ADVANCING RELIABILITY Through Root Cause Analysis

TMC puts you in touch with the industry’s top trucking technical professionals and fleet decision makers.

tmcannual.trucking.org
Advancing Reliability Through Root Cause Analysis
at TMC’s 2023 Annual Meeting & Transportation Technology Exhibition!

Comprised of a broad cross-section of experienced fleets, equipment suppliers and service providers, no other industry trade association can match the real-world experience and technical expertise of TMC’s membership. By providing leadership support and opportunities to collaborate, TMC helps members develop the industry’s best practices that address the critical truck technology and maintenance issues that have the greatest impact on truck fleets.

Where Industry Solutions Are Forged
More than just a trade show, TMC is home to trucking’s leading fleet professionals, vehicle manufacturers, and component suppliers. It is the industry’s leading forum for getting things done collaboratively. From brakes to bearings, from scanners to software, ATA’s Technology & Maintenance Council’s (TMC) Study Groups and Task Forces cover it all.

Best Educational Program Available
Whether your interest is staying current on equipment, maintenance or technology issues, there’s no better venue than TMC meetings to catch up on industry-specific news. This year TMC is holding sessions with a special emphasis on advancing reliability through root cause analysis as well as focusing on evolving powertrain, specification, and maintenance options and the regulations that are shaping them. (see pages 8-13 for details.)

History of Cooperative Development
TMC is a place for serious work, and our dedication to the cooperative development of voluntary industry best practices is evident through the publication of the Council’s recommended engineering and maintenance practices adopted by industry. These practices represent more than 65 years of industry knowledge. Today, TMC’s growth and strength comes from its pioneers and visionaries who have dedicated much of their lives to the Council.

Maximize Your Membership—Attend TMC’s Annual Meeting!
If you’re a TMC member, or your company is an ATA member, you are part of an important team dedicated to improving our industry in a way that no other group can. But if you haven’t attended TMC’s Annual Meeting and Transportation Technology Exhibition before, you’re missing out on an important aspect of TMC/ATA membership. Annual Meeting veterans will attest that attending TMC meetings maximizes their membership investment. It enables both fleets and suppliers to make personal contact with an incredible cross-section of the industry's most important and influential equipment and technology specialists, putting you in touch with North America’s top technical professionals and fleet decision makers.

If you’re not a TMC member, come see what you’re missing. There’s never been a better time to join and save! Everyone is welcome at TMC’s 2023 Annual Meeting & Transportation Technology Exhibition!

“*I truly believe in the value of TMC. We are all working toward one common goal — and that is to improve the trucking industry and improve technology.*”

Ashley Schimmel, Dir., Sales - North Central Territory, TRANSTEX
Trailblazers in Thought Leadership
For fleets, this means having direct access to information on equipment and technology specifications and maintenance best practices. At TMC, equipment and technology professionals can:

- Attend the industry’s most innovative educational sessions covering all aspects of vehicle maintenance and design. Planned by fleets, for fleets.
- Gain and share information with hundreds of your peers at TMC’s Shop Talk, a free-form discussion on equipment issues.
- Resolve troubling equipment issues at TMC’s Town Meeting and Fleet Operators’ Forum.
- Participate in voluntary standards-setting efforts through TMC’s Study Groups and Task Forces, which are tackling important issues such as wheel end thermal events, electric vehicle standardization and emerging onboard technologies.
- Participate in the most informative technical event — TMC’s Transportation Technology Exhibition. TMC’s exhibition makes available to attendees the best minds on equipment issues in the trucking industry. This year’s exhibit features a special Sustainable and Automated Vehicle Technology Pavilion; and a “ride and drive” dimension (see page 15 for details).
- Participate in TMC’s Future Truck Initiative. As the only industry association that is focused solely on truck technology and maintenance, TMC and its member companies work together with OEMs to create the industry’s standards for future truck technology and equipment that help ensure that the truck of the future is one that is the most efficient to operate and maintain.

What’s more — it’s the industry’s best meeting value proposition!

Where else can you get access to all this information? We even include a host of meals during the week — a big savings for budget-conscious fleets. Here’s what you get for your full meeting registration:

- Access to more than a dozen educational sessions, including Shop Talk
- Entrance to ‘Trucking’s Complete Technology Tradeshow’
- Chance to participate in over 100 industry task forces
- Three breakfast events
- Two luncheon events
- Two evening receptions
- TMC’s Annual Banquet
- TMC’s Fleet Operators’ Forum
- Unequalled networking opportunities
- Access to the industry’s best technical experts

Fleet or supplier, TMC offers so much for you. We’re North America’s premier technical conference for trucking, and it’s an event you simply must attend to stay current on industry practices.

There’s simply no other venue that offers so much information on how to maximize fleet performance and efficiency. It’s your one-stop shop for fleet education, supported by the industry’s only user-driven best practices.

At TMC, we’re electrifying performance in maintenance management, and we look forward to seeing you in Orlando this February!

If you’re not a TMC member, this is a golden opportunity to see what TMC can offer you. Most first-time attendees come to their next TMC event as members!

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### Saturday, February 25

- **8 am – 5 pm**
  - Registration/Welcome & Help Desk Open
- **8 am – 5 pm**
  - Exhibit Setup
- **9 am – 10 am**
  - Associates Operating Manual Review Committee (Closed)
- **9 am – 10 am**
  - New Directors Meeting (Closed)
- **9:30 am – 10 am**
  - TMC Officers Meeting (Closed)
- **10 am – 11 am**
  - Future Truck Committee Meeting
- **10 am – 11 am**
  - Member Outreach Committee Meeting
- **11 am – Noon**
  - Strategic Planning Committee Meeting (Closed)
- **11 am – Noon**
  - Future Truck Task Force Leadership Meeting (Closed)
- **11 am – Noon**
  - Technician and Educator Committee Meeting
- **12:15 – 2:15 pm**
  - Study Group and Meeting Planning Committee Meetings (Closed)
- **2:30 – 4:30 pm**
  - Board of Directors Meeting (Closed)
- **3 – 4 pm**
  - Sergeant-at-Arms and Meeting Mechanics Meetings (Closed)
- **4:30 – 5 pm**
  - New Board/Officer’s Election (Closed)
- **5 – 6 pm**
  - TMC Mentor Committee Meeting (Closed)
- **7 – 10 pm**
  - CCJ Fleet Maintenance Executive Career Leadership Reception & Dinner (By Invitation Only)

### Sunday, February 26

- **8 am – 5 pm**
  - Registration/Welcome & Help Desk Open
- **8 am – 5 pm**
  - Exhibit Setup
- **8:30 am – 10 am**
  - TMC Kickoff Breakfast
  - Featured Speaker: Travis Mills, U.S. Army Veteran and Inspirational Speaker
- **10:15 am – 2:15 pm**
  - Walk-Around Luncheon, Coffee Break and Exhibition Viewing
- **2:30 – 4 pm**
  - Study Group Sessions:
    - S.6 — A Fresh Look at Aftermarket Brake Lining Classification
    - S.18 — Hands-off Insurance: Insurance Guidelines for Automated Vehicles
- **4:15 – 5:45 pm**
  - Study Group Sessions:
    - S.2 — Tire and Wheel Product and Service Choices for Today’s and Tomorrow’s Fleets
    - S.3 — Supply Chain Challenges and Its Impact on Equipment Lifecycles
- **6:45 am – 5 pm**
  - Exhibit Teardown
- **6:45 am – 7 am**
  - TMC Ride and Drive
- **9 – 10 am**
  - TMC Leaders of Tomorrow Class of 2024 Training (Closed)
- **10:45 am – 12:15 pm**
  - TMC Leaders of Tomorrow Class of 2025 Training (Closed)

### Monday, February 27

- **6:45 am – 7:30 am**
  - Registration/Welcome & Help Desk Open
- **7 – 8 am**
  - Study Group Leadership Breakfast Meetings (Closed)
- **7 – 7:30 am**
  - First-Time Attendee and New Member Orientation (AM session)
- **8 am – Noon**
  - Exhibit Setup

### Tuesday, February 28

- **6:45 am – 5 pm**
  - Registration/Welcome & Help Desk Open
- **6:45 am – 8:15 am**
  - TMC Kickoff Breakfast
  - Featured Speaker: Travis Mills, U.S. Army Veteran and Inspirational Speaker
- **2:30 – 4 pm**
  - Study Group Sessions:
    - S.6 — A Fresh Look at Aftermarket Brake Lining Classification
    - S.18 — Hands-off Insurance: Insurance Guidelines for Automated Vehicles
- **4:15 – 5:45 pm**
  - Study Group Sessions:
    - S.2 — Tire and Wheel Product and Service Choices for Today’s and Tomorrow’s Fleets
    - S.3 — Supply Chain Challenges and Its Impact on Equipment Lifecycles
- **6:45 – 9:15 pm**
  - Exhibition Grand Opening and Reception
- **7 – 8 pm**
  - TMC Leaders of Tomorrow Networking Event

### Wednesday, March 1

- **6:30 – 7 am**
  - Coffee Service
- **6:30 am – 5 pm**
  - Registration/Welcome & Help Desk Open
- **7 – 8:30 am**
  - Shop Talk and Fleet Operators’ Forum Wrap-up

### Thursday, March 2

- **7 – 8 am**
  - Buffet Breakfast
- **7 am – Noon**
  - Welcome & Help Desk Open
- **7 am – 5 pm**
  - Exhibit Teardown
- **8 – 9:30 am**
  - Technical Session #3:
    - Healthy Cab, Healthy Driver: Technologies That Can Improve the Future of Cab Environments
- **9:30 – 9:45 am**
  - Coffee Break
- **9:45 – 11:15 am**
  - Study Group Sessions:
    - S.1 — Battery Compatibility: What We Can and Can’t Do With Lithium-ion Batteries
    - S.5 — Root Cause Analysis: From the Shop to the Supply Chain
- **Noon – 1 pm**
  - Admin. Wrap-up Meeting (Closed)
- **1 – 2 pm**
  - Board of Directors Meeting (Closed)
SUNDAY
- TMC Leadership and Press Conference Day. This is when TMC holds its organizational meetings and press conferences are held for the trade press and media.
- NOTE: Additional press conferences will be held during specified exhibit viewing times on Monday, February 27 and Tuesday, February 28 — if needed.

MONDAY (meeting officially starts)
- Task Force Day. TMC Task Forces are held from 8 am – 4 pm.
- First-Time Attendee and New Member orientations held at 7 am and Noon.
- Monday concludes with TMC’s Town Meeting/Fleet Operators’ Forum and TMC’s Exhibit Grand Opening.

TUESDAY
- Educational Sessions begin.
- TMC Kickoff Breakfast starts at 6:45 am.
- Walk-around Luncheon and Exhibition Viewing runs from 10:15 am – 2:15 pm.

