



*presents the*

*32nd Annual  
Emergency & Municipal Apparatus  
Maintenance Symposium*

September 23 thru 27, 2024  
at the

**OHIO FIRE ACADEMY**

Check online for updates to this schedule: [oavt.org](http://oavt.org)

The Ohio Association of Emergency Vehicle Technicians will present it's 32nd Annual Emergency & Municipal Apparatus Maintenance Symposium September 23 thru 27, 2024.

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

### SCHEDULE OF EVENTS

Sept. 23  
Monday

#### REGISTRATION AND OPENING REMARKS

Registration starts at 7:00 AM and Opening Remarks will begin promptly at 8:30 AM.

#### EMERGENCY VEHICLE TECHNICIAN CERTIFICATION TESTING OHIO FIRE ACADEMY. TIME 4:00 PM

Applicants must have preregistered and paid the required fees to the EVT Certification Commission prior to testing. Registration deadline is September 2, 2024. Go to [www.evtcc.org](http://www.evtcc.org) or call 847-426-4075 for more information, registration forms, or electronic registration. Testing is not required to attend the symposium.

Sept. 23  
thru 27

#### PRESENTATION OF CLASSES

Class Instruction runs Monday - Thursday, 9:00 AM to 4:00 PM. Friday, 9:00 AM to noon.

Sept. 24  
Tuesday

#### ALL AMERICAN FIRE EQUIPMENT, ROSENBAUER FIRE TRUCK DISPLAYS & BBQ VIOLET TWP WIGWAM EVENT CENTER 4:00 PM

BBQ Dinner sponsored by All American Fire Equipment. Buses will provide transportation from OFA and host hotel area at 4:00 PM. 10190 Blacklick-Eastern RD NW, Pickerington, OH 43147.

Sept. 25  
Wednesday

#### OAEVT ANNUAL MEETING

Pizza and Wing Party Sponsored by Austin Hardware. OAEVT Annual Meeting to begin at 4:00 PM with EVT of the Year Award Presentation followed by dinner at 5:30 PM

Sept. 26  
Thursday

#### EMERGENCY VEHICLE TECHNICIAN CERTIFICATION TESTING OHIO FIRE ACADEMY. TIME 4:00 PM

Applicants must have preregistered and paid the required fees to the EVT Certification Commission prior to testing. Registration deadline is September 5, 2024. Go to [www.evtcc.org](http://www.evtcc.org) or call 847-426-4075 for more information, registration forms, or electronic registration. 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 2024, OAEVT, with a special rate for OAEVT per night for all style rooms, which includes a full breakfast bar. 614-861-8888

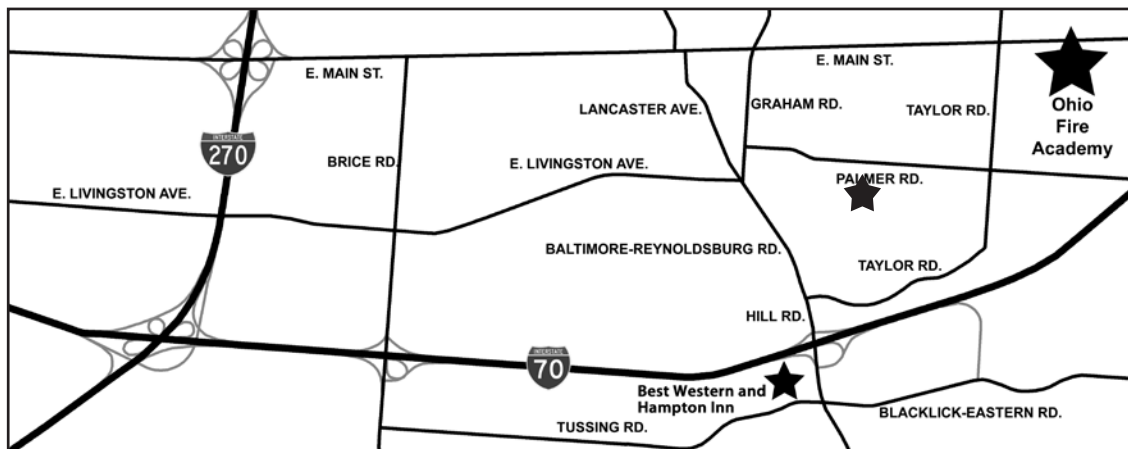
The Fairfield Inn & Suites 2826 Taylor Rd Extension, Pickerington, OH 43147 Confirmation 2024, OAEVT, with a special rate for OAEVT per night for all style rooms, which includes a full breakfast bar. 614-864-4555

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

## 2024 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 13, 2024. All late registrations after 9-13-24 will be required to pay a fee of \$30 per day/class or \$150 total for the week. Full registration refund prior to 8-23-24. 50% refund on or before 9-1-24. No refund after 9-1-24.

