must be numbered and function coded, vehicles shall have a complete as built schematic.

- ☐ A back-up camera with audio shall be installed for a rear view of the apparatus and area surrounding the apparatus. The screen for the camera must be easily viewable for the driver.
- ☐ In addition to the vehicles own NFPA required Vehicle Data Recorder, an event recording camera meeting the County specifications must be provided. (Contact Apparatus Maintenance for specific ordering instructions).
- ☐ The front bumper must be reinforced the full height and width resulting in the total thickness being at least ½". If possible, supports shall run from the chassis frame to the outer end of the bumper on each side.
- ☐ Must provide all hardware necessary to activate the station exhaust system.
- ☐ Must provide an air compressor if applicable.
- ☐ Must provide a battery conditioner for vehicle batteries.
- ☐ The vehicle must be capable of being towed from the front with no obstructions and provide front accessible glad hands for hooking up brakes while in tow.
- ☐ Must specify DAVCO fuel water separator, if applicable.
- ☐ Wheels – Aluminum disc-type construction, tubeless design.
- ☐ The DEF fill cap should have a protective cover isolating it from the fuel fill. Also, a locking cap for the DEF tank is highly recommended, if applicable.
- ☐ 12-volt wiring shall be provided for the power supply for a mobile radio and mobile data terminal in the front of the cab. These wires shall be clearly marked on the end for the installers. Consideration should be given to having manufacturer install the proper radio antennas on the roof of the apparatus at construction. (Contact AMD for the number needed).
- ☐ Mobile radios will be provided for vehicle/apparatus purchases. Please contact the radio shop or Captain Gunn for assistance in receiving a radio.
- ☐ The mobile radio shall be mounted in such a way that it is reachable by the officer while staying seated and belted in their respective seat.
- ☐ There shall be an MDC docking station supplied with the vehicle/apparatus bought by the department making the purchase. (Contact AMD for current model required).
- ☐ The apparatus shall have an MDT. This MDT purchase is the responsibility of the department or corporation making the purchase. (Contact Captain Amy Gunn for direction on this purchase).

## Fire Pump and Tank

- ☐ Fire pump rated 250 gallons per minute, as a minimum.
- ☐ All pump piping shall be stainless steel.
- ☐ Must provide sacrificial anodes on the pump.
- ☐ Booster tank – must be constructed of polypropylene.
- ☐ Booster tank – minimum capacity 200 gallons.

## Lighting and Misc. Equipment

- ☐ Permit the County to install 1-1/2 lettering to denote the assigned M number in a contrasting color on the interior of the driver's door.
- ☐ All emergency lighting should be manufactured by the Whelen Lighting Company or equivalent. Please contact AMD to determine the standard lighting number that are currently in use.
- ☐ Numbers on the apparatus denoting the company station number shall be consistent with the COG numbering system. (Ex. E841, TW839)
- ☐ Apparatus color and graphics shall follow General Order 02-18.
- ☐ As built engineering drawings shall be provided to the Apparatus Maintenance Division.

**ATTACHMENT E**

# Prince George's County Fire/EMS Department

## Rescue Squad/Special Services Fire Apparatus Specifications Checklist

### UNIT INFORMATION

| | | | |
|---|---|---|---|
| Station: | | Date: | |
| Unit: | | M#: | |
| Reviewer: | | Fleet Manager: | |

### Definition

A multi-purpose apparatus that primarily provides support services at emergency scenes. These services could be rescue, command, hazardous materials containment, air supply, electrical generation and floodlighting, vehicle extrication, or transportation of support equipment and personnel.

### General

- ☐ Must be in compliance with the current NFPA 1901, 1911 and 1912 standard as adopted by Prince George's County Fire/EMS Department and Prince George's County Volunteer Fire and Rescue Association standards.
- ☐ Must provide a copy of either a certification that the apparatus fully complies with the current NFPA 1901 or a Statement of Exceptions from the manufacturer.
- ☐ Dealer/Manufacturer must be registered with the State of Maryland.
- ☐ Parts, Service and Operation manuals for the unit shall be provided to the Apparatus Maintenance Division preferably in electronic format.
- ☐ Parts, Service and Operations manual for any vehicle mounted systems shall be provided to the Apparatus Maintenance Division, preferably in electronic format.
- ☐ Must provide a copy of the 3rd party certifications where applicable:
  - ☐ Aerial Devices
  - ☐ Air hose reels
  - ☐ SCBA Fill Stations
  - ☐ Fire Pumps
  - ☐ Water tanks
  - ☐ Foam proportioning system
  - ☐ Low voltage electrical systems & warning devices
  - ☐ Air compressors
  - ☐ Crane or vehicle mounted lifting systems
  - ☐ Winch and winch cable

### Cab and Chassis

- ☐ Must provide a copy of the load distribution plan.
- ☐ Sound – noise level must not exceed 85dba in the non-response mode at all seated positions.
- ☐ A voice-activated intercom system (similar to David Clark, FireCom etc.) shall be provided with headsets at each seated position. The system shall not be hooked up to any am/fm radio.
- ☐ Speed Limits
  - Vehicles shall not be capable of exceeding 68 mph.
- ☐ In addition to the requirements outlined in NFPA 1901, 4.13.3 Load distribution, the apparatus must have a 3% buffer between the in-service weights and the gross axle weight ratings (GAWR), the overall gross vehicle weight rating (GVWR) and the chassis manufacturer's load balance guidelines. The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.
- ☐ The engine must be diesel powered.
- ☐ The engine coolant shall be OATS coolant and approved by AMD.
- ☐ The transmission must be automatic.
- ☐ Radiator must be equipped with a sight gauge or translucent tank and low coolant level alarm.
- ☐ All coolant and radiator hoses shall be silicone and have a rating of at least 500 degrees
- ☐ Brakes must be air actuated disc-type brakes with automatic slack adjusters, if applicable.
- ☐ An anti-lock brake system shall be provided.
- ☐ The vehicle must have Electronic Stability Control (ESC).