WEDNESDAY
- Educational Sessions continue.
- TMC’s Shop Talk and Fleet Operators’ Forum Wrap-up runs from 7 – 8:30 am.
- TMC’s final exhibit viewing period runs from 8:30 am – 12:30 pm.
- Industry Awards Luncheon takes place from 12:45 – 2:15 pm.
- Our Annual Reception and Banquet takes place 7-10:30 pm.

THURSDAY
- Technical Sessions continue Thursday morning.
- NATMI Certification Classes held.

TMC Leaders of Tomorrow
The TMC Leaders of Tomorrow program is open to “up-and-coming” fleet maintenance professionals in their early 40s or younger and/or who have a minimum of five years’ experience working in the trucking industry. Participants must be TMC members and attend four consecutive TMC general meetings (our Annual and Fall Meetings) within a two-year period. During these meetings they must attend all Technical Sessions, several Study Group Mini-Tech sessions, all Study Group meetings to which they are assigned, attend all TMC Leaders of Tomorrow training sessions and events scheduled during the TMC general meetings, complete and pass online TMC exams, and participate as judges during the Fall TMCSuperTech Competitions.

Candidates have to be nominated by a direct supervisor or company executive who must complete a TMC Leaders of Tomorrow Nomination Form that can be found on TMC’s website http://tmc.trucking.org. A nominee’s professional resume and letter of recommendation must be included with the completed Nomination Form and submitted to TMC staff. TMC’s 2023 Annual Meeting will celebrate the graduation of our fifth TMC Leaders of Tomorrow class at our Wednesday Industry Awards Luncheon. Two other classes in training will also meet during TMC’s 2023 Annual Meeting. Schedule details will be sent directly to class members prior to the event.
## Task Force Schedule

### S.1 Electrical—Chairman: Jody Younce
- **Future Electrical/Electronic Systems (Joint Future Truck/S.1)**
- **Fifth Wheel Ground Strap Maintenance Guidelines**
- **Electrical Diagnostics Incorporating Lab Scopes**
- **Advanced Battery Technology**
- **Next Generation Tractor-Trailer Interface**
- **Rear-facing LED Out-of-Service Criteria**
- **Wireless Electric Vehicle Charging Recommendations**
- **Chassis-to-Body Electrical Interface Guidelines**
- **for Construction Trucks (Joint S.1/S.14)**

### S.2 Tire & Wheel—Chairman: Todd Stout
- **Use of Telematics for ATIS and TPMS**
- **Considerations for Tires on Commercial Electric Vehicles**
- **Tire Maintenance Considerations for Light Commercial Vehicles (Joint S.2/S.14)**
- **Tire Conditions Analysis Guide for Commercial Vehicles (Joint S.2/S.14)**
- **Exploratory Session**

### S.3 Engine—Chairman: Bryan Stewart
- **RP Updates (S.3)**
- **RP 318C Update (Engine Oil Analysis) NEW**
- **RP 319B Update (SCA Guidelines) NEW**
- **RP 322B Update (Coolant Pump Failure Modes) NEW**
- **RP 348A Update (Coolant Hose Rating Factors) NEW**
- **RP 360 Update (Diesel Exhaust Fluid Guidelines) NEW**
- **RP 363A Update (Underhood Thermal Event Prevention) NEW**
- **Coolants for Electric Vehicles**
- **Leak Detection Guidelines for Electric Vehicles**
- **Lubrication for Electric Vehicles**
- **CNG Post-Collision and Thermal Events**

### S.4 Cab & Controls—Chairman: Mark Kennedy
- **RP Updates (S.4)**
- **Odometer Synchronization**
- **RP 430 Update (Guidelines for Collision Warning)**
- **RP 404B Update (Truck & Truck Tractor Access Systems) A. Krum**
- **Conversion of Rear View Mirrors to Cameras**
- **RP 420B Update (HVAC Service Life Requirements)**
- **In-cab Gas Detectors**

### S.5 Fleet Maintenance Management—Chairman: Matt Farcosky
- **RP Updates (S.5)**
- **VMRS Codes**
- **Health Ready Components Standards**
- **Cybersecurity Issues**
- **Electric Vehicle Shop Bay Planning (Joint S.5/S.16 in S.5 Room) NEW**
- **Electric Vehicle Pre-Trip Inspection**
- **Root Cause Analysis**
- **Cost Benefit Analysis of Extended Warranty NEW**
- **Parts Room Design Standardization NEW**
- **Hiring Military Personnel**

### S.6 Chassis & Brake Systems—Chairman: Joey Young
- **RP Updates (Brake-Related RPs)**
- **RP Updates (Chassis-Related RPs)**
- **Towing Electric Vehicles**
- **RP 624B Update (Lubricant Fundamentals)**
- **RP 628C Update (Aftermarket Brake Lining Selection)**

### S.7 Trailers, Bodies & Material Handling—Chairman: Justin Olsen
- **RP Updates (S.7)**
- **Brake-Activated Pulsating Lamps**
- **RP 755A Update (Alternative Liftgate/Material Handling Charging Methods)**
- **Exploring Trailer Voltage Drop for Current & Future Demands**

### S.11 Sustainability & Environmental Technology—Chairman: Ken Marko
- **RP Updates (S.11)**
- **RP 1109B Update (Type IV Fuel Economy Test Procedures)**
- **Energy Efficiency Test Procedures for Electric Vehicles**
Monday, February 27, 2023

Electric Terminal Tractor Implementation Considerations
P. Seeberg 10 – 10:30 am

Fleet Expectations and Guidelines for Spec’ing Electric Vehicles
P. Seeberg 10:30 – 11 am

Understanding Electric Vehicle Efficiency Performance
K. Otto 11 am – Noon

TCO Calculator for Electric Vehicles NEW
K. Marko 12:30 – 1 pm

Charge Cycle Optimization and Energy Management
for Battery Electric Vehicles
Z. Ruderman 1 – 2 pm

Energy Conservation/Industry Sustainability Update
K. Marko 2 – 2:30 pm

SmartWay Activities
K. Marko 2:30 – 3 pm

Recommendations for Developing Charging Station Infrastructure
for Commercial Fleet Operations
J. Miller 3 – 4 pm

S.12 On-Board Vehicle Electronics—Chairman: Kurt Dunn
RP Updates (S.12)
K. Dunn 9 – 10 am
RP 1226 Messaging Standardization
K. DeGrant/W. Stegall 10 – 11 am
Open Wireless Vehicle Diagnostic Adapter API
K. DeGrant 1 – 1:30 pm
CAN Bus Troubleshooting
K. DeGrant 1:30 – 2 pm
Open Telematics API
S. Bumgarner/V. Vanszl 2:30 – 3 pm
Exploratory Session
K. Dunn 3 – 4 pm

S.14 Last Mile & Vocational Vehicles—Chairman: Ryan Steamer
ePTO and Hybrid Auxiliary Power Systems in Vocational Vehicles
K. Calhoun 8 – 9 am
Lumen Ratings Definition for White LED Worklamps
J. Davenport 9 – 10 am
VMRS Code Development for Specialty Vehicles
R. Nordstrom 10 – 11 am
Class 2-6 Electric Vehicle Inspection Standards NEW
J. Massicotte 11 am – Noon
RP Updates (S.14)
L. Disque 1 – 2 pm
Tire Maintenance Considerations for Light Commercial Vehicles (Joint S.2/S.14 in S.2 Room)
R. Patterson 1 – 2 pm
Chassis to Body Electrical Interface Guidelines
for Construction Trucks (Joint S.1/S.14 in S.1 Room)
C. Villa 2 – 2:30 pm
Tire Conditions Analysis Guide for Commercial Vehicles (Joint S.2/S.14 in S.2 Room)
T. Tipton 2 – 3 pm
Vocational Duty Cycles for Aftertreatment Systems
K. Calhoun 3 – 4 pm

S.16 Service Provider—Chairman: Homer Hogg
Proper Vehicle Lifting Procedures and Equipment
R. Pop 8 – 8:30 am
Digital Data Exchange and Management
D. Mustafa 8:30 – 9:30 am
Service Provider Standards of Excellence
J. Sulser 9:30 – 10:30 am
When to Trade or Keep a Vehicle (Joint S.16/S.5 in S.16 Room)
M. Jablon 10:30 – 11:30 am
Electric Vehicle Shop Bay Planning
A. Krey 11:30 am – Noon
Implementing TMC RPs in Fleet & Service Provider Operations
J. Gingerich/D. Will Noon – 12:30 pm
Safety Aspects of Electric Vehicles
C. Voyles 2 – 3 pm
Vocational Duty Cycles for Aftertreatment Systems
H. Hogg 3 – 4 pm

S.17 Collision and Corrosion—Chairman: Justin Worden
Corrosion Manual Update
D. Szczepanik 8 – 9 pm
Cab & Control Corrosion Control
T. May 9:30 – 10 am
Heavy-Duty Collision Repair Roadmap
J. Worden 10 – 10:30 am
Frame Correction
J. Worden 10:30 – 11 am

S.18 Automated Vehicles—Chairman: Kyle Mitchell
Platooning
R. Bishop 8 – 9 am
Automated Vehicles
K. Mitchell 9 – 10 am
Automated Truck Inspection and Enforcement
D. Goff 10 – 11 am
ADAS Selection and Specification
W. Hahn 11 – 11:30 am
Technician & Maintenance Shop Requirements for Automated Vehicles NEW
K. Mitchell 11:30 am – Noon
Implementing TMC RPs in Fleet & Service Provider Operations
P. Sniegocki 1 – 2 pm
Technician Spacing for Automated Vehicles NEW
K. Mitchell 2 – 3 pm
Exploratory Session

Technician and Educator Committee—Chairman: David Kegley
Technician Skills Competitions
R. Patterson 8 – 9 am
Future Technician Scholarships
E. Brennan 9 – 10 am
Fostering State Competitions
B. Karim 10 – 11 am
Educator Involvement
G. Arrants 11 am – Noon
Progression from Technician to Instructor
G. Arrants Noon – 1 pm
Entry-Level Technician Training for Electric Vehicles
D. Alef 1 – 2 pm

Future Truck Committee—Chairman: Anthony Marshall
Future Electrical/Electronic Systems (Joint S.1/FT in S.1 room)
A. Lesesky 8 – 9 am
Future Tire Reliability/Durability
D. Shy 9 – 10 am
Future Cab and Driver Interface
J. Adami 10 – 11 am
Future Trailer Productivity
C. Lee 11 am – Noon
Future Integrated Vehicle Health Mgmt.
W. Stegall 1 – 2 pm
Future Chassis and Brake Systems
E. Benge 2 – 3 pm
Augmented and Virtual Training
M. Johnston 3 – 4 pm

FOR MORE INFORMATION, VISIT TMCANNUAL.TRUCKING.ORG
**Technical Session #1**

**Powertrains of the Future!**

Alternatively fueled vehicles are gaining a fantastic level of attention within the commercial vehicle industry these days. Alternatives to diesel are not new to our industry, but the breadth of selection is greater now than perhaps at any time in commercial vehicle history.

