



PONDEROSA FIRE DEPARTMENT

DRIVER TRAINING PROGRAM

PUMPER

Name

DRIVER TRAINING PROGRAM

PUMPER

1. Approval of station company officer to begin driver training of the apparatus at the respective station.
2. Approval of station Captain to begin driver training of the apparatus at the respective station.
3. Meeting with station Captain to explain the driver training process and all required documentation that must be completed.
4. Upon entry into the driver training program, the following steps will be followed in order.
5. Driving of PFD apparatus *will not* be allowed until Step 1 and Step 2 have been completed.
6. Prior to beginning Step 3, the individual must obtain their Class B Exempt Permit.

STEP 1 – APPARATUS/EQUIPMENT FAMILIARIZATION

- Apparatus Familiarization
- Equipment Familiarization – Inventory Sheets
- Driving Simulator (TBD)
- Driving Guideline
- Familiarization Test – conducted by station Captain
 - Apparatus Familiarization
 - Equipment Familiarization
 - Driving Guideline
- Required Documentation*

- 0 **Training Log** – completed for each training session
- 0 **Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category

STEP 2 – PUMP OPERATIONS

- Apparatus Pumping
- Driving Simulator (TBD)
- Apparatus Pumping Test – conducted by station Captain or designee
 - 0 Apparatus Pumping – hands-on using the Pump Operations Checklist as a minimum
- Required Documentation*
 - 0 **Training Log** – completed for each training session
 - 0 **Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category
 - 0 **Pump Operations Checklist** – completed for each Apparatus Pumping training session

STEP 3 – NON-EMERGENCY DRIVING

- Apparatus Driving
- Driving Simulator (TBD)
- Required Documentation*
 - 0 **Training Log** – completed for each training session
 - 0 **Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category

- 0 **Non-Emergency Driving Checklist** – competed for each Apparatus Driving training session

STEP 4 – EMERGENCY DRIVING

- Apparatus Driving – 3 Emergency Responses
- Required Documentation*
 - 0 **Training Log** – completed for each emergency response
 - 0 **Emergency Driving Checklist** – competed for each emergency response

STEP 5 – FINAL EVALUATION

- Apparatus/Equipment Familiarization
- Pump Operations
- Driving Evaluation
- Driving Guideline Test
- Driving Simulator
- Required Documentation*
 - 0 **Training Log** – completed for each training session
 - 0 **Training Sign-In Sheet** – completed for each category with appropriate SFFMA category
 - 0 **Final Approval Checklist**

STEP 6 – PAPERWORK COMPLETION and SUBMISSION

STEP 7 – COMMAND STAFF APPROVAL

DRIVER TRAINING PROGRAM

RESCUE

7. Approval of station company officer to begin driver training of the apparatus at the respective station.
8. Approval of station Captain to begin driver training of the apparatus at the respective station.
9. Meeting with station Captain to explain the driver training process and all required documentation that must be completed.
10. Upon entry into the driver training program, the following steps will be followed in order.
11. **Driving of PFD apparatus *will not* be allowed until Step 1 and Step 2 have been completed.**
12. **Prior to beginning Step 3, the individual must obtain their Class B Exempt Permit.**

STEP 1 – APPARATUS/EQUIPMENT FAMILIARIZATION

- Apparatus Familiarization
- Equipment Familiarization – Inventory Sheets
- Driving Simulator (TBD)
- Driving Guideline
- Familiarization Test – conducted by station Captain
 - Apparatus Familiarization
 - Equipment Familiarization
 - Driving Guideline

Required Documentation

- 0 Training Log** – completed for each training session
- 0 Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category

STEP 2 – EQUIPMENT OPERATIONS

Apparatus Components

- 0 Generator**
- 0 Winch**
- 0 Cascade System** including filling operations
- 0 Awning**
- 0 On-Board Hydraulic System**

Apparatus Equipment

- 0 Air Tools**
- 0 Air Bags** – Res-Q-Tec and Vetter Systems
- 0 Paratech Tool**
- 0 Res-Q-Jack Stabilization System**
- 0 Hydraulic Rescue Tools**
 - Portable Power Unit
 - Cutters
 - Spreaders
 - Rams
 - Manual Cutters
- 0 Decontamination Shower**

Driving Simulator (TBD)

Apparatus Equipment Test – conducted by station Captain

Required Documentation

0 Training Log – completed for each training session

0 Training Sign-In Sheet – completed for each category and training session with appropriate SFFMA category

STEP 3 – NON-EMERGENCY DRIVING

Apparatus Driving

Driving Simulator (TBD)

Required Documentation

0 Training Log – completed for each training session

0 Training Sign-In Sheet – completed for each category and training session with appropriate SFFMA category

0 Non-Emergency Driving Checklist – completed for each Apparatus Driving training session

STEP 4 – EMERGENCY DRIVING

Apparatus Driving – 3 Emergency Responses

Required Documentation

0 Training Log – completed for each emergency response

0 Emergency Driving Checklist – completed for each emergency response

STEP 5 – FINAL EVALUATION

Apparatus/Equipment Familiarization

Equipment Operations Test

Driving Evaluation

Driving Guideline Test

Driving Simulator

□ *Required Documentation*

- 0 **Training Log** – completed for each training session
- 0 **Training Sign-In Sheet** – completed for each category with appropriate SFFMA category
- 0 **Final Approval Checklist**

STEP 6 – PAPERWORK COMPLETION and SUBMISSION

STEP 7 – COMMAND STAFF APPROVAL

DRIVER TRAINING PROGRAM

TOWER

13. Approval of station company officer to begin driver training of the apparatus at the respective station.
14. Approval of station Captain to begin driver training of the apparatus at the respective station.
15. Meeting with station Captain to explain the driver training process and all required documentation that must be completed.
16. Upon entry into the driver training program, the following steps will be followed in order.
17. Driving of PFD apparatus *will not* be allowed until Step 1, Step 2 and Step 3 have been completed.
18. Prior to beginning Step 4, the individual must obtain their Class B Exempt Permit.

STEP 1 – APPARATUS/EQUIPMENT FAMILIARIZATION

- Apparatus Familiarization
- Equipment Familiarization – Inventory Sheets
- Driving Simulator (TBD)
- Driving Guideline
- Familiarization Test – conducted by station Captain
 - 0 Apparatus Familiarization
 - 0 Equipment Familiarization
 - 0 Driving Guideline

Required Documentation

- 0 Training Log** – completed for each training session
- 0 Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category

STEP 2 – PUMP OPERATIONS

- Apparatus Pumping / Ladder Pipe Operations
- Driving Simulator (TBD)
- Apparatus Pumping Test – conducted by station Captain or designee
 - 0 Apparatus Pumping** – hands-on using the Pump Operations Checklist as a minimum

Required Documentation

- 0 Training Log** – completed for each training session
- 0 Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category
- 0 Pump Operations Checklist** – completed for each Apparatus Pumping training session

STEP 3 – AERIAL / EQUIPMENT OPERATIONS

- Apparatus Placement
- Aerial Set-Up
- Manual Operations
 - 0 Outriggers**
 - 0 Ladder**
 - 0 Nozzle**
 - 0 Override Switches**
- Aerial Usage