- ☐ The parking brake release shall have a guard to prevent accidental release.
- ☐ Wheels – disc type construction, tubeless design.
- ☐ All wiring must be numbered and function coded.
  All vehicles shall have a complete as-built wiring schematic provided to AMD prior to final approva.
- ☐ As built engineering drawings shall be provided to the Apparatus Maintenance Division.
- ☐ If offered by the chosen manufacturer, the apparatus shall use a complete Multi-Plex wiring system.
- ☐ Software for the Multi-Plex diagnostic system shall be provided, along with training on the software if required by AMD.
- ☐ A back-up camera shall be installed for a rear view of the apparatus and area surrounding the apparatus. The screen for the camera must be easily viewable for the driver.
- ☐ In addition to the vehicles own Vehicle Data Recorder, an event recording camera meeting the County specifications must be provided. (Contact Apparatus Maintenance for specific ordering instructions).
- ☐ The front bumper must be reinforced the full height and width resulting in the total thickness being at least ½". If possible, supports shall run from the chassis frame to the outer end of the bumper on each side.
- ☐ Must provide all hardware necessary to activate the station exhaust system.
- ☐ Must provide an air compressor/battery conditioner.
- ☐ The vehicle must be capable of being towed from the front with no obstructions and provide front accessible glad hands for hooking up brakes while in tow.
- ☐ Must specify DAVCO fuel water separator.
- ☐ All tilt cab apparatus shall be able to be jump started without the need to raise or tilt the cab.
- ☐ The DEF fill cap should have a protective cover isolating it from the fuel fill. Also, a locking cap for the DEF tank is highly recommended.
- ☐ 12-volt wiring shall be provided for the power supply for a mobile radio and mobile data terminal in the front of the cab. These wires shall be clearly marked on the end for the installers. Consideration should be given to having manufacturer install the proper radio antennas on the roof of the apparatus at construction. (Contact AMD for the number needed).
- ☐ Mobile radios will be provided for vehicle/apparatus purchases. Please contact AMD for the radio.
- ☐ The mobile radio shall be mounted in such a way that it is reachable by the officer while staying seated and belted in their respective seat.
- ☐ There shall be an MDC docking station supplied with the vehicle/apparatus bought by the department making the purchase. (Contact AMD for current model required).
- ☐ The apparatus shall have an MDT. This MDT purchase is the responsibility of the department or corporation making the purchase. MDT must be purchased to current specifications set by the radio shop.
- ☐ There shall be a system, or access panel for the checking of the vital fluids without tilting or raising the cab.
- ☐ Seatbelt sensors and Seat pressure sensors shall be wired in case of either one becoming un-plugged or a wire chaffed or cut. That an alarm will sound and there is an indicator light when the parking brake is disengaged, indicating there is an issue with the system.
- ☐ Front collision airbags and side roll protection airbags shall be supplied in the front cab area, along with the crew area directly behind the driver and officers seats.
- ☐ Rear suspension shall be air ride per PGFD specifications.
- ☐ A HAAS collision system shall be installed on the apparatus and fully operating for the life of the apparatus..
- ☐ An OPTICOM shall be provided. It will be wired so that it will only activate when the parking brake is released and emergency lights are activated.

## Ladders

☐ The minimum ladder compliment shall be:

1- 24' extension ladder Duo-Safety 900A
1- 14' roof ladder Duo-Safety 775-DR
1- 10' folding ladder Duo Safety 585A

All ladders shall meet the NFPA 1931 standard.

## If unit is equipped with Fire Pump

- ☐ Fire pump rated 300 gallons per minute, as a minimum.
- ☐ Fire Pump recommended as a Hale Fire Pump, a substitution pump can be requested.
- ☐ All valves in the fire pump and associated piping shall be Akron valves.
- ☐ All pump piping shall be stainless steel.
- ☐ Fire pump should be single stage unless justification is given for the need for the two-stage pump.
- ☐ Must provide sacrificial anodes on the pump.
- ☐ Booster tank – must be constructed of polypropylene.

☐ Booster tank – minimum capacity 150 gallons.
☐ Pump intake – the master intake of the pump must be capable of connecting to a 3" supply line.
☐ Intake relief valve to be Elkhart brand.

## Lighting and Misc. Equipment

☐ Permit the County to install 1-1/2 lettering to denote the assigned M number in a contrasting color on the interior of the driver's door.
☐ All emergency lighting should be manufactured by the Whelen Lighting Company or equivalent. Please contact AMD to determine the standard lighting number that are currently in use.
☐ Numbers on the apparatus denoting the company station number shall be consistent with the COG numbering system. (Ex. E841, TW839)
☐ Apparatus color and graphics shall follow General Order 02-18.
☐ There shall be at least a 20kw generator installed on the apparatus.
☐ There shall be at least a two electric cord reels on the apparatus. These cord reels shall be at least 200' in length with 10/4 wire.
☐ All 120-volt (AC) receptacles shall be National Electrical Manufacturers Association (NEMA) configuration L5-20R and all 120-volt (AC) plugs shall be NEMA configuration L5-20P.
☐ There shall be scene lighting (12-volt preferred) on all four sides of the apparatus. The lighting shall be LED.
☐ Compartment floor construction should be able to be able to support at the least 500lbs.
☐ A winch capable of at least 12,000lbs shall be permanently installed on the front or rear of the apparatus.
☐ A winch capable of at least 9,000 lbs. shall be a part of the equipment compliment that is capable of being moved around the apparatus.
☐ Two or more vehicle wheel chocks.
☐ All hydraulic rescue tools shall meet the current NFPA requirement.

## Minimum Equipment Standard

- Hydraulic 10,000 PSI System
  - 2 – Onboard hydraulic reels 100' in length of hose per reel
  - 2 – Cutters minimum of 7" opening
  - 2 – Spreaders with minimum of 28" spread
  - 2 – Medium rams with minimum of 50" extended
  - 2 – Large ram with minimum of 59" extended
  - 1 – Portable pump of running one tool
  - 2 – Ram supports "L" brackets
  - 1 – Battery powered mini cutter
- Stabilization Struts
  - 2 – Threaded struts 25" to 36"
  - 2 – Threaded struts 37" to 58"
  - 2 – Strut extensions 12"
  - 2 – Strut extensions 24"
  - 2 – Strut extensions 36"
  - 4 – Multi bases
  - 4 – Hinged bases with anchor
  - 4 – Rachet belts with finger hooks 27'
  - 4 – Tie down keys with "J" hooks