Many powertrain technologies exist for equipment users to consider when spec’ing their future fleets. Battery electric vehicles (BEVs) often take the headlines these days, but hydrogen fuel cell electric, hydrogen internal combustion engines, biofuels, renewable diesel, other hybrid electric models, as well as natural gas (compressed and liquefied) and propane autogas are in the mix.

There are many benefits and challenges with each of these technology options, but the road to a zero-emission vehicle future is not clear. What works for one operation, even in the same vocation, may not fit the bill for another. Is your operation ready for the powertrains of the future?

Attend this session and learn more about future powertrains and considerations fleet managers must know when it comes to alternative powertrain options for commercial vehicles. But don’t wait — when it comes to commercial vehicle powertrains, the future is now.

**Technical Session #1**  
*Tuesday, February 28*  
*8:30 – 10 am*

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**Technical Session #2A**

**Recruiting and Retention of Technicians Through Root Cause Analysis**

Browse any industry news outlet and it’s hard to miss the ongoing coverage of the driver shortage. While this is an important issue, the growing diesel technician shortage is of equal concern and it hasn’t received a fraction of the attention that’s needed.

Ask shop managers — fleet, dealer or independent — and they will tell you the same thing, “Bring me a good tech and I’ll put them to work tomorrow.”

Today’s retiring technicians are taking with them years of experience that will not be replaced overnight. Backfilling these positions alone with qualified, experienced technicians is a bit like “free agency” as the pool is limited.

According to the TechForce Foundation, the industry will need to fill 163,000 positions by the year 2030. And according to the latest Bureau of Labor Statistics (BLS) projections for 2020-2030, demand for diesel technicians will continue to rise, at a pace of about one percent annually, which means growth will generate a need for 25,000 new diesel positions by 2030.

To address our growing needs, it is vital we grow the talent from the ground up. Many of today’s “senior” techs were exposed to the automotive repair business at a very early age by way of the “full service” gas station. (When is the last time you stopped at one of those?) This experience shaped many a career path. While a number of programs are in place, more must be done. To effectively address this issue we must get to the prospective employee at an early age.

Time is running short for a great many fleets and service providers when it comes to staffing replacements for their current generation of technicians. Smart operations are already implementing programs designed not only to attract new technicians to our industry, but also do a better job of training and keeping those technicians once they’ve come onboard.

Part of the problem is attracting new entrants to the technician career path, but a substantial concern is also keeping technicians once they’ve entered the field. A 2022 study (Randall-Reilly/Shell) revealed only a quarter of technicians surveyed feel they have a clear path for advancement, and most said they would pursue a job in a different industry for more money. Does this sound familiar? Attend this session and learn what cutting-edge operations are doing to recruit, hire, develop and keep technicians. Panelists will leverage root cause analysis strategies to help attendees find the true causes for their technician shortage and provide information to better position companies to attract and keep these important workers.

**Technical Session #2A**  
*Wednesday, March 1*  
*2:30 – 4 pm*
Technical Session #2B

Does the Industry Need an Open Telematics API?

Telematics is revolutionizing vehicle maintenance. The amount of information that is now available to fleet managers is astounding as compared to just a few short years ago. However, the availability of this information and the technology that is making it possible is providing new concerns to fleets, suppliers, maintenance providers and manufacturers alike.

Traditionally, fleets have enjoyed the use of third parties to provide important communications and data about vehicle status and location, load security, etc. But as cybersecurity concerns mount — particularly with greater adoption of over-the-air vehicle programming — manufacturers and telematics service providers are inclined to want to limit data on vehicle data systems to prevent bad actors from infiltrating integration. That potentially can hamper the ability of fleets to leverage third-party resources in telematics operations.

ATA's Technology & Maintenance Council (TMC), through its S.12 Onboard Vehicle Electronics Study Group, has been working with other groups such as the National Motor Freight Transportation Association (NMFTA) to address this issue. One solution would be the development of an industry standard for an Open Telematics Application Program Interface (OTAPI).

An OTAPI would be intended to make the telematics service provider (TSP) make back office data interaction standardized across all TSPs. It would not be intended to specify any aspects of TSP connections to telematics devices, nor would it imply any changes to the location where data is stored or access controls on the data — the data will still reside at the carrier as sourced from their accounts at the TSP.

OTAPI simply helps transit data from the tractor to the back office system while setting a minimum expectation for the carrier. The TSP may always go above and beyond for their carrier through extension. An OTAPI is envisioned to be complete enough such that carriers could use these APIs instead of the proprietary TSP APIs — while still connecting to TSP-hosted servers and hence still using the same provider. This would be a standardized API for retrieving telematics logs and data. The OTAPI, as an additional interface, will be made available by TSPs to allow their fleet customers ready access to pull data in the standardized format. Moreover, the OTAPI may play an important role in Integrated Vehicle Health Maintenance and Conditioned Based Maintenance systems as they are emerge and developed through TMC RP 1226B, Vehicle Accessory Connector Guidelines.

Consensus for an OTAPI remains elusive at the present, however; particularly among manufacturers. Attend this session and learn why your operation needs to become fully aware of the impact cybersecurity concerns will have on TSP-carrier operations and how an OTAPI might be the best industry solution for standard definition, cost control and RP 1226 specification flexibility.

Technical Session #3

Healthy Cab, Healthy Driver:
Technologies That Can Improve the Future of Cab Environments

The trucking industry has historically placed a great deal of focus on driver safety, and rightly so. However, driver health should also be a priority for all fleets with a commitment to civic and corporate responsibility.

In fact, drivers’ own expectations around both safety and health are undergoing positive change. In an industry that is perpetually challenged with driver recruitment and retention, the need for fleets to evaluate and deploy new technology that enhances driver safety and health surely is an important factor in their ability to compete for drivers.

The premise is simple: healthy cabs support healthy drivers. The Technology & Maintenance Council’s (TMC) Future Cab & Driver Interface Task Force is currently developing an information report on driver health and safety expectations. The report is intended to collect fleet input and anticipate specific areas where the driver experience might be elevated by new perspectives of what is “safe” and “healthy”, given the continual advance of technology. So far, the Task Force has identified half a dozen areas where emerging technologies would significantly upgrade the driver’s experience and/or health, including:

- Quieter Cabins
- Cleaner Air
- Reduced Vibration
- Ingress & Egress
- Operator Alertness
- Operator Health

Attend this session and learn what TMC has discovered when it comes to cutting-edge approaches to improving driver health through cab specification. Panelists will share what industry is doing to evaluate these options and expedite adoption of those technologies that meet the greatest need.

Technical Session #3
Thursday, March 2
8 – 9:30 am
S.1 Battery Compatibility: What We Can and Can’t Do With Lithium-ion Batteries

As battery technology continues to advance, there are an increasing number of questions from fleet managers as to what we can and can’t do with the latest kid on the block — lithium-ion batteries.

New battery chemistries especially formulated for hybrid-electric, all-electric and hydrogen-hybrid electric vehicles (EVs) are making fleet managers take a second look at what they think they know about battery specification. Lithium-ion and nickel-metal hydride batteries are the norm in these applications, because of their high power-to-weight ratio, longer life cycles, temperature performance, efficiency and low self-discharge. But not all batteries are alike however, and fleet managers need to know important facts about spec’ing these energy storage systems.

For example:
• How long can you leave lithium-ion batteries on a charger?
• Are there any downsides to leaving them discharged for long periods?
• Can you mix lithium-ion and conventional lead-acid batteries in the same battery pack?
• What’s different to consider with lithium-ion batteries in the event of a vehicle fire?
• Is the temperature range the same for lithium-ion battery performance as it is with conventional batteries?
• Are there special storage practices to consider for lithium-ion batteries?

Attend this session and learn the important facts you need to know before spec’ing your first batch of lithium-ion batteries, or just brush up on what you think you know about this new battery technology. At the end of this session, you’ll have a good idea about what you can and can’t do when it comes to these new generation energy storage devices.

S.1 Electrical Study Group
Thursday, March 2
9:45 – 11:15 am

S.2 Tire and Wheel Product and Service Choices for Today’s and Tomorrow’s Fleets

When it comes to tire and wheel programs, there are as many variations as there are differences in fleet vocation. That’s because what works for one operation — even within the same vocation — may not work for another.

Some fleets may keep the entire tire and wheel program in-house, including inventory management. Others may completely outsource tire and wheel maintenance to a trusted third-party or parties. Many more may employ a hybrid of these two approaches.

There’s a lot to managing a tire and wheel program to consider. Internal training, inventory management, component specification, and cost-per-mile determination are just a few of the considerations. Is your fleet successful at these and other important metrics?

During this session, our panel of experts will take a deep dive into tire and wheel product and service choices for today’s and tomorrow’s fleets. In this interactive mini-technical session, we’ll cover how the program is set up, what are the logistics of finding a provider, what are the do’s and don’ts involved and examples of key lessons learned.

Fleet managers will discuss how they manage inventory, new original equipment orders, retreading considerations, vehicle trade-in cycles, moving tires/equipment between different terminals (for larger fleets), and much more. Service providers and manufacturers will provide insights into new concepts and product designs that could well change the way your operation looks at its own tire and wheel program.

S.2 Tire & Wheel Study Group
Tuesday, February 28
4:15 – 5:45 pm

“If you are in the field of trucking and maintenance, TMC is where you come together to improve the trucking industry.”

Leonard Wheatley
Supervisor, Operations
FleetPro, Inc.
**Supply Chain Challenges and Its Impact on Equipment Lifecycles**

For fleet operations, one of the big corporate-related casualties caused by Covid has to be reliable and timely parts availability. Every fleet manager in North America has had to endure with parts shortages, and has been forced to turn to alternate and what once were unconventional sources (Craig’s List, eBay, etc.) to source badly needed parts to get units back on the road.

Smart fleet managers had developed great relationships with their vendor/supplier networks before the pandemic hit, and were able to go to the head of the line when it came to accessing parts; but this did not insulate these operations from all the challenges associated with supply chain shortages.

Panelists will present information on the latest techniques and case studies from the fleet, supplier and manufacturer perspective for solving shop and supplier issues using root cause analysis approaches. With today’s struggles in addressing downtime, labor and parts availability issues, this is a session fleet managers are sure to want to catch.

**Root Cause Analysis: From the Shop to the Supply Chain**

During the past several years, ATA’s Technology & Maintenance Council (TMC) has offered meeting attendees the opportunity to work through real diagnostic problems using LEAN/Six Sigma approaches, designed to eliminate waste and increase efficiency in finding solutions. This cross-disciplinary approach helps fleet managers see differing perspectives in an effort to reduce waste in maintenance management.

