



presents the

*31st Annual
Emergency & Municipal Apparatus
Maintenance Symposium*

September 18 thru 22, 2023
at the

OHIO FIRE ACADEMY

Check online for updates to this schedule: oavt.org

The Ohio Association of Emergency Vehicle Technicians will present it's 31st Annual Emergency & Municipal Apparatus Maintenance Symposium September 18 thru 22, 2023.

Classes will be conducted at the Ohio Fire Academy 8895 E. Main St. Reynoldsburg, Ohio.

SCHEDULE OF EVENTS

- Sept. 18-Monday **REGISTRATION AND OPENING REMARKS**
Registration 7:00 to 8:30 and Opening Remarks at 8:30
Certification Testing 4:00 PM. See Thursday for more information.
- Sept. 18 thru 19 **PRESENTATION OF CLASSES**
Monday - Friday Class Instruction starts at 9 AM
Monday - Thursday, class ends at 4 PM. Friday, class ends at noon.
- Sept. 20-Wednesday **HORTON FACTORY TOUR & BBQ 4:30 PM**
OAEVT ANNUAL MEETING
Factory tour at Horton Emergency Vehicles Factory (Grove City Plant) with BBQ dinner.
Buses will provide transportation from OFA and host hotel area at 4:30 PM.
OAEVT Annual Meeting after BBQ dinner with **Presentation of EVT of the Year Award.**
- Sept. 21-Thursday **EMERGENCY VEHICLE TECHNICIAN CERTIFICATION TESTING**
Ohio Fire Academy. Time: 4:00 PM Thursday.
Applicants must have preregistered and paid the required fees to the
EVT Certification Commission prior to testing. Registration deadline,
September 3, 2023. EVT Cert. Comm, P.O. Box 894, Dundee, IL 60118, 847-426-4075
Testing is not required to attend the symposium.

LODGING

The Host Hotels are as follows. The Holiday Inn & Suites 2806 Taylor Rd Extension, Pickerington, OH 43147 Confirmation 2023, OAEVT, with a special rate for OAEVT per night for all style rooms, which includes a full breakfast bar. 614-861-8888

The Fairfield Inn & Suites 2826 Taylor Rd Extension, Pickerington, OH 43147 Confirmation 2023, OAEVT, with a special rate for OAEVT per night for all style rooms, which includes a full breakfast bar. 614-864-4555

Ohio Fire Academy also has hotel style rooms available 1-888-726-7731

Hampton Inn – East 1890 Winderly Lane, Pickerington, OH, OAEVT Group pricing, 614-864-8383

Best Western Inn and Suites 1899 Winderly Lane, Pickerington, OH 614-860-9804

Comfort Inn – 1800 Hill Rd N Winderly Lane, Pickerington, OH, OAEVT Group pricing, 614-575-9900



ATTENDEE REGISTRATION FORM

2023 OHIO ASSOCIATION OF EMERGENCY VEHICLE TECHNICIANS EMERGENCY & MUNICIPAL APPARATUS MAINTENANCE SYMPOSIUM

NOTE: PLEASE PRINT or TYPE all information. This form must be filled out completely or it will be returned to you. **DEADLINE** for registration is September 8, 2023. All late registrations after 9-8-23 will be required to pay a fee of \$30 per day/class or \$150 total for the week. Full registration refund prior to 8-18-23. 50% refund on or before 9-1-23. No refund after 9-1-23.

Name _____

Preferred Address _____

City _____ State _____ Zip _____

Cell Phone () _____ Work Phone () _____

E-mail _____

Fire Dept./ Agency / Company _____

Address _____ Zip _____

- I plan to attend the Wednesday Factory Tour and BBQ Dinner.
Buses will provide transportation from OFA and host hotel area at 4:30 PM.

REGISTRATION

Carefully fill out the registration form and send it along with full tuition or payment verification: (for example purchase order number from your employer). Electronic payment available online at oaevt.org/training-symposium.