- 0 Offensive
- 0 Defensive
- 0 Ventilation
- 0 Rescue
- Breathing Air – Using & Filling
- Lufe Accessories including Stokes Basket operations
- Generator
- Required Documentation*
 - 0 **Training Log** – completed for each training session
 - 0 **Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category

STEP 4 – NON-EMERGENCY DRIVING

- Apparatus Driving
- Driving Simulator (TBD)
- Required Documentation*
 - 0 **Training Log** – completed for each training session
 - 0 **Training Sign-In Sheet** – completed for each category and training session with appropriate SFFMA category
 - 0 **Non-Emergency Driving Checklist** – competed for each Apparatus Driving training session

STEP 5 – EMERGENCY DRIVING

- Apparatus Driving – 3 Emergency Responses
- Required Documentation*
 - 0 **Training Log** – completed for each emergency response
 - 0 **Emergency Driving Checklist** – competed for each emergency response

STEP 6 – FINAL EVALUATION

- Apparatus/Equipment Familiarization
- Pump Operations
- Aerial / Equipment Operations
- Driving Evaluation
- Driving Guideline Test
- Driving Simulator

- Required Documentation***
 - 0 Training Log** – completed for each training session
 - 0 Training Sign-In Sheet** – completed for each category with appropriate SFFMA category
 - 0 Final Approval Checklist**

STEP 7 – PAPERWORK COMPLETION and SUBMISSION

STEP 8 – COMMAND STAFF APPROVAL

Name: _____

Date: _____

Driving Guideline Test

Circle the most correct answer

1. No member will drive emergency if he/she has been convicted of DWI/DUI during the past _____ years.
 - A. 3
 - B. 2
 - C. 1

2. How many years must a member wait after a DWI/DUI before they can reapply for emergency driving status?
 - A. 1 year
 - B. 3 years
 - C. Never

3. How often will a review be conducted to determine a member's emergency driving status?
 - A. Semi-annually
 - B. Annually
 - C. Every 2 years

4. Any time a PFD apparatus is backing, a ground guide is _____.
 - A. Required
 - B. Recommended
 - C. Not necessary

5. What vehicle in the PFD does not require a ground guide?
 - A. Equipment trucks
 - B. All apparatus
 - C. Staff vehicles

6. POV's are to only park on the _____ of the roadway away from the scene.
 - A. Left side
 - B. Right Side
 - C. All of the above

7. The _____ must approve the individual's use of personal warning devices on an individual basis.
- A. Command Staff
 - B. The Fire Chief
 - C. Station Captain
8. Who may respond emergency traffic to any and all incidents?
- A. Command Staff
 - B. Lieutenants
 - C. All of the above
9. What two months will a review be conducted to determine a member's emergency driving status?
- A. March & October
 - B. January & June
 - C. May & November
10. For an in district box assignment, members shall respond emergency traffic to the station. When the apparatus responds members may divert and respond emergency traffic direct to the incident.
- A. True
 - B. False
11. Members are allowed to respond emergency traffic direct to out of district box alarms and entrapments.
- A. True
 - B. False
12. If a member is convicted of a second DWI/DUI within five years of the first conviction, the member is _____.
- A. Suspended for 1 month
 - B. Terminated
 - C. Never allowed to have emergency driving status again
13. The _____ shall be the ruling authority for all personal vehicle driving infractions and complaints.

- A. Station Captain
- B. Command Staff
- C. Members Lieutenant

14. To qualify to drive PFD vehicles non-emergency, and to drive POV's emergency the member must be _____ years of age.

- A. 16
- B. 18
- C. 21

15. As a minimum the member must have attended a defensive driving course (DDC) within the past _____ years.

- A. 2
- B. 3
- C. 5

16. During high water situations, the driver will reduce vehicle speed to _____ or less.

- A. 5 MPH
- B. 10 MPH
- C. 15 MPH

17. An authorized emergency vehicle shall be equipped with signal lamps that emits a light visible at a distance of _____ feet in normal sunlight.

- A. 200
- B. 500
- C. 1000

18. After the Member has participated in drivers training with an approved driver trainer and has met the minimum requirements and has been recommended by a driver trainer. The driver must drive on a minimum of _____ emergency runs with the station Captain or designee in the officer seat.

- A. 2
- B. 3
- C. 4

19. What are the five factors that show a statistical significance in accident phenomenon?

A. length of membership, age of the driver, marital status, violations and the number of accidents.

B. length of membership, sex of the driver, marital status, violations and the number of close calls.

C. race of the driver, sex of the driver, marital status, violations and length of membership.

20. On the point's portion of the emergency driving guideline, if a member has _____ points or above, his/her membership will be terminated.

A. 175

B. 205

C. 195

DRIVER TRAINING COORDINATOR PROCEDURE

OBJECTIVES

To establish a method of training qualified members to drive fire apparatus.

1. Select qualified Driver Trainers
 2. Select a member at each station to the driver training coordinator.
 3. Track and maintain better training records.
 4. Establishing correct driving standards by adhering to operational guidelines.
- Qualified driver trainers will be established at each station who will be responsible for training the qualified candidate.
 - These individuals will be responsible for instructing correct driving methods.
 - These individuals will be responsible for showing the candidate videos and providing a written test as well as assisting the candidates in obtaining a Class B permit and license. The driver trainer will also be responsible for maintaining training records. These records will be submitted to the training officer, these hours will be recorded and kept in their personnel files.
 - Members from each station will be the appointed for each station's driver training. The member does not have to be the sole driver trainer. He/she is responsible for making sure that the driver candidate is receiving proper training and that proper records are kept and provided to the training officer.
 - He/she will be responsible to inform qualified driver trainers of candidates who request to drive as well as being assured that each individual's training is following adopted procedures.
 - Driver Trainer at each station will assure that all records are provided to the Departmental Driver Trainer Coordinator. It will be the Driver Trainer's responsibility to make sure that a training record is properly completed.
 - The Driver Trainer will assure the candidate understands the apparatus how to operate and locate all equipment on the apparatus as well as the pumping of the apparatus. The Driver Trainer will also be responsible for providing his/her recommendation to the proper officers as per in the guidelines.
 - Driver Trainers must assure that the approved driver trainers are using correct driving methods, and assure the records are turned in to the appropriate personnel.

- Driver trainers will be responsible to inform driver trainee's Company Lieutenant or Station Captain of driver trainee's progress, and to give officer proper paper work to submit for approval at next officer meeting.

SFFMA DRIVING CATEGORIES

SECTION 7 APPARATUS FAMILIARIZATION - 6 HOURS

BASIC - 6 Hours

7-01.01 - The firefighter shall be able to identify various types of automotive fire apparatus.

7-01.02 - The firefighter shall identify various types of fire apparatus pumps and pumps components, and their functions.

7-01.03 - The firefighter shall identify various types of aerial apparatus components and their functions.

7-01.04 - The firefighter shall identify various types of tools and appliances, and their location on the fire department apparatus.