Previously, TMC has applied this technique to tires, preventive maintenance, aftertreatment and brakes. During this session, our S.5 Fleet Maintenance Management Study Group will take a step deeper into the advantages of root cause analysis — this time, focusing on its application from the shop environment to the supply chain.

Panelists will present information on the latest techniques and case studies from the fleet, supplier and manufacturer perspective for solving shop and supplier issues using root cause analysis approaches. With today’s struggles in addressing downtime, labor and parts availability issues, this is a session fleet managers are sure to want to catch.
A Fresh Look at Aftermarket Brake Lining Classification

Replacing brake linings can be tricky business for fleet managers. There are a lot of options available when it comes to specifying the lining material for a vehicle’s first reline, all featuring different performance and cost considerations.

Staying with original equipment manufacturer (OEM) parts is one way to ensure close compatibility with the original lining specification, but it can be a more expensive proposition.

Aftermarket linings can be less expensive, and just as capable as OEM offerings, but how does a fleet manager know since aftermarket friction performance is completely unregulated in North America?

Fleet managers should ask themselves:
- Will your equipment stop with aftermarket friction like it did when it was new?
- Do you know the questions to ask when talking with aftermarket friction providers?
- Are you ready to stand up in court and defend your aftermarket friction selection?

Faced with this situation nearly 20 years ago, TMC’s S.6 Chassis & Brakes Study Group developed RP 628, Aftermarket Brake Lining Classification, to help fleet managers assess aftermarket lining performance in a manner similar to OEM performance.

The RP provides information for judging the performance of aftermarket brake linings on air-actuated foundation brakes, when performing the dynamometer test and vehicle stopping distance procedures in Federal Motor Vehicle Safety Standard (FMVSS) No. 121, Air Brake Systems, and lining supplier qualification information. This information is designed to help fleet operators in choosing aftermarket brake linings that will perform adequately on typical combination (tractor/trailer) vehicles and single trucks.

RP 628 has undergone three updates since its original edition was published in 1995, the latest coming in 2016. A lot has changed since 1995, with disc brakes becoming more commonplace and reduced stopping distance (RSD) brakes introduced in 2011 on most 6x4 tractors. Accordingly, S.6 is reviewing the current version — RP 628C — to determine how the document can be improved for greater industry adoption and fleet usability.

The time has come for a fresh look at the situation. Attend this session and learn what the latest perspectives are when it comes to aftermarket brake lining classification and where TMC may be headed in updating this important fleet manager tool to improve brake reliability and performance.

S.6 Chassis & Brakes Study Group
Tuesday, February 28
2:30 – 4 pm

Talking Straight With Your Trailer Part 2: Direct-to-Trailer Diagnostic Communication

For years, trailers were considered to be rather primitive when it came to diagnostic capabilities. But now, trailers are becoming smarter and a number of manufacturers and diagnostic adapter providers are offering solutions that allow for direct-to-trailer diagnostic communication.

During TMC’s 2022 Fall Meeting, our S.7 Trailers, Bodies & Material Handling Study Group explored new options that allow technicians to make a direct-to-trailer connection with a battery/secondary power source that energizes the trailer’s seven-pin connector for diagnostics independent of a tractor. This, in addition to diagnostic solutions that work across multiple manufacturers products, such as trailer antilock braking systems.

Now, during our 2023 Annual Meeting, TMC will next explore the host of telematics solutions that are coming of age for the emerging generation of smart trailer systems that fleets can leverage for direct diagnostic information. We’ll examine the range of smart trailer solutions that promise to increase diagnostic and performance data and minimize downtime in various fleet operations.

Is your operation taking full advantage of these cutting edge tools that can simplify trailer maintenance? Attend this session and learn how your maintenance operation can start talking “straight” to its trailers.

S.7 Trailers, Bodies & Material Handling Study Group
Tuesday, February 28
4:15 – 5:45 pm
**Electric Vehicle Battery Safety Guidelines**

Batteries have been a major component on commercial vehicles since the dawn of trucking. Batteries have seen their fair share of technological advancements, but the revolution that’s now coming thanks to the strong interest in vehicle electrification is unprecedented.

Conventionally powered vehicles have long relied on flooded cell lead-acid battery technology for many years, with recent advancements such as absorbed glass mat (AGM) designs providing incremental improvements in packaging, storage and durability. Now, new chemistries especially formulated for hybrid-electric, all-electric and hydrogen-hybrid electric vehicles (EVs) are making fleet managers take a second look at what they think they know about battery specification.

In fact, batteries used in EVs have more in common with their smaller cousins used in smartphones and consumer electronics than trucks. Lithium-ion and nickel-metal hydride batteries are the norm in these applications, because of their high power-to-weight ratio, longer life cycles, temperature performance, efficiency and low self-discharge.

There’s no doubt about it — the latest battery technologies are something entirely new, and the safety measures fleets and equipment users need to take in working with them are new too. Is your operation up to the challenge? Our newly rebranded study group — TMC’s S.14 Last Mile & Vocational Vehicles — is here to help.

The current fleet focus when it comes to batteries is generally on performance. However, industry thought is starting to change such that the focus should shift to prioritize battery safety and mitigation of thermal events.

Attend this session and learn the important facts you need to know about electric vehicle battery safety. Our expert panel will cover important guidelines for mitigating thermal events and reducing risk associated with the battery technology used in electric vehicles suited for last mile and vocational service.

**S.14 Last Mile & Vocational Vehicles Study Group**  
**Tuesday, February 28**  
**4:15 – 5:45 pm**

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**Hands-off Insurance: Insurance Guidelines for Automated Vehicles**

There’s an old saying, “tomorrow, tomorrow, always tomorrow.” And it often appears as if that’s the mantra for widespread adoption of automated vehicle technologies — or at least the ones that approach truly autonomous capabilities such as the SAE Level 4 and 5 vehicles promise.

You might not be able to spec them in large numbers today, but make no mistake — automated vehicles are coming to a shop near you and more than likely in force by the end of the decade. As a forward-looking, progressive fleet manager, you may be giving a great deal of thought to how to specify and maintain this revolutionary class of trucks, but have you given any thought at all to how these units will be insured?

There are a lot of factors to consider. How will you understand and negotiate the risk exposures to calculate coverages, rates and retentions with underwriters? Are you going to own the automated vehicle or lease? Is your operation going to be responsible for maintenance? Some vendors will offer fleets the opportunity to take care of their own maintenance as usual, with proper training. Others, not so much. And will a human be in the cab monitoring vehicle functions and traffic, ready to take over just in case — or not?

Attend this session and learn the different approaches that are coming to insurance of automated vehicles. Panelists will provide various perspectives depending on the model of automated vehicle adoption embraced. One thing is for certain — a hands-off approach to how your operation handles its insurance of these units is risky business.

**S.18 Automated Vehicles Study Group**  
**Tuesday, February 28**  
**2:30 – 4 pm**
Other Features of Interest

**TMC Kickoff Breakfast**

**Featuring: Travis Mills, Retired United States Army Staff Sergeant of the 82nd Airborne**

On April 10, 2012, United States Army Staff Sergeant Travis Mills of the 82nd Airborne was critically injured on his third tour of duty in Afghanistan by an improvised explosive device (IED). As a result of the blast Travis suffered the loss of both arms and both legs. He is one of only five quadruple amputees from the wars in Iraq and Afghanistan.

Enduring a grueling rehabilitation program, Travis committed himself not only to recovery, but to fatherhood and to giving back to the veteran community any way he could. In September 2013, Travis and his wife Kelsey founded the Travis Mills Foundation, a nonprofit organization formed to benefit and assist post-9/11 veterans who have been injured in active duty or as a result of their service to our nation.

Critical to the foundation’s mission is for the veteran’s family to be included, not just the vet. Through the foundation, the veteran and their family receive an all-inclusive, all-expenses paid, barrier-free vacation to Maine where they spend time with Travis and his family, and participate in adaptive activities, bond with other veteran families, and enjoy much-needed rest and relaxation in Maine’s great outdoors.

Travis’s story has been featured extensively on local and national news including The Ellen DeGeneres Show, NBC, CBS, Fox News, The O’Reilly Factor, CNN and countless other outlets.

A true American hero, Mills will share with TMC attendees his philosophy for success based on motivation, endurance, resiliency, and inspiration.

**Tuesday, February 28**

6:45 – 8:15 am

**TMC’s Town Meeting & Fleet Operators’ Forum**

TMC’s best-attended event is always its Town Meeting and Fleet Operators’ Forum. TMC’s Town Meeting provides an opportunity for the Council to present members and attendees with information about what’s happening within TMC. Reports are provided regarding Council membership, meetings, and exhibits, as well as TMC Recommended Practices, information reports, technical policy advisories and products. Additionally, a federal regulatory report is provided by a senior representative of ATA’s regulatory and policy affairs department.

TMC’s Silver Spark Plug Awards will be presented during the Town Meeting as well. The Silver Spark Plug is TMC’s highest honor.

TMC’s Fleet Operators’ Forum immediately follows the Town Meeting. At the Fleet Operators’ Forum, fleet attendees bring up equipment problems that they have been unable to resolve successfully with their product manufacturer or supplier. An update is given later during the week at TMC’s Fleet Operators’ Forum Wrap-up. If you have an issue you wish raised, please contact TMC at (703) 838-1763 or use the following link to report your issue: [https://www.surveymonkey.com/r/TMC23A_FOF](https://www.surveymonkey.com/r/TMC23A_FOF).

**Monday, February 27**

5:15 – 6:45 pm

**Fleet Talk / Shop Talk**

Fleet Talk and Shop Talk rank consistently as the most popular features at TMC general meetings. TMC’s Fleet Talk is a lively dialogue based on TMC’s successful Shop Talk format, but open only to fleet attendees. Topics of interest that emerge from this session will be raised at Shop Talk later in the week for open discussion before the entire Council. Shop Talk, open to all registered attendees, offers a unique chance to learn and share the tricks of the trade from the industry’s best experts.

At both sessions, two veteran fleet managers will lead what will be a spirited discussion on what works or doesn’t work in vehicle maintenance.

**Fleet Talk**

Monday, February 27

4 – 5 pm

**Shop Talk & Fleet Operators’ Forum Wrap-up**

Wednesday, March 1

7 – 8:30 am

**TMC Industry Awards Luncheon**

TMC’s Industry Awards Luncheon features the presentation of various Council and industry awards including the Recognized Associates Award, Study Group Secretary Award, Excellence in Maintenance Supervision Award, and others. A plated luncheon begins at 12:45 pm with award presentations commencing at approximately 1:30 pm. The TMC Leaders of Tomorrow graduating class — Class of 2023 — will also be recognized.