- Cribbing
  - 4 – Step Chocks
  - 12 – 2x4 Wedges
  - 28 – 4x4's
  - 6 – 6x6's
  - 12 – sx4's
  - 1 – 2-1/2 ton floor jack
- Airbags
  - 6 – High Pressure bags
  - 6 – Inline relief/shut off valves
  - 1 – Operating controller
  - 1 – Pressure reducing regulator
- Pneumatic
  - 1 – Scott Air Cart to PGFD Specifications
  - Ajax Rescue Tools Kit
    - 1 -SCBA Regulator
    - 1 – Air Chisel
    - 1 – 1/2" Impact Gun w/Attachments
    - 1 – Ajax Cutoff tool w/ wheels
- Chain
  - Grade 80 (min) 4 lengths (min) totaling 100'
  - Chain any combination of 10', 20' or 25'
  - 2 – 20' 13,200 pound round slings
  - 2 – 10' 13,200 pound round slings
  - 1 – 3-ton chain come-a-long
  - 1 – TU-28 Grip Hoist
    - 2 ton capacity
    - 60' galvanized wire rope w/ safety hook mounted on carting reel
    - Telescopic handle
    - Snatch block pulley
    - Wire rope sling 6' w/chocker hook
    - Wire rope sling 6'
    - Wire rope sling 9'
  - 2 – Grade 80 chain shortner
  - 2 – 9 ton shackles
- Battery/Handheld Tools
  - 1 - At least 18V battery 1/2" Impact Wrench w/ battery
  - 1 - At least 18V battery 1/2" Hammer Drill/Driver w/ battery
  - 2 - At least 18V battery saws-all w/battery
  - 1 - At least 18V Deep Cut Band Saw w/battery
  - 1 – At least 18V 7-1/4" Circular Saw w/battery
  - 1 – At least 18V 4-1/2" / 5" Braking Grinder w/battery
  - 1 – At least 18V 9" Cut Off Saw w/battery
  - 1 – Battery charger that can charge 6 batteries at once
  - 4 spare batteries for battery tools
- Small Tools
  - 1 – 250 Piece Mechanics tool set
  - 4 – Halligan Bars
  - 2 – Flat head axes
  - 1 – Pick head axe
  - 2 – Sledge hammers at least 6lbs
  - 2 – 36" Bolt Cutters
  - 2 – 18" Bolt Cutters
  - 1 – 14" Pipe wrench
  - 1 – 24" Pipe wrench
  - 2 – Hydra Rams

    - 2 – Push Broom
    - 2 – Square Shovels
    - 2 – Pointed Shovels
    - 2 – 25’ Tape Measures
    - 2 – 6ft Pike Poles
    - 2 – 4ft Pike Poles
    - 1 – Duck bill Lock Breaker
- Water Rescue
    - 4 – PFD Life Jackets
    - 4 – Rope Throw Bags 50’
    - 1 – Fire Hose Inflation Kit
- Metro
    - 1 – WASAD
    - 1 – Hotstick
    - 1 – Metro Maps
- EMS
    - All BLS Equipment required by PGFD
- Saws
    - 2 – Rotary Saws per PGFD Specifications
    - 2 – Chain saws to PGFD Specifications
- RIT
    - PGFD Specification RIT Bag
    - 1 – 9” Heavy Duty wire cutters
    - 1 – 8.5” Quick Lock Carabiner
- Rope Rescue
    - 3 bags of 200’ of ½ Static Kernmantle Rope
    - 4 – Short 8mm Bound Sewn Prusik Cords
    - 4 – Long 8mm Bound Sewn Prusik Cords
    - 3 – Small Double Loop Runners
    - 3 – Large Double Loop Runners
    - 1 - Patient Restraint System for stokes basket
    - 2 – 25’ ½” Static Kernmantle for stokes lashing
    - 12 – Steel Carabiners
    - 1 – Tri Link
    - 3 – Omni Block Single Pulleys
    - 1 – Omni Block Double Pulley
    - 2 – Rigging Plates
    - 4 – Class III Harnesses
    - 1 – Stokes Basket (Plastic)
    - 1 – SKED Device
- Portable Electrical Equipment
    - 4 – Akron Revel Lights w/batteries
    - 4 – chargers for Revel batteries
    - 4 – 120 adaptors for Revell lights
    - 2 – 120 volt scene lights with stand
    - 2 – cord reels
    - Pigtails
- Misc Equipment
    - Traffic Vest for every seated position
    - 1 – Emergency Response Guide
    - 1 – Binoculars
    - 1 – Multi-Gas Meter
    - 1 – GasTrac type meter
    - 1 – Elevator Keys
    - 2 – Salvage Buckets
    - 1 – Container of Absorbent
    - 1 – Lock Out Tag Out Kit

- 1 - Man in the Machine Kit
- 2 – Battery Powered Ventilation Fans to PGFD Specifications
- SCBA for at least 4 seated positions

**ATTACHMENT F**

# Prince George's County Fire/EMS Department

## Mobile Water Supply Fire Apparatus Specifications Checklist

### UNIT INFORMATION

| | | | |
|---|---|---|---|
| Station: | | Date: | |
| Unit: | | M#: | |
| Reviewer: | | Fleet Manager: | |

### Definition

An apparatus designed primarily for transporting, picking-up, transporting and delivering water to fire emergency scenes to be applied by other vehicles or pumping equipment.

### General

- ☐ Must be in compliance with the current NFPA 1901, 1911 and 1912 standard as adopted by Prince George's County Fire/EMS Department and Prince George's County Volunteer Fire and Rescue Association standards.
- ☐ Must provide a copy of either a certification that the apparatus fully complies with the current NFPA 1901 or a Statement of Exceptions from the manufacturer.
- ☐ Dealer/Manufacturer must be registered with the State of Maryland.
- ☐ Parts, Service and Operation manuals for the unit shall be provided to the Apparatus Maintenance Division preferably in electronic format.
- ☐ Must provide a copy of the 3rd party certifications where applicable:
  - ☐ Aerial Devices
  - ☐ Air hose reels
  - ☐ SCBA Fill Stations
  - ☐ Fire Pumps
  - ☐ Water tanks
  - ☐ Foam proportioning system
  - ☐ Low voltage electrical systems & warning devices