INTERMEDIATE – 0 Hours

ADVANCED – 0 Hours

SECTION 4 DRIVING APPLICATIONS - 4 HOURS

4-01 - The driver/operator trainee shall identify the acquired abilities to operate a fire department vehicle while responding to and returning from an emergency.

4-02 - The driver/operator trainee shall identify administrative rules and regulations governing the performance of the fire vehicle while responding to and returning from emergencies.

4-03 - The driver/operator trainee shall identify the proper driver's licenses for the operation of fire department vehicles.

4-04 - The driver/operator trainee shall identify the legal terms:

4-04.01 - true emergency

4-04.01 - due regard

4-04.01 - negligence

4-05 - The driver/operator trainee shall identify the national standards addressing the fire department vehicle driver:

4-05.01 - National Fire Protection Association 1002

4-05.02 - National Fire Protection Association 1500

4-05.03 - National Fire Protection Association 1451

4-06 - The driver/operator trainee shall identify the affects that physical forces have on a fire department vehicle:

4-06.01 - friction

4-06.02 - velocity

4-06.03 - momentum and inertia

4-06.04 - centrifugal force

4-07 - The driver/operator trainee shall identify the areas where gross axle weight ratings and gross vehicle weight may be found on a fire department vehicle.

4-08 - The driver/operator trainee shall identify the types of primary and secondary braking systems on a fire department vehicle:

4-08.01 - air

4-08.02 - hydraulic

4-08.03 - antilock braking systems

4-08.04 - automatic transmission retarder

4-08.05 - driveline retarder

4-09 - The driver/operator trainee shall identify baffling systems and how they affect the physical forces of a fire department vehicle.

4-10 - The driver/operator trainee shall identify an inspection and maintenance program of a fire department vehicle.

4-11 - The driver/operator trainee shall identify major components of a fire department vehicle:

4-11.01 - chassis

4-11.02 - body

4-11.03 - primary functions/tasks

4-11.04 - auxiliary systems

4-12 - The driver/operator trainee shall identify pre and post inspections.

4-13 - The driver/operator trainee shall identify the checklist of a fire department vehicle.

4-14 - The driver/operator trainee shall identify components of a fire department vehicle checklist:

4-14.01 - vehicle overview

4-14.02 - engine compartment

4-14.03 - cab area

4-14.04 - lights and audio devices

4-14.05 - walk-round inspections

4-14.06 - pump panel components

4-14.07 - brake system(s)

4-15 - The driver/operator trainee shall identify automotive gauges and controls and demonstrate the operation of automotive gauges and proper operation limits.

4-16 - The driver/operator trainee shall demonstrate the operation of all systems and equipment on a fire department vehicle.

4-17 - The driver/operator trainee shall identify types of maintenance programs:

4-17.01 - routine

4-17.02 - schedule

4-17.03 - crisis

4-18 - The driver/operator trainee shall identify the recording keeping process of a fire department vehicle.

4-19 - The driver/operator trainee shall identify safe road operation of a fire department vehicle:

4-19.01 - defensive driving skills

4-19.02 - route planning

4-19.03 - driver readiness

4-19.04 - startup procedures

4-19.05 - emergency driving

4-20 - The driver/operator trainee shall identify and demonstrate:

4-20.01 - space management

4-20.02 - speed management

4-20.03 - basic maneuvers

4-20.04 - backing up

4-20.05 - lane changing

4-20.06 - turning

4-20.07 - passing

4-21 - The driver/operator trainee shall identify operating a fire department vehicle under adverse conditions:

4-21.01 - traction implications

4-21.02 - vision implications

4-21.03 - crash avoidance

4-22 - The driver/operator trainee shall identify placement of fire department vehicles at emergency incidents, on and off roadways.

4-23 - The driver/operator trainee shall identify hand signals of a spotter while backing a fire department vehicle.

SECTION 5 DRIVING PRACTICES – 4 HOURS

5-01 - The driver/operator trainee shall operate a fire department vehicle incorporating various maneuvers:

5-01.01 - four left and four right turns

5-01.02 - a straight section of roadway one mile long or more

5-01.03 - one through intersection and two intersections where a stop has to be made

5-01.04 - one railroad crossing

5-01.05 - one curve

5-01.06 - a section of limited-access highway that includes a conventional ramp entrance and exit and a section of road long enough for two lane changes

5-01.07 - one underpass or low clearance or bridge; as applicable to the local jurisdiction

5-02 - The driver/operator trainee shall demonstrate vehicle dimension knowledge and turning characteristics while using mirrors for backing.

5-03 - The driver/operator trainee shall demonstrate backing from a roadway into restricted space, requiring 90-degree right and left hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions.

5-04 - The driver/operator trainee shall demonstrate maneuvering a vehicle around an obstruction.

5-05 - The driver/operator trainee shall maneuver a vehicle around obstructions while moving forward and in reverse, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstruction.

5-06 - The driver/operator trainee shall demonstrate backing a vehicle within a confined space.

5-07 - The driver/operator trainee shall turn a vehicle 180 degrees within a confined space in an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space.

5-08 - The driver/operator trainee shall maneuver a vehicle in areas with restricted horizontal and vertical clearances.

SECTION 12 WATER SUPPLIES - 12 HOURS

BASIC - 2 Hours

12-01.01 The firefighter shall identify the water distribution system, and other alternate water sources in the area of responsibility.

12-01.02 The firefighter shall identify the following parts of a water distribution system:

- A. distributors
- B. primary feeders
- C. secondary feeders

12-01.03 The firefighter shall identify a:

- A. dry-barrel hydrant
- B. wet-barrel hydrant

12-01.04 The firefighter shall identify the following:

- A. normal operating pressure of a water distribution system
- B. residual pressure of a water distribution system
- C. the flow pressure from an opening that is flowing water

12-01.05 - The firefighter shall demonstrate hydrant to pumper hose connections for forward and reverse hose lays.

INTERMEDIATE - 4 Hours

12-02.01 - The firefighter shall identify the following types of water main valves:

- A. indicating
- B. non-indicating
- C. post indicators
- D. outside screw and yoke

12-02.02 - The firefighter shall identify hydrant usability by:

- A. obstruction to use of hydrant
- B. direction of hydrant outlets to suitability of use
- C. mechanical aboveground damage
- D. condition of paint for rust and corrosion
- E. the flow by fully operating the hydrant
- F. the ability to drain

12-02.03 - The firefighter shall define, explain, and demonstrate where applicable, the use of a rural dry fire hydrant system and static water supply source.

12-02.04 - The firefighter shall define a tanker shuttle.

12-02.05 - The firefighter shall identify the apparatus, equipment, and appliances required to provide water at rural locations by relay pumping, large diameter hose, or a tanker shuttle.

12-02.06 - The firefighter shall demonstrate deployment of a portable water tank.

ADVANCED - 6 Hours

12-03.01 - The firefighter shall identify and explain the four (4) fundamental components of a modern water system.

12-03.02 - The firefighter, given a pitot tube and gauge, shall use, read, and record several flow pressures.

12-03.03 - The firefighter, given a chart, size of openings, and flow pressures, shall determine the quantity of water flowing from the openings.

