BEYOND THE FRONTIER OF MAINTENANCE

Georgia World Congress Center
Atlanta • March 18-21, 2019

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

For more information, visit: http://tmcannual.trucking.org
Going **Beyond the Frontier of Maintenance** at TMC’s 2019 Annual Meeting & Transportation Technology Exhibition!

Comprised of a broad collection of experienced fleets, equipment suppliers and service providers, TMC is the only industry association focused solely on truck technology and maintenance. Using their real world experience, members work together to create the industry’s best practices in truck technology and maintenance to help improve trucking equipment and transportation efficiencies throughout North America.

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.

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 60 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 & 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. Everyone is welcome at TMC’s 2019 Annual Meeting & Transportation Technology Exhibition!

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.
- **Witness** and 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 Advanced Technology Pavilion; and our expanded “Technology Showcase,” a new hands-on dimension of the exhibition (see page 15 for details).
- **Participate** in TMC’s Future Truck Initiative. As the only industry association focused solely on truck technology and maintenance, TMC and its member companies work together with OEMs to create the industry’s benchmarks for future truck technology and equipment that help ensure that the truck of tomorrow is one that is the most efficient to operate and maintain.
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!

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

Where else can you get access to all this information? And 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 10 educational sessions
- Shop Talk/Fleet 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 going beyond the frontier of maintenance, and we look forward to seeing you in Atlanta this March!

“Honestly, TMC can be overwhelming to a new member. The (TMC of Tomorrow or ToT) program can make new membership an enjoyable and rewarding experience,” said Chuck Kerr, Fleet Maint. Programs Advisor, FedEx Freight.
**Saturday, March 16**
- 3 - 8 pm: Exhibit Setup
- Noon - 6 pm: Press Conferences

**Sunday, March 17**
- 8 am - 5 pm: Exhibit Setup
- 9 - 10 am: Strategic Planning Committee Meeting (Closed)
- 10 am - Noon: Future Truck Committee Meeting
- 10 am - Noon: Member Outreach Committee Meeting
- 11 - 11:30 am: New Directors Meeting (Closed)
- 11 am - Noon: Future Truck Task Force Leadership Meeting (Closed)
- 11 am - Noon: Professional Technician Development Committee Meeting
- 11:30 am - Noon: TMC Officers Meeting (Closed)
- 12:15 - 2:15 pm: Study Group and Meeting Planning Committee Meetings (Closed)
- 2:30 - 4:30 pm: Board of Directors Meeting (Closed)
- 3 - 5 pm: Sergeant-at-Arms and Meeting Mechanics Meetings (Closed)
- 4 - 5 pm: Secretaries Meeting
- 4:30 - 5 pm: Mentor Meeting
- 4:30 - 5 pm: New Board Mtg./Officers’ Election (Closed)
- 5 - 6 pm: Recognized Associates Meeting (Closed)
- 6 - 7 pm: TMC First Timer Welcome Reception
- 7 - 10 pm: CCJ Fleet Executive Career Leadership Reception & Dinner (By Invitation Only)

**Monday, March 18**
- 6:45 am - 7:30 pm: Registration Kiosks/Welcome Desk Open
- 7 - 8 am: Study Group Leadership Breakfast Meetings (Closed)
- 7 am - Noon: Exhibit Setup
- 7 - 7:30 am: First Time Attendees and New Member Orientation (morning session)
- 8 am - 4 pm: Task Force Meetings
- 3 - 3:30 pm: First Time Attendees and New Member Orientation (afternoon session)
- 4 - 5 pm: Fleet Talk
- 4 - 5 pm: Full Associates Meeting (Associates Only)
- 5:15 - 6:45 pm: Fleet Operators’ Forum/Town Meeting
- 7 - 9:30 pm (2.5 hours): Exhibition Grand Opening and Reception

