

Montgomery County Fire and Rescue Apparatus Specifications Manual 2021



Montgomery County Fire and Rescue Service maintains a large fleet of varying types of apparatus to support the mission of protecting lives, property, and the environment. A general review of the apparatus specifications is included in this manual and is a reference for the EMST/508 decision process.

Montgomery County Logistics Section
Fleet Operations and Fleet Support
14935 Southlawn Lane
Rockville, MD 20850
240-777-2485

Freightliner / PL Customs Ambulance or Medic Unit:



- Length 23'6", Width 9' 6", Height: 10'6", Gross Vehicle Weight: 20,000 pounds
- Stryker Power-PRO XT cot and PowerLoad system with "MCI fastener" for compatibility with other cots
- 2 Portable radios
- Germicidal air purification system
- Onboard "M" size oxygen cylinder with Zico electric oxygen tank lift
- Onboard suction and supplies
- Reeves stretcher
- Child car seat
- Stair chair for moving patients up and down stairs
- 2 Sets of SCBA
- Portable suction
- Mass casualty incident triage bag
- Fire extinguisher
- Long spine board and splinting equipment
- Short spine board, Kendrick extrication device
- Scoop stretcher
- Oxygen and airway bag including airway masks and bag valve mask
- BLS medications and glucometer
- Onboard suction and supplies
- BLS airway management supplies
- Obstetric kits
- BLS trauma and burn management supplies

Medic units include:

- Portable monitor/defibrillator
- Advance life support bag includes I.V. kit's, and medications
- ALS airway bag airway, emergency intubations with cameras (laryngoscopes), emergency cricothyrotomy kits, emergency pneumothorax kits
- Continuous Positive Airway Pressure (CPAP)

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

2018/2019 Pierce Engines



- Length 32' 6", Width 9' 6", Height 9' 6", Gross Vehicle Weight 47,000 pounds
- "Type 1" Structural Attack Pumper
- 1500 Gallons per minute (GPM) Hale Q-Max pump
- 750 Gallon Water Tank
- Short wheelbase
- Low hosebed and crosslays
- Low ground ladder access
- 50 Gallon tank of Class-A foam
- 20 Gallons of Class-B foam in 5-gallon containers
- Seating for 5 personnel
- Cab storage for complete set of ALS & BLS equipment
- 4 Portable radios
- 1800 feet of 4" supply hose in dual beds set up for our rural/urban interface
- Drafting capability from 3 sides of the unit via Master Intake Valves
- 1000 GPM pre-piped master stream device ("deck gun")
- 500 GPM portable master stream device
- 6 Pre-connected attack lines
- 2 Standpipe packs / highrise bundles with 100 feet of 2" line
- 200' 1" Booster line with power rewind
- 24' Extension ladder, 14' roof ladder, 10' attic ladder
- Two 10' hard sleeves
- Forcible entry equipment

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Engine Tanker:



- Length: 35' 6", Width: 9' 1", Height: 10'-1", Gross Vehicle Weight 64,000 pounds
- 1,750 GPM pump
- 2,000 Gallon water tank
- 50 Gallon Class "B" foam tank
- 2,100 Gallon portable folding water tank
- 1,800' Supply hose
- 4 Attack lines
- 300' Booster hose (pre-connect)
- 3 Water dump chutes
- 10-Kilowatt PTO generator
- Two 150' pre-connected electric cord reels
- 2,000-Watt portable generator with light
- 24' Extension ladder, 14' roof ladder, 10' attic ladder
- Forcible entry tools

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Rosenbauer Brush Engine:



- Length: 32', Width: 8'4", Height: 10'6", Gross Vehicle Weight 38,000 pounds
- 1250 GPM primary pump
- 500 Gallon water tank
- Can function as structural attack engine
- "Pump and roll" capability
- Portable floating pump
- Six-wheel drive
- Seating for 5 personnel
- Two attack lines
- Two high-rise bundles
- Booster reel
- 1000' 4" Supply line
- Two 15' hard sleeves
- Five sets of SCBA
- Four portable radios
- Roof ladder, extension ladder, and attic ladder
- Forcible entry tools

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Tanker:



- Length: 34', Width: 9'9", Height: 10' 7.5", Gross Vehicle Weight 70,000 pounds
- 3500 Gallon water tank
- 1500 GPM pump
- 3 Dump chutes
- Two 2000-gallon folding tanks
- Minimum of 20' of hard sleeves
- Portable floating pump
- 2 Portable radios
- Two 200' attack lines
- 400' of 4" supply hose
- 2 Sets of SCBA
- Direct tank fill

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Spartan Tractor-Drawn Aerial:



