



Monroe Fire Department

Standard Operating Guidelines Driver Training Program

ADMINISTRATION

Goal: To develop and maintain a force of driver-operators and ensure they are proficient and competent operating the apparatus in which they are cleared.

Implementation: This program will be managed and implemented in accordance with MFD SOG 5.002, Drivers Clearance & Training Procedure. Other applicable criteria pertaining to driving and operation include: MFD SOG 2.012, Job Description for Driver/Operator-MPO and MFD SOG 4.009, Operation of Motor Vehicles. This program may be modified in whole or in part at the discretion of the Apparatus Chief or Fire Chief.

Program Outcomes:

- Driver-operators operate apparatus in a manner that is safe for their passengers, motorist, pedestrians, and themselves.
- Driver-operators support incident operations by establishing a water supply, providing scene lighting, air supply for breathing and tools, electrical power for tools, and traffic control using light panels and devices.
- Driver-operators assist personnel assigned to their apparatus with locating and troubleshooting equipment.

Audience: All department members who drive and/or operate department equipment.

Prerequisites: Driver-operators must be at least 21 years of age, possess a valid Wisconsin driver's license, have an approved driving record and possess the state certification that is necessary for their level of performance (*see MFD SOG's 2.0012 and 5.0002 for more info*).

Levels of Performance: There are essentially three levels of performance for a driver-operator based upon the type of apparatus being operated, the operator's certification, the expectations placed upon the operator, and pre-requisites:

- General Drivers (*non-MPO*): operate light apparatus, Tender 8, small pumps, and utility units.
- Motor Pump Operators (*MPO*): operates engines (*pumpers*) and Tender 9.
 - Must achieve clearance on all apparatus at the General Driver level.
 - Must have held certified FF2 level for at least 12 months.
 - Must have possess Wisconsin Motor Pump Operator State Certification
- Aerial Operators: operates Ladder 7.
 - Must have Wisconsin MPO and be cleared on all engines.
 - Must possess Wisconsin Aerial state certification

See the Driver-Operator Development Strategy section for detailed information on each level of performance, specific KSA's required, and development strategy.

Recordkeeping: A driver-operator matrix that outlines each driver's training attendance and the apparatus he/she has worked on shall be maintained and kept current at all times. An apparatus task and check-off sheet shall be maintained for all drivers as they complete the training and clearing process.

PROGRAM DESIGN & MANAGEMENT

Job Performance Requirements

The Driver-Operator Job Performance Requirements (*JPRs*) are the heart of the program. Training content and performance objectives derive from the JPR's which were identified by listing the various tasks that an operator may be asked to perform and then identifying what underlying knowledge, skills, and abilities (*KSAs*) that an operator must possess to complete the various tasks. See the Driver-Operator JPRs document for a complete listing of the tasks and KSAs that were identified.

Instructional Design and Methodology

The training and clearing process is very much task and competency driven, meaning that driver-operators advance through the program based upon demonstrated performances. The process consists of two steps:

- Provide training to build the KSA's necessary to operate the apparatus (*as well as future apparatus*)
- Evaluate to verify competency in order to clear

Using a competency based training and clearing format makes the program flexible and adaptable to the unique needs of each driver while maintaining a level of consistency in regards to training content and evaluation. Key characteristics of the program include:

- Customizable training lessons that may be modified to match the driver-operators level of performance, skill, and experience.
- Be designed in such a way that driver-operators are progressively developed and challenged as they advance through the three levels of performance; responsibilities and tasks become more advanced while fundamental KSA's are periodically reinforced and verified.
- Accommodates both drivers who are working on clearing on an apparatus and those who are re-clearing.

Frequency

Once an operator has received clearance on an apparatus, he/she will be required to re-clear on that apparatus every other year. To make the driver-operator pool more manageable, odd numbered helmets will re-clear on odd years and even numbered on even years (Per MFD SOG 5.002).

If a new operator doesn't finish clearing on all apparatus in their first year, he/she may continue the sequence in the following year but will be required to restart the sequence after two years. In most cases, the operator will have completed clearing on all apparatus within a two year period.

Apparatus Groups & Sequence

The training and clearing sequence for new drivers is as follows:

1. Brush 4 and Utility Units
2. Tenders 8
3. Engine 3
4. Tender 9
5. Squads 5 and 6
6. Engines 1 and 2
7. Ladder 7
8. Command 10 and 11¹

Operators may work on any apparatus within an apparatus group but actual clearing must occur in sequence. i.e. an operator may work on S5 instead of S6 to work on some of the tasks associated with the front row group, but must still clear on E1 and E2. Operators who have cleared on all apparatus may “re-clear” in any order but should follow the same clearing process as new drivers where possible.

