MONROE TOWNSHIP FIRE & EMS



Engineer's Packet



Engineer Training

Before being qualified as an Engineer the student driver must complete the following steps

- 1. Complete obstacle Course.
- 2. Over the road portion
- **3.** Hands on pump practical
- 4. Pass Written test
- 5. Complete Engine/Summit La-France Re-Cert (On line Dept web site)
- 6. Complete Engine/Tender certification and **POWERPOINT** (On line Dept web site)
- 7. Pass yearly courses specific to Fire apparatus operator

The over the road portion will only be completed with certain officers who are listed below. It is your responsibility to have a good working knowledge of all Apparatus in Monroe Township's Inventory. Once you as the Student feel comfortable you can ask to be tested out to be an Engineer.

You may only be cleared on specific apparatus or all apparatus depending on performance during the testing process. Any section of the test can only be attempted twice in a calendar year. Failing any portion twice will cause the student to have to wait till the next calendar year to start over. During that time they are encouraged to keep training so they will be successful in a future attempt. New Engine operators should when complete have at least 40 hours of training total. All drivers yearly should have 24 hours in Apparatus operation.

Fire and squad Apparatus Training Officers:

Chief Carey A/C Downey Captain Lang Firefighter/Paramedic Doug Jones Any designee as assigned



Fire Apparatus Operator certification SOG Section 901 06/30/16 Page 1 of 1

<u>PURPOSE</u>

This SOG will provide the process required to be certified as a FIRE APPARATUS OPERATOR for Monroe Township FIRE-EMS. Fire Apparatus will not be operated by persons who have not completed or who are not in the process of completing the following Procedures. Any persons who have not successfully completed the process will not operate apparatus in an EMERGENCY response mode to Scenes.

PROCESS

The candidate will be a Cross trained member of the department. When atleast two Officers deem it is appropriate the Candidate will complete the following steps. All Full time Employees will complete in the first Year.

1. If the candidate is a FAO at another department they will provide a letter from the department's training officer or Fire Chief stating that they are operators at that department. The initial certification hours will be twenty four (24) hours with the acceptance of this letter. If the above does not apply the candidate will complete forty hours (40) for initial FAO status.

2. The Candidate will complete the FAO packet in entirety. Test, Skills and driving will be recorded.

3. The Candidate will complete the E-33 (American La-France/Summit) Retest located in the members section on the department web site. www.monroetwpfire.net.

4. Complete any and all training that is deemed needed at a later time. (For example new trucks purchased)

5. Signatures must be placed at the end of the packet in reference to what equipment has been checked off

6. The Chief of the department has final decision

MANAGEMENT RESPONSIBILITIES

This process is meant as a guideline to establish safe and understandable procedures to complete the fire apparatus operator. It is the responsibility of management to determine if longer or more training is needed. The above is a guide to complete but the decision and final approval comes from the officers of the department.

Summary

The candidate will complete the steps and hours as required above. The proper steps completed along with the <u>**REQUIRED**</u> signatures will make for a complete FAO approval.



Engineer Training <u>The Student will log at least</u>

- 1. Three hours of drive time on Engines (32,33,E/T 32) and Medic (32,33)
- Three hours of drive time and understanding of operating a standard transmission with Brush Unit
- 3. Support (33) will require half an hour
- 4. Drive and Operation of all other apparatus not listed above.

Some part of the course can be modified at the Officer's discursion for those who

are engineers at other dept's

The route of travel will consist of areas we frequent during daily operations. In addition the student will be taken down some of the narrower roads when ready. The student will also demonstrate backing techniques to be completed in the Monroe Park lot across from station 32 when on the North side and the school parking lot off Franklin Laurel on the South side. The cemetery area behind station 33 can also be utilized. The student will be explained the different turn radius between apparatus and have an understanding of how much the front end and rear end of each apparatus sticks out. This can be accomplished in the parking areas when working on backing. If an emergency run comes in while the student driver is driving you must stop the apparatus at the most appropriate point and let the officer or Engineer drive to the emergency run the only exception to this rule is if it is a non-emergent response then the student driver may continue on to the detail. At the end of your training the supervising officer may recommend more time on any of the required areas.



| Engine 32 | | | | | | |
|---|------|-----------------|------|--|--|--|
| Name: Da | .te: | Officer: | | | | |
| 1. Start Time/Mileage: Route Taken and Comments: | | End Time/Mileas | ge:/ | | | |
| 2. Start Time/Mileage: Route Taken and Comments: | | End Time/Mileag | ge:/ | | | |
| 3. Start Time/Mileage: Route Taken and Comments: | | End Time/Mileag | ge:/ | | | |
| 4. Start Time/Mileage: Route Taken and Comments: | // | End Time/Milea | ge:/ | | | |
| 5. Start Time/Mileage: Route Taken and Comments: | | End Time/Mileag | ge:/ | | | |
| 6. Start Time/Mileage: Route Taken and Comments: | | End Time/Milea | ge:/ | | | |
| Additional Drive Time Neede Student Drivers Signature: | | | No | | | |
| Officers Signature: | | | | | | |