Scan and email completed registration to pguhde@aol.com or by mail,

**Ohio Association of Emergency Vehicle Technicians, Inc.
P.O. Box 303 • Avon, Ohio 44011**

Use class selection number — **PLEASE** indicate second choice!

| | Monday | Tuesday | Wednesday | Thursday | Friday |
|---------------|--------|---------|-----------|----------|--------|
| First Choice | | | | | |
| Second Choice | | | | | |

Form may be photocopied as needed.

TUITION INFORMATION

REGISTRATION CLOSES SEPTEMBER 8, 2023

Late registration rate will be required. \$30 per day/class.

FULL PACKAGE

Includes the 5 day symposium and daily lunch:

\$615.00 _____

Daily Rate - Any Class.....\$200.00 _____

TOTAL ENCLOSED _____

Late Registration after 9-8-23 Full Week\$150.00 _____

Per Day/Class.....\$30.00 _____

TOTAL INCLUDING LATE REGISTRATION _____

*Send registration form along with full tuition or payment verification:
(for example, purchase order number from your employer)
Electronic payment available online at oaevt.org/training-symposium.*

Registration: Monday 7:00 AM to 8:30 AM Welcome & Opening Remarks: 8:30 AM
Class Times: Classes are Monday thru Thursday from 9 AM to 4 PM, with one hour for lunch and two 15 minute breaks. Friday 9 AM - 12 PM

Lunch will be in the Ohio Fire Academy cafeteria. Meal tickets will be issued to each student. Some classes are limited in size due to hands-on training. Register early, classes will be filled on a first come, first served basis.

Class registrations must be postmarked by September 8, 2023. Electronic or scanned registrations are encouraged; send to pguhde@aol.com.

Certificates of attendance will be awarded upon payment of all fees and verification of attendance.

Students are responsible for providing suitable personal protective equipment, i.e., eye protection, hearing protection, as may be needed for the hands-on portion of any class.

O.A.E.V.T. reserves the right to cancel or substitute classes due to conditions beyond our control. Reasonable efforts have been made to confirm the classes and instructors scheduled.

Please call Pat Guhde (440) 476-8707 or E-mail at pguhde@AOL.com

Class 050 Oil, Fuel, Antifreeze Clinic**3 Hrs.**

This segment will touch on the hot topics listed above including the antifreeze mystery and the old vs new extended antifreeze. This class will then go into the oil of today and the dynamic of increased heat from the new EPA complaint engines. The class will also go into oil analysis.

Instructor: Jim Salmon, D. A. Lubricants & Mike Wolf, Holmes Oil Distributing

Class 051 Elkhart Brass Valve ID, Maintenance and Repairs**3 Hrs.**

This class will go over the cleaning, maintenance, Identification, and repair of Elkhart Brass valves and other Appliances. Class will include lecture and hands on some specific common nozzles and Valves used today. Class also will go over valve identification for rebuilding ball valves.

Instructor: Brad Bay & Keith Chard, Safefleet

Class 200 Pump Repair & Maintenance by Hale (Tuesday-Wednesday)**12 Hrs.**

This two (2) day class covers the care, operation and maintenance of the Hale mid-ship pump, using an actual training pump components, the gearbox, impeller assembly and all valves normally supplied with the pump will be removed, explained, examined and re-assembled. Components will be Hale specific, and class will be a terrific refresher or can be used as a prep class.

Instructor: John Falco, Hale Corporation

Class 300 EVT Prep F-2 Design and Performance Standards of Fire Apparatus**12 Hrs.**

This 2 day class is designed for the student to really understand the requirements of the F-2 material which covers the standards for fire apparatus as described in NFPA 1900: Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances (NFPA 1901 Chapters)

Instructor: Rob Burly, EVTS – Emergency Vehicle Technical Support Inc.

Class 400 EVT Prep F-3 Fire Pumps and Accessories

Class prepares the technician to understand the general design, performance and testing standards for pumper apparatus, per the NFPA 1900 & 1910. The technician will understand the hydraulic principles of water movement in pumping operations, learn the terms that relate to the basic hydraulic principles used in the fire service, understand the mechanical principles of pumps, pump controls and accessories during pumping operations, understanding the procedures necessary to overhaul a fire pump and the procedures of performing a pump service test. (Textbooks Recommended: NFPA 1900, NFPA 1910, Standards for Fire Apparatus Preventative Maintenance Program, IFSTA Pumping Apparatus Driver/Handbook, second edition. Note; Student must preregister with EVTCC for testing.