Driver-operators are not required to clear on every apparatus. However, MPO’s must clear on at least one engine to retain MPO pay rate (MFD SOG 5.002) and continue to work towards clearance on subsequent units. Individuals who complete aerial certification are expected to clear on Ladder 7.

Training Materials and References

The *Apparatus Task and Check-off Sheets*, in conjunction with the *Apparatus Facts Sheet*, serve as the basis for all instruction and clearing.

Apparatus Task and Check-off Sheets: these contain a list of tasks in the form of performance objectives which must be achieved in order to clear. The task sheets provide:

- A list of objectives to guide training and evaluation
- A means of communicating performance requirements to the operator
- A system for tracking the operator’s progress
- Record of the operator’s clearance achievement

Apparatus Facts Sheets: provide a standardized listing of apparatus specifications and equipment.

- Blank sheets are used as an “operator worksheet” to develop the operator’s general knowledge of the apparatus.
- Master sheets provide an “official” reference to actual specifications and an equipment inventory.

Other Resources:

- IFSTA Pumping Apparatus Driver-Operator Manual
- IFSTA Aerial Apparatus Manual
- Department exercise diagrams

¹ Not applicable to all drivers. Training and clearing to occur on an as-needed basis for officers.

DEVELOPMENT STRATEGY FOR DRIVER-OPERATORS

The development process listed below is broken down by level of performance. The process is intended to be flexible to each driver-operator's experience and abilities, while at the same time providing a basis for consistency in regards to training content and performance requirements. Program managers may use the below strategies to develop each driver-operator based upon performance requirements that are known and understood by instructors and students alike.

It should also be noted that the level of training and instruction must be modified to fit the needs of driver's that are "re-clearing" on an apparatus. Further, the KSA's of "veteran" operators (*those who have cleared on all apparatus*) may be best maintained by being utilized in instructional roles. These operators did not get to where they are by chance and should be given credit for demonstrating their ability by instructing whenever the opportunity exists to do so.

General Driver-Operators

Those who are working on clearing on Brush 4, Tenders 8 & 9, Utility 13, light tower, air trailer, and the ATV. Driver-operators at this level have varying levels of driving and pumping experience and often lack any formal certification training. Consequently, training and clearing at this level must focus heavily on safety, general driving skills, and basic pump fundamentals.

While the apparatus at the general level of performance is smaller, the same hazards are present. One challenge with this level of performance is that the driver-operator may have no formal training on pumps or hydraulics. Another consideration is that the operator may be required to tow a trailer and depending on his/her prior experiences this may be a challenge. Specific areas of emphasis for this level of performance include:

- Driver Safety
- Map reading and navigation
- Basic pump fundamentals

Brush 4

- Winch operation
- 4 x 4 Operation
- Grass fire tactics
- Fill site setup and operations
- Power and scene lighting (generator and tri-pods)
- Operating the pump (supplying lines and drafting)

The driver may clear on any utility unit after clearing on B4. Driver clearance for U13 will be granted following clearance on B4 and a brief orientation to the emergency light/traffic controls. Clearing on trailer based units to occur only after clearance on B4 has been completed.

Utility/Support Units (U13, ATV, Air Trailer, Light Tower, Hazmat Trailer)

- Towing/backing trailers
- Setup of light tower
- Setup of air trailer
- ATV use and operation
 - Operator safety
 - Loading/unloading

- Filling/dumping procedures
- Pump use

Tenders Group (8 & 9)

- Scene placement and backing (maneuvering skills necessary for positioning apparatus with fill and drop sites)
- Negotiating turns safely and stopping abruptly (two notorious hazards of tender operation)
- Setup of fold-a-tank
- Filling and dumping procedures
- Operation of the portable pump
 - Starting/stopping
 - Priming
 - Operating valves for filling tank and pumping hand lines
 - Pump use

MPO's

Driver-operators at this level may train and clear on Engines 1, 2 and 3 and Squads 5 and 6. Training begins on engines (3, 1 & 2) where operators work to master basic pump operations and advance to the larger squads where the duties and responsibility increases.

