



MONTGOMERY COUNTY FIRE AND RESCUE SERVICE  
DRIVER/OPERATOR TRAINING PROGRAM

**EMERGENCY VEHICLE DRIVER/OPERATOR  
ASSIGNMENT/QUESTIONS  
RESCUE SQUAD**

Trainee Name: \_\_\_\_\_ ID# \_\_\_\_\_ Date: \_\_\_\_\_

Station/Shift/Dept: \_\_\_\_\_ Mentor: \_\_\_\_\_

Unit #: \_\_\_\_\_ Make: \_\_\_\_\_ Year: \_\_\_\_\_

**Driving Systems:**

1. Define the following terms as they relate to the emergency vehicle driver and provide an example of each.
  - a. Due Regard
  - b. Negligence
  - c. Gross Negligence
  - d. Vicarious Liability
2. What is the maximum speed that the speed limit can be exceeded during emergency and routine driving? Define the legal standard that one must abide by when exceeding the posted speed limit.
3. What is the MCFRS procedure for traversing across guarded and unguarded railroad crossing?
4. What are the requirements for reporting collisions involving MCFRS emergency vehicles? Explain what actions should be taken by the MCFRS driver.
5. Explain what standard of care the driver must meet when responding through a controlled intersection (refer to Policy 808).
6. Explain the four second rule and when it is applicable. How is this rule affected when engaged in emergency driving?
7. What is the zone of confusion? List some precautions that an emergency vehicle operator may take to ensure everyone's safety when this occurs.

8. What is the proactive driving formula? Explain how to utilize this formula when approaching a controlled intersection in which you have just received the green light.
9. What is the purpose of emergency signaling equipment? When responding to a “bonafide” emergency call is it acceptable to utilize only the emergency vehicle lights?
10. Explain the operation and circumstances in which a driver should deploy on-spot or manual snow chains.
11. When should a driver cover the brake and what are the benefits to this proactive driving technique?
12. What backing tips should be utilized to help prevent if not eliminate backing incidents?
13. What three components affect total stopping distance?
14. Explain the procedures and operation for deploying the vehicle’s traction control device.
15. What is the most hazardous turnabout? What are some considerations that should be taken when doing so?
16. What action should be taken when the emergency vehicle hydroplanes?

### **Hydraulic Systems:**

17. Research and explain the working pressures of a high and low pressure hydraulic system. Explain how the pressure is created.
18. Explain the differences between high and low pressure hydraulic systems.
19. Explain the capacities of the hydraulic tools carried on your rescue squad. Why can some hydraulic cutters cut hinges while others cannot?
20. Explain why a hydraulic tool may run backwards (when using the Deadman switch in the direction it shows to open the arms of a tool it actually closes the tool). What must be done to correct this problem?
21. What are the operating pressures of the first and second stages of your hydraulic system?

### **Pneumatic Systems:**

22. What are the working pressures of all airlines carried on your Rescue Squad?
23. Why might your Rescue Squad have airlines with different working pressures? Why would they or would they not be interchangeable?

24. How many PSI is one bar? How many bars is the operating pressure of your airbags? (High and Medium Pressure).
25. What is the difference between a piston regulator and a diaphragm regulator?
26. If there are preset regulators carried on your Rescue Squad, what are they set at? How can you change the preset pressure?
27. Explain the construction of the airbags carried on your Rescue Squad.
28. What is the mathematical formula for the capacity of a high pressure airbag?
29. What is the heaviest object you can lift with the equipment carried on your Rescue Squad?
30. What is the maximum inlet pressure to the controller of your airbag system? What happens if that pressure is exceeded?
31. Explain the maintenance procedures that must be performed on the high and medium pressure airbag system monthly, bi-annually annually, and after 6 years.
32. How many box cribs built to their maximum safe height, with 4 points of contact, can be built with the cribbing on your Rescue Squad?
33. What type of wood is used for cribbing? Why is this type of wood used?
34. How many mechanical struts can be built to support a load 8 feet off the ground? What is the load bearing capacity of each eight foot strut?
35. What is the maximum distance away from a load that an anchor can be made and from that anchor the load is pulled? (using slings and a come-along)
36. What is the weakest link in the system constructed in question #35?
37. What is the maximum weight of a load that can be supported by the equipment carried on your Rescue Squad with 1 attachment point to the load? With two attachment points to the load? What if the load is vertically below the grade you are working?
38. Explain the mathematical formula for the capacity of 4 x 4 cribbing.
39. How many anchor points are on your Rescue Squad? Which is the strongest? Which is the weakest?
40. What is the total capacity of the winch on your Rescue Squad as well as each layer of winch ling?
41. If a load is 10 pounds heavier than the Working Load Limit of the winch on your Rescue Squad can you move that load? If so, how?

42. If a load is the same weight as the Rescue Squad your winch is attached to, and the Working Load Limit of the winch is higher than the load and the Rescue Squad, can you move the load? How?

**Electricity:**

43. What is the capacity of the generator on your Rescue Squad?

44. How many units does it take to run your hydraulic system?

45. If you carry a plasma cutter, how many units does it require to run?

46. Explain the operation of the plasma cutter.

47. How many units does it take to run all the lights on your Rescue Squad?

**Miscellaneous:**

48. Explain how to move a car, in gear, without using a come-along, winch, or brute strength.

49. List all the ways to lift a car 2 inches using the equipment carried on your Rescue Squad (at least 7).