

	TRAVIS COUNTY ESD #5 MANCHACA FIRE RESCUE Department Best Practices	A403
	Authorized by:  Fire Chief Chris Barron	Effective: 1/26/2018 Rescinds:
Brush Truck Operations		Reference: AFD A403.2 Application: Shift Personnel

I. Purpose

To serve as a guideline with regards to staffing, maintaining, responding and operating Brush Trucks.

II. Background

Brush Trucks are a critical component in our firefighting mission. They play an indispensable role in accessing and attacking wildland fires and in the protection of structures in the wildland/urban interface. The dependability and reliability of the apparatus and crew is of the utmost importance. These guidelines will result in a consistent response and a shared set of expectations amongst our auto-aid partners at wildfire incidents.

This document is a direct adaptation of the Austin Fire Department SOG on Brush Truck Operations. It has been adopted by Manchaca Fire Rescue as an Auto Aid partner to maximize standardization between partner agencies. Variations and additions to the language from the parent AFD document will be signified by text in italics. Generic changes that do not affect content such as formatting and changing "AFD" to "MFR" will not be noted.

III. Policy

- A. **Unstaffed unit.** Brush Trucks are normally unstaffed units. When assigned to an incident, a Brush Truck will be staffed by the crew of the pumping apparatus from that station. These two apparatus will then respond together.
- B. **Special call for staffing.** A chief may call for the independent staffing of Brush Trucks during times of high call volume or elevated fire danger levels. During this time, a brush truck may respond to wildfire incidents as a stand-alone unit.
- C. **Strike teams.** Brush Trucks may be assigned to an incident as a Brush Truck Strike Team (Type 5 or Type 6 Engines). This resource group should be requested in the event that five Brush Trucks are needed to

respond as a team to a wildfire incident. The Strike Team concept provides a 'ready-made' work unit that comes with a Strike Team Leader ready to be assigned to a Division, Group, or Branch during an active incident.

When dispatched to a wildfire incident, companies should check the incident call text on the MDC for a possible Strike Team assignment and related information such as a response location, Strike Team Leader and assigned radio channel. For out of area response, the Brush Truck Strike Team should be assigned to a rally point for staging until arrival of the Strike Team Leader. The Strike Team should operate as a unit under the direction of the Strike Team Leader.

- D. **Brush truck operator qualification.** *Only members who possess a Pumping Apparatus Driver/Operator certification and have successfully completed the brush truck position task book may drive and/or operate a Brush Truck. Anyone operating a Brush Truck should be familiar with that unit's operation on and off road, as handling characteristics are quite different from standard pumping apparatus.*
- E. **Seat belt use.** Seat belts will be worn anytime the Brush Truck is in motion. Under no circumstance will members be allowed to ride on the apparatus other than seat-belted in the cab.
- F. **PPE.** *Members responding on a brush truck should have both wildfire and structural PPE with them (including fire shelters). If the brush truck was staffed with engine company members and the engine is responding with the brush truck, the member's structural PPE may be carried on the engine.*
- G. **Operational safety.** All firefighting operations involving Brush Trucks will normally be performed while operating in the black. Firefighters walking with hoselines connected to the Brush Truck will avoid operating in the Brush Truck driver's blind spots. The driver of the Brush Truck must maintain visual contact with the firefighter at all times the Brush Truck is moving. Using mirrors is not considered visual contact.
- H. **Refill safety.** The refilling of Brush Trucks using an open hose butt into the top tank vent is unsafe and is strictly prohibited. Refilling operations will only be performed by direct connection to the intake using 2 ½ or 3 inch hose.
- I. **Mobility.** One of the main advantages for Brush Trucks is their mobility. Consideration must be given to any activity that would limit this advantage. When Brush Trucks (Type 3, Type 5, or Type 6) are used for structural protection, they should be replaced with Structural Engines (Type 1) as soon as they become available.

IV. Best Practices

The following best practices should be followed at all firefighting and emergency scene operations, except where deviation can be justified by Fire Officers. Any significant deviation should be communicated to responding/on-scene units as soon as possible.

A. Staffing.

1. **Split crew.** When a Brush Truck responds to an incident, two members of the company will normally respond on the Brush Truck and two members will respond on the pumping apparatus.
2. **Officer role.** The Company Officer *may respond on the Brush Truck based on their discretion and qualifications of the available staffing.*
3. **Co-responding engine.** The assisting pumping apparatus will normally establish a water supply, perform exposure protection if needed, and/or deploy their wildland hose pack.

B. Brush Truck Firefighting Operations.

1. **Attack from the black.** All firefighting operations involving Brush Trucks will normally be approached from the black. For wildland firefighting tactics, refer to MFR Best Practices A401 Wildland Fires.
2. **Access points.** Access points to wildland fires should be located and clearly marked during multiple unit responses. The location of the access points should be announced during size up and as they become available. Companies are encouraged to make access points and mark them with traffic cones.
3. **Four-wheel drive.** The use of four-wheel drive function should be considered when the Brush Truck is taken off road. These apparatus are very heavy and if stranded could have detrimental effects on the incident. *Four-wheel drive low range should be used when operating off road. Four-wheel drive should be disengaged when driving on improved road surfaces for an extended time.*
4. **Updating conditions.** When making access to remote fires, the Officer on the Brush Truck will report the fire size and conditions upon arrival. Any further change in fire conditions (such as extreme fire conditions, fires spotting over containment lines, etc.) or exposure hazards should be announced on the fireground channel.
5. **Apparatus spotters.** The use of a separate spotter is recommended while operating in rough terrain or in low visibility areas. The driver must have visual contact with the spotter while the Brush Truck is in motion.