**Wednesday, March 1**

12:45 – 2:15 pm

**General Associates Meeting**

Open to all registered associate (supplier/vendor) and service provider attendees, this meeting will feature the latest in a continuing series of interactive interviews with industry leaders designed to help associate and service provider attendees better understand their role within the industry in these dynamic times.

**Monday, February 27**

4 – 5 pm
Press Conferences

Press conferences will be held on Sunday, February 26 at various times by TMC exhibitor companies. Schedules will be distributed to TMC press contacts as the event draws closer. Additionally, TMC’s meeting will feature a Media Room for press attendees that will offer working space. The Media Room will be open throughout the event beginning Sunday, February 26. [NOTE: Additional press conferences will be held during specified exhibit viewing times on Monday, February 27 and Tuesday, February 28— if needed.]

Sunday, February 26
8:30 am – 7 pm

TMC’s Annual Reception and Banquet

TMC’s Annual Reception and Banquet will feature the traditional changing of the guard at which our new leadership will be installed for 2023-2024. The event will be held at nearby Universal Studios. Transportation will be provided.

Wednesday, March 1
7 – 10:30 pm

Exhibit to Feature Technology Showcase for 2023

ATA’s Technology & Maintenance Council (TMC) is enhancing its 2023 Annual Meeting & Transportation Technology Exhibition by once again offering a “TMC Technology Ride & Drive” that will showcase cutting-edge/emerging technologies via a live demonstration (e.g., ride & drive) format. Specific technology categories will be identified by staff and vetted by TMC’s volunteer Meeting Planning Committee, and TMC exhibitors with offerings in those areas of interest will be approached to demonstrate as part of this meeting segment.

Ride & Drive Sponsorship and exhibit booth space is required to participate— $25,000 for ride/drive presentation. Ride & Drive is not a traditional TMC educational offering, which has strict rules regarding commercialism, but rather a supplemental activity of our Transportation Technology Exhibition.

The Ride & Drive will be open to all registered TMC attendees, and a special invitation will be made to members of both trade and lay media. For more information, contact ATA Director, Allied Partnerships & Exhibits Dan Duggan at (703) 838-1756; ATAexhibits@trucking.org.

NOTE: All participants in TMC’s Technology Showcase program must be current year exhibitors holding the same or greater space commitment as the previous year’s TMC transportation technology exhibition.

‘Sustainability & Automated Vehicles’ Pavilion Featured at 2023 Exhibition

For 2023, TMC’s Transportation Technology Exhibition will feature a special pavilion for sustainability and automated vehicle technologies. Appropriate technologies for this area of the exhibition include: cybersecurity, automated driving and platooning, drone/quadcopter applications for transportation and related specification/maintenance, advanced driver assistance systems (ADAS) and alternatively powered vehicles.

TMC’s 2023 exhibit will provide one-stop shopping for the busy fleet executive who wants to quickly get up to speed on all segments of emerging and advanced technology in these areas.

Maintenance and purchasing executives will ultimately be charged with developing the proper spec’s and making the right decisions appropriate to their fleet. Make sure your company gets the information it needs at TMC’s 2023 Sustainability and Automated Vehicles Pavilion.

“TMC is great because it is an opportunity to network with a lot of vendors, see a lot of new technology as it rolled out, and see how it’s impacting the trucking industry.”

Frank Ems, Field Safety Manager, FedEx
Meeting Safely, Together

TMC is working closely with the Orange County Convention Center and our partner hotels to help ensure the health and safety of all meeting participants. TMC will be implementing appropriate measures including sanitation and cleaning protocols and other actions as per facility guidelines.

Meeting Registration Fees & Policies

To attend all business sessions, exhibition viewing periods, breakfasts, luncheons, cocktail receptions, etc., you must be fully registered. The Member rate is applicable to all TMC and ATA members.

Three Ways to Register

Online

Registering online at http://tmcannual.trucking.org is the fastest and easiest way to register for the meeting and secure your hotel room. Once you have successfully registered online, by fax, or mail you will receive an email confirmation which will contain your personal hotel reservation link.

If you need assistance with username and/or password to register online, please call ATA Registrations at (866) 821-3468 from 8:30am - 5:30pm ET or email: registrations@trucking.org or tmc@trucking.org.

By Fax/Email

If registering by fax (with completed credit card information) or mail (with a completed check), address and fax information is provided below. Faxed registrations take up to 72 hours to process. Fax: (703) 838-1701.


If you need to cancel your meeting registration, please send written notification of cancellation to registrations@trucking.org or on or before January 30, 2023, and you will receive a refund less a $200 per person administrative fee. No refunds for registration fees will be processed for cancellations postmarked after this date.

IMPORTANT: No refunds for registration fees will be processed for cancellations postmarked after January 30, 2023.

Registration Fees

Full Meeting Registration Fees include all business sessions, food functions and social events. Please register your spouse/guest using the Spouse/Guest Registration section on the Full Meeting Registration form (online or PDF). This will ensure admittance at all open meeting functions. Spouse/Guest registration includes entry to exhibit hall, food functions, receptions and Banquet; does not include entry to business sessions. For membership information, call TMC/ATA Member Services at (703) 838-1701, email tmc@trucking.org, or visit http://tmc.trucking.org.

Fully Registered Meeting Attendees

Early Bird Registration Fees

(on or before January 30, 2023)

Full Meeting Registration (TMC or ATA member) $750
Full Meeting Registration (TMC or ATA non-member) $1250
Full Meeting Registration, First-Time Fleet, Educator, or Service Provider Attendee (member/non-member, subject to verification) $450/$950
Spouse/Guest Badge (member/non-member) $250/$500

Regular Registration Fees

(after January 30, 2023)

Full Meeting Registration (TMC or ATA member) $850
Full Meeting Registration (TMC or ATA non-member) $1250
Full Meeting Registration, First-Time Fleet, Educator, or Service Provider Attendee (member/non-member, subject to verification) $550/$950
Spouse/Guest Badge (member/non-member) $250/$500

Membership Saves!

When you join TMC or renew your TMC membership, you qualify for TMC member registration fee pricing. Non-members—join TMC to enjoy the best rates. Non-members who pay the fully registered, non-member rate will otherwise receive membership in TMC for the balance of 2023, unless TMC staff is otherwise notified. To save the most money, be sure to join or renew first—you could save up to $260 by doing so. Your membership will save you big for TMC’s 2023 Fall Meeting in September, too.

Special Discount Offered for First-Time Fleet, Educator and Service Provider Attendees

First-time fleet, educator and service provider attendees may take advantage of a special $300 discount! To take advantage of this offer, call (703) 838-1763 or email: tmc@trucking.org for verification of your first-time status and you’ll receive a discount code to use when registering online.

Substituting for a TMC Member

Membership has its privileges — Only TMC/ATA Members receive the Member rate. TMC does not allow non-member individuals to substitute for a TMC member; however, exceptions may be made for certain extenuating circumstances. Call TMC staff at (703) 838-1763 for details.

Refund Policy

If your plans to attend TMC’s meeting changes, you may receive a refund—less a $200 administrative fee—up until January 30, 2023. There will be no refunds or credits after January 30, 2023. Written cancellations accepted by fax (703) 838-1701 or email at registrations@trucking.org.

NOTE: There will be a $200 administrative fee for those Associate Attendees who downgrade their badge status from “Blue” (fully registered) to “Orange” (exhibit-only) after having so registered.

Housing

ConferenceDirect is the official housing bureau for TMC’s Annual Meeting. Only those registered for the meeting will receive a hotel booking link in their registration confirmation email. The deadline to complete your hotel reservation at the TMC/ATA discounted rate is January 30.

HEADQUARTERS HOTEL (Full Meeting Registrants Only)

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<tr>
<th>Hotel Name</th>
<th>Nightly Rate (single/double)</th>
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OVERFLOW HOTELS

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<tr>
<th>Hotel Name</th>
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</tr>
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</table>

Nightly rates do not include taxes and fees, which are subject to change without notice. Rates may increase with additional occupancy. A deposit equal to one night’s room and tax is required and will be charged by the hotel on or around February 3.

If you need to make changes to your hotel reservation (arrival/departure/cancellation), please contact ConferenceDirect at (833) 638-6496 or mail to: tmc@conferencedirect.com. Monday – Friday, 9 am – 7 pm (ET).

ConferenceDirect will charge a $30.00 cancellation fee for any reservation cancellation made at any time.

Attire

Attire for TMC’s 2023 Annual Meeting is business casual.
Certification Courses Offered This March for Maintenance Directors and Supervisors by NATMI, TMC

Want to become a certified maintenance professional? Now you can do it for less money and in less time!

TMC and the North American Transportation Management Institute (NATMI) have teamed up to strengthen and increase the visibility of the Certified Director of Maintenance certification (CDM/E) and Certified Supervisor of Maintenance certification (CSM/E).

TMC’s Education Subcommittee and NATMI’s Oversight Committee have collaborated on examining, updating and enriching all aspects of the program, including certification requirements, scope, class schedules and locations, and educational content.

The courses will be held onsite March 2-4 in Orlando, Fla., at the Orange County Convention Center in conjunction with TMC’s 2023 Annual Meeting.

COURSES

**Essentials of Fleet Maintenance Management**

Courses will be held on Thursday, March 2, 2023 and Friday, March 3, 2023.

**Certification Exams will take place on Saturday morning, March 4, 2023.**

The two-day Essentials of Fleet Maintenance Management course is applicable toward NATMI’s nationally recognized, university-accredited certification programs. Taking the course is the first step toward earning a credential that will help you become a more competent professional, earn industry recognition and credibility in court testimony. For more information on membership or how to become certified, call (303) 952-4013.

If you have the job experience, you can pay one lump sum that covers all fees for certification, and complete the process within 60 days of taking the training and exam.

**How to Become a Certified Maintenance Professional...**

**Job Experience Required:**

Certified Director of Maintenance/Equipment (CDM/E):

- 5 Years (or 4 years if you have a college degree) experience in fleet maintenance management

Certified Supervisor of Maintenance/Equipment (CSM/E):

- 2 years in fleet maintenance profession

There are education and experience certification requirements as well. CDM/E and CSM/E candidates are full-time administrators who have ably demonstrated their expertise and leadership in establishing programs, policies, setting standards, and mastering new technologies and systems.

**To Register:**

For more information, or to register, visit NATMI’s website at [www.natmi.org](http://www.natmi.org).

*TMC members may register at the NATMI member rate!* TMC members may register for the course at the NATMI member rate! Additional information on the CDM/E and CSM/E programs may be obtained from Kelly Long Crow at (720) 259-2185.