### Cab and Chassis

- ☐ Must provide a copy of the load distribution plan.
- ☐ Sound – noise level must not exceed 85dba in the non-response mode at all seated positions.
- ☐ A voice-activated intercom system (similar to David Clark, FireCom etc.) shall be provided with headsets at each seated position. The system shall not be hooked up to any am/fm radio.
- ☐ Speed Limits
  - Vehicles shall not be capable of exceeding 65 mph.
- ☐ In addition to the requirements outlined in NFPA 1901, 4.13.3 Load distribution, the apparatus must have a 3% buffer between the in-service weights and the gross axle weight ratings (GAWR), the overall gross vehicle weight rating (GVWR) and the chassis manufacturer's load balance guidelines. The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.
- ☐ The engine must be diesel.
- ☐ The engine coolant shall be OATS coolant and approved by AMD.
- ☐ The transmission must be automatic.
- ☐ Radiator must be equipped with a sight gauge or translucent tank and low coolant level alarm.
- ☐ Brakes must be air actuated disc-type brakes with automatic slack adjusters, if applicable.
- ☐ An anti-lock brake system shall be provided.
- ☐ The vehicle must have Electronic Stability Control (ESC).
- ☐ The vehicle must have Anti-Lock Brake System.
- ☐ Front collision airbags and side roll airbags should be the standard. Commercial chassis may require a deviation approved by AMD.
- ☐ Rear Suspension shall be air ride suspension, per PGFD Specs.
- ☐ The parking brake release shall have a guard to prevent accidental release.

- ☐ All wiring must be numbered and function coded, vehicles shall have a complete as built wiring schematic.
- ☐ A back-up camera with audio shall be installed for a rear view of the apparatus and area surrounding the apparatus. The screen for the camera must be easily viewable for the driver.
- ☐ In addition to the vehicles Vehicle Data Recorder, an event recording camera meeting the County specifications must be provided. (Contact Apparatus Maintenance for specific ordering instructions).
- ☐ The front bumper must be reinforced the full height and width resulting in the total thickness being at least ½". If possible, supports shall run from the chassis frame to the outer end of the bumper on each side.
- ☐ Must provide all hardware necessary to activate the station exhaust system.
- ☐ Must provide an air compressor/battery conditioner.
- ☐ The vehicle must be capable of being towed from the front with no obstructions and provide front accessible glad hands for hooking up brakes while in tow.
- ☐ Must specify DAVCO fuel water separator.
- ☐ Wheels – Aluminum disc-type construction, tubeless design.
- ☐ All tilt cab apparatus shall be able to be jump started without the need to raise or tilt the cab.
- ☐ The DEF fill cap should have a protective cover isolating it from the fuel fill. Also, a locking cap for the DEF tank is highly recommended.
- ☐ 12-volt wiring shall be provided for the power supply for a mobile radio and mobile data terminal in the front of the cab. These wires shall be clearly marked on the end for the installers. Consideration should be given to having manufacturer install the proper radio antennas on the roof of the apparatus at construction. (Contact AMD for the number needed).
- ☐ Mobile radios will be provided for vehicle/apparatus purchases. Please contact AMD for assistance in receiving a radio.
- ☐ The mobile radio shall be mounted in such a way that it is reachable by the officer while staying seated and belted in their respective seat.
- ☐ There shall be an MDC docking station supplied with the vehicle/apparatus bought by the department making the purchase. (Contact AMD for current model required).
- ☐ The apparatus shall have an MDT. This MDT purchase is the responsibility of the department or corporation making the purchase. MDT shall be the current specification set by the radio shop.
- ☐ A HAAS collision system shall be installed on the apparatus and fully operating for the life of the apparatus..
- ☐ An OPTICOM shall be provided. It will be wired so that it will only activate when the parking brake is released and emergency lights are activated.
- ☐ There shall be a system, or access panel for the checking of the vital fluids without tilting or raising the cab.

## Fire Pump and Tank

- ☐ Fire pump rated to at least 1000 gallons per minute, as a minimum.
- ☐ Fire pump should be a Hale Fire Pump, a substitution pump can be requested.
- ☐ All valves in the fire pump and associated piping shall be Akron valves.
- ☐ All pump piping shall be stainless steel.
- ☐ Fire pump should be single stage unless justification is given for the need for the two-stage pump.
- ☐ Must provide sacrificial anodes on the pump.
- ☐ Water tank – must be constructed of polypropylene.
- ☐ Water tank – minimum capacity 2500 gallons.
- ☐ Pump discharge – incorporate one (1) discharge for 4" or 5" hose with Storz couplings. If a 4" discharge is provided, a 4" to 5" adapter shall be provided. If a 5" discharge is provided, a 5" to 4" adapter shall be provided. The minimum size piping and valve for this discharge shall be 3".
- ☐ Pump intake – the master intake of the pump must be capable of connecting to a 4" or 5" Stortz LDH coupling.
- ☐ A minimum of 20 feet of suction sleeves shall be provided on the apparatus.
- ☐ There shall be three tank dumps on the apparatus, they shall be capable of dumping 90% of the tanks capacity within two minutes.
- ☐ There shall be a minimum of three water tank level gauges. One at the rear, one at the pump panel and one in cab in easy view of the driver.
- ☐ There shall be two direct tank fills located at the rear of the apparatus at least 3 inches in diameter.
- ☐ All dump chutes will be properly lighted so visible from cab and surrounding area. Controls for all dump chutes will be located in cab and at the chute.

## Lighting and Misc. Equipment

☐ Permit the County to install 1-1/2 lettering to denote the assigned M number in a contrasting color on the interior of the driver's door.
☐ Numbers on the apparatus denoting the company station number shall be consistent with the COG numbering system. (Ex. E841, TW839)
☐ Apparatus color and graphics shall follow General Order 02-18.
☐ All emergency lighting shall be LED. Whelen is the preferred manufacturer.
☐ There shall be 12 volt LED scene lighting on all four sides of the apparatus
☐ Apparatus will have two at least 3000 gallon portable tanks mounted on the unit.
☐ As built engineering drawings shall be provided to the Apparatus Maintenance Division.

## Supply Line, Attack Lines and Nozzle Minimums

☐At a minimum, the supply line configuration shall consist of the following:
- 100' of 4" fabric supply line
- 100' of 3" fabric supply line

☐ At a minimum, the apparatus shall have the following size and length attack lines:
- 400' of 1.75" fabric attack line

☐ Nozzles for attack lines shall be 50psi/150 gpm fog nozzles with an integrated 15/16th slug.

Exceptions to the hose line compliment/configuration can be made based on specific need, subject to the approval of the Fire Chief.