Name \_\_\_\_\_

Preferred Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cell Phone (    ) \_\_\_\_\_ Work Phone (    ) \_\_\_\_\_

E-mail \_\_\_\_\_

Fire Dept./ Agency / Company \_\_\_\_\_

Tee-Shirt Size \_\_\_\_\_

I plan to attend the Tuesday Displays and BBQ Dinner. Buses will provide transportation from OFA and host hotel area at 4:00 PM.

I plan to attend the Wednesday Pizza and Wing party at 4:30 PM.

This is my first time attending the Symposium.

### 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](http://oaevt.org/training-symposium).

Scan and email completed registration to [pguhde@aol.com](mailto:pguhde@aol.com) or by mail,

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

Use class selection number

	Monday	Tuesday	Wednesday	Thursday	Friday
Class Choice					

*Form may be photocopied as needed.*

# TUITION INFORMATION

REGISTRATION CLOSES SEPTEMBER 13, 2024

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

## FULL PACKAGE

Includes the 5 day symposium and daily lunch:

\$625.00 \_\_\_\_\_

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

TOTAL ENCLOSED \_\_\_\_\_

Late Registration after 9-13-24 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](http://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 13, 2024. Electronic or scanned registrations are encouraged; send to [pguhde@aol.com](mailto: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](mailto: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 compliant engines. The class will also go into oil analysis.  
*Instructor: Mike Wolf, D. A. Lubricants*
- Class 051 Akron Brass Valve ID, Maintenance and Repairs** **3 Hrs.**  
 This class will go over the cleaning, maintenance, identification, and repair of Akron 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: Akron Brass Corporation*
- Class 052 Willburt Light Towers and Electrical Training** **3 Hrs.**  
 Class will cover some Electrical theory and also discuss the differences and advantages between the 12 volt and 120 volt power for the systems. Training will go into product specific troubleshooting, Maintenance and Repairs for the light towers.  
*Instructor: Kevin Lenart, Willburt Corporation*
- Class 200 Pump Repair & Maintenance by Waterous (Tuesday - Wednesday)** **12 Hrs.**  
 This two (2) day class covers the care, operation and maintenance of the Waterous 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 Waterous specific, and class will be a terrific refresher or can be used as a prep class.  
*Instructor: Jay Rought, Fire Pump Training LLC - Waterous Co. (Retired)*
- Class 300 EVT Prep F-2 Design and Performance Standards of Fire Apparatus** **12 Hrs.**  
 This two (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** **12 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: Rob Burly, EVTS – Emergency Vehicle Technical Support Inc.*
- Class 500 Sutphen Aerial Maintenance Multiplex Systems (Tuesday - Wednesday)** **12 Hrs.**  
 This two (2) day 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.  
*Instructor: Janelle Kizer, Brian Teach, & Jamie Dodane, Sutphen Corporation*
- Class 100 EVT Objective Review for F-3 Fire Pumps and Accessories (Monday)** **6 Hrs.**  
**Class 120 EVT Objective Review for F-3 Fire Pumps and Accessories (Thursday)** **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: Jay Wrought, Waterous Corp*
- 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.  
*Instructors: Janelle Kizer, Brian Teach, & Jamie Dodane, Sutphen Corporation*
- Class 103 Electrical Troubleshooting** **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.  
*Instructor: John Merrifield, Spartan Chassis*
- Class 104 EVT Objective Review F-1 & E-0 Maintenance, Inspection, and Testing of Ambulances & Fire Trucks** **6 Hrs.**  
 This class reviews the objectives of 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: Kenny Stevens, EVTS – Emergency Vehicle Technical Support Inc.*