TMC Spouses’ Program for 2023

TMC has made the decision, in concert with our Spouses’ Program Planning Committee, to no longer offer organized Council-led and managed spouse tours as part of our TMC Annual and Fall Meeting Programs. That being said, however, TMC will still offer spouse registration for its Annual Meeting that includes access to meal functions, exhibit viewing periods, receptions and social events. See page 16 for registration information.
Task Force Descriptions

NOTE: Not all Task Forces listed below will meet at TMC’s 2023 Annual Meeting.
For a list of all Task Forces that will meet in Orlando, see pages 6 and 7.

S.1—Electrical

RP Updates (S.1)
Chairman: Albert Mihic, Delco Remy, (765) 778-6541
This Task Force will review existing S.1 Recommended Practices and update them as needed.

Fifth Wheel Ground Strap Maintenance Guidelines
Chairman: Larry Rambeaux, Purkeys, Inc., (479) 531-7769
This Task Force will develop a Recommended Practice to provide a systems approach to properly maintain ground straps on heavy-duty truck fifth wheels and truck frames.

Next Generation Tractor/Trailer Electrical Interface
Chairman: Dan Forthoffer, Phillips Industries, (313) 949-9178
This Task Force will work to create backward-compatible, future-looking definition of tractor to trailer interface connections for improved safety, autonomous operation, enhanced diagnostics, and increased durability. It will consider both wired and wireless connectivity.

RP 177 Update (Solar Panels for Commercial Vehicles)
Chairman: Matt Srnec, Thermo King Corp., (952) 426-0104
This Task Force will develop a Recommended Practice offering guidelines on the application of solar power technology to commercial vehicles. It will define uses of solar power, identify variables affecting generation of power using solar cells, and offer recommendations on safety, maintenance, installation, specification and sizing of solar panels.

Electrical Diagnostics Incorporating Lab Scopes
Chairman: George Arrants, ASE Education Foundation, (281) 850-1676
The Task Force will develop a Recommended Practice regarding dynamic diagnostics and communications systems utilizing lab scopes, and to provide an understanding of the wide range of testing and information retrieval of live data. Its purpose is to reduce “guesswork” on information and electrical circuits of 21st century vehicles.

Advanced Battery Technology
Chairman: Jeffrey Coleman, East Penn Logistics, (610) 682-6361
This Task Force will develop a Recommended Practice providing guidelines for advanced battery Technologies.

Rear Facing LED Out-of-Service Criteria
Chairman: Robert Koelzer, Haldex Brake Products, (816) 801-2391
This Task Force will develop a Recommended Practice regarding identification of conditions in rear facing LED lights requiring removal from service.

Wireless EV Charging Standards and Recommendations
Chairman: Michael Masquelier, Wave, Inc., (801) 935-8650
This Task Force will develop guidelines regarding inductive charging applications for Commercial Electric Vehicles.

Chassis-to-Body Interface Guidelines for Construction Vehicles (Joint S.1/S.14)
Chairman: David Troupe, Mack Trucks, (336) 393-4164
This Task Force will develop guidelines for a common electrical chassis to body interface for construction vehicles.

S.2—Tire & Wheel

RP Updates (S.2)
Chairman: Patricia Meisenholder, Michelin NA, Inc., (864) 458-6413
This Task Force will review existing S.2 Recommended Practices and update them as needed.

Use of Telematics for ATIS and TPMS
Chairman: Lee Demis, Doran Manufacturing, (513) 699-6230
This Task Force will develop a Recommended Practice covering the application of telematics in Automatic Tire Inflation Systems and Tire Pressure Monitoring Systems.

Considerations for Tires on Commercial Electric Vehicles (S.2/S.18)
Chairman: Dan Shy, Goodyear Tire & Rubber Co., (330) 283-3817
This Task Force will evaluate the use of tires on Commercial Electric Vehicles (EVs) and develop information reports and/or RPs based upon those considerations.

Tire Conditions Analysis Guide for Commercial Vehicles (S.2/S.14)
Chairman: Troy Tipton, Michelin NA, Inc., (260) 446-6880
This Task Force will develop considerations for tire maintenance on light-duty commercial vehicles and develop an information report and/or RP based upon those considerations.

Tire Maintenance Considerations for Light Commercial Vehicles (S.2/S.14)
Chairman: Randy Patterson, Bridgestone Comm. Solutions, (801) 209-1946
This Task Force will develop considerations for tire maintenance on light-duty commercial vehicles and develop an information report and/or RP based upon those considerations.

S.3—Engine

RP Updates (S.3)
Chairman: Brian Liimatta, Cummins, Inc., (812) 447-0551; Paul Cigala, ExxonMobil Corp., (856) 404-1342
This Task Force will review existing S.3 Recommended Practices and update them as needed.

RP 318C Update (Engine Oil Analysis)
Chairman: P. Cigala, ExxonMobil, (856) 404-1342
This Task Force is updating RP 318C covering engine oil analysis guidelines for heavy-duty diesel-powered commercial vehicles.

RP 319B Update (SCA Guidelines)
Chairman: P. Woyciesjes, Prestone Products, (203) 731-8105
This Task Force is updating RP 319B covering supplemental coolant additives for commercial diesel-powered vehicles.

RP 322B Update (Coolant Pump Failure Modes)
Chairman: F. Woodson, Gates Corp., (314) 630-6644
This Task Force is updating RP 322B covering coolant pump failure modes.

RP 348A Update (Coolant Hose Rating Factors)
Chairman: P. Cigala, ExxonMobil, (856) 404-1342
This Task Force is updating RP 348A covering coolant hose rating factors for commercial vehicles.
Task Force Descriptions

**RP 360 Update (Diesel Exhaust Fluid Guidelines)**
Chairman: P. Cigala, ExxonMobil, (856) 404-1342
This Task Force is updating RP 360 covering diesel exhaust fluid (DEF) guidelines.

**RP 363A Update (Underhood Thermal Event Prevention)**
Chairman: P. Cigala, ExxonMobil, (856) 404-1342
This Task Force is updating RP 363A covering underhood thermal prevention guidelines for diesel-powered commercial vehicles.

**CNG Post-Collision and Post-Thermal Events**
Chairman: Chris Culberson, Momentum Technologies, (817) 767-6039
This Task Force will develop a recommended practice on recovery/repair practices following thermal events associated with LNG/CNG fueled commercial vehicles.

**RP 341A Update (Diesel Additive Functionality Groups & Winter Operability Guidelines)**
Chairman: Brian Liimatta, Cummins, Inc., (812) 447-0551
This Task Force will update RP 341A, which provides information on the basic types and functions of diesel fuel additives, as well as information on diesel fuel winter operability.

**RP 317B Update (Fuel Filtration and Water Separating Devices)**
Chairman: Brian Liimatta, Cummins, Inc., (812) 447-0551
This Task Force will update RP 317B, which provides guidelines on how to best specify a fuel/water separating device.

**RP 367 Update (Fuel Filters: Complaint, Cause, Correction)**
Chairman: Brian Liimatta, Cummins, Inc., (812) 447-0551
This Task Force will update RP 367, which provides guidelines on troubleshooting fuel filters in commercial vehicles.

**Coolants for Electric Vehicles**
Chairman: Joe Long, PEAK Commercial & Industrial, (203) 648-2849
This Task Force will evaluate the use of coolants on Commercial Electric Vehicles (EVs) and develop information reports and/or RPs based upon those considerations.

**Lubrication for Electric Vehicles**
Chairman: R. McDonald, Cox Automotive, rmcondald@coxautoinc.com
This Task Force will evaluate the use lubricants on Commercial Electric Vehicles (EVs) and develop information reports and/or RPs based upon those considerations.

**Leak Detection Guidelines for Electric Vehicles**
Chairman: Mark Hawkins, Redline Detection, (714) 919-7704
This Task Force will evaluate methods for testing and detection of leaks in the powertrains of commercial Electric Vehicles (EVs) and develop information reports and/or RPs based upon those considerations.

**S.4—Cab & Controls**

**RP Updates (S.4)**
Chairman: Andrew Krum, Va. Tech Transportation Institute, (540) 231-0353
This Task Force will review existing S.4 Recommended Practices and update them as needed.

**RP 404B Update (Truck and Truck Tractor Access Systems)**
Chairman: Andrew Krum, Va. Tech Transportation Institute, (540) 231-0353
This Task Force will review and update RP 404B, “Truck and Truck Tractor Access Systems.”

**RP 420B Update (Minimum Service Life Requirements for Heavy-Duty HVAC Cab Controls)**
Chairman: Brett Herrmann, Bergstrom, Inc., (612) 874-7821
This Task Force will review and update RP 420B, covering the Minimum Service Life Requirements for Heavy-Duty HVAC Cab Controls.

**RP 430 Update (Guidelines for Collision Warning)**
Chairman: Mark Kennedy, Knight-Swift Transportation, (602) 477-7177
This Task Force will update TMC RP 430, which covers collision warning systems used on heavy-duty trucks.

**RP 442A Update (Standardization of Speedometer and Tachometer Signaling)**
Chairman: Geoff Selby, D&D Instruments, (612) 378-1224 Ext. 31
This Task Force will review and revise RP 442 covering standard signal frequencies for speedometers and tachometers.

**RP 443 Update (In Cab Cleaning and Deodorizing Guidelines)**
Chairman: Mark Winchell, Whiting Systems, Inc., (501) 951-0682
This Task Force will review and revise RP 443 as needed, with a focus on sanitizing and bedbug control.

**Conversion of Rear View Mirrors to Cameras**
Chairman: Brian Kujala, Hadley Products, (616) 249-8496
This Task Force will develop a recommended practice regarding installation of cameras to replace rear view mirrors in truck-tractors.

**In Cab Gas Detectors**
Chairman: Kirk Altrichter, The Kenan Advantage Group, (330) 409-2122
This Task Force will develop a recommended practice regarding equipment to detect carbon monoxide (CO) and smoke in the cab of a truck-tractor.

**Odometer Synchronization**
Chairman: Geoff Selby, D&D Instruments, (612) 378-1224, Ext. 31
This Task Force will develop a new Recommended Practice regarding synchronization of the mileage readings of new/replacement odometers with various in-cab devices that record vehicle mileage.

**RP 417/435 (Tractor-to-Trailer/Trailer-To-Dolly Air Lines) Update**
Chairman: Bruce McKie, Tectran, (716) 780-1996
This Task Force will update RP 417 regarding pneumatic tractor-trailer and trailer to dolly hookup lines and RP 435, offers installation and inspection guidelines for coiled and straight pneumatic tractor-to-trailer hookup lines.

**RP 404B Update (Truck and Truck Tractor Access Systems)**
Chairman: Andrew Krum, Va. Tech Transportation Institute, (540) 231-0353
This Task Force will review RP 404B, “Truck and Truck Tractor Access Systems.”