## Minimum Equipment Standard

- 3 – 1.75" nozzles and shutoffs 50/150 with 15/16th integrated smooth bore.
- 2.5 Gallon Water Extinguisher
- 15lb ABC extinguisher
- 2 – Hydrant Gates 2.5"(F) to 2.5" (M)
- 2 – Spanner/Hydrant sets and holders
- 1 – Set of LDH spanners
- 1 adaptor 1.5"(F) to 2.5"(M)
- 2 – 2.5" double females
- 2 – 2.5" double males
- 1 – Reducer 2.5"(F) to 1.5"(M)
- 1 – Adaptor 6" to 4.5" (F) swivel
- 1 – Adaptor 4" Stortz to 2.5"(F)
- 1 – Adaptor 4" Stortz to 2.5"(M)
- 1 – Adaptor 4" Stortz to 4.5"(F) swivel
- 2 – Adaptors 4" stortz to 5" stortz
- 1 – Adaptor 6" NH Double female
- 1 – Floating strainer w/ 6" female long handled swivel
- 1 – Low Level strainer w/ 6" female long handled
- 1 – 30" bolt cutters
- 1 – 30" halligan bar
- 1 – Flat head axe
- 2 – Rubber connections mallets
- 1 – 24" Pipe wrench
- 1 – Section 4" x 50' supply line with stortz couplings
- 2 – Sections 4" x 25' supply line with stortz couplings
- 2 – Section of 3" x 50' supply line with 2.5" couplings
- 10 Sections of 1.75" attack line
- 1 - Manual valve w/ 30 degree elbow 6"(F) to 4" stortz
- 1 – Suction Siamese 6"(F) to two 2.5"(F)
- 1 – Barrel strainer 6"(F)
- 1 – Gated "Y" 2.5"(F) to 2-1.5"(M)

- 2 – Salvage tarps
- 1 – 3 way ball valve gate 4” stortz to 1-4”stortz and 2-2.5”(M)
- 2 – Holly Tubes
- 2 – portable tanks with at least a 3000 gallon capacity
- 2 – SCBA
- Complete set of EMS equipment to county standard

# Prince George's County Fire/EMS Department

## Ambulance Specifications Checklist

### UNIT INFORMATION

| | | | |
|---|---|---|---|
| Station: | | Date: | |
| Unit: | | M#: | |
| Reviewer: | | Fleet Manager: | |

### Definition

Any "over the road" vehicle used for emergency medical care and patient transport.

### General

- ☐ Meets minimum compliance with the current edition of KKK 1822 and NFPA 1917 standards.
- ☐ Unit shall meet General Order 02-18 for color and graphics.
- ☐ Dealer/Manufacturer must be registered with the State of Maryland.
- ☐ Parts and service manuals shall be provided to the Apparatus Maintenance Division.

### Cab and Chassis

- ☐ Must be a Type I Ambulance (10,001 to 14,000 GVWR) or Type I-AD (Additional Duty) Ambulance (14,001 or more) – which shall be a cab-chassis with modular ambulance body. Vans and Cutaway Vans are not acceptable.
- ☐ Weight ratings Amendments:
  - Compliance with KKK 1822, 3.5 Vehicle Weight Ratings and Payload,
  - In addition: Unit must have a 3% buffer between the in-service weights and the gross axle weight ratings (GAWR), and the overall gross vehicle weight rating (GVWR). To determine the vehicle's in-service weight, the vehicle will be weighed fully equipped with no personnel or cot, and then the occupant weight shall be added at 250 pounds for each designated seating position in the cab, 750 pounds for the primary patient and cot, and 500 pounds for two attendants in the rear. The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.
- ☐ Speed Limits
  - Vehicles shall not be capable of exceeding 75 mph.
- ☐ OPTICOM
  - Shall be wired so that it will only activate when the parking brake is released and emergency lights are on upon delivery of the unit.
- ☐ Chassis will provide front collision airbags and rollover protection for driver and passenger seat.
- ☐ Rear tires shall be "All Season" type, preferably block tread.
- ☐ Front and rear tow hooks shall be provided which are attached to the chassis frame.
- ☐ Vehicle Exhaust System
  - Exhaust shall discharge at the driver's side of the vehicle at a maximum distance of 1" beyond the side of the module.
  - Tailpipe outlet shall not terminate within 12" of the vertical axis of the fuel tank filler opening(s) when located on the same side.
  - Modifications or extensions made to the OEM exhaust system shall meet or exceed OEM's requirements in terms of backpressure, components, design, and workmanship must exit on the driver's side of the vehicle, forward of the rear axle.
- ☐ Must provide all hardware necessary to activate the station exhaust system.
- ☐ The seats shall utilize "high wear" upholstery.
- ☐ The cab floor shall be covered with vinyl in lieu of carpet.
- ☐ A non-resettable engine hour meter must be provided on the driver's side of the center console.
- ☐ Alarms
  - Visual and audible alarms to indicate low engine oil pressures and/or high engine coolant temperature.
- ☐ All DOT lighting shall be LED.
- ☐ Both exterior rear-view mirrors shall be controlled electronically from the drivers position and shall be heated.

☐ Security
- Power door locks shall be provided which control the cab, patient module entrances, and compartment doors.
  - Unit shall also have alternate means (on the exterior) to unlock power doors (i.e. key pad, hidden switch, etc.)
- All vehicles will be equipped with a Vista Brake Lock system.

☐ Ambulances which exceed 80 dba in either the response mode or non-response mode must be equipped with a voice activated intercom system (similar to David Clark, Sigtronics, FireCom, etc.) with two (2) headsets in the cab and one (1) in the patient compartment. These headsets shall not be hooked up to the am/fm radio.

☐ Event recording camera meeting the County specifications must be installed (ROSCO). **

☐ A HAAS Alerting system shall be installed with a five year subscription.

☐ Unit shall have frontal airbags in case of collision.

☐ Electrical Requirements (Cab)
- Shall be equipped with four (4) 12-volt power points:
  - One (1) shall be a "lighter" type.
  - One (1) shall have 2 USB ports.
  - Two (2) shall be a 12-volt power/ground strips (center console preferable inside console for MDC, Tablet, and siren accessories).
    - One (1) wired hot to battery.
    - One (1) wired to ignition power.
- Standard NEMA 120V Dual Outlets shall be provided in the following location
  - Center console

## Module Body

☐ Patient Capability:
- Must be capable of transporting one fully immobilized adult patient.