Engine 33

| Name | Date: | | | Officer: | | |
|------|--|---|-----|-------------------|----|--|
| | Start Time/Mileage: Taken and Comments: | / | | End Time/Mileage: | | |
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| | Start Time/Mileage: Taken and Comments: | / | | End Time/Mileage: | / | |
| | Start Time/Mileage: Taken and Comments: | / | | End Time/Mileage: | / | |
| | onal Drive Time Needed: nt Drivers Signature: | | Yes | or | No | |
| | Officers Signature: | | | | | |



MEDIC 32

| Name | Date: | | | Officer: | |
|------|--|---|-----|-----------------|-----|
| | Start Time/Mileage: Taken and Comments: | / | | End Time/Mileag | e:/ |
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| | Start Time/Mileage: Taken and Comments: | / | | End Time/Mileag | e:/ |
| | onal Drive Time Needed: nt Drivers Signature: | | Yes | or | No |
| | Officers Signature: | | | | |



Medic 33

| Name: | Date: | | | Officer: | | |
|-------|---------------------------------------|---|-----|----------------|------|----|
| | t Time/Mileage: n and Comments: | / | | End Time/Milea | age: | / |
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| | t Time/Mileage: n and Comments: | / | | End Time/Milea | age: | / |
| | Drive Time Needed: vers Signature: | | Yes | or | | No |
| Offi | cers Signature: | | | | | |



EXTRA DRIVE SHEET

| Name: | Dat | e: | Officer: | | |
|-------|--|----|----------------------|----|---|
| | Start Time/Mileage: Taken and Comments: | / | _ End Time/Mileage:_ | / | - |
| | Start Time/Mileage: Taken and Comments: | / | _ End Time/Mileage:_ | / | |
| | Start Time/Mileage: Taken and Comments: | _/ | _ End Time/Mileage:_ | / | |
| | Start Time/Mileage: Taken and Comments: | / | _ End Time/Mileage:_ | / | - |
| | Start Time/Mileage: Taken and Comments: | / | _ End Time/Mileage:_ | // | - |
| | Start Time/Mileage: Taken and Comments: | / | _ End Time/Mileage:_ | / | |
| | onal Drive Time Needed | | or | No | |
| | Officers Signature: | | | | |



| | | | <u>Br</u> | <u>ush 33</u> | | |
|-------|---|---|-----------|-------------------|----|--|
| Name: | Date: | | | Officer: | | |
| | Start Time/Mileage: Taken and Comments: | / | | End Time/Mileage: | / | |
| | Start Time/Mileage: Faken and Comments: | / | | End Time/Mileage: | / | |
| | Start Time/Mileage: Faken and Comments: | / | | End Time/Mileage: | / | |
| | Start Time/Mileage: Faken and Comments: | / | | End Time/Mileage: | / | |
| | Start Time/Mileage: Taken and Comments: | / | | End Time/Mileage: | / | |
| | Start Time/Mileage: Faken and Comments: | / | | End Time/Mileage: | / | |
| | onal Drive Time Needed: t Drivers Signature: | | Yes | or | No | |
| | Officers Signature: | | | | | |



| <u>Support 33</u> | | | | | | | |
|---|-----|---------------------|----|---|--|--|--|
| Name: Date: | | Officer: | | | | | |
| 1. Start Time/Mileage: Route Taken and Comments: | / | _ End Time/Mileage: | / | _ | | | |
| 2. Start Time/Mileage: Route Taken and Comments: | / | _ End Time/Mileage: | / | | | | |
| 3. Start Time/Mileage: Route Taken and Comments: | / | _ End Time/Mileage: | / | | | | |
| 4. Start Time/Mileage: Route Taken and Comments: | / | _ End Time/Mileage: | / | | | | |
| 5. Start Time/Mileage: Route Taken and Comments: | / | _ End Time/Mileage: | / | | | | |
| 6. Start Time/Mileage: Route Taken and Comments: | / | _ End Time/Mileage: | / | | | | |
| Additional Drive Time Needed: Student Drivers Signature: | Yes | or | No | | | | |
| Officers Signature: | | | | | | | |