Instructor: Rob Burly, EVTS – Emergency Vehicle Technical Support Inc.

Class 500 Sutphen Aerial Maintenance Multiplex Systems (Tuesday-Wednesday)**12 Hrs.**

This class will cover the recommended maintenance practices specifically for the Sutphen Aerial product to include the multiplex portion of the outrigger interlock systems. Class will consist of classroom and an actual truck for hands-on. This is a two day class

Instructor: Janelle Kizer, Brian Teach, & Jamie Dodane, Sutphen Corporation

Class 600 Fundamental Electrical Troubleshooting (Monday & Tuesday)**12 Hrs.**

This two (2) day class repeated twice has a student limit of 12 and will cover the book authored by Dan. He will take the electrical beast and slaughter it. Dan's fun way of learning this practice is apparent throughout the book and he will be live and in person to deliver the facts, myths and explain electricity for the mechanic. Any electrical engineers in the audience will not be allowed. Sign up now.

Instructor: Dan Sullivan, Author Fundamental Electrical Troubleshooting

Class 700 Fundamental Electrical Troubleshooting (Wednesday & Thursday)**12 Hrs.**

This two (2) day class repeated twice has a student limit of 12 and will cover the book authored by Dan. He will take the electrical beast and slaughter it. Dan's fun way of learning this practice is apparent throughout the book and he will be live and in person to deliver the facts, myths and explain electricity for the mechanic. Any electrical engineers in the audience will not be allowed. Sign up now.

Instructor: Dan Sullivan, Author Fundamental Electrical Troubleshooting

Class 100 EVT Objective Review for F-3 Fire Pumps and Accessories**6 Hrs.****Class 121 EVT Objective Review for F-3 Fire Pumps and Accessories****6 Hrs.**

Class prepares the technician to understand the general design, performance and testing standards for pumper apparatus, per the NFPA 1900 & 1910. The technician will understand the hydraulic principles of water movement in pumping operations, learn the terms that relate to the basic hydraulic principles used in the fire service, understand the mechanical principles of pumps, pump controls and accessories during pumping operations, understanding the procedures necessary to overhaul a fire pump and the procedures of performing a pump service test. (Textbooks Recommended: NFPA 1900, NFPA 1910, Standards for Fire Apparatus Preventative Maintenance Program, IFSTA Pumping Apparatus Driver/Handbook, second edition. Note; Student must preregister with EVTCC for testing.

Instructor: John Falco, Hale Corporation

Class 101 Spartan Air Conditioning Maintenance and Repair–Monday**6 Hrs.**

This class taught by Wade should say it all, but he will go over in the classroom basics and theory first and then move to the demo to do some hands on. Class will include maintenance, troubleshooting and repair of the air conditioning systems in fire apparatus.

Instructor: Wade Nichols, Spartan Chassis

Class 102 Sutphen Custom Pumper Maintenance**6 Hrs.**

This class will cover the recommended maintenance practices specifically for the Sutphen product. Class will consist of classroom and an actual truck for hands-on.

Instructor: Janelle Kizer, Brian Teach, & Jamie Dodane, Sutphen Corporation

Class 103 Electrical Troubleshooting E-100**6 Hrs.**

This class is designed to instruct technicians on the repair and maintenance of Basic Electrical Systems. The class will start at the basics with power and ground and work up from there. Class includes lecture, demonstration, and hands- on instruction. Students must have this class to be eligible for E-200 or-E300

Instructor: John Merrifield,, Spartan Chassis

Class 104 EVT Objective Review Class, E- 2 & F-4 Amb. & Fire Truck Electrical Systems**6 Hrs.****Class 116 EVT Objective Review Class, E- 2 & F-4 Amb. & Fire Truck Electrical Systems****6 Hrs.**

This class reviews the objectives for the technician to understand The EVTCC E-2 exam which covers the basic design and performance requirements of ambulance electrical systems, components of electrical systems, and preventive maintenance and troubleshooting activities. And the EVTCC F-4 Fire Truck Electrical, Any Heavy Duty Truck Electrical Manual & Fire Dept. Pumping Apparatus Maintenance.