**Tuesday, March 19**
- 6:45 am - 5 pm: Registration Kiosks/Welcome Desk Open
- 6:45 - 8:15 am: TMC Kickoff Breakfast
  - Featured Speaker: Marc Bedard, president and founder, The Lion Electric Company
- 8:30 - 10 am: Technical Session #1: Justifying, Implementing & Maintaining Active Safety Systems
- 10:15 am - 2:15 pm (4 hours): Walk-Around Luncheon, Coffee Break and Exhibition Viewing
- 2:30 - 4 pm: Study Group Sessions:
  - S.1 Electrical
  - S.2 Tire & Wheel
- 4 - 4:30 pm: Study Group Business Sessions
  - (no educational sessions):
    - S.6 Chassis & Brake Systems
    - S.11 Sustainability & Environmental Technologies
    - S.16 Service Provider
    - S.17 Corrosion Control
    - S.18 Automated & Electric Vehicles
    - Educator Committee
- 4:45 - 6:15 pm: Study Group Sessions:
  - S.4 Cab & Controls
  - S.12 Onboard Vehicle Electronics

**Wednesday, March 20**
- 6:30 am - 5 pm: Registration Kiosks/Welcome Desk Open
- 7 - 8:30 am: Shop Talk & Fleet Operators’ Forum Wrap-up
- 8:30 am - 12:30 pm (4 hours): Final Exhibit Period & Walk-Around Breakfast
  - TMC Technology Showcase: 10 am - Noon
  - Daytona and Bingo Card Prize Drawings take place between Noon and 12:30 pm
- 12:30 - 5 pm: Exhibit Teardown
- 12:45 - 2:15 pm: TMC Industry Awards Luncheon
- 2:30 - 4 pm: Technical Session #2: TMC/SAE Symposium—The Coming Impact of the New 21st Century Truck Partnership Initiative
- 4:15 - 5:45 pm: Study Group Sessions:
  - S.3 Engine
  - S.7 Trailers, Bodies & Material Handling
- 6:15 - 7:15 pm: Silver Spark Plug & General Chairman’s Reception (Closed)
- 7 - 10:30 pm: Annual Reception/Banquet

**Thursday, March 21**
- 6 - 7 am: Buffet Breakfast
- 7 am - Noon: Registration Kiosks/Welcome Desk Open
- 7 am - 5 pm: Exhibit Teardown
- 7 - 8:30 am: Study Group Sessions:
  - S.5 Fleet Maintenance Management
  - S.14 Light-, Medium- & Specialty Vehicles
- 8:30 - 8:45 am: Coffee Break
- 8:45 - 10:15 am: Management Session 1: Preparing Powerful Business Presentations
- 10:30 am - Noon: Technical Session #3: International Forces Driving Electric Vehicle Standardization
- 12:15 - 1:15 pm: Administrative Wrap-up Meeting (Closed)
- 1:30 - 2:30 pm: Board of Directors Meeting (Closed)
**Annual Meeting Schedule Overview**

**SUNDAY**
- Sunday, March 17 is 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 the afternoon of Saturday, March 16, and during specified exhibit viewing times on Monday, March 18 and Tuesday, March 19 — if needed.
- A special reception will be held Sunday evening for First Time attendees!

**MONDAY (Meeting Officially Starts)**
- Monday, March 18 is Task Force Day.
- TMC Task Forces are held from 8 am - 4 pm.
- First Timer orientations held at 7 am and 3 pm.
- Monday concludes with TMC’s Town Meeting/Fleet Operators’ Forum and TMC’s Exhibit Grand Opening.

**TUESDAY**
- Educational Sessions begin Tuesday, March 19.
- 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 on Wednesday, March 20.
- 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.
- TMC’s new Technology Showcase is featured Thursday morning from 10 am to Noon.
- Industry Awards Luncheon takes place from 12:45 – 2:15 pm.
- Our Annual Reception and Banquet will take place Wednesday evening.

**THURSDAY**
- Educational Sessions continue Thursday morning, March 21.
- Meeting concludes with TMC’s Technical Session 3, entitled “International Forces Driving Electric Vehicle Standardization.”

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**TMC Returns to ATLANTA**

Join us in Atlanta for TMC’s 2019 Annual Meeting & Transportation Technology Exhibition. We’re returning for year two of a three-year engagement at the Georgia World Congress Center, which runs through 2020.

**TMC of Tomorrow**

The TMC 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 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 Competition.