Engine/Tender 32

| Name: | D | ate: | | Officer: | | |
|-------|--|------|-----|----------------|------|--|
| | Start Time/Mileage:_ Taken and Comments | | | End Time/Milea | ge:/ | |
| | Start Time/Mileage:_ Taken and Comments | | | End Time/Milea | ge:/ | |
| | Start Time/Mileage: Taken and Comments | | | End Time/Milea | ge:/ | |
| | Start Time/Mileage:_ Taken and Comments | | | End Time/Milea | ge:/ | |
| | Start Time/Mileage: Taken and Comments | | | End Time/Milea | ge:/ | |
| | Start Time/Mileage:_ Taken and Comments | | | End Time/Milea | ge:/ | |
| | onal Drive Time Need | | Yes | or | No | |
| | Officers Signature: _ | | | | | |



Extra drive sheet

| Name: | Da | nte: | | Officer: | |
|-------|--|------|-----|------------------|----|
| | Start Time/Mileage: Taken and Comments: | | | End Time/Mileage | :/ |
| | Start Time/Mileage: Taken and Comments: | | | End Time/Mileage | :/ |
| | Start Time/Mileage: Taken and Comments: | | | End Time/Mileage | :/ |
| | Start Time/Mileage: Taken and Comments: | | | End Time/Mileage | :/ |
| | Start Time/Mileage: Taken and Comments: | | | End Time/Mileage | :/ |
| | Start Time/Mileage: Taken and Comments: | | | End Time/Mileage | :/ |
| | onal Drive Time Needont Drivers Signature: | | Yes | or | No |
| | Officers Signature: | | | | |



Engine 33Engine/Tender 32Engine 32

1) Demonstrate Knowledge of Where Equipment is and How it's Operated (Generators, Saws, Extrication Tools, Cascade, ect)

| Engine 33 | PASS | FAIL <u>Tender/Engine 32</u> | PASS | FAIL |
|-----------|------|------------------------------|------|------|
| Engine 32 | PASS | FAIL | | |

2) Demonstrate Proper Starting and Stopping Procedure of apparatus.

| Engine 33 | PASS | FAIL Tender 32 | PASS | FAIL |
|-----------|------|----------------|------|------|
| Engine 32 | PASS | FAIL | | |

3) Demonstrate Proper Vehicle Checks including Lifting Cab and Checking Fluid

| Engine 33 | PASS | FAIL Tender 32 | PASS | FAIL |
|-----------|------|----------------|------|------|
| Engine 32 | PASS | FAIL | | |

4) Proper Procedure for placing Apparatus in Pump Gear

Engine 32

PASS

| Engine 33 | PASS | FAIL Tender 32 | PASS | FAIL |
|-----------|------|----------------|------|------|
| Engine 32 | PASS | FAIL | | |

| 5) Be able to explain pressure relief and set it. | | | | | |
|---|------|------|--------------------|------|--|
| Engine 33 | PASS | FAIL | Engine/Tender PASS | FAIL | |
| | | | | | |

FAIL

6) Able to Pump One Hand line at Proper Pressure within 45secs after deployment

| Engine 33 | PASS | FAIL | | |
|-----------|------|----------------|------|------|
| Tender 32 | PASS | FAIL Engine 32 | PASS | FAIL |



7) Able to transition from Tank Water to Hydrant Water without a 10PSI pressure loss or gain with one hand line operating

| Engine 33 | PASS | FAIL | | |
|---------------|------|----------------|------|------|
| <u>Tender</u> | PASS | FAIL Engine 32 | PASS | FAIL |

8) Able to fill tank while operating off of Hydrant without a 10PSI pressure loss or gain with one hand line operating

| Engine 33 | PASS | | | | |
|---------------|------|------|-----------|------|------|
| <u>Tender</u> | PASS | FAIL | Engine 32 | PASS | FAIL |

9) Able to open second hand line while operating off of <u>tank water</u> without a 10PSI pressure loss or gain in already operating line

| Engine 33 | PASS | FAIL | | |
|---------------|------|----------------|------|------|
| <u>Tender</u> | PASS | FAIL Engine 32 | PASS | FAIL |

10) Able to open second hand line while operating off of <u>a hydrant</u> without a 10PSI pressure loss or gain in already operation line

| Engine 33 | PASS | FAIL | | |
|-----------|------|----------------|------|------|
| Tender 32 | PASS | FAIL Engine 32 | PASS | FAIL |

11) If sufficient Hydrant pressure is available operate two hand lines and fill tank off of Hydrant

| Engine 33 | PASS | FAIL | | |
|-----------|------|----------------|------|------|
| Tender 32 | PASS | FAIL Engine 32 | PASS | FAIL |

12) Able to draw a static draft from Drop Tank within a reasonable amount of time without damaging truck and to keep draft while feeding another Apparatus

| Engine 33 | PASS | FAIL | | |
|-----------|------|----------------|------|------|
| Tender 32 | PASS | FAIL Engine 32 | PASS | FAIL |