**S.5—Fleet Maintenance Management**

**VMRS Codes**
Chairman: Paul Moszak, MOTOR Information Systems, (585) 789-1691
The VMRS Codes Task Force’s purpose is to explain the benefits and to foster the use of the Vehicle Maintenance Reporting Standard (VMRS) system. The Task Force also encourages the exchange of information and user problems between VMRS system users and establishes new parts codes as requested.
Task Force Descriptions

**RP Updates (S.5)**
Chairman: Paul Birkenstock, New Market Sales, (516) 241-2213
This Task Force will review existing S.5 Recommended Practices and update them as needed.

**Cybersecurity Issues**
Chairman: Mark Zachos, DG Technologies, (248) 488-2080
This Task Force will explore preventive cybersecurity methods; develop guidelines for fleets to create their own cybersecurity program; standardize over-the-air ECM programming through specific protocols that allow for fail safe options and secure messaging; work with other associations to strengthen related standards by fleet user influence; examine the development of a reporting and responding alert program for industry users; and examine the possibility of developing a cyber-intrusion challenge track as part of the TMCSuperTech competition.

**RP 518A Update (Fuel Station Planning)**
Chairman: Dan Martin, Dual Green Consulting, (512) 705-3113
This Task Force will review and revise the Recommended Practice RP 518A providing guidelines for designing and working with fueling stations.

**Technical Apprentice Standards**
Chairman: Arica Jackson, UPS, (804) 743-8448
The purpose of this task force is to start assembling information on the potential for standardizing technician apprenticeship programs. The group is a collaborative effort involving representatives from several TMC Study Groups and Committees including: Educator, Professional Technician Development, S.5 Fleet Maintenance Management and S.16 Service Provider.

**Hiring Military Personnel**
Chairman: Travis Wynes, Mobile Transportation Service, (770) 568-4284
This Task Force is investigating pathways of hiring former military personnel to ease the current industry technician shortage.

**Technician Training for Advanced Driver Assistance Systems (ADAS)**
Chairman: Amanda Schuier, Jetco Delivery Inc., (713) 678-6426
This Task Force will develop guidelines for the training of technicians to support the maintenance and repair of Advanced Driver Assistance Systems (ADAS)

**ADAS Nomenclature (S.5/S.18)**
Chairman: Amanda Schuier, Jetco Delivery Inc., (713) 678-6426
This Task Force will develop guidelines for common nomenclature for Advanced Driver Assistance Systems (ADAS), as utilized in medium- and heavy-duty commercial vehicles.

**Health Ready Components Standards**
Chairman: Wally Stegall, The Morey Corp., (630) 842-0489
This Task Force will develop a recommended practice regarding the use of VMRS codes in developing data sheets for health ready componentry in conjunction with SAE International Health Ready Component Signaling practice.

**RP 511/520 Updates (Refrigerant Recovery/AC Refrigerant Flushing)**
Chairman: Travis Wynes, Mobile Transportation Service, (770) 568-4284
This Task Force will jointly review RPs 511 and 520 to reflect current technologies and requirements.

**Root Cause Analysis**
Chairmen: J. Grubaugh, Autocar Truck, (765) 220-0155; M. Parnitzke, Association for Commercial Equipment Solutions
This Task Force will develop a Recommended Practice for Root Cause Analysis for fleet maintenance operations.

**Electric Vehicle Pre-trip Inspection**
Chairman: M. McDonald, Benore Logistics Systems, (610) 360-5208
This Task Force will develop guidelines for pre-trip inspection procedures on electric commercial vehicles.

**Electric Vehicle Shop Bay Planning**
Chairman: Adam Krey, Navistar, Inc., (331) 332-8626
This Task Force will develop guidelines for electric vehicle shop bay planning.

**Cost Benefit Analysis of Extended Warranty**
Chairman: Ivy Abernathy, U.S. Xpress Enterprises, (423) 653-3090
This Task Force is developing guidelines for analyzing the cost benefits of extended warranty plans for commercial vehicles.

**Parts Room Design Standardization**
Chairman: Wayne Skinner, Ozark Motor Lines, (901) 427-2163
This Task Force is developing guidelines for standardizing parts room design.

**S.6—Chassis & Brake Systems**

**RP Updates (S.6)**
Chairman: Jack Vander Giessen, Meritor, Inc., (248) 761-3881
This Task Force will review existing S.6 Recommended Practices and update them as needed.

**RP 624B Update (Lubricant Fundamentals)**
Chairman: Donna Mosher, BASF Corp., (281) 217-1715
This Task Force will review and update RP 624B, which describes how all types of heavy-duty vehicle lubricants are manufactured and classified.

**RP 628C Update (Aftermarket Brake Lining Classification)**
Chairman: Ron Moody, Haldex Brake Products, (ron.moody@haldex.com)
This Task Force will review and update RP 628C, which provides information for judging the performance of aftermarket brake linings on air-actuated foundation brakes.

**RP 648 Update (Troubleshooting Ride Complaints)**
Chairman: Steve Williams, Dayton Parts, Inc., (813) 847-5590
This Task Force is updating RP 648, which offers guidelines on troubleshooting ride complaints.

**Wheel End Thermal Events (S.6/S.7)**
Chairman: Joey Young, Publix, (863) 688-1188
This Task Force is conducting research to establish guidelines for investigation and correction of wheel end thermal events.

**RP 652 Update (Service and Inspection of Air Disc Brakes)**
Chairman: Jack Vander Giessen, Meritor, Inc., (248) 761-3881
This Task Force will update recommendations for the inspection and maintenance of air disc brakes.

**Towing Electric Vehicles**
Chairman: Jack Vander Giessen, Meritor, Inc., (248) 761-3881
This Task Force will develop a Recommended Practice covering guidelines for the towing of electric commercial motor vehicles.

**S.7—Trailers, Bodies & Material Handling**

**RP Updates (S.7)**
Chairman: Jeff Updike, Stoughton Trailers, (608) 873-3090
This Task Force will review existing S.7 Recommended Practices and update them as needed.
Van Trailer Washing Procedures and Testing  
Chairman: Mark Winchell, Whiting Systems, Inc., (501) 951-0682  
This Task Force will develop a recommended practice for washing van trailers and testing the efficacy of wash practices.

Wheel End Thermal Events (S.6/S.7)  
Chairman: Joey Young, Publix, (863) 688-1188  
This Task Force is conducting research to establish guidelines for investigation and correction of wheel end thermal events.

Brake-Activated Pulsating Lamps  
Chairman: J. Davenport, Peterson Manufacturing, (816) 765-2000  
This Task Force will develop recommendations regarding specifications, installation, and maintenance of supplemental, pulsating brake lamps on trailers.

Upper Coupler and Kingpin Repairs  
Chairman: David Pacacha, LSR, LLC, (407) 769-6953  
This Task Force will develop guidelines for the inspection and maintenance of upper couplers and kingpins on trailers.

RP 755A Alternative Liftgate & Material Handling Charging Methods  
Chairman: Larry Rambeaux, Purkeys, (479) 419-4800  
This Task Force is updating RP 755A which covers alternative liftgate and material handling charging methods. The scope of this Task Force will also include the evaluation of all trailer power alternatives.

Exploring Trailer Voltage Drop for Current & Future Demands  
Chairman: Gary Gaussoin, Silver Eagle Manufacturing Co., (503) 325-2114  
This Task Force will examine voltage drop in trailer applications and develop information reports or recommended practices based on these findings.

S.11—Sustainability & Environmental Technologies  
RP Updates (S.11)  
Chairman: Amy Winfield, Suburban Seating and Safety, (973) 778-9227  
This Task Force will review existing S.11 Recommended Practices and update them as needed.

SmartWay Activities  
Chairman: Kenneth Marko, US Foods, (940) 597-7508  
This Task Force will present an ongoing series of informational presentations regarding EPA SmartWay’s Greenhouse Gas Emissions Model (GEM) for medium- and heavy-duty vehicle compliance.

Energy Conservation and Sustainability Update  
Chairman: Kenneth Marko, US Foods, (940) 597-7508  
This Task Force will develop position papers that will challenge industry to implement change in practices and performance as it relates to energy conservation.

Electric Terminal Tractor Implementation Considerations  
Chairman: Patrick Seeberg, Meritor, Inc., (248) 435-1382  
This Task Force will develop a recommended practice on implementation options for terminal tractors equipped with electric powertrains.

RP 1109B Update (Type IV Fuel Economy Test Procedures)  
Chairman: Brian Wilson, Southwest Research Institute, (210) 522-3873  
This Task Force will update RP 1109B, Type IV Fuel Economy Test Procedures.

Understanding Electric Vehicle Efficiency Performance  
Chairman: Kevin Otto, Retired Silver Spark Plug, (812) 447-3911  
This Task Force will develop guidelines for methodologies to assess the efficiency of commercial Electric Vehicles (EVs).

Recommendations for Charging Station Infrastructure for Commercial Fleet Operations  
Chairman: J. Miller, Citgo Petroleum, (980) 309-8385  
This Task Force will develop guidelines for design and maintenance of infrastructure to support electric commercial vehicle fleet maintenance operations.

Fleet Expectations and Guidelines for Spec’ing EVs  
Chairman: Patrick Seeberg, Meritor, Inc., (248) 435-1382  
This Task Force will develop guidelines to assist fleets in selecting and specifying Electric Vehicles for Commercial Operations.

TCO Calculator for Electric Vehicles  
Chairman: Kenneth Marko, US Foods, (940) 597-7508  
This Task Force is developing a total cost of ownership calculator for electric vehicles.

Charge Cycle Optimization and Energy Management for Battery Electric Vehicles  
Chairman: Z. Ruderman, Orange EV, (765) 702-6398  
This Task Force is developing guidelines for charge cycle optimization and energy management for battery electric vehicles.

Energy Efficiency Test Procedures for Electric Vehicles  
Chairman: Brian Wilson, Southwest Research Institute, (210) 522-3873  
This Task Force will develop energy efficiency test procedures for electric vehicles.

Energy Efficiency Test Procedures for Electric Vehicles  
Chairman: Brian Wilson, Southwest Research Institute, (210) 522-3873  
This Task Force will develop energy efficiency test procedures for electric vehicles.

S.12—On-Board Vehicle Electronics  
RP Updates (S.12)  
Chairman: Kurt Dunn, PIT OHIO, (412) 350-8691  
This Task Force will review existing S.12 Recommended Practices and update them as needed.

RP 1226 Messaging Standardization  
Chairman: Ken DeGrant, LHP Engineering Solutions, (859) 358-1485  
Wally Stegall, The Morey Corp., (630) 842-0489  
Ben Gardiner, NMFTA, (613) 286-7781  
This Task Force is developing a total cost of ownership calculator for electric vehicles.