Candidates have to be nominated by a direct supervisor or company executive who must complete a TMC 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 2019 Annual Meeting will celebrate the graduation of our first TMC of Tomorrow class at our Monday evening Town Meeting. Two other classes in training will also meet during TMC’s 2019 Annual Meeting. Schedule details will be sent directly to class members prior to the event.
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<tr>
<th>Task Force</th>
<th>Chairman</th>
<th>Schedule</th>
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<tr>
<td><strong>S.1 Electrical—Chairman: Chris Disantis</strong></td>
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<tr>
<td>Future Electrical/Electronic Systems (Joint Future Truck/S.1)</td>
<td>A. Lesesky</td>
<td>8 – 9 am</td>
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<tr>
<td>RP Updates (S.1)</td>
<td>A. Mihic</td>
<td>9 – 9:30 am</td>
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<tr>
<td>Fifth Wheel Ground Strap Installation Guidelines</td>
<td>A. Puckett/L. Rambeaux</td>
<td>9:30 – 10 am</td>
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<tr>
<td>Electrical Infrastructure Safety and Interoperability for High-Power Electrical Refrigeration</td>
<td>M. Srnec</td>
<td>10 – 10:30 am</td>
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<tr>
<td>High-Voltage Cable for Heavy-Duty Truck-Tractor Wiring Systems</td>
<td>F. Kelley</td>
<td>10:30 – 11 am</td>
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<tr>
<td>Non-Connector Based Wiring Repairs</td>
<td>B. Purkey</td>
<td>11 am – Noon</td>
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<tr>
<td>RP 110C Update (Low-Tension Cable For Heavy-Duty Truck-Tractor Wiring Systems)</td>
<td>F. Kelley</td>
<td>1 – 1:30 pm</td>
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<tr>
<td>Troubleshooting 12-Volt Cranking and Charging Systems</td>
<td>J. Brakley/D. Cox</td>
<td>1:30 – 2 pm</td>
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<tr>
<td>Diagnostics Related to Lightning Strikes</td>
<td>C. Disantis</td>
<td>2 – 2:30 pm</td>
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<td><strong>S.2 Tire &amp; Wheel—Chairman: Mitch Windorff</strong></td>
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<tr>
<td>Tire Asset Management (Cradle to Grave)</td>
<td>J. Ricapito</td>
<td>8 – 9 am</td>
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<tr>
<td>RP Updates (S.2)</td>
<td>P. Fisher</td>
<td>10 – 11:30 am</td>
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<tr>
<td>Tire Shop Tools and Procedures</td>
<td>R. Patterson</td>
<td>11:30 am – Noon</td>
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<tr>
<td>Specification of Tires for Heavy-Duty Electric Vehicles</td>
<td>J. Mueller</td>
<td>1 – 2 pm</td>
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<tr>
<td>Repolishing Aluminum Wheels</td>
<td>C. Bartley</td>
<td>2 – 3 pm</td>
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<tr>
<td>Driver Pocket Guide for Tires and Wheels</td>
<td>P. Fisher</td>
<td>3 – 4 pm</td>
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<tr>
<td><strong>S.3 Engine—Chairman: Radu Mihai</strong></td>
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<tr>
<td>RP Updates (S.3)</td>
<td>P. Cigala</td>
<td>8 – 9 am</td>
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<tr>
<td>RP 371 Update (LNG/CNG)</td>
<td>D. Martin</td>
<td>9 – 10 am</td>
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<tr>
<td>RP 338 Update (Extended Service Interval Coolants)</td>
<td>R. Schornstein</td>
<td>10 – 10:30 am</td>
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<tr>
<td>LNG/CNG Thermal Events</td>
<td>D. Martin/M. Louzon</td>
<td>10:30 – 11:30 am</td>
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<tr>
<td>RP 326 Update (Recycled Engine Coolant)</td>
<td>G. Mixon</td>
<td>11:30 am – Noon</td>
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<tr>
<td>RP 364 Update (Fleet Purchasing Specification for Organic Acid Technology Extended Life Coolant)</td>
<td>P. Woyciesjes</td>
<td>1 – 2 pm</td>
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<tr>
<td>Guidelines for Diesel Particulate Filter Cleaning</td>
<td>W. Juchno/B. Balfour</td>
<td>2 – 3 pm</td>
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<tr>
<td>Smoke Detection Guidelines</td>
<td>M. Hawkins</td>
<td>3 – 4 pm</td>
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<tr>
<td><strong>S.4 Cab &amp; Controls—Chairman: Mark Kennedy</strong></td>
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<tr>
<td>RP Updates (S.4)</td>
<td>J. Adami</td>
<td>8 – 8:30 am</td>
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<tr>
<td>RP 414B Update (Truck A/C Specification Sheet)</td>
<td>A. Moutanovsky</td>
<td>8:30 – 9 am</td>
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<tr>
<td>RP 401C Update (Location and Operation of Instruments and Controls in Motor Truck Cabs)</td>
<td>G. Paletti</td>