☐ Stretcher/Stair Chair/Pediatric Devices:
- Only County approved Stryker Power Load System and stretcher, and cot fastening systems can be installed. **
- The stair chair must be a Stryker chair that is current with PGFD specifications.
- The Stryker system must have two spare batteries and charger.
- Transportation Devices for Pediatric Patients
  - The stretcher must be compatible with the Ferno PediMate pediatric transport device, or equivalent, for patients from 10 to 40 pounds.
  - The unit must be equipped with a SafeGuard Transport Ambulance Cot Restraint, or equivalent, for patients from 40 to 100 pounds.
    - Storage must be provided with the stair chair in an external compartment. Must comfortably accommodate 29.5"h x17"w x 6.5"d.
  - At least one seat in the patient compartment shall be designed as an integrated attendant/child seat, meeting all applicable federal and state regulatory standards.

☐ Back-Up Camera
- Shall be provided which is viewable from the driver's position. The camera shall be activated automatically when the vehicle is placed in reverse, have audio capability and a manual activation button shall also be provided.

☐ Oxygen Requirements:
- Must be at least three (3) accessible wall dual outlets for medical oxygen.
  - One (1) on the action area wall.
  - One (1) in the ceiling above patient's head.
  - One (1) on the curb side wall.
  - All outlets shall be compatible with Ohmeda style quick-disconnect fittings.
- On-board oxygen cylinder:
  - Must be "H" cylinder.
  - Must be an electric cylinder lift which prevents personnel from lifting cylinder into vehicle.
- Oxygen Bracket:
  - Universal Oxygen bracket capable of securing two (2) portable oxygen cylinders.

☐ All DOT lighting shall be LED.

☐ The heater lines going to the rear module shall be equipped with shut off valves that are identified and easily accessible unless it has automatic electric valves installed.

☐ Electrical
- Auto-Eject Plug
  - This device shall be wired to a battery charger/conditioner.
  - Will automatically eject the power cord when the vehicle is started.
  - The auto-eject plug shall be located on the driver's side in close proximity to driver's door.

- Carbon Monoxide (CO) Detector hardwired in patient compartment.

- Inverter:
  - Shall be equipped with a minimum of a 1000-watt 120V AC Inverter integrated into 120 V power systems. When attached to shore line power, the inverter shall be disabled. When the vehicle is running the inverter shall automatically provide 120V AC power to the system. The inverter shall be appropriate for use with computer equipment without damaging their electrical systems.
- Shall be equipped with two (2) 12-volt power points:
  - Two (2) shall be a "lighter" type.
- Standard NEMA 120V dual outlets shall be provided in the following location:
  - Action Wall
- Radio Requirements:
  - Unit must have mobile radio prewired in cab and patient compartment. This includes:
    - Placement of two (2) antenna's (dual band radios) for the purposes of maintaining an EMRC mobile radio for statewide EMRC radio communication.
    - Wiring harnesses in center console of cab and patient compartment. **
    - Power lead in center console of cab and patient compartment. **

☐ 12-volt wiring shall be provided for the power supply for a mobile radio and mobile data terminal in the front of the cab. ☐ These wires shall be clearly marked on the end for the installers. Consideration should be given to having manufacturer install the proper radio antennas on the roof of the apparatus at construction. (Contact AMD for the number needed).

☐ Mobile radios will be provided for vehicle/apparatus purchases. Please contact the radio shop or Captain Gunn for assistance in receiving a radio.

☐ There shall be an MDC docking station supplied with the vehicle/apparatus bought by the department making the purchase. (Contact AMD for current model required).

☐ The apparatus shall have an MDT. This MDT purchase is the responsibility of the department or corporation making the purchase. MDT must meet current specifications mandated by the radio shop..

☐ Rear suspension shall be air ride per PGFD specifications.

☐ A HAAS collision system shall be installed on the apparatus and fully operating for the life of the apparatus.

☐ The on-board suction system shall be compatible with the Bemis 1200cc disposable suction container.

## Specialty – ALS Compartment

☐ A compartment on the curb side forward shall be standardized for Advanced Life Support (ALS) Equipment. This compartment will allow for the standardization of ALS equipment in a temperature control compartment.

☐ Specification Requirements:

- Monitor/Defibrillator
  - Approximately 32"L x 22"W x 18"H.
  - Must comfortably accommodate a Medtronic/Physio-Control LifePak 15.
  - Must include a mobile battery support system
    - Wall mount with power lead – 12" x 12" x 12".
- ALS Stat Pack
  - Approximately 32"Lx22"Wx27"H inches.
  - Compartment must be insulated and protected against temperature extremes.
- Lucas Compression Device
  - Approximately 26"Lx14"Wx10"H inches.
- Each of these pieces of equipment will be accessed through the curbside forward compartment door on the patient module. Each will enter that compartment on the Length Axis. The long dimension will be left to right across the body.

☐ Drug Lock Box Specifications:

- DEA mandated custody controlled substances must be able to be contained within this locking compartment, Knox Med Vault 2-mini (contact EMS Office for additional information and Knox approval) shall be provided. This unit will require a direct wire power source.

☐ Electrical:

- Two (2) sets, Standard NEMA 120V dual outlets shall be provided in the following locations:
  - ALS Compartment

## Specialty – Protective Clothing Storage Compartment

☐ External Compartment:

- Shall be equipped with a ventilated compartment for storage of protective clothing and SCBA.
- There shall be no means for air to exchange between the protective clothing storage compartment and the patient compartment.
- The compartment shall be at least 24 cubic feet and accommodate two sets of PPE measuring 22” x 24” x 36”.
- SCBA Storage:
  - Two (2) Self Contained Breathing Apparatus (SCBA) brackets shall be provided for storage of the SCBA.

## Misc

* = Request for variance to this specification can be made in writing through the chain of command. Final approval will be submitted to the Fire Chief or his/her designee.

** = Contact Apparatus Maintenance for specific ordering instructions.

**Future**

**Brush Truck Specifications Checklist**

**Future**

**Fireboat Specifications Checklist**

**Future**

**Rescue Boat Specifications Checklist**

**ATTACHMENT K**

# Prince George's County Fire/EMS Department

## Used Apparatus Specifications Checklist

### UNIT INFORMATION

| | | | |
|---|---|---|---|
| Station: | | Date: | |
| Unit: | | M#: | |
| Reviewer: | | Fleet Manager: | |

### Definition

Any vehicle or apparatus titled to another entity other than the manufacturer or dealer.