12-03.04 - The firefighter, given a chart, shall identify the approximate discharge capacities of various water pipe sizes.

12-03.05 - The firefighter shall identify the pipe sizes used in water distribution systems for residential, business, and industrial districts.

12-03.06 - The firefighter shall identify two (2) causes of increased resistance or friction loss in water mains.

SECTION 24 PUMP OPERATIONS/HYDRAULICS - 24 HOURS

BASIC - 8 Hours

24-01.01 - The firefighter shall identify the operating principles of single stage and multi-stage centrifugal fire pumps as follows:

A. The firefighter shall list the percentages of rated capacity rated pressures and capacity in gallons per minute at the rated pressures of a fire department pump.

B. The firefighter, given a pump model/diagram, shall identify the main components indicating pump capacity, number of discharges and number of suction inlets.

C. The firefighter shall "explain the difference between series/parallel operations of centrifugal fire pumps.

D. The firefighter, given the proper information, shall list three (3) advantages of a centrifugal fire pump as compared to other types of fire pumps (i.e. positive displacement, rotary vane).

24-01.02 - The firefighter shall demonstrate the use of mathematical calculations as required to solve fire department pumper hydraulic problems as follows:

A. The firefighter shall list the mathematical orders of operation concerning addition, subtraction, multiplication, and division.

B. The firefighter shall solve mathematical problems finding the square root, and decimal/fraction conversions.

C. The firefighter shall list formulas used in finding GPM rates, friction loss of fire hose, engine pressure for hose layouts of nozzles, standpipe/sprinkler, master streams, and elevation operations.

D. The firefighter, given the proper information, shall list conversion factors of fire hose that are smaller/larger than 2½ inches.

E. The firefighter shall calculate the correct engine pressures for a specific situation.

24-01.03 - The firefighter shall set up and perform pumping operations as follows:

A. The firefighter shall list conditions that may result in pump damage.

B. The firefighter, given a pump model or diagram, shall demonstrate the proper test/check inspection routines required to assure operational readiness.

C. The firefighter, given a pump panel or diagram, shall identify all gauges and valves, and demonstrate their usage.

D. The firefighter, given a pump panel or diagram, shall identify the proper usage of valves and gauges to obtain a flow of water from the following:

1. a 1 inch (booster line) discharge outlet
2. a 1½ or 1¾ inch discharge outlet
3. a 2½ inch discharge outlet
4. master stream discharge outlet (if applicable)

E. The firefighter, given a pump panel or diagram, shall demonstrate the proper technique of hooking up or connecting intake hoses to the pumps.

F. The firefighter, given an engine apparatus or diagram, shall demonstrate/list the engagement procedure of the PTO (power take-off) systems for the pumping apparatus.

G. The firefighter, given a pump panel or diagram, shall demonstrate the proper procedure of valve manipulation to produce water from:

1. a positive water source
2. a static water source by drafting
3. booster tank

INTERMEDIATE - 8 Hours

24-02.01 - The firefighter shall identify the type, design, operation, nozzle pressure and flow in GPM of various types of nozzles.

24-02.02 - The firefighter shall list the different types of fire streams.

24-02.03 - The firefighter, given a 2½ inch straight stream nozzle, shall demonstrate the proper opening and closing techniques and line movement procedures.

24-02.04 - The firefighter shall calculate nozzle reaction for various nozzle pressures.

24-02.05 - The firefighter, given the proper information, shall list advantages and disadvantages of various nozzles:

- A. straight stream
- B. fog
- C. master stream

24-02.06 - The firefighter shall define water hammer and list ways of preventing water hammer.

24-02.07 - The firefighter shall calculate the water flow rate needed to control fire in a room that is 20'x20'x 8'.

24-02.08 - The firefighter, given a diagram of various nozzles, shall list major parts and trace flow routes through each.

24-02.09 - The firefighter shall list factors that influence fire streams.

24-02.10 - The firefighter shall list the proper procedures for inspection and maintenance of fire fighting nozzles.

24-02.11 - The firefighter shall demonstrate the operations of the pumper pressure relief system and/or pressure control valve as follows:

- A. The firefighter, given a pump panel, shall identify a pressure relief system.
- B. The firefighter shall list the reasons a pressure relief system is used.
- C. The firefighter shall list the different types of pressure relief systems used in the fire service.
- D. The firefighter shall list three (3) reasons of how excessive pressure develops in fire hose.

ADVANCED - 8 Hours

24-03.01 - The firefighter shall identify terms relating to the principles of fire service hydraulics as follows:

- A. The firefighter shall list the forms water takes and advantages water exhibits as an extinguishing agent.
- B. The firefighter shall list six (6) types of pressure, which affect the properties of water in fire service hydraulics.
- C. The firefighter, given a pump diagram and flow chart, shall explain the theory of drafting and principle component uses in a drafting operation.
- D. The firefighter shall calculate the available water supply from a fire hydrant.
- E. The firefighter shall demonstrate assembly and connection of the equipment necessary for drafting from a static water supply source and demonstrate drafting operations.

SECTION 19 EMERGENCY VEHICLE OPERATIONS - 6 HOURS

BASIC - 6 Hours

19-01.01 - The firefighter shall define and demonstrate the departmental policy and prescribed procedures for emergency vehicle response.

19-01.02 - The firefighter shall define and explain the authority and responsibility of the emergency vehicle operator.

19-01.03 - The firefighter shall identify and explain state and local laws governing emergency vehicle response.

19-01.04 - The firefighter shall identify the prescribed methods used in driver selection, training, testing and licensing of emergency vehicle operators.

INTERMEDIATE – 0 Hours

ADVANCED – 0 Hours

1.0 POSITIONING AERIAL DEVICE

1.1 S.O.G. for staging ladder truck.

1.2 Four (4) tactical uses of aerial devices and placement consideration for each tactic.

- A. Rescue
- B. Access to upper levels
- C. Ventilation
- D. Fire suppression

1.3 Safety factors to consider when positioning aerial device.

- A. The condition of the parking surface
- B. Wind and weather conditions
- C. The presence of overhead lines and obstructions
- D. The angle and location of the aerial device operation
- E. Condition of the fire building

2.0 STABILIZING AERIAL APPARATUS

Tower 61 – Two (2) sets of 16-foot double-box beam outriggers with four (4) ground pads

3.0 SETUP PROCEDURES – Warning: Observe all load limits and multiplexing "Caution/Warning/Danger" messages.

3.1 Position truck in best location possible. Remember...ladder over the rear is the most stable operating position and affords the greatest reach. Think ahead because relocating an already deployed aerial is very time consuming. Find the best location as soon as possible and stage in that position—more apparatus on scene means less space for an aerial device.

3.2 Set parking brake and front wheel lock.

3.3 Place the transmission in neutral.

3.4 Engage P.T.O. and Aerial Master switch. When the Aerial Master is activated, a amber light should be illuminated in the cab near the switch. An illuminated red light indicates an emergency stop button has been activated (Buttons are found on the turntable console and on the basket controls). An activated emergency stop button will not allow the stabilizers to be utilized.