<td>9 – 10 am</td>
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<tr>
<td>RP 430 Update (Guidelines for Collision Warning)</td>
<td>B. Wilkerson</td>
<td>10 – 11 am</td>
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<tr>
<td>RP 443 Update (In-Cab Cleaning &amp; Deodorizing Guidelines)</td>
<td>M. Winchell</td>
<td>11 am – Noon</td>
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<tr>
<td>Power Management Strategies for In-Cab (CPAP) Medical Devices</td>
<td>J. Fielding</td>
<td>Noon – 12:30 pm</td>
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<tr>
<td>Conversion of Rear View Mirrors to Cameras</td>
<td>M. Kennedy</td>
<td>12:30 – 1 pm</td>
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<tr>
<td>In-cab Gas Detectors</td>
<td>K. Allrichter</td>
<td>1 – 2 pm</td>
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<tr>
<td>Odometer Synchronization</td>
<td>G. Selby</td>
<td>2 – 3 pm</td>
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<tr>
<td>RP 417/423 Update (Tractor-to-Trailer Air/Electric Lines)</td>
<td>B. McKie</td>
<td>3 – 4 pm</td>
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<td><strong>S.5 Fleet Maintenance Management—Chairman: Amanda Schuier</strong></td>
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<td>RP Updates (S.5)</td>
<td>D. Weider</td>
<td>8 – 8:30 am</td>
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<tr>
<td>P 512A Update (Technician Staffing)</td>
<td>J. Cornelius</td>
<td>8:30 – 9 am</td>
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<tr>
<td>VMRS Codes Committee</td>
<td>P. Moszak</td>
<td>9 – 10 am</td>
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<tr>
<td>Developing Key Performance Indicators</td>
<td>L. Flowers</td>
<td>10 – 11 am</td>
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<tr>
<td>Cybersecurity Issues</td>
<td>M. Zachos</td>
<td>11 am – 12:30 pm</td>
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<tr>
<td>Right to Repair</td>
<td>L. Flowers</td>
<td>12:30 – 1:30 pm</td>
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<tr>
<td>Internet of Things</td>
<td>M. McGowan</td>
<td>1:30 – 3 pm</td>
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<td>Application of Social Media to Maintenance</td>
<td>B. Dunne</td>
<td>3 – 4 pm</td>
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<td><strong>S.6 Chassis &amp; Brake Systems—Chairman: Jim Boyd</strong></td>
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<tr>
<td>RP Updates (Chassis-Related RPs)</td>
<td>J. Vander Geissen</td>
<td>8 – 9 am</td>
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<tr>
<td>RP Updates (Brake-Related RPs)</td>
<td>J. Vander Geissen</td>
<td>9 – 10 am</td>
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<tr>
<td>RP 642B Update (Total Vehicle Alignment)</td>
<td>M. Lynch</td>
<td>10 – 10:30 am</td>
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<td>RP 602/626 Update (Towing Procedures)</td>
<td>J. Vander Geissen</td>
<td>10:30 – 11 am</td>
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<td>RP 614A Update (Air Brake Tubing &amp; Fittings)</td>
<td>J. Kruse</td>
<td>11 – 11:30 am</td>
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<tr>
<td>RP 608B Update (Brake Drums and Rotors)</td>
<td>G. Sturdy</td>
<td>11:30 am – Noon</td>
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<td>RP 638 Update (Heavy-Duty Clutch Maintenance)</td>
<td>J. Cordes</td>
<td>12:30 – 1 pm</td>
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<tr>
<td>Rear Suspension Inspection Procedure</td>
<td>J. Knutson</td>
<td>1 – 1:30 pm</td>
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<tr>
<td>Disc and Drum Brake Integration Issues</td>
<td>G. Sturdy</td>
<td>1:30 – 2 pm</td>
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<tr>
<td>RP 605 Update (Reconditioning Brake Shoes)</td>
<td>M. Williams</td>
<td>2 – 2:30 pm</td>
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<tr>
<td>Proper Diagnosis of S-cam Out-of-Service Criteria</td>
<td>G. Cram</td>
<td>2:30 – 3 pm</td>
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<td>RP 652 Update (Service/Inspection Air Disc Brakes)</td>
<td>R. Petresh/M. Karich</td>
<td>3 – 3:30 pm</td>
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<tr>
<td>RP 648 Update (Troubleshooting Ride Complaints)</td>
<td>J. Holman</td>
<td>3:30 – 4 pm</td>
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<td><strong>S.7 Trailers, Bodies &amp; Material Handling—Chairman: Richard Brown</strong></td>
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<tr>
<td>RP Updates (S.7)</td>
<td>H. Schneider</td>
<td>8 – 9 am</td>
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<tr>
<td>RP 746 Update (Drawbar Length)</td>
<td>C. Lee</td>
<td>9 – 9:30 am</td>
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<tr>
<td>Cryogenic Cooling Systems</td>
<td>P. Jacobsen</td>
<td>9:30 – 10 am</td>
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S.7 Trailers, Bodies & Material Handling—Chairman: Richard Brown (continued)