### Required

- ☐ All used apparatus being considered for incorporation into the Prince George's County Fire/EMS Department must be inspected for compliance with the used apparatus requirements and general overall condition by the Apparatus Maintenance Division. It is recommended that any corporation considering the purchase of used apparatus have the apparatus reviewed by AMD prior to purchase.
- ☐ Must be in compliance with all applicable sections of the NFPA 1901 Standard, NFPA 1912 Standard, or the NFPA 1917 Standard.
- ☐ The purchasing department shall work to bring the vehicle up to current NFPA 1901, NFPA 1912 or NFPA 1917 Standard.
- ☐ The manufacturer of the chassis, body, pump and/or aerial device as applicable must be still in existence and have a dependable parts supplier.
- ☐ Parts, Service and Operation manuals for the unit shall be provided to the Apparatus Maintenance Division.
- ☐ The maximum age of the vehicle at the time it is ready to be placed in service shall be as follows:
  - ☐ Ambulance – 5 years
  - ☐ Pumper – 12 years
  - ☐ Aerial Fire Apparatus – 12 years
  - ☐ Rescue Squad – 12 years
  - ☐ Initial Attack Apparatus – 12 years
  - ☐ Mobile Water Supply Fire Apparatus – 12 years
- ☐ Successful results of the oil analysis of the engine, drive-line components and any associated hydraulics.
- ☐ A copy of the State of Maryland Vehicle Inspection.
- ☐ Aerial Devices must have an Aerial Certification, Non-Destructive Test and Aerial Maintenance performed within the last 90 days. The aerial testing company shall provide a copy of the associated paperwork to Apparatus Maintenance for review. The vehicle must remain out of service since the test.
- ☐ Pumping Devices – Certification that the pump has been inspected and tested by a pump testing company in accordance with NFPA 1901 within 90 days of the purchase, and that the vehicle has remained out-of-service since that test.
- ☐ Ground Ladders – Certification that each ground ladder has been inspected and tested by a ladder testing company in accordance with NFPA 1932 within 90 days of the purchase, and that the ladders have remained out-of-service since the test.
- ☐ In addition to the requirements outlined in NFPA 1901, 4.13.3 Load distribution, the apparatus must have a 5% buffer between the in-service weights and the gross axle weight ratings (GAWR), the overall gross vehicle weight rating (GVWR) and the chassis manufacturer's load balance guidelines. (Example: If the rear axles' in-service weight is 22,000 pounds, we will add 5%, which would be 1,100 pounds, the rear GAWR must be at least 23,100 pounds). The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.
- ☐ Sound – noise level must not exceed 85dba in the non-response mode at all seated positions.
- ☐ A voice-activated intercom system (similar to David Clark, FireCom etc.) shall be provided with headsets at each seated position. The system shall not be hooked up to any am/fm radio.
- ☐ The engine must be diesel.
- ☐ The engine coolant shall be OATS coolant and approved by AMD.
- ☐ The transmission must be automatic.
- ☐ Radiator must be equipped with a sight gauge or translucent tank and low coolant level alarm.
- ☐ Brakes must be air actuated disc-type brakes with automatic slack adjusters, if applicable
- ☐ An anti-lock brake system shall be provided.

- ☐ The parking brake release shall have a guard to prevent accidental release.
- ☐ A back-up camera with audio shall be installed for a rear view of the apparatus and area surrounding the apparatus. The screen for the camera must be easily viewable for the driver.
- ☐ In addition to the vehicles own NFPA required Vehicle Data Recorder, an event recording camera meeting the County specifications must be provided. (Contact Apparatus Maintenance for specific ordering instructions).
- ☐ Speed Limits
  - Vehicles shall not be capable of exceeding 68 mph.
  - 65 MPH for Aerial/Tower rigs
  - 65 MPH for Tankers
- ☐ Wheels – disc type construction, tubeless design.
- ☐ The front bumper must be reinforced the full height and width resulting in the total thickness being at least ½". If possible, supports shall run from the chassis frame to the outer end of the bumper on each side.
- ☐ Must provide all hardware necessary to activate the station exhaust system.
- ☐ Must provide an air compressor/battery conditioner.
- ☐ The vehicle must be capable of being towed from the front with no obstructions and provide front accessible glad hands for hooking up brakes while in tow.
- ☐ Must specify DAVCO fuel water separator.
- ☐ 12-volt wiring shall be provided for the power supply for a mobile radio and mobile data terminal in the front of the cab. These wires shall be clearly marked on the end for the installers. Consideration should be given to having manufacturer install the proper radio antennas on the roof of the apparatus at construction. (Contact AMD for the number needed).
- ☐ Mobile radio will be provided for vehicle/apparatus purchases.
- ☐ The mobile radio shall be mounted in such a way that it is reachable by the officer while staying seated and belted in their respective seat.
- ☐ There shall be an MDC docking station supplied with the vehicle/apparatus bought by the department making the purchase. (Contact AMD for current model required).
- ☐ The apparatus shall have an MDT. This MDT purchase is the responsibility of the department or corporation making the purchase.
- ☐ Apparatus/Vehicle color and graphics shall follow General Order 02-18.

## Used Pumper Specific Requirements

- ☐ Fire pump rated 1250 gallons per minute, as a minimum.
- ☐ Must provide sacrificial anodes on pump.
- ☐ Booster tank – must be constructed of polypropylene.
- ☐ Booster tank – minimum capacity 500 gallons.
- ☐ A minimum of two (2), six-inch by ten-foot hard sleeves mounted on the apparatus.
- ☐ LED Scene lighting on all four sides of the engine.
- ☐ Equipment and Hose requirements to match new engine listings.

## Used Aerial Apparatus Specific Requirements

- ☐ Alternating current (AC) power source minimum continuous duty rating 10,000 watts, as a minimum.
- ☐ All 120-volt (AC) receptacles shall be National Electrical Manufacturers Association (NEMA) configuration L5-20R and all 120-volt (AC) plugs shall be NEMA configuration L5-20P.
- ☐ Illumination (scene lighting) must be provided on two (2) sides of the vehicle.
- ☐ There shall be a minimum of 133 total feet of ground ladders.
- ☐ A minimum of 20 feet of suction sleeves shall be provided on the apparatus if a quint.
- ☐ At least a 1250 GPM fire pump and 300 gallon booster tank.
- ☐ Aerial device must be at least 75 feet in length.
- ☐ Aerial tip load at full extension and at 0 degrees shall be at least 500lbs.
- ☐ LED Scene lighting on all four sides of the apparatus.
- ☐ Equipment list to match new ladder requirements.