- Class 105 Fire Pump Familiarization (Monday)** **6 Hrs.**  
**Class 117 Fire Pump Familiarization (Wednesday)** **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.  
*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 ie. Blind spot, backup sensors & Hybrid and EV vehicles, and help understand how 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: Robert Roth, Raytheon*
- Class 107 Cummins Engines ISB, ISC, ISL Maintenance and common failures (Monday)** **6 Hrs.**  
**Class 127 Cummins Engines ISB, ISC, ISL Maintenance and common failures (Thursday)** **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.  
*Instructors: Ron Heitman, Michael Baldwin & Seth Romine Cummins Bridgeway*
- Class 108 Disc & Drum Air Brake Maintenance and Repair** **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. Wade 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 EVT Objective Review F-1 & E-0 Maintenance, Inspection, and Testing of Ambulances & Fire Trucks** **6 Hrs.**  
This class reviews the objectives of 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: John Merrifield, Spartan*
- Class 110 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 111 Rom Roll-Up Doors & FRC Pressure Governors** **6 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.  
*Instructors: Marcus Allen, Lou Zara, & Will Turcious, Safeleet*
- 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: Robert Roth, Raytheon*
- Class 113 Hydraulic Principles and Theory – Smart Power Generators (Tuesday)** **6 Hrs.**  
**Class 119 Hydraulic Principles and Theory – Smart Power Generators (Wednesday)** **6 Hrs.**  
This class taught by a senior trainer and manager in the field of hydraulic generators. Class will cover the hydraulic principles and theories and then get into the care and maintenance and proper installation of the smart power products. The instructors will also offer some common troubleshooting and repair procedures.  
*Instructors: Jordan Rautiola & Scott Jones, Smart Power*
- Class 114 Kussmaul Electronics Troubleshooting (Wednesday)** **6 Hrs.**  
**Class 121 Kussmaul Electronics Troubleshooting (Thursday)** **6 Hrs.**  
This class will review basic electric and chassis electrical troubleshooting. Also included in this class is the troubleshooting and repair of the Kussmaul Electronic Products. This class is a shortened version of the standard full class.  
*Instructor: Jeff McKittrick, Kussmaul Electronics*
- Class 115 International Engine and Service 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.  
*Instructors: Joel Crist & Tim White, International Truck – Rush International*
- Class 116 EVT Objective Review E-4 Ambulance Cab, Chassis and Powertrain** **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 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 how 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: Robert Roth, Raytheon*



**Class 122 Weldon Multiplex Design and Troubleshooting****6 Hrs.**

This class will cover multiplex systems to include theory, maintenance and troubleshooting. Class will be Weldon specific with actual components to include classroom and some hands on.

*Instructor: Jeff Dilgren, Weldon Technologies*

**Class 123 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: Class 1*

**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.

*Instructors: Dan Tyrrell & Will Turcios, Safe Fleet*

**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 system 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: Robert Roth, Raytheon*

**OAEVT MAINTENANCE SYMPOSIUM SCHEDULE • SEPTEMBER 23 THROUGH 27**

<b>MONDAY 9-23</b>	<b>TUESDAY 9-24</b>	<b>WEDNESDAY 9-25</b>	<b>THURSDAY 9-26</b>	<b>FRIDAY 9-27</b>
EVT Objective Review F-3 Fire Pump 100	Waterous Fire Pump Maint & Repairs 200 - Day 1 of 2	Waterous 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	Kussmaul Electronics Products, Troubleshooting and Repair 114	Kussmaul Electronics Products, Troubleshooting and Repair 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	Wilburt Light Tower and Electrical Training 052
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	Weldon Multiplex Design and Troubleshooting 122	
Electrical By Spartan 103	EVT Objective Review F-1 & E-0 109	International Engine and Service Diagnostics and Diamond Logic Builder 115	Class 1 Vehicle Electronics 123	
EVT Objective Review F-1 & E-0 104	EVT Objective Review E-2 & F-4 110	EVT Objective Review E-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 Emissions 112	Refrigeration Diagnostics & HVAC Controls by GM 118	Multiplex Data Bus Networks by GM 126	
Cummins Engine Maintenance 107	Hydraulic Principles and Generators 113	Hydraulic Principles and Generators 119	Cummins Engine Maintenance 127	
<b>EVT Testing OFA 4PM MPR-A, B, &amp; C</b>	<b>All American Fire Equipment Displays &amp; BBQ Violet Twp Wigwam Event Center 4PM</b>	<b>Annual Meeting Pizza and Wing Party Sponsored by Austin Hardware 4:30PM @ OFA</b>	<b>EVT Testing OFA 4PM MPR-A, B, &amp; C</b>	

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

FIRST CLASS MAIL  
DATED MATERIAL