Heavy Haul Trailer Issues
K. Tomlinson/S. Bartlein 10 – 10:30 am
Van Trailer Washing Procedures and Testing
M. Gordon 10:30 – 11 am
RP 708C Update (Trailer Axle Alignment)
D. Cordier 1 – 2 pm

S.11 Sustainability & Environmental Technology—Chairman: Marc Clark

Terminal Tractor Powertrain Options
J. Schreiber/C. Matheis 8 – 9 am
RP 1112 Update (Lightweight Components and Fuel Economy)
C. Horpel 9 – 10 am
RP 1105 Update (Idle Limiting Systems)
B. Wilson 10 – 11 am
RP 1115 Update (Fuel Economy Benefit Claims)
S. Waltzer 11 am – Noon
Alternative Energy Implementation Elements
D. Jaskolski 1 – 2 pm
Future Energy Conservation (Joint S.11/FT Task Force in FT room)
K. Rutherford 2 – 3 pm
SmartWay Activities
D. Johnson/S. Waltzer 2 – 2:30 pm
Cost Modeling for Aerodynamic Devices
A. Winfield/D. Memering 2:30 – 3 pm

S.12 On-Board Vehicle Electronics—Chairman: Troy Jergens

RP 1226 Messaging Standardization
C. Villa 8 – 8:30 am
RP 1210C Update (Windows API)
K. DeGrant 8:30 – 9 am
Mobile Device Communication API
C. York 9 – 9:30 pm
RP 1210 Compliance
J. Bate 9:30 – 10 am
RP 1210 OEM Application Validation Testing
L. Long 10 – 10:30 am
RP Updates (S.12)
K. DeGrant 10:30 – 11 am
Electronic Logging Devices
T. Cuthbertson 11 am – Noon
Connected Vehicle
T. Cuthbertson 1 – 2 pm
Active Safety System Telematics Guidelines
L. Stumpp 2 – 3 pm

S.14 Light- & Medium-Duty / Specialty Trucks—Chairman: Paul Wion

Inspection of CMV Axle and Transmission Fluid Levels
L. Stumpp 8 – 9 am
Technician and Bucket/Utility Truck Safety
P. Wion 9 – 9:30 am
RP 1514 Update (Hydraulic System Failure Analysis)
P. Wion 10 – 11 am
RP 1412 Update (Walk-in Van Electrical System Routing/Load Requirements)
L. Stumpp 11 am – Noon
RP 1411 Update (Light- & Medium-Duty Auto Transmission Fluid Guidelines)
M. Quinn 1 – 2 pm
Work Truck Hybridization
R. Winters 2 – 3 pm