Length 59', Width 9'11", Height 11'3", Gross Vehicle Weight 74,500 lbs

- Articulated truck for maneuverability
- 100-foot heavy duty aerial ladder (500lb load at tip)
- Pre-piped, 1000 GPM elevated master stream
- 202 feet of ground ladders
- 4 Portable radios
- 10-Kilowatt on-board generator
- Vehicle extrication equipment "Jaws of Life" (battery or hydraulically powered)
- Air Bags: 1-ton, 8-ton, 38-ton, and 55 ton
- Wood cribbing
- Rescue struts for vehicle, trench rescue, and building collapse
- Chains and straps for vehicle stabilization
- Rope rescue equipment
- Stokes basket
- Water rescue equipment
- Portable lighting and power
- Ventilation fans (two gasoline and two battery/electric)
- Rapid intervention equipment and thermal imaging camera
- Forcible entry tools
- Elevator rescue tools
- Salvage equipment
- Metro bag and Warning Strobe Alarm Device
- Electric and air cord reels
- Gas powered saws for wood, metal, and masonry
- Battery powered tools
- Various small hand tools, screw drivers, wrenches, etc. for rescue utilization

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Pierce All-Steer Aerial Tower:



- Length: 47', Width: 9'8" (with jacks 17'5"), Height: 12'2", Gross Vehicle Weight 74,800
- 100' Aerial platform with 1000-pound capacity
- 2000 GPM elevated master stream
- Platform capacity of 3 people (2 people when flowing 1000 GPM)
- 158 feet of ground ladders-1-14', 1-16', 1-20', 1-28', 2-35'
- 4 Portable radios
- Rope rescue equipment
- Stokes basket
- Pierce brackets for "life ladder" used with 16' ladder for parapet operations
- Wood cribbing
- 15-Kilowatt on-board generator
- 2 Portable generators with lights
- Portable lighting
- Ventilation fans (two gasoline and two electric)
- Forcible entry tools
- Rapid intervention equipment and thermal imaging camera
- Elevator rescue tools
- Salvage equipment
- Metro bag and Warning Strobe Alarm Device (WSAD)
- Electric cords on reels
- 5 Gas powered saws for wood, metal, and concrete.
- Battery powered tools

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Pierce Rescue Squad:



- Length 38' 2", Width 96", Height 10' 6", Gross Vehicle Weight 62,000 pounds
- Seating for 6 personnel
- Standard firefighting equipment including SCBA, ventilation fans, fire extinguishers, roof saws, ladders, interior and exterior lighting units.
- Hydraulic rescue tool system (Jaws of Life), including six (6) tools pre-connected to reels so that each tool is "hot" and ready to use immediately on arrival.
- 35-Kilowatt power-take-off (PTO) generator and 20-Kilowatt diesel back-up generator
- 9,000-watt light tower
- Rescue struts for vehicle, trench rescue, and building collapse
- Heavy rigging equipment component including chains, rigging slings, come-a-longs, anchoring devices, portable winches, etc.
- Stationary anchoring points on four sides of the apparatus, top and bottom, for securing unstable vehicles and other objects.
- Water and ice rescue equipment
- "High-angle" rescue equipment such as ropes, pulleys, harnesses, stokes baskets, etc., for rescue from high-rise buildings, steep embankments, structural power and water towers, rock cliffs, etc.
- Air plasma cutting system and cutting torch for cutting structural steel and aluminum.
- Rapid intervention equipment and thermal imaging camera
- A 16.2 CFM on-board air compressor and a portable air cart for pneumatic cutting, lifting, and burning tools
- High pressure and medium pressure power lifting bags (for cars, concrete, trains)
- Concrete cutting and chipping equipment for lightweight structural collapse
- Wood cribbing and shoring materials
- Confined space rescue equipment such as atmospheric monitoring devices, ventilation systems, patient evacuation systems,
- Hydraulic power lifting cylinders, capacity 100,000 pounds

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Medical Ambulance Bus (MAB):



MCFRS operates two of the six medical ambulance buses that were purchased as part of the Urban Area Security Initiative. These units enhance the Metropolitan Washington regional capability to deliver on-scene mass casualty care.

- Length 37', Width 9' 6", Height 12' 4", Gross Vehicle Weight 33,480 pounds
- Capability for twenty littered patients, with litters rated for 350 pounds.
- Removable articulating rear ramp.
- Eight "K" oxygen cylinders providing 15 liters per minute of oxygen for 16 patients, for up to a total of 3 hours.
- External inlet to feed oxygen from an external source to the medical ambulance bus.
- 12.5-Kilowatt generator.
- External inlet to provide shoreline electrical power to the medical ambulance bus.
- BLS patient treatment supplies.
- 2 Bariatric cots with the capability to hold a patient 1100 pounds in the down position and 700 pounds in the raised position.

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Mass Casualty Support Unit (MCSU):



MCFRS operates two MCSUs that were purchased as part of the Urban Area Security Initiative. These units provide support and equipment and are designed to operate with or without the Mobile Ambulance Busses.

- Length 30', Width 9' 6", Height 10' 2", Gross Vehicle Weight 35,000 pounds
- Mass casualty supplies adequate for 100 patients, including:
 - 80 Backboards with spinal immobilization straps
 - 40 Field stretchers
 - Tarps, cones, and flags color-coded for triage areas
 - 4 "M" Cylinder oxygen tanks with distribution system
 - Four 2,000-watt portable generators with lights

The cache has supplies apportioned for 50 patients on each side of the unit. The supplies are in containers that are color coded for triage. Additional supplies are provided in clear plastic containers.