3.5 Check again for overhead obstructions and power lines.

- 3.6 Ensure stabilizers will operate. If not, check Emergency Stop buttons on turntable and basket (The emergency stop buttons should be illuminated red for the stabilizers to work)
- 3.7 Extend all stabilizer beams to maximum extension. Activate the high idle. However, if the pump is engaged the high idle feature will not function.
- 3.8 Place ground pads on ground under stabilizer pads. The ground pads must be used at **ALL** times when using stabilizers. Ground pad handles should be placed closet to the apparatus to avoid creating a trip hazard. Take special precautions when placing ground pads (avoid placing them on manhole covers or unstable ground)
- 3.9 Extend stabilizers and lift truck enough to take the bulge out of the rear tires. A sheet of paper should be able to pass underneath the rear wheels. If grade permits, front axle should remain on the ground level from low point first. Turntable should be as level as possible.

Grade operation- 0-3.5 Degrees- 100% Rated load capacity
 3.5-6.5 Degrees- Load capacity reduced by 50 %
 > 6.5 Degrees- Operation is unsafe

Slope operation- 0-3.5 Degrees- 100% Rated load capacity
 3.5-5.5 Degrees- Load capacity reduced by 50 %
 > 5.5 Degrees- Operation is unsafe

- 3.10 Insert safety pins into stabilizer beam with the handle on the inside of the beam. The pins should be inserted into the highest visible pinhole. The pin shall be positioned so that the handle does not rest against the outrigger (this will prevent pin from breaking in the event of outrigger failure).

- 3.11 Ladder is now ready for operations.

4.0 LADDER TOWER USAGE

The following ladder tower load capabilities have been determined in the unsupported configuration:

□ of Elevation	-5□ to 29□	30□ to 39□	40□ to 49□	50□ to 75□
Basket	1000 #	1000 #	1000 #	1000 #
Fly tip	---	---	250 #	500 #
Mid tip	---	250 #	500 #	750 #
Base tip	250 #	500 #	750 #	1000 #

5.0 TURNTABLE CONTROL CONSOLE AND BASKET CONTROLS

The turntable control console is located on the left hand side of the superstructure facing the ladder tip, and is equipped with the following items clearly identified and conveniently located for ease of operation:

- 5.1 Aerial Controls- Elevate, rotate, extend, retract, and lower
- 5.2 Speed switch- Normal, and Fast Idle
- 5.3 Emergency stop button
- 5.4 Load chart
- 5.5 Monitor controls (monitor is electronic)

6.0 LADDER OPERATIONS

- 6.1 Allow personnel to board the elevating platform (secured).
- 6.2 Personnel in the basket requires personnel on the turntable. (NO EXCEPTIONS)
- 6.3 Turntable aerial controls override basket aerial controls.
- 6.4 Tower 61 has 2 idle positions (normal & fast). Select the appropriate speed prior to using the ladder depending on what function the ladder is performing.
- 6.5 Check the intended path of the aerial device for obstructions.
- 6.6 Elevate the aerial device (lift the aerial device to an elevation that is slightly higher than the required reach of the intended target).
- 6.7 Rotate the aerial device (bring to a gradual stop).
- 6.8 Extend the aerial device. (Note: always cease operations when rung alignment is indicated on the aerial parameter screen.)
- 6.9 Lower the aerial device to the objective—approach from above especially in rescue situations (do NOT allow basket to rest on any surface).
- 6.10 If climbing the ladder, deactivate ladder power by depressing the turntable's emergency stop button.

6.11 Climb device, if needed.

7.0 WATER TOWER OPERATION

The basic rules for safe water tower operation are:

- 7.1 Know your water capacities – review the load chart.
- 7.2 Turn water supply lines “on” and “off” slowly – water hammer caused by abrupt water supply changes greatly increases reaction forces and can cause ladder whip.
- 7.3 Make all nozzle and ladder movements slow and precise while discharging water.
- 7.4 DO NOT retract the waterway when flowing 1000 gpm or more. SLOW, limited retraction of the aerial is allowable when flowing 500-1000 gpm. Use extreme caution while retracting the aerial during water flows as damage to the waterway or waterway seals may occur.
- 7.5 Never attempt to extend or retract ladder with the water pipe charged and all the valves closed. Open drain located under the rear bumper first.
- 7.6 Ice deposits reduce capabilities because of increased weight. Never allow the water in the pipe to become frozen. (see Pierce Operators Guide for ice build up information)
- 7.7 Keep a person at the turntable control station at all times.

Any procedure established by the fire company to deploy the water tower is acceptable if the basic rules listed above are followed. Establish a definite procedure based on your particular circumstances and the conditions on the fire ground.

8.0 WATER TOWER CAPACITIES

Rated capacities at full extension - 360°.

With the Ladder Tower water system charged, continuous duty, 360° operation, an unsupported configuration, half of the rated load chart is allowable.

The Ladder Tower is capable of flowing 2,000 gpm. Slightly limited nozzle positions when flowing 0-1500 gpm. When flowing 1500-2000 gpm, limit nozzle positions to 15 degrees from center on the horizontal plane. The limits on the vertical plane are dependent on the ladder angle.

Capacities governed by:

- 8.1 Outriggers set with extension beams at maximum and weight relieved enough to let the bulge out of the rear tires.
- 8.2 Operating Condition; including supporting surfaces, wind (rated to 50 mph), and other factors affecting stability, hazardous surroundings, experience of personnel, etc.
- 8.3 Grade operation- 0-3.5 Degrees- 100% Rated load capacity
 3.5-6.5 Degrees- Load capacity reduced by 50 %
 > 6.5 Degrees- Operation is unsafe
- Slope operation- 0-3.5 Degrees- 100% Rated load capacity
 3.5-5.5 Degrees- Load capacity reduced by 50 %
 > 5.5 Degrees- Operation is unsafe

WARNING: Capacities established by Pierce Manufacturing. The weight of optional basket equipment (hoses, ladders, axes, etc.) must be deducted from basket loads.

WARNING: Capacity reductions must be made to allow for ice deposits.

8.4 Operation Instructions:

- A. Turn water supply “on” and “off” slowly.
CAUTION: Abrupt changes in water supply can create “Water Hammer” which greatly multiplies reaction forces. All LDH valves are slow close valves.

- B. All ladder movements CAN be performed during water tower operation when flowing 1000 gpm or less.

CAUTION: Retracting the ladder with a charged water pipe could increase water reaction forces beyond allowable limits. Always retract very slowly when operating water system. (See Section 7.4)

WARNING: Dump the water from the water system before returning to standard Ladder Tower operation. (Drain behind rear bumper)

8.5 Stowing Procedures

Upon completion of fire fighting activities or training program, the following stowing procedure should be followed:

- A. Drain waterway of water from water tower operation.
- B. Return ladder to truck cradle.
- C. Remove and store vertical jack safety lock pins.
- D. Raise jack cylinders evenly until weight of truck is completely resting on wheels and pads are approximately 3" off the ground..
- E. Raise jack cylinder stabilizers to full retraction.
- F. Retract outrigger extension cylinders until fully retracted.
- G. Return engine rpm to idle (automatic when system load is removed).
- H. Place ground pads (handle DOWN) in storage shelves.
- I. Disengage PTO and Aerial Master.