S.16 Service Provider—Chairman: Homer Hogg

Heavy-Duty Collision Repair Roadmap
J. Fassett 8 – 9 am
Developing and Leveraging Next Generation Leaders
B. Fackey 9 – 10 am
Implementing TMC RPs in Fleet & Service Provider Operations
J. Gingrich/B. Olsen 10 – 11 am
Safety Guidelines for Mobile Maintenance
J. Bodkins 11 am – Noon
Heavy-Duty Collision Repair Guidelines
C. Sterwerf 1 – 2 pm
RP Updates (S.16)
P. Savage 2 – 3 pm
Study Group Exploratory Meeting
H. Hogg 3 – 4 pm

S.17 Corrosion Control—Chairman: Nick Forte

Cab & Control Corrosion Control
T. Brune 8 – 9 am
Corrosion of Non-Ferrous on Chassis and Suspension
B. Herrington 9 – 10 am
Corrosion Manual Update NEW
D. Winn 10 am – 2 pm

S.18 Automated & Electric Vehicles—Chairman: Kyle Mitchell

Automated Driving and Platooning
R. Bishop 8 – 10 pm
Exploratory/Planning Session
K. Mitchell 10 am – Noon

Educator Committee—Chairman: Jack Werner

Curriculum Development
E. Brennan 8 – 9 am
PMI Manual Updates
S. Bennett 9 – 10 am
Educator Involvement
G. Arrants 10 – 11 am
NATMI Curriculum Advisory
R. Braswell 11 am – Noon

Professional Technician Development Committee—Chairman: Winston Minchew

Future Technician Scholarships
R. Bazzel 8 – 9 am
Fostering State Association Competitions
B. Karim 9 – 10 am
Technician Skills Competition Review
R. Patterson 10 am – Noon

Future Truck Committee—Chairman: Anthony Marshall

Future Electrical/Electronic Systems (in S.1 room)
A. Lesesky 8 – 9 am
Future Tire Reliability/Durability
P. Arnold 9 – 10 am
Sensor-Enhanced Maintenance
W. Stegall 10 – 11 am
Future Cab and Driver Interface
J. Hubbell 11 am – Noon
Future Trailer Productivity
C. Lee Noon – 12:30 pm
Future Chassis and Brake Systems
E. Benge 12:30 – 1 pm
Future Augmented and Virtual Training
A. Summers 1 – 2 pm
Sensor-Enhanced Maintenance
W. Stegall 2 – 3 pm
Future Energy Conservation (Joint S.11/FT Task Force)
K. Rutherford 2 – 3 pm
Future Alternate Propulsion Systems
L. Stumpp 3 – 4 pm

FOR MORE INFORMATION, VISIT HTTP://TMCANNUAL.TRUCKING.ORG
Technical Session #1

Justifying, Implementing & Maintaining Active Safety Systems

Many fleets are starting to deploy the latest generation of active safety systems to improve driver awareness, assist the driver in maintaining safe distances, and intervene if the driver does not respond to a potential conflict. These systems provide drivers with a variety of warnings that can reduce distractions, modify driver behavior, teach drivers how to identify conflicts before they unfold, and enable improved vehicle control.

Driver assist technologies, such as automatic emergency braking (AEB), represent the next wave of potential significant advances in vehicle safety. AEB systems, which can provide dynamic brake support and crash imminent braking, have the potential not only to save lives but also to reduce moderate and less severe rear-end crashes, advocates say.

During this session, panelists will share experiences in justifying, implementing and maintaining active safety systems, such as electronic roll stability, adaptive cruise control, and other advanced collision mitigation systems. Representatives will be on hand from the major system suppliers and from fleets that use the technologies.

Various aspects of these technologies are or will soon be mandated. Come to this session and learn whether today’s building blocks of tomorrow’s automated vehicle revolution make sense for your operation now.

Tuesday, March 19
8:30 – 10 am

Technical Session #2

TMC/SAE Symposium — The Coming Impact of the New 21st Century Truck Partnership Initiative

Government agencies are working together to take a new approach to the ongoing challenges of commercial vehicle safety, efficiency, and cost-effectiveness. That approach is embodied by the newly refocused 21st Century Truck Partnership.