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Hazardous Materials Unit:



- Length 34' 6", Width 10' 1", Height 11' 6", Gross Vehicle Weight 44,000 pounds
- 4 Portable radios
- Seating for 4 personnel
- Command "research area" in the cab
- Climate controlled storage in cab area
- Exterior awning
- Absorbent storage
- Power Take Off (PTO) driven Generator
- Light tower
- Personnel protective ensembles from Level A to Level D
- Self Contained Breathing Apparatus
- Communications for riding and entry position with in-suit capability
- Medical monitoring
- Air monitoring sensors for single or multi gas
- Photoionization detection
- Powdered classification
- Radiation detection
- Liquid transfer equipment
- Diking, damming, and plugging capabilities
- Over-packing capabilities
- Decontamination equipment

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Mobile Air Unit:



- Length: 31'6", Width: 9', Height: 10', Gross Vehicle Weight 33,000 pounds
- 6000 psi air compressor
- Breathing air cylinder cascade system
- 5 Breathing air cylinder cart
- Air cylinder filling station
- 90 SCBA cylinders
- 250' 6000 PSI portable air-line reel
- 50-Kilowatt generator
- Electrical grounding cable with stake
- 6000-Watt light tower
- Electric cord reels

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Bomb Unit:



- Length: 37', Height: 12' 8", Width: 9' 5", Weight: 47,000 pounds
- 20-Kilowatt on board generator
- 20' Mast video camera
- 20' Light tower
- Multiple platforms and equipment for use in Fire and Explosion investigations

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Chesapeake Model Rescue Boat:



- Length: 17'2", Width: 7'10", Weight 625lbs (w/ Engine) 375lbs (w/o Engine),
- Designed working load 3000 pounds, maximum buoyancy 7200 Pounds
- 80 Horsepower jet drive engine
- Mobile radio
- Rope rescue equipment
- Stokes basket with accessories including rigid backboard and helicopter bridle
- EMS equipment
- 2 Life rings, cinch ring collar, 4 throw bags
- 4 Patient personal floatation devices
- 4 Paddles, 2 walking poles, gaff hook
- SCBA cylinder for refilling the hull
- Air horn, flare gun, glow sticks and dye markers

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Rescue Sled Style Boat:



- Length: 14' 6", Width: 7', Weight: 475lbs (w/ engine) 225lbs (w/o engine)
- 40 Horsepower jet drive engine
- Rope rescue equipment
- Stokes basket with accessories including rigid backboard and helicopter bridle
- EMS equipment
- 2 Life rings, cinch ring collar, 4 throw bags
- 4 Patient personal floatation devices
- 4 Paddles, 2 walking poles, gaff hook
- SCBA cylinder for refilling the hull
- Air horn, flare gun, glow sticks and dye markers

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Brush Truck:



- Length: 21' 8", Width: 9' 1", Height: 7' 10", Gross Vehicle Weight 13,880 pounds
- 400 GPM pump
- 300 Gallon tank
- 1 Portable radio
- 200' of 3" Supply hose
- 400' Forestry hose
- 150' of 1 3/4" hose
- 300' Booster hose
- 2000-Watt portable generator with light
- Fixed 500-watt flood lights
- Portable 500-watt light
- Chain saw
- 12,000-pound winch

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Rescue Engine:



- Length 37' 4", Width 9' 9", Height 10' 2", Gross Vehicle Weight 63,000 pounds
- 1500 Gallon water tank
- 2000 GPM pump
- Pre-piped 1000 GPM master stream device
- 4 Portable radios
- 20-Kilowatt generator
- 6,000-Watt light tower
- Electric cord reels with lights
- 2000' of Supply hose
- 5 Pre-connected attack lines
- Standpipe packs
- 24' Extension ladder, 14' roof ladder, 10' attic ladder
- Forcible entry equipment
- Hurst hydraulic rescue tool system (Jaws of Life), including pre-connected to reels so that each tool is "hot" and ready to use immediately on arrival.
- Paratech rescue strut package
- 26-Ton air bags
- Cribbing and shoring for vehicle stabilization
- Chains and ratchet straps for vehicle stabilization
- Rescue air tool compliment
- Water rescue equipment
- Ventilation fans
- Lock out/Tag Out kit
- Rope rescue equipment
- Complete set of battery-operated tools

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

APPARATUS SPECIFICATION SHEET

Utility Task Vehicle / Brush UTV



- Length: 10' 2", Height: 70", Width: 60" Gross Vehicle Weight 2500 pounds
- Can be built for patient care or brush fires
- Capable of carrying a patient and 2 or 3 fire department personnel
- Also used to carry and deliver equipment and personnel off road
- EMS equipment
- Pump and water tank
- Towed to scene using an open trailer and pickup truck or SUV