FAIL

13) Able to operate one hand line at proper pressure and draw a Draft from a dump tank while maintaining water constantly and not having the PSI in hand line vary more than 10PSI and Drawing a Draft before water in the tank runs out

| Engine 33 | PASS | FAIL | | |
|-----------|------|----------------|------|------|
| Tender 32 | PASS | FAIL Engine 32 | PASS | FAIL |

Engine Summit/LaFrance (Foam and other ops)

In addition to initial pump objectives outlined earlier you must also meet these objectives to be qualified on this Engine

1) Ability to Power On and Off Electronic Ladder Rack Raise and Lower

PASS

3) Properly Identify Usages of Class A Foam PASS FAIL

4) Demonstrate usage of Foam Pro System on One discharge where Foam can be used

PASS FAIL

5) Demonstrate How to change percentage on Foam Pro System and track Water Usage and GPM rates

PASS FAIL

6) Demonstrate how to pump properly with using the Fire Commander Pump including drafting from a Static Source and Drafting while operating one Hand Line

PASS FAIL

7) Demonstrate how to properly attach Deck Gun to Top Mount

PASS FAIL



Pump Engine/Tender

In addition to initial pump objectives outlined earlier you must also meet these objectives to be qualified on Tender 32

1) Demonstrate Proper procedure for engaging pump

PASS FAIL

2) Demonstrate Proper procedure for setting up Dump Tank

PASS FAIL

Brush units

1) Identify all equipment

Pass Fail

2) Operate Saw

Pass Fail

3) Operate pump

Pass Fail



Fire Apparatus Written Test

Date:

Name:

1. All Monroe Township Fire Apparatuses have automatic transmissions?

- A: True
- B: False

2. When preparing to put the pump in gear, the next step after spotting the Apparatus is?

- A: Setting the Parking Brake
- B: Putting the pump shift lever in the "Pump" position
- C: Shifting into the proper gear for pumping
- D: Pulling the Tank to Pump Lever

3. All Fire Attack Cross Lays are 200Ft and are Two and a Half inch in Diameter?

- A: True
- B: False

4. Engine Summit/LaFrance carries how much water?

- A: 750gallons
- B: 1000gallons
- C: 1500gallons
- D: 2000gallons

5. Engines carries Two and a Half inch Diameter Hose

- A: True
- B: False

6. Our Rescue tool makers are?

- A: Genesis
- B: Hurst
- C: Holmaltro
- D: King

7. Engine Summit/LeFrance Generator can be engaged with high Idle on.

- A: True
- B: False

8. Engines have what size supply line?

- A: 2 1⁄2
- B: 3 inch
- C: 4 inch
- D: 5 inch



9. We have Engines that carry 750 gallons of water?

A: True

B: False

10. To operate on spots, you?

A: Place the truck in park. Put your foot on the brake and flip the third switch on the panel.

B: Place the truck in second gear slow down to 12MPH and flip the third switch on the panel.

- C: Come to a complete stop and flip the third switch on the panel.
- D: Make sure you are under 20 MPH and flip the third switch on the panel.
- E: None of the above

11. When should a backer be used when operating Monroe Twp apparatus?

- A: When it is dark
- B: During heavy rain, sleet, snow or storm mode
- C: During daylight operations
- D: All of the above

12. Who has initial accountability when the first engine arrives and no other units are on scene yet of a working fire?

- A. Dispatch
- B. The officer of the next arriving engine
- C. The engineer of the first arriving engine
- D. The water supply officer

13. What is the universal signal to evacuate a structure?

- A. Three blasts from the air horn and a verbal command on the fire ground channel to evacuate
- B. Two different siren tones from the first arriving engine
- C. Everyone on the fire ground yelling to get out
- D. None of the above

14. What is one of the first things the driver must be sure of before any apparatus leaves the station?

- A. The radio is on the right channel
- B. All personnel are wearing seat belts
- C. The lights are off in the day room
- D. None of the above

15. When operating the built in foam system on Engine 32 the engineer should do the following

- A. The foam is set to 19%
- B. The rear suction is closed
- C. Nothing Engine 32 does not have a built in Foam system
- D. You only flow foam from discharge number two



CHECKED OFF

| Engine Summit/LaFrance Complete | | |
|---------------------------------|-------------------|---------|
| YES | Officer Signature | Date// |
| Engine Ferrera Complete | | |
| YES | Officer Signature | Date// |
| Support 33 Complete | | |
| YES | Officer Signature | Date// |
| Brush Complete | | |
| YES | Officer Signature | Date// |
| Tender/Engine Complete | | |
| YES | Officer Signature | Date//_ |
| Medic 108 Complete | | |
| YES | Officer Signature | Date// |
| Medic 111 Complete | | |
| YES | Officer Signature | Date// |
| Medic 206 Complete | | |
| YES S: | Officer Signature | Date// |