9.0 SHORT JACKING PROCEDURES

- 9.1 On occasion it may be necessary to set-up in a confined space where the stabilizers cannot be extended on one side. Operation shall and will be limited to the side where the stabilizers are fully extended.
- 9.2 On the short jack side, it will be necessary to extend the beam far enough to remove the safety pin from its' storage bracket and install it into the jack assembly.
- 9.3 After completing the set-up procedure, a warning message will appear on the LCD display indicating the short jack condition ("SHORT SET")
- 9.4 If aerial operation is attempted on the unsafe side, it will automatically stop, a warning will be displayed and the control in that direction will no longer function.

10. LYFE ACCESSORIES

- 10.1 LyfeLadder- see Pierce Operation Guidebook
- 10.2 LyfeSupport- Stokes Basket cradle for aerial device. When in use, pay particular attention to the unit's load limits. No more than 2 rescuers should be in the basket when lowering a patient on the LyfeSupport cradle. (For more information, see Pierce Operation Guidebook
- 10.3 Lyfe Rappelling Eyes

DRIVING

A. Purpose:

The driving guideline is to provide a method to insure that members of the Ponderosa Fire Department are safe and conscientious drivers, and to provide for the safety of the general public when our members are driving the apparatus or their personal vehicles.

B. General:

1. DWI or DUI - No member will drive emergency if he/she has been convicted of DWI/DUI during the past three years. A member must wait three years from the date of the offense (or date of conviction) before re-applying for emergency driving status. If a member is convicted of a second DWI/DUI within five years of the first conviction, the member is terminated.
2. Traffic Violations/Accidents - It will be the responsibility of each member to report traffic convictions and accidents to the Office Manager. Failure to provide said information will be detrimental to the member when his/her driving record is reviewed.
3. A semi-annual review will be used to determine a member's emergency driving status. The reviews will be conducted in May and November of each year.
4. The Office Manager will obtain each member's driving record during the first week of the above months. The Command Staff will then determine each member's points as applies to the Driver Evaluation Guideline. These findings will be presented at an officers' meeting for review.
5. The aforementioned point system will be used to determine if members are allowed to use warning devices (lights & siren) to respond to emergency calls. See Driver Evaluation Guideline.

C. Apparatus:

1. Only those firefighters specifically approved by the Command Staff may drive apparatus. Drivers must obtain the appropriate license for the type of vehicle being driven and may request reimbursement for the upgrade.
2. The apparatus driver's sole responsibility will be the safe driving of the equipment. The front seat passenger should operate all emergency equipment as well as continuous monitoring of traffic conditions and communicating with the driver.
3. Seat belts shall be worn by all firefighters in route and returning from all mobile apparatus assignments. All firefighters in the cab and jump seats shall remain seated with seat belts in use until the apparatus comes to a complete stop. Under no circumstances should personnel exit or mount the apparatus while in motion.

4. The driver shall be primarily concerned with safely driving the apparatus. The driver should not operate sirens, air horns, or radio. The driver is to continually monitor driving conditions and listen for instructions. The driver shall be the initial pump operator, if the apparatus is so equipped.
5. The right side cab seat is reserved for the senior officer at the time of response. Those lower in rank shall vacate the seat, if requested.
6. Tailboard riding positions are prohibited.
7. **Any time a PFD apparatus is backing, a ground guide is required. The Plymovent will be used each time the apparatus is backed into the station.** Staff vehicles do not require a ground guide. The person in the right front seat will insure that a ground guide and or a plymovent operator is provided. No other personnel shall exit the apparatus until the air brake has been applied. If there are no passengers on the apparatus, the driver should exercise due caution while backing.
8. The ground guide should have a hand held radio on primary when performing duties as ground guide. Other frequencies may be used, but care must be taken to reset the radio to the proper channel.
9. Any PFD personnel who are at a fire station and hear a backup alarm have the responsibility to check and see that any and all apparatus in reverse have a ground guide. If an apparatus is found to not have a ground guide, then he/she shall immediately assume the role of ground guide.
10. At night a hand light and rear lighting will be utilized for lighting the ground behind the apparatus.
11. In the event the driver is the only person on the apparatus, the operator will position the apparatus on the apron to provide a straight back-in, once the driver has positioned the apparatus he/she should exit the apparatus, check behind the apparatus for obstructions and to insure the apparatus is aligned properly with the bay. Once this is accomplished the operator may back the vehicle into the bay.
12. During hose packing operations, tailboard work positions are permissible if done under the direction of a ground guide with visual and radio contact with the vehicle's operator.
13. If an apparatus is involved in any accident in which direct contact is made with another object, the driver is under immediate driving suspension until officers' review. (see Accident and Investigation)
14. High water conditions may exist throughout the area during storms and runoff periods. The following list of considerations is to be taken into account for emergency and non-emergency response. In most cases, PFD apparatus will have very few problems "navigating

our waters". The following guidelines are to be adhered to for preventing apparatus damage, preventing accidents, and still providing timely response. The objective is to arrive safely!

A. High Water:

1. Reduce speed to 5 mph or less
2. After entering the high water, apply brakes slightly to dry out linings.
3. After exiting high water, apply the brakes to verify proper brake performance.
4. Drive slowly! Do not produce a wave effect, as damage to other vehicles and property will occur.
5. Most water induced mechanical failures in vehicles are caused from excess speed and high water being sprayed by the vehicle's engine cooling fan.
6. Never park in high water areas since water will infiltrate chassis and wiring components.

B. Heavy rains, slick streets, icy conditions:

1. Extreme caution is to be observed.
2. Reduce top speed substantially.
3. Do not tailgate--keep at least one hundred feet distance.
4. Utilize extreme caution while braking.
5. All apparatus equipped with retarders shall be in the "low" power position or "off".

D. Operation of Personal Vehicles:

1. All members driving their personal vehicles to the scene of an emergency shall obey all Texas State Laws and Statutes. All personally owned and operated vehicles utilized for transporting PFD personnel and/or equipment and used for authorized departmental functions shall meet or exceed any applicable local, state, or federal laws. This specifically relates to State of Texas inspections, driver's license, insurance, licensing of the vehicle, and any other item relating to the condition and safety of the vehicle.
2. All personnel in POV's must yield the right of way to all fire, EMS, and police units in emergency responses.
3. Firefighters are not to park their POV's within the area used for apparatus use or staging. POV's are to only park on the right side of the roadway away from the scene. Utilize a driveway, parking lot or other open space away from the emergency.
4. All active members should display a departmental supplied identification decal on their POV. The location should be on driver's side rear window. No other PFD identification materials may be used without the consent of the Fire Chief. Upon the sale of the vehicle or membership termination the individual shall remove any and all PFD markings.