Led by four federal agencies with commercial truck transportation-related missions (the U.S. Departments of Energy and Transportation, the U.S. Environmental Protection Agency, and the U.S. Army/TARDEC), the 21st Century Truck Partnership is taking a lead role in fostering technological innovation across the nation’s economically vital truck freight transportation system through this strategic public-private partnership. The 21st Century Truck Partnership’s overall vision is for our nation’s trucks and buses to safely move larger volumes of freight and greater numbers of passengers with increased energy efficiency, productivity, reliability, and equivalent or lower total cost of ownership (including capital and operating costs), while supporting national energy security and environmental stewardship.

The 21st Century Truck Partnership addresses the technical needs of the medium- and heavy-duty truck industry, as well as major policy goals for government agencies, through three main activities:

• Accelerating technology development through collaborative, pre-regulatory, and pre-competitive R&D component and system-level projects.
• Focusing R&D efforts on topics of broad interest by providing a discussion forum and organizing consensus building tools such as roadmaps and position papers that help Partnership members come to agreement on R&D topics and goals.
• Facilitating information exchange and dissemination through regular conference calls, meetings, and information dissemination tools.

The Partnership combines analytical efforts and collaborative Partnership inputs with federally-sponsored research results from projects such as the very successful SuperTruck initiative to develop detailed future technology goals in four critical technical focus areas covering conventional powertrains, electrified powertrains, freight operational efficiency, and safety.

Attend this session — co-sponsored by TMC and SAE International — and learn what this Partnership’s expanded effort means for the trucking industry and fleets in particular. Panelists will outline the technology roadmap envisioned for the near and long-term future of commercial vehicle operations and ways in which this technology research will make trucks safer, more productive, and more efficient for future fleet buyers.

Wednesday, March 20
2:30 – 4:30 pm
Technical Session #3

International Forces Driving Electric Vehicle Standardization

Electric vehicles for commercial applications have certainly garnered a great deal of media attention recently. But are the designs promoted in the press ready for prime time with the fleets?

As electric commercial vehicles move from the shadowy future into the spotlight of operational reality, what is the industry demanding from original equipment manufacturers (OEMs) and suppliers to attain durability, maintainability and reliability? One thing is for certain — electric vehicles are coming and in some cases are here already. Standards are fast coming together that you may not know about, but could impact your operation in the near future.

Attend this session and learn the status of efforts to develop a global common charging system standard for heavy-duty electric vehicles — standards that will include high energy charging for quick turn-around. This session will cover the implications for facility and operations planning; what new diagnostic tools and troubleshooting practices will fleets need to acquire, and what knowledge and skills must the new generation of technicians master in order to keep an e-truck fleet on the road.

Thursday, March 21
10:30 am – Noon

Management Technical Session #1
Powerful Business Presentations: How Engineers & Technical Experts Can Win Their Audience Every Time

Many engineers and technical professionals are experts in their chosen fields, but will candidly admit communicating their knowledge and expertise effectively can be quite challenging. Does this sound familiar? Do you find yourself wishing you could be more effective in delivering presentations?

During this management technical session, TMC presents proven strategies for preparing powerful business presentations. Communication consultant and coach, Deborah Boswell, designed this class to help anyone who wants to project confidence and credibility when delivering presentations. Topics covered during this management session include:

• grabbing your audience with the first words spoken
• minimizing Powerpoint for maximum impact
• overcoming fear and shyness associated with public speaking
• presenting technical information clearly, concisely and persuasively
• mastering voice projection, articulation, pace, body language, eye contact and gestures
• using audience involvement techniques to identify and handle questions

Clear and concise presentations make a positive impact on earning ability and the company bottom line. Attend this session and learn ways to improve your communication skills for personal and business growth.

Thursday, March 21
8:45 – 10:15 am

“TMC gave me a different perspective. I’m involved with other organizations but felt TMC was directly in my lane. The broad mix of participants makes (TMC) more relevant to my skill set and background.” – Nick Rivera ExxonMobil Corporation’s field testing coordinator.
S.1 Electrical Study Group

Preparing for Next Generation Multi-Voltage Electrical Systems (12/24/48 Volts)

Think you’ve got spec’ing vehicle electrical systems figured out? Think again.