Open Telematics API  
Chairman: Sean Bumgarner, Old Dominion Freight Line Inc., (336) 822-1260  
This Task Force will develop a Recommended Practice for standardized Open Telematics API for retrieving telematics logs and data, utilizing a schema developed by the National Motor Freight Traffic Association (NMFTA) Inc.

CAN Bus Troubleshooting  
Chairman: Ken DeGrant, LHP Engineering Solutions, (859) 358-1485  
This Task Force will develop guidelines for troubleshooting CAN Bus issues.

FOR MORE INFORMATION, VISIT TMCANNUAL.TRUCKING.ORG
Task Force Descriptions

Open Wireless VDA API
Chairman: Ken DeGrant, LHP Engineering Solutions, (859) 358-1485
This Task Force will develop a Recommended Practice for standardized Open Wireless VDA API.

S.14 — Last Mile & Vocational Vehicles

RP Updates
Chairman: Larry Disque, Leyman Liftgates, (336) 210-2604
This Task Force will review existing S.14 Recommended Practices and update them as needed.

Lumen Rating Definitions for White LED Worklamps
Chairman: Jay Davenport, Peterson Manufacturing Company, (816) 765-2000
This Task Force will develop a Recommended Practice to define lumen ratings for white LED worklamps.

Vocational Duty Cycles for Aftermarket Systems
Chairman: Kenneth Calhoun, Altec Industries, kenneth.calhoun@alte.com
This Task Force will develop guidelines regarding duty cycles for various aftermarket systems used in vocational vehicles.

VMRS Code Development for Specialty Vehicles
Chairman: Robert Nordstrom, Decisiv, Inc, (804) 762-4153
This Task Force will work with the TMC VMRS Codes Committee (S.5) to identify and develop new categories pertaining to Specialty Vehicle equipment and systems.

Class 2-6 Electric Vehicle Inspection Standards
Chairman: J. Massicotte, Diesel Forward, (630) 742-7905
This Task Force is developing Class 2-6 electric vehicle inspection standards.

ePTO and Hybrid Auxiliary Power Systems in Vocational Vehicles
Chairman: Kenneth Calhoun, Altec Industries, kenneth.calhoun@alte.com
This Task Force will explore application of electric PTOs and hybrid auxiliary power trains to work-performing platforms/systems in Class 2-6 and vocational vehicles.

S.16 — Service Provider

RP Updates
Chairman: Homer Hogg, Travel Centers of America, (520) 252-2731
This Task Force will review existing S.16 Recommended Practices and update them as needed.

Electric Vehicle Shop Bay Planning (Joint S.5/S.16)
Chairman: Adam Krey, Navistar, Inc, (331) 332-8626
This Task Force will develop guidelines for electric vehicle shop bay planning.

Implementing TMC RPs in Fleet and Service Provider Operations
Chairman: Jill Gingrich, Wheeltime Network, (313) 475-3135; Doug Will, STEMCO, (267) 719-5127
This Task Force will develop guidelines for implementing/utilizing TMC recommended practice in fleet and service provider operations.

Proper Vehicle Lifting Procedures and Equipment
Chairman: Radu Pop, Stertil-Koni, (470) 717-3127
This Task Force will develop recommended practices to help shop managers choose the correct types of lifting equipment for their type of maintenance operations, and general safety, productivity, and ergonomic considerations.

Digital Data Exchange and Management (469) 801-2510
Chairman: Daniel Mustafa, TravelCenters of America, (331) 206-2697
This Task Force will develop a Recommended Practice to help Service Providers effectively use digital information to plan and complete service or maintenance events in the most efficient manner possible.

When to Trade or Keep a Vehicle (S.5/S.16)
Chairman: Matt Jablon, DTNA, (713) 213-2999
This Task Force will work to develop a resource to guide managers and leaders through the process of determining if a vehicle should be traded, sold or continue in operation.

Safety Aspects of Electric Vehicles
Chairman: Chas Voyles, Navistar, (260) 227-1377
This Task Force is developing guidelines for safety aspects of electric vehicles.

S.17 — Collision & Corrosion Control

Cab and Controls Corrosion Control
Chairman: Tim May, Minimizer, (507) 774-9292
This Task Force will develop guidelines for dealing with corrosion as it relates to cab and control systems.

Corrosion of Non-Ferrous Materials on Chassis and Suspension
Chairman: Brian Herrington, Haldex Brake Products Corp, (216) 970-4066
This Task Force will investigate the impact of corrosion on rubber on chassis and suspension components.

Corrosion Manual Update
Chairman: Dan Szczepanik, Sherwin-Williams, (216) 332-8513
This Task Force will update the TMC Corrosion Manual

Refinishing to Maximize Adhesion
Chairman: Jim Kolea, Penn Fleet Corp, (610) 940-1507 Ext. 201
This Task Force will develop recommendations for Heavy Duty Collision Repairs (HDCR) to improved paint and coatings adhesion during the refinishing operation.

Heavy-Duty Collision Repair Roadmap
Chairman: J. Worden, Nussbaum Transportation Services, (309) 319-9262
This Task Force will develop a roadmap/flowchart for the steps needed to take a truck or trailer involved in a collision and make it road ready and safe for service. The flowchart will consider safety, cost and equipment utilization, and identify areas for future Task Force development.

Frame Correction
Chairman: J. Worden, Nussbaum Transportation Services, (309) 319-9262
This Task Force will develop guidelines and practices for fleets and collision repair operations to return damage frames to proper specifications in order for the vehicle to function safely.

S.18 – Automated & Electric Vehicles

Platooning
Chairman: Richard Bishop, Richard Bishop Consulting, (443) 695-3717
This Task Force is exploring the need for recommended practices and developing a position paper on platooning truck technologies.

Automated Vehicles
Chairman: Wolfgang Hahn, ZF Group, wolfgang.hahn@zf.com
This Task Force is exploring the need for recommended practices, information reports and/or position papers on medium- and heavy-duty automated trucks.
**Automated Truck Inspection and Enforcement**
Chairman: Daniel Goff, Kodiak Robotics, Inc., (646) 515-3933
This Task Force will develop guidelines for maintenance and safety inspections for automated medium- and heavy-duty commercial trucks including compliance with North American Standard Out-Of-Service criteria.

**ADAS Nomenclature (Joint with S.5)**
This Task Force will develop guidelines for common nomenclature for Advanced Driver Assistance Systems (ADAS), as utilized in medium- and heavy-duty commercial vehicles.

**ADAS Selection and Specification**
Chairman: Kyle Mitchell, Maverick Transportation, (501) 955-1660 Ext. 1660
This Task Force will develop guidelines to assist fleets in selecting and specifying Advanced Driver Assistance Systems (ADAS) for various operational and vocational applications.

**Trailer Spacing for Automated Vehicles**
Chairman: Paul Sniegocki, Clarience Technologies (716) 661-1122
This Task Force is developing guidelines for trailer spacing for automated vehicles.

**Technician & Maintenance Shop Requirements for Automated Vehicles**
Chairman: Kyle Mitchell, Maverick Transportation, (501) 955-1660 Ext. 1660
This Task Force is developing technician and maintenance shop requirements for automated vehicles.

**Technician & Educator Committee**

**Technician/Student Skills Competition**
Chairman: Randy Patterson, Bridgestone Comm. Solutions, (601) 209-1946
This Task Force is developing procedures for implementing a national technician and student skills contest under the auspices of TMC.

**Future Technician Scholarships**
Chairman: Erin Brennan, Goodheart-Wilcox, (518) 852-3721
This Task Force is examining means of establishing technician scholarship programs.

**Fostering State Trucking Association Competitions**
Chairman: Bonne Karim, Retired Silver Spark Plug, (405) 641-5241
This Task Force is examining means of establishing state trucking association competitions for technician excellence that participate in TMCSuperTech.

**Educator Involvement**
Chairman: George Arrants, ASE Education Foundation, (281) 850-1676
This Task Force will develop recommendations for increasing educator involvement in ATA's Technology & Maintenance Council.

**NATMI Curriculum Advisory**
Chairman: Robert Braswell, TMC, (703) 638-1776
This Task Force will develop recommendations and materials for the curriculum of the North American Transportation Management Institute’s (NATMI) Certified Director/Supervisor of Maintenance programs.

**Progression from Technician to Instructor**
Chairman: George Arrants, ASE Education Foundation, (281) 850-1676
This Task Force will develop recommendations for progressing technicians to instructors for technician school programs.

**Entry-Level Technician Training for Electric Vehicles**
Chairman: David Alef, Meritor, Inc., (925) 303-0586
This Task Force will develop guidelines for the training of technicians to support electric commercial vehicle fleet maintenance operations, and for training requirements for electric vehicles in technician school curriculum programs.

**Future Truck Committee**

**Future Electrical/Electronic Systems**
Chairman: Al Lesesky, Vehicle Enhancement Systems, (440) 241-3598
This Task Force keeps abreast of the latest in heavy-duty electrical systems and explores new and emerging electrical/electronic system technologies. The Task Force then makes these new technologies known to TMC members and provides information on benefits and possible problems and solutions.

**Future Tire Durability & Reliability**
Chairman: Dan Shy, The Goodyear Tire and Rubber Co., (330) 283-3817
This Task Force will attempt to discover causes and solutions to problems that limit tire durability and reliability in order to reduce tire operating costs. All causes of tire failures, including operation hazards, maintenance problems, manufacturing defects, retread & repair errors, will be addressed.

**Future Cab and Driver Interface**
Chairman: John Adami, NW Heavy Duty Component Sales, (425) 633-4309
This Task Force keeps abreast of the latest issues and information affecting the tractor and the driver. At present it is dealing with driver interface issues.

**Future Trailer Productivity**
Chairman: Chris Lee, Great Dane, (912) 644-2250
The Future Trailer Task Force keeps TMC members abreast of the latest in trailer technology, including aerodynamics, and addresses feasibility of new trailer technologies.

**Future Energy Conservation (S.11/FT)**
Chairman: Kenneth Marko, US Foods, (940) 597-7508
This Task Force will develop position papers challenging industry to implement change in practices/performance relating to energy conservation.

**Future Chassis and Brake Systems**
Chairman: Eric Benge, Walmart Transportation, (479) 277-9855
The purpose of this Task Force is to develop position papers and information reports that will challenge industry to implement changes in practices and performance as it relates to chassis and brake systems.

**Future Virtual/Augmented Training**
Chairman: Matt Johnston, Design Interactive, (703) 578-1544
This Task Force will explore the application of virtual/augmented training simulation software to commercial vehicle maintenance.

**Future Integrated Vehicle Health Management**
Chairman: Wally Stegall, The Morey Corp., (630) 842-0489
This Task Force will explore how the information from health ready componentry can be shared and integrated into systems for prognostic maintenance as well as for demonstrating regulatory compliance for advanced technology vehicles.
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