5. Members (this excludes firefighter candidates and junior members) may install approved audible and visual warning devices on their personal cars if they so desire and at their own expense. These devices shall meet all Laws Applicable to Emergency Vehicles. The Command Staff must approve the individual's use of personal warning devices on an individual basis.
6. Members having audible and visual warning devices meeting these requirements shall drive their personal vehicles in a safe and prudent manner when making a response to the scene of an emergency and they shall follow all the restrictions of Laws Applicable to Emergency Vehicles.
7. Only those vehicles meeting the requirements of the Laws Applicable to Emergency Vehicles shall respond emergency under any circumstances. Both visual and audible devices must be used.
8. The use of audible and/or visual warning devices for other than sanctioned departmental emergencies may result in disciplinary action. Any member responding emergency without approved equipment is subject to the full punishment under the law.
9. Command Staff & Lieutenants may respond emergency traffic to any and all incidents.
10. Still Alarms
 - a. Members shall only respond emergency traffic to the station. No member shall respond emergency traffic direct to an incident. When the apparatus responds members shall downgrade and divert to scene.
11. In District Box Alarms and Entrapments
 - a. Members shall respond emergency traffic to the station. When the apparatus responds members may divert and respond emergency traffic direct to the incident.
12. Out of District Box Alarms and Entrapments
 - a. Members shall only respond emergency traffic to station. No member shall respond emergency traffic direct to an incident. When the apparatus responds reduce to non emergency and continue to the station to staff the station.
13. Only members approved by the Command Staff may deviate from the above response guidelines
14. Any member not complying with any of the above is subject to disciplinary action.
15. Personal Vehicle Driving Enforcement
 - a. The Command Staff shall be the ruling authority for all personal vehicle driving infractions and complaints.

- b. If a complaint is received regarding a personal vehicle the Command Staff shall obtain all necessary information regarding the complaint including a discussion with the complainant and driver.
- c. The primary purpose will be concerned with the manner in which members drive their personal vehicles while representing the Ponderosa Fire Department and with the type, number, or quality of the emergency equipment used.
- d. Disciplinary action by the Command Staff shall be in addition to any action taken by those empowered to uphold laws.

DRIVER QUALIFICATIONS

- A. To qualify to drive PFD vehicles non-emergency, and to drive POV's emergency, these minimum qualifications must be met:
 - 1. Be 18 years old.
 - 2. Have taken the written Class B test and received the driving permit (PFD apparatus only).
 - 3. Have acceptable driving record as per related guideline.
 - 4. Have attended a DDC course or equivalent within the last five years.
 - 5. Have the approval of the respective station Captain.
 - 6. Have the approval of the Command Staff (POV emergency driving only).
 - 7. Have approved driver trainer in the officers' seat (PFD apparatus only).

- B. To qualify to drive PFD vehicles emergency status, learning and regular response, the above minimum qualifications apply and the following additional criteria must be met:
 - 1. Class B license (as applicable to vehicle)
 - 2. Receive recommendation by the station Captain.
 - 3. Has proven proficiency in driving and operation of the apparatus systems.
 - 4. Approval by the Command Staff at a regular officers meeting. (Final Approval.)
 - 5. The Captain will retain all training documentation and provide at a regular officers meeting for approval to be added to the approved driver list.

- C. During the driver-training phase, the member must ride with an approved driver trainer in the officer's seat. Training issues to be addressed include but are not limited to all items contained in the driver training checklist.

- D. Before being allowed to drive the apparatus under emergency conditions, the member must show proficiency in operating the pump in non-complex situations. A non-complex situation is defined as a scene that does not require water relays, drafting, or the use of dry hydrants. The member should have an understanding of how to use a water manifold and gated Y.

After the Member has participated in drivers training with an approved driver trainer and has met the minimum requirements and has been recommended by a driver trainer. the driver must drive on a minimum of three emergency runs with the station Captain or designee in the officer seat. After the three responses, the Captain will re-evaluate the driver and either approve the driver for emergency response or require additional training.

After the member has obtained the minimum requirements as set forth above, and is in the evaluation phase (waiting to obtain 3 emergency responses with the Captain) the member may upon the Captain approval respond in the truck to a scene in a non-emergency mode. This may be necessary to get the apparatus to the scene in the absence of an approved driver.

DRIVER EVALUATION

A. Objective:

To establish a method of evaluating Ponderosa Volunteer Fire Department members for consideration of:

1. Operating department apparatus
2. Using lights / sirens POV's
3. Maintaining membership

B. Historically, there are five factors that show a statistical significance in traffic accident phenomenon. These are length of membership, age of the driver, marital status, violations and the number of accidents. The points assigned to each category are as follows:

1. Length of Employment

Under 1 year	20
1 to 2 years	15
2 years and over	10

2. Age

Under 21	45
21 to 24	30
25 to 29	15
30 to 65	10

3. Violations

3 or more	60
2	30
1	20
0	10

4. Accidents

2 or more	60
1	30
0	10

5. Martial Status

Single/Divorced	10
Married	0

The following criteria have been established:

1. Points - if a member has 195 points or above, his/her membership will be terminated.
2. Points - Any member scoring between 125 and 195 points will have his/her driving record reviewed by the Command Staff. After review, the Command Staff will decide if the person may drive the department apparatus, or a POV utilizing emergency warning devices.

Example: A member who has been a member for 4 years, is 27 years old, has one violation, one accident, and is single. Add the appropriate category from (A) + (B) + (C) + (D) + (E) or 10+15+20+30+10 = 85 points.

SUMMARY OF LAWS APPLICABLE TO EMERGENCY VEHICLES

CHAPTER 541, SUBCHAPTER C VEHICLES, RAIL TRANSPORTATION, AND EQUIPMENT

§ 541.201. Vehicles

In this subtitle:

A. "Authorized emergency vehicle" means:

1. a fire department or police vehicle;
2. a public or private ambulance operated by a person who has been issued a license by the Texas Department of Health;
3. a municipal department or public service corporation emergency vehicle that has been designated or authorized by the governing body of a municipality;
4. a private vehicle of a volunteer firefighter or a certified emergency medical services employee or volunteer when responding to a fire alarm or medical emergency;
5. an industrial emergency response vehicle, including an industrial ambulance, when responding to an emergency, but only if the vehicle is operated in compliance with criteria in effect September 1, 1989, and established by the Texas Industrial Fire Training Board of the State Firemen's and Fire Marshals' Association of Texas; or
6. a vehicle of a blood bank or tissue bank, accredited or approved under the laws of this state or the United States, when making emergency deliveries of blood, drugs, medicines, or organs.

**CHAPTER 545, SUBCHAPTER B
DRIVING ON RIGHT SIDE OF ROADWAY AND PASSING**

§ 545.058. Driving on Improved Shoulder

- A. A limitation in this section on driving on an improved shoulder does not apply to:
1. an authorized emergency vehicle responding to a call;
 2. a police patrol; or
 3. a bicycle.

**SUBCHAPTER H
SPEED RESTRICTIONS**

§ 545.365. Speed Limit Exception for Emergencies; Municipal Regulation

- A. The regulation of the speed of a vehicle under this subchapter does not apply to:
1. an authorized emergency vehicle responding to a call;
 2. a police patrol; or
 3. a physician or ambulance responding to an emergency call.
- B. A municipality by ordinance may regulate the speed of:
1. an ambulance;
 2. an emergency medical services vehicle; or
 3. an authorized vehicle operated by a blood or tissue bank.