Note; Student Must be Pre-Registered with the EVTCC to take test

Instructor: Kenny Stevens, EVTS – Emergency Vehicle Technical Support Inc.

- Class 105 Monday Fire Pump Familiarization** **6 Hrs.**
Class 117 Thursday Fire Pump Familiarization **6 Hrs.**
 This class is designed for the technician to familiarize and understand Fire Pump operations and all the components of Fire Pump operation as used by the Firefighter. The class will enable practical evolutions to enable the technician to fully understand the common practices used at fire scenes and theory to back it up which will help identify problems or find specific problems or repairs when faced with them. Perfect class for the Technician that wants to know why all those chrome gauges, handles and labels. This one day class repeated twice 103 on Monday and 113 on Thursday
Instructor: Dave Woodward, Retired Violet Township Fire
- Class 106 Advanced Driver Assistance Devices & GM Hybrid** **6 Hrs.**
 This seminar will provide technicians with the diagnostic techniques and strategies required to diagnose Advanced Driver Assistance systems i.e. Blind spot, backup sensors & Hybrid and EV vehicles, and help understand to diagnose multiplex networks. Setup procedures for all related modules will be reviewed. This course will include simulated diagnostic exercises to apply the principles learned
Instructor: Keith Glasgow, Raytheon
- Class 107 Cummins Engines ISB, ISC, ISL Maintenance and common failures** **6 Hrs.**
Class 113 Cummins Engines ISB, ISC, ISL Maintenance and common failures **6 Hrs.**
 This class will cover the Cummins product line from years back to current production to include the 5.9, 8.3, and the big block family. Live engine troubleshooting and the regeneration aftertreatment process will be discussed This technical trainer comes from Cummins Bridgeway Columbus branch and needless to say he has seen a bunch. Don't miss this. Class Repeated, Monday and Tuesday
Instructor: Ron Heitman, Michael Baldwin & Seth Romine Cummins Bridgeway
- Class 108 Disc & Drum Air Brake Maintenance and Repair Tuesday** **6 Hrs.**
Class 121 Disc & Drum Air Brake Maintenance and Repair Thursday **6 Hrs.**
 This class will cover air brake theory and proper set-up to enable the technician to understand the air brake system and properly troubleshoot and repair them. John will focus on the Air Drum and Air Disc systems and will have hands on demonstration stands for students to work on.
Instructor: Wade Nichols , Spartan Chassis
- Class 109 Electrical Troubleshooting by Spartan E-200** **6 Hrs.**
 This class is designed to instruct technicians on the repair and maintenance of Electrical Systems. The class will continue to test your basic knowledge with power and ground and work up to become an Intermediate electrical troubleshooter. Class includes lecture, demonstration, and hands- on instruction. Student must have had or shall take E-100 prior to being in this class
Instructor: John Merrifield, Spartan Chassis
- Class 110 EVT Objective Review for F-3 Fire Pumps and Accessories** **6 Hrs.**
 Class prepares the technician to understand the general design, performance and testing standards for pumper apparatus, per the NFPA 1900 & 1910. The technician will understand the hydraulic principles of water movement in pumping operations, learn the terms that relate to the basic hydraulic principles used in the fire service, understand the mechanical principles of pumps, pump controls and accessories during pumping operations, understanding the procedures necessary to overhaul a fire pump and the procedures of performing a pump service test. (Textbooks Recommended: NFPA 1900, NFPA 1910, Standards for Fire Apparatus Preventative Maintenance Program, IFSTA Pumping Apparatus Driver/Handbook, second edition. Note; Student must preregister with EVTCC for testing.