6. **Brush truck stability.** Always use caution while driving on any sloping grades, as Brush Trucks are inherently top heavy. Always drive straight up or down any steep grades to avoid toppling over.
7. **Ice operations.** In icy conditions, apparatus should always be driven in four-wheel drive and driven slowly. *Four-wheel drive high range can be used when operating on icy roads.*
8. **Nozzle operator.** If operating a nozzle from the cab of the apparatus, the passenger will operate the nozzle, thus allowing the driver to focus on driving and negotiating any hazards. If a firefighter is walking and using a hoseline connected to the Brush Truck, it is highly recommended that the nozzle firefighter walk on the driver's side in plain view of the Brush Truck driver. Visual contact with firefighters in the area must be maintained at all times when the Brush Truck is in motion.
9. **Tandem operations.** When multiple Brush Trucks operate in the same area, they should follow each other in a tandem fashion with the lead Brush Truck performing initial knockdown and the following Brush Truck(s) ensuring containment and extinguishment. When the lead Brush Truck has exhausted its booster tank it will exit the fire area, and the Brush Truck next in line will take over as lead. Brush Truck personnel should maintain awareness of the water tank level. It is a good practice to keep a reserve water supply to be used in the event of an emergency while en route to refill. It should be immediately announced to the Supervisor or Command when the Brush Truck is out of water and returning for refill.
10. **Other brush truck uses.** A pumping apparatus Company Officer at a station with a Brush Truck should consider responding the Brush Truck in addition to his or her regular apparatus on any alarms in which the Brush Truck may prove useful (smoke investigations in outlying areas, trash fires, etc.). The pumping apparatus will normally be assigned by Fire Dispatch. When choosing to respond the Brush Truck *in addition to the engine*, the Officer *should advise Dispatch of the Brush Truck response and status it by radio if the Brush Truck does not have a MDC.*
11. **Requesting brush trucks.** All Officers should be cognizant of the capabilities of Brush Trucks and request their response if needed at any incident type.

C. **Brush Truck Refilling Operations.**

1. **Refill site.** Establishing a water supply for Brush Trucks should be a high priority. This is usually accomplished by implementing a Brush Truck refilling station or stations where pumping apparatus provide water and refill the Brush Trucks. Normally this should be performed by the pumping apparatus that responded with the initial Brush Truck. However, if the first pumping apparatus is protecting exposures, a refilling station should be set up by the next arriving pumping apparatus.
2. **Announce location.** The *Driver/Operator* on the pumping apparatus assigned to establish refilling operations shall advise Command of the location for the refill station.

3. **Water Supply Group.** A *Water Supply Group* should be assigned to manage and oversee the Brush Truck refilling operations. The *Water Supply Group Supervisor* is responsible for establishing a refilling station and securing a reliable water supply (hydrant supply, drafting operations, water relay and shuttle operations, etc.). The *Water Supply Group Supervisor* will be in charge of all Brush Truck traffic flow in the refill station. A separate tactical radio channel may be needed.
4. **Refill site considerations.** The site chosen for the refilling station should be easily accessible and allow the Brush Trucks to refill and pull forward in an orderly fashion. The refilling site should be on pavement or a hard surface to prevent mud conditions. Refill lanes should be clearly marked with cones and provide easy one-way access. For large-scale wildland fire operations, two or three separate refill lanes with supply hose available to each lane should be considered.
5. **Refill safety.** Brush Truck refilling operations will be performed only by direct connection to the pump intake or tank refill connections using 2½ or 3 inch hose. Filling into the top vent opening of the tank with an open hose butt is hazardous and strictly forbidden. Pumping operations for refilling should be limited to no more than 60psi at the Brush Truck intake. Pump operators should be aware of the water level to ensure that the filling is slowed as the Brush Truck water tank becomes full. Filling a tank completely at full flow can severely damage the water tank.
6. **Additional supplies.** For extended wildland incidents, consider requesting additional supplies for the refilling station such as Class A foam, gasoline for pump engines, rehab supplies, etc.

D. Equipment.

1. **Equipment checks.** *The brush truck shall be checked on a daily basis utilizing the daily check procedures. A weekly check of the brush truck shall also be performed in accordance with policy and the weekly duties schedule.*
2. **Class A foam.** Class A foam *can* be added to the booster tank at the rate of 2 quarts (½ gallon) per 500 gallons. Excessive amounts could have negative effects on the pump and its plumbing. Foam should be flushed from the water tank, pump and plumbing when returning to service after use to prevent damage.