**SUBCHAPTER I
MISCELLANEOUS RULES**

§ 545.407. Following or Obstructing Fire Apparatus or Ambulance

- A. An operator, unless on official business, may not follow closer than 500 feet a fire apparatus responding to a fire alarm or drive into or park the vehicle in the block where the fire apparatus has stopped to answer a fire alarm.
- B. An operator may not:
 - 1. follow closer than 500 feet an ambulance that is flashing red lights unless the operator is on official business; or
 - 2. drive or park the vehicle where an ambulance has been summoned for an emergency call in a manner intended to interfere with the arrival or departure of the ambulance.

§ 545.408. Crossing Fire Hose

An operator may not, without the consent of the fire department official in command, drive over an unprotected hose of a fire department if the hose is on a street or private driveway and is intended for use at a fire or alarm of fire.

CHAPTER 546

OPERATION OF AUTHORIZED EMERGENCY VEHICLES AND CERTAIN OTHER VEHICLES

SUBCHAPTER A. AUTHORIZED EMERGENCY VEHICLES

§ 546.001. Permissible Conduct

- A. In operating an authorized emergency vehicle the operator may:
 - 1. park or stand, irrespective of another provision of this subtitle;
 - 2. proceed past a red or stop signal or stop sign, after slowing as necessary for safe operation;
 - 3. exceed a maximum speed limit, except as provided by an ordinance adopted under Section 545.365, as long as the operator does not endanger life or property; and
 - 4. disregard a regulation governing the direction of movement or turning in specified directions.

§ 546.003. Audible or Visual Signals Required

Except as provided by Section 546.004, the operator of an authorized emergency vehicle engaging in conduct permitted by Section 546.001 shall use, at the discretion of the operator in accordance with

policies of the department or the local government that employs the operator, audible or visual signals that meet the pertinent requirements of Sections 547.305 and 547.702.

§ 546.005. Duty of Care

- A. This chapter does not relieve the operator of an authorized emergency vehicle from:
1. the duty to operate the vehicle with appropriate regard for the safety of all persons; or
 2. the consequences of reckless disregard for the safety of others.

§ 547.702. Additional Equipment Requirements for Authorized Emergency Vehicles

- B. An authorized emergency vehicle may be equipped with a siren, exhaust whistle, or bell:
1. of a type approved by the department; and
 2. that emits a sound audible under normal conditions at a distance of at least 500 feet.
- C. The operator of an authorized emergency vehicle shall use the siren, whistle, or bell when necessary to warn other vehicle operators or pedestrians of the approach of the emergency vehicle.
- D. Except as provided by this section, an authorized emergency vehicle shall be equipped with signal lamps that:
1. are mounted as high and as widely spaced laterally as practicable;
 2. display four alternately flashing red lights, two located on the front at the same level and two located on the rear at the same level; and
 3. emit a light visible at a distance of 500 feet in normal sunlight.
- E. A private vehicle operated by a volunteer firefighter responding to a fire alarm or a medical emergency may, but is not required to, be equipped with signal lamps that comply with the requirements of Subsection (c).
- F. A private vehicle operated by a volunteer firefighter responding to a fire alarm or a medical emergency may be equipped with a signal lamp that is temporarily attached to the vehicle roof and flashes a red light visible at a distance of at least 500 feet in normal sunlight.
- G. A police vehicle may, but is not required to, be equipped with signal lamps that comply with Subsection (c).

ACCIDENT & INJURY INVESTIGATION

A. Purpose:

The purpose of this guideline is to provide a process for investigating accidents / incidents.

B. Guideline:

It is the guideline of the PFD to investigate accidents / incidents of the following nature:

1. Most apparatus and POV accidents (POV's while on PFD business). The Senior Officer available will determine the necessity of a full or condensed incident investigation. This decision is somewhat subjective but must error toward the conservative of a full investigation process. A condensed investigation is considered an exception to the rule.
2. All accident documentation must be clearly marked with the following phrase "**in anticipation of litigation**". Any pictures of the accident must be provided to the fire chief and NOT retained by the individual and will be stored by the fire chief.
 - All documentation including pictures will be provided to the PVFA attorney after being marked "in anticipation of litigation".

C. Guidelines that will be considered in the decision process requiring a full investigation are:

1. Estimated damage greater than \$750. (Insurance deductible is \$1,000)
2. A damaged vehicle that cannot be transported under its own power
3. The member-driver receives a traffic citation
4. Other extenuating circumstances
5. Injuries that require medical treatment
6. Incidents that result in significant property damage
7. Any other accident at the discretion of the senior officer present

An investigation will begin within 48 hours of the incident and will be concluded within seven days of the incident. The investigation report will detail the root causes of the accident, a corrective action plan that will help prevent similar occurrences in the future, and recommendations for disciplinary action if necessary.

D. Procedures:

Vehicular Accidents:

1. The driver of the vehicle must provide a verbal report to the senior officer available as soon as feasible. Failure to notify will result in an immediate 30-day suspension from the department.
2. If the incident occurs during a response, consideration must be given to completing the response, but it is not a requirement. Normal information exchange must occur between PFD personnel and the affected public.
3. Immediately after the incident (as soon as feasible), the driver of the PFD vehicle will be suspended from driving PFD apparatus and the use of POV emergency equipment until such time as the accident receives a preliminary investigation and a decision is made to allow or disallow driving. The senior officer available usually performs this as long as he/she is not directly involved in the incident.
4. The driver of the vehicle involved in the incident must complete a written report within six hours of the incident and submit to the senior officer available.

Injury Incidents:

1. The immediate priority after an injury incident will be the appropriate treatment of the injured person(s).
2. All fire ground injuries must be reported the Incident Commander and/or Senior PFD Officer present as soon as possible. Other injuries while on PFD business or on PFD premises are to be reported to the Senior Officer available.

Investigation:

1. The Senior Officer available will appoint an ad hoc investigative committee within two days of the incident. The committee will consist of a Command Staff member (unless that officer was involved or is a direct witness), the departmental Safety Officer if available, and a representative group of three additional personnel (one from each station). If the Senior Officer available was involved, then the next most senior officer available will assume responsibility for the investigation.
2. The investigation committee will gather any and all information necessary to determine the cause(s) of the incident and to determine what measures are necessary to prevent similar occurrences in the future. If the incident is deemed preventable, the committee will also determine appropriate suspension, termination, and/or training attendance that may be necessary for those involved.

3. A preliminary report of the investigation findings will be prepared. The report will include a description of the incident, the immediate and root cause(s), and the corrective actions determined appropriate. A diagram of the incident should be included if it would add clarity to the investigation. The Command Staff will assign primary ownership for completion of the corrective actions. Closure of the corrective actions and supporting documentation (if any) will be included in the final report. Final accident reports will be maintained in an accident file and if appropriate, in the individual personnel files of those involved.

ACCIDENT INVESTIGATION FLOW MODEL