Instructor: Kenny Stevens, EVTS-Emergency Vehicle Technical Support Inc.
- Class 111 ROM Roll-Up Doors & FRC Pressure Governors** **3 Hrs.**
 This class will go over the set-up, installation, and operation of Roll up doors. The instructor will have an actual door for the classroom portion and will be able to discuss, proper alignment, adjustment, and be able to work through electronic switch issues. The class will be able to go to the A building and use the skills learned on actual fire trucks at the Academy. The afternoon will consist of FRC pressure governors, gauges, displays, & Foam heads
Instructor: Marcus Allen, Lou Zara, & Will Turcious, Safefleet
- Class 112 Active & Dynamic Fuel Management & GM Diesel Emissions** **6 Hrs.**
 This class will cover Fuel Management & GM Diesel Emissions for the GM product. Common mistakes on diagnosing, repair and identification of problems with each system in the GM product. Class will consist of diagnostics, troubleshooting and repair of the systems
Instructor: Keith Glasgow, Raytheon
- Class 114 EVT Objective Review E-0 & F-1 Maintenance, Inspection, and Testing of Ambulances & Fire Trucks** **6 Hrs.**
 This class reviews the objectives the Maintenance, Inspection, and Testing of Ambulances and F-1 Fire Trucks as covered in NFPA 1917 & Federal Specification for the Star of Life Ambulance, Meritor Preventive Maintenance and Lubrication, and NFPA 1911, Standard for the Inspection, Maintenance, Testing and Retirement of In-Service Fire Apparatus. Note; Student Must be Pre-Registered with the EVTCC to take test
Instructor: Wade Nichols, Spartan Chassis
- Class 115 Electrical Troubleshooting E-300** **6 Hrs.**
 This day class is designed to instruct the technician on the repairs and maintenance of Fire Apparatus Electrical Equipment. Class will not review E-100 or E-200 rather build off them, Student must have had or shall take E-100 and E-200 prior to being in this class. Class includes lecture, demonstration, and hands-on instruction. The Weldon Multiplex system will be included in the segment.
Instructor: John Merrifield, Spartan Chassis
- Class 118 GM Refrigeration & HVAC Systems** **6 Hrs.**
 This class will provide technicians with the diagnostic techniques and strategies required to diagnose HVAC controls, blend door, and refrigeration principles for GM vehicles, and help understand to diagnose multiplex networks. Setup procedures for all related modules will be reviewed. This course will include simulated diagnostic exercises to apply the principles learned
Instructor: Keith Glasgow, Raytheon
- Class 119 International Engine Maintenance and After Treatment** **6 Hrs.**
 This class will cover the Diamond Logic and ISIS systems used by International Truck to diagnose and repair the engine and chassis systems. Joel will present material for the DT and V8 Engine product line as well as maintenance tips and tricks for the exhaust after treatment systems. 2027 Emissions mandate will also be discussed
Instructor: Joel Crist & Tim White, International Truck-Rush International
- Class 122 Specification Design & Apparatus Considerations** **6 Hrs.**
 This course is designed to introduce the emergency vehicle technician to the specification process with the overview of what the firefighter paramedic expects and how they abuse their apparatus. This class will provide you with an overview and education to topics such as the actual width of hose for hose trays, overview and pump operations hands on training to provide firsthand experience of what is needed to fine tune water flow from the truck to the end of the nozzle and a brief overview of the tools carried and when we deploy them. We will also discuss the importance of effective communication between the EVT and their firefighters.
Instructor: Ron Whitaker, Lebanon Fire Division