Whereas MPO's receive formal training on driving and operating pumping apparatus, the training and clearing process consists of repetitive tasks and learning the equipment that is unique to each apparatus. Below are fundamental KSA's that an MPO must develop and maintain for each engine:

- Locating equipment
- Operating onboard equipment such as PTO generators and cascade systems
- Setting up scene lighting and power
- Driving and maneuvering skills
 - Negotiating narrow streets (as frequently encountered in Monroe)
 - Turning on short radiuses due to congestion and obstructions (limited road width to complete turns w/o striking curb or other obstacles)
 - Positioning to "hit" a hydrant
 - Positioning for relay pumping on-scene
- On-going practice with basic pump operations to reinforce the following skills
 - Engage/disengage pump
 - Priming the pump (priming intake lines where applicable)
 - Recirculating the pump
 - Switch from tank to separate supply (both rural and municipal sources) and vice versa
 - Refilling and maintain tank supply
 - Managing multiple discharges
- Communications and water supply management
 - Keeping tank water for reserve whenever possible
 - Advising personnel who depend on the flow of water and superiors of supply levels at all times
- Troubleshooting pump problems
 - Can't obtain prime or loss of prime
 - Line bursts

- Water source is compromised or interrupted
- Pumping under various configurations
 - Relaying to another engine
 - Pumping from a relayed source
 - Pumping using the jet-siphon on a multi-tank setup
 - Setting up at the water hole/fill site
 - Setting up at the drop site

The tasks for driving-operating the engines are relatively similar from one apparatus to the next. However, the operation, role, assignment, and degree of difficulty do vary from a front row engine to a back row. For this reason, this level of performance is further broken down into two groups: (*Engines 1, 2 and 3*) and (*Squad 5 and 6*).

Engines Group (1, 2 and 3)

Pumping and hydraulics are major points of emphasis during certification training of an MPO. However, the training doesn't focus on the specific items that each apparatus is equipped with. Therefore, gaining detailed knowledge of how the apparatus is set up and what it is equipped with needs to be of primary focus so that entry level MPO's understand that there is more to being an operator than just pumping. There is also a perception that pumping is more critical on front row trucks than back row. The reality is that while front row trucks are often directly connected to suppression lines, back row engines may be called upon to establish a supply at a fill site or to relay from the drop site, both of which are just as critical.

Squad Group (5 and 6)

The primary differences between an Engine and Squad operator is there is "more truck" to contend with in regards to size and equipment. Pumping operations can be at times more complex whereas the operator must manage pressures on both the intake side and on multiple discharges. Also, discharges are often directly supplying suppression lines that are being utilized and relied upon by interior personnel. So operators must be able to operate the pump with no hesitation and be capable of immediately resolving any problems without interrupting the fire flow. KSA's and tasks include:

Aerial (Ladder 7)

Achieving aerial driver-operator status is a highly respected achievement, but it comes with a great level of responsibility. Below are just some of the reasons that demand the attention and respect of a driver-operator of Ladder 7:

- It has a longer wheel base and the overhanging platform make turns a challenge, particularly on residential streets
- There are a substantial number of hazards presented by the aerial ladder itself and the operator must carefully supervise how the aerial ladder is being set up and operated.
- The aerial waterway presents an increased challenge for pumping which also compounds the risk that fireground personnel are subjected to.
- The apparatus is equipped as a "truck"; thus, compartment contents and layout differs from the engines.
- The special features of the truck require an increased level of knowledge.
- Ladder 7 isn't used as frequently as the engines which place both the operator and firefighters at a disadvantage.

All differences aside, there are some advantages that an operators training and clearing on Ladder 7 has which help to offset the added challenges. By the time an operator begins to train

and clear on Ladder 7, he/she has mastered the fundamentals of pumping and most pumping tasks are of second nature. The second advantage is that the operator works exclusively (*in most cases*) on Ladder 7 during certification training so he/she begins the clearing process with a better level of knowledge with the apparatus than an entry level operator.

General tasks for the operator to focus on include:

- Apparatus placement and setup
 - Rescue ops
 - Relay pumping
 - Defensive operations
- Pumping elevated master streams
- Use of the platform breathing system

Implementation: This policy has been approved by the Officers of the Monroe Fire Department and the Monroe Common Council. This policy, and all adopted procedures, provide a guideline for operations within the Monroe Fire Department. Adoption of these guidelines in no way restricts the incident commander, department administration or the Monroe Common Council from modifying operations or implementing exceptions to policy in the interest of safety, efficiency and harmony within the organization. It shall remain in effect until withdrawn or modified by the department.

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