## Used Rescue Squad Specific Requirements

- ☐ Alternating current (AC) power source minimum continuous duty rating 10,000 watts, as a minimum.
- ☐ All 120-volt (AC) receptacles shall be National Electrical Manufacturers Association (NEMA) configuration L5-20R and all 120-volt (AC) plugs shall be NEMA configuration L5-20P.
- ☐ Illumination (scene lighting) must be provided on three (3) sides of the vehicle.
- ☐ There shall be a minimum of one 24' extension ladder, 14' roof and 10' folding ladders.

☐ Walk in style Rescue Squads shall only require headsets in the squad body if the noise levels exceeds 85dBA in the non-response mode or 90 dBA with the audible warning devises in operation. Interior noise levels shall be measured with the vehicle in motion at the speed that produces the highest noise level, up to 55mph with the windows closed.

## Used Initial Attack Specific Requirements

☐ Vehicles which exceed 80dBA in either the response mode or non-response mode must be equipped with a voice activated intercom system (David Clark or similar) with a headset at each seated position in the cab. These headsets shall not be wired or hooked into anything but the fire radio.
☐ Booster tank shall be at least 200 gallon capacity.
☐ Booster tank must be constructed of polypropylene.
☐ Pump engines must have oil drains run to the bottom of the chassis.
☐ All pump valves shall be manufactured by Akron.

## Used Mobile Water Supply Specific Requirements

☐ Minimum tank capacity of 2500 gallons.
☐ Tank must be constructed of polypropylene.
☐ Each tank dump shall be capable of dumping 90% of the tanks rated capacity within two minutes.
☐ All pump valves shall be manufactured by Akron.
☐ The bottom of the chutes shall be between 36” and 42” above the ground when the tank is fully loaded.
☐ There shall be at least on water tank level gauge.
☐ There shall be two direct tank fills capable of a filling rate of 1000 gpm minimum.
☐ Fire pump rated at 1000 gpm’s as a minimum.
☐ Must have sacrificial anodes on pump.
☐ There shall be lights to illuminate the dumping area, and LED Lighting on all four sides for scene lighting.
☐ A minimum of two (2) six-inch by ten-foot hard sleeves mounted on the apparatus.

## Used Ambulance Specific Requirements

☐ Must be compliant with the NFPA 1917 Specification as of the date of manufacture.
- Excluding color, paint and finish criteria outlined in NFPA 1917

☐ As of the date of purchase:
- Manufacturer of chassis must currently be in business.
- No more than 5 years old.
- No more than 50,000 miles.
- Manufacturer of patient module must currently be in business.
- May be mounted to a replacement chassis.

☐ Must be Type I ambulance (10,001 to 14,000 GVWR) or type I-AD (additional duty) ambulance (14,001 or more) which shall be a cab-chassis with modular ambulance body. Consideration will be given to those stations which have dimensional issues.
☐ In addition: Unit must have a 5% buffer between the in service weights and the gross axle weight ratings (GAWR), and the overall gross vehicle weight rating (GVWR). (Example: If the rear axles in service weight is 10,000 pounds we will add 5% which would be 500 pounds, the rear GAWR must be at least 10,500 pounds) To determine the vehicles in service weight the vehicle will be weighed fully equipped with no personnel or cot, and then the occupant weight shall be added at 250 pounds for each designated seating position in the cab, 750 pounds for the primary patient and cot, and 500 pounds for two attendants in the rear. The purpose of this buffer is to provide the capability of changing the complement of equipment carried in the future without exceeding the GAWR or GVWR of the vehicle.
☐ Ambulances which exceed 80 dba in either the response mode or non-response mode must be equipped with a voice activated intercom system (similar to David Clark, Sigtronics, FireCom, etc.) with two (2) headsets in the cab and one (1) in the patient compartment. These headsets shall <u>not</u> be hooked up to the am/fm radio.
☐ Rear tires shall be “All Season” type preferably block tread.
☐ The cab floor shall be covered with vinyl in lieu of carpet.
☐ A non-resettable engine hour meter must be provided.
☐ Event recording camera meeting the County specifications must be installed.
☐ Visual and audible alarms to indicate low engine oil pressures and/ or high engine coolant temperature.
☐ If road speed can be controlled electronically limited, it shall not exceed 70 miles per hour
☐ The cab will be equipped with two (2) 12V power points.

MODULAR BODY

☐ The cot must be compatible and interchangeable with the existing fleet of County ambulances.

☐ A Powerload Stryker cot system shall be installed, with Powerload cot.

☐ The stair chair must be compatible and interchangeable with the existing fleet of County ambulances.

☐ Must be at least two (2) accessible wall outlets for oxygen.

- One (1) on the action wall.
- One (1) on the curb side wall at the second patients head.
- All outlets shall be compatible with Ohmeda style quick-disconnect fittings.

☐ On-board oxygen cylinder:

- Must be “H” cylinder.
- Must be an electric cylinder lift which prevents personnel from lifting cylinder into vehicle.

☐ The heater lines for the patient module shall be equipped with shut off valves that are identified and easily accessible.

☐ The on-board suction system shall be compatible with the Bermis 100cc disposable suction container.

☐ Two (2) Self Contained Breathing Apparatus (SCBA) brackets shall be provided for the storage of the SCBA.

☐ Transportation devices for pediatric patients:

- The stretcher must be compatible with the Ferno PediMate pediatric transport device, or equivalent for patients from 10 to 40 pounds.
- The unit must be equipped with a SafeGuard Transport Ambulance cot restraint, or equivilant, for patients 40 to 100 pounds.
- Storage must be provided with the stair chair in an external compartment.
- Must comfortably accommodate 29.5”h x 17”w x 6.5” d.

ELECTRICAL SYSTEM

☐ The vehicle shall be equipped with a minimum of a 1000-watt 120V AC inverter integrated into 120V power system. When attached to shore line power, the inverter shall be disabled. When the vehicle is running, the inverter shall provide 120V AC power to the system. The inverter shall be appropriate for use with computer equipment without damaging their electrical systems. Outlets shall be provided in the cab center console and the patient action wall.

☐ The vehicle battery charger/conditioner shall also be equipped with an air compressor if the chassis has an air system. This device shall be wired to an auto-eject plug which ejects the power cord when the vehicle is started.

Attachment L

# Application for Introducing a Vehicle into the Fleet
# Flow Chart