Class 123 Data Link Diagnostics, Code Reading via gauges, DVM**6 Hrs.**

This class is designed to instruct the participant on how to extract information from the fire truck electronics used the above methods. Wade knows his way around the truck and will help you use the trucks technology to help diagnose issues that you have. Bring your electronic tools and he will also be able to show you how to use them.

Instructor; John Merrifield, Spartan Chassis

Class 124 EVT Objective Review E-3 Ambulance HVAC**6 Hrs.**

This class will review the objectives that covers basic design, requirements and components of these systems.

Note; Student Must be Pre-Registered with the EVTCC to take test

Instructor: Kenny Stevens, EVTS–Emergency Vehicle Technical Support Inc.

Class 125 Foam Pro and EVT F-7 Objective Review**6 Hrs.**

This class will discuss the Foam Pro Systems for installation, set-up, troubleshooting and repairs of the Foam Pro product. This class will also review the objectives that covers basic design, requirements and components of these systems.

Note; Student Must be Pre-Registered with the EVTCC to take test

Instructor: Laurence Lagrange, Safefleet

Class 126 Multiplex Data Bus & Networks**6 Hrs.**

The class will cover hands on electrical diagnostics and with the GM trainer and the live trainer board for the common electrical systems found in the GM product, although no electrical systems is the same manufacture to manufacture. It does all operate on the same 12 volt power. Don't miss this practical class taught by the best GM trainer, with tips for everyday troubleshooting

Instructor: Keith Glasgow, Raytheon

Class 127 Class 1 Vehicle Electronics**6 Hrs.**

This class will cover the Class 1 product line to include Pressure Governors, PDM, the ES Key Systems, Climate Control Modules, Seat Belt Warning Systems and other Vehicle Electronic Systems offered by Class 1 Corporation

Instructor: Atlantic Emergency Solutions/Pierce Manufacturing

OAEVT MAINTENANCE SYMPOSIUM SCHEDULE • SEPTEMBER 18 THROUGH 22

| MONDAY 9-18 | TUESDAY 9-19 | WEDNESDAY 9-20 | THURSDAY 9-21 | FRIDAY 9-22 |
|--|---|---|---|---|
| EVT Objective Review F-3 Fire Pump 100 | Hale Fire Pump Maint & Repairs 200 - Day 1 of 2 | Hale Fire Pump Maint & Repairs 200 - Day 2 of 2 | EVT Objective Review F-3 Fire Pump 120 | Oil, Fuel, & Coolants 050 |
| Air Conditioning Maint. & Repair by Spartan 101 | Disc & Drum Brakes - Maint, & Troubleshooting 108 | EVT Objective Review F-1 & E-0 Maint & Inspection 114 | Disc & Drum Brakes - Maint, & Troubleshooting 121 | Elkhart Brass Nozzle, Valve and Repairs 051 |
| EVT Prep Design & Performance F 2 Day 1 of 2 300 | EVT Prep Design & Performance F 2 Day 2 of 2 300 | EVT Prep Fire Pumps & Accessories F-3 Day 1 of 2 400 | EVT Prep Fire Pumps & Accessories F-3 Day 2 of 2 400 | |
| Sutphen Custom Pumper Chassis Maint. 102 | Sutphen Aerial Maint., Repairs & Troubleshooting 500 Day 1 of 2 | Sutphen Aerial Maint., Repairs & Troubleshooting 500 Day 2 of 2 | Specification design Apparatus Considerations 122 | |
| E-100 Electrical By Spartan 103 | E-200 Electrical By Spartan 109 | E-300 Electrical by Spartan 115 | Data Link Diagnostics Electrical Accessory 123 | |
| EVT Objective Review E-2 & F-4 104 | EVT Objective Review F-3 110 | EVT Objective Review E-2 & F-4 116 | EVT Objective Review E-3 124 | |
| Fire Pump Familiarization 105 | Rom Roll Up door Maintenance/ Repair & FRC Pressure Governors, Gauges 111 | Fire Pump Familiarization 117 | Foam Pro & F-7 Review 125 | |
| Advanced Driver Assistance & Hybrid Vehicles by GM 106 | Active & Dynamic Fuel Management & Diesel Emmissions 112 | Refridgeration Diagnostics & HVAC Controls by GM 118 | Multiplex Data Bus Networks by GM 126 | |
| Cummins Engine Maintenance 107 | Cummins Engine Maintenance 113 | International Engine Maint. & 119 | Class 1 Vehicle Electronics 127 | |
| Fundamental Electrical Troubleshooting 600 Day 1 of 2 | Fundamental Electrical Troubleshooting 600 Day 2 of 2 | Fundamental Electrical Troubleshooting 700 Day 1 of 2 | Fundamental Electrical Troubleshooting 700 Day 2 of 2 | |
| EVT Testing OFA 4:00 MPR-A, B, & C | | Horton Tour & BBQ Annual Meeting | EVT Testing OFA 4:00 MPR-A, B, & C | |

Ohio Association of Emergency Vehicle Technicians
P.O. Box 303
Avon, Ohio 44011

FIRST CLASS MAIL
DATED MATERIAL