The trucking industry has relied on 12-volt electrical systems since the 1960s, but things are likely to soon change. Higher voltages are coming, with 48-volt systems superseding even the 24-volt electrical systems already in wide use in Europe, the U.S. military, and in other parts of the world.

Hybrid and full electric propulsion systems are largely driving the change to take advantage of new energy saving possibilities, but even conventional powertrains will be affected, and possibly with 12-, 24- and 48-volt technology having to co-exist on the same vehicle.

At TMC’s 2018 Fall Meeting, we explored technician readiness for higher voltage electrical systems. Now we turn our attention to fleet specification and shop management. Attend this session and learn how fleets should rethink their vehicle specifications, tooling and diagnostic devices.

Tuesday, March 19
2:30 – 4 pm

S.2 Tire & Wheel Study Group

Proven Strategies for Successful Fleet Tire Testing

Tire technology has come a long way in recent years with changes in tire construction, compounding, tread designs and sizes — and these changes seem to be coming faster and faster. While tire makers use computer-based modeling and finite element analysis to simulate a myriad of conditions to which tires are exposed in on-highway applications, there is really no replacement for testing truck tires on commercial vehicles in real life operations on the nation's roads.

Both tire manufacturers and fleets have to rely on actual field testing of new technologies, compounds, and tread designs to prove the new designs will deliver the tire performance that is promised. Fleets also conduct testing on tires to determine the performance characteristics of different brands and types of tires, the serviceability and retreadability of tires, the benefits of changing inflation pressures, rotating tires, various alignment settings, and determining various tires’ fuel economy. When it comes to fuel economy, TMC has been a leader in standardized test methodology in this area, with its Type II Fuel Economy Test being a long-recognized tool for evaluating tire fuel economy performance.

Attend this session and learn what strategies are being used today to properly conduct tire tests and what new methods and options may be on the horizon when it comes to fleet tire testing. Panelists will include manufacturers, fleet managers and tire testing professionals. With tires traditionally being a fleet’s number one maintenance cost, this is a session that smart fleet managers won’t want to miss.

Tuesday, March 19
2:30 – 4 pm
S.3 Engine Study Group

How Will the New FA-4 Oils Fit Into Your Fleet?

When manufacturers replaced CJ-4 oil formulations in 2017, they did so with two new American Petroleum Institute (API) categories — CK-4, which is backward compatible; and FA-4, which was not. Newer engines, designed especially for FA-4 oils, can take advantage of new technologies that provide a number of performance and fuel economy enhancements, but they require FA-4 formulations to do so.

FA-4 oils (typically 10W-30 weight vs. 15W-40) are designed to meet 2017 model year on-highway greenhouse gas (GHG) emission standards. These oils are formulated for use in on-highway applications with diesel fuel sulfur content up to 15 ppm. According to API, they are blended to a high temperature high shear (HTHS) viscosity range of 2.9cP-3.2cP to assist in reducing GHG emissions. These oils are especially effective at sustaining emission control system durability where particulate filters and other advanced aftertreatment systems are used.

API FA-4 oils are designed to provide enhanced protection against oil oxidation, viscosity loss due to shear, and oil aeration as well as protection against catalyst poisoning, particulate filter blocking, engine wear, piston deposits, degradation of low- and high-temperature properties, and soot-related viscosity increase.

Now that FA-4 oils are factory filled by OEMs, fleets need to understand how these oils should be implemented correctly in newer and older equipment. Does running FA-4 oils make sense in your operation? It depends on your fleet’s make up — (engine vintage, make and model, etc.) — and whether your shops can handle inventorying multiple formulations without issue.

Attend this session and learn whether the potential fuel economy benefit in newer vehicles makes it worth changing from CK-4 to FA-4, and how changing tractor diesel engine oil may affect auxiliary equipment, such as refrigerated trailers and auxiliary power units. Panelists will include fleet managers, oil suppliers and equipment manufacturers.

Wednesday, March 20
4:15 – 5:45 pm

S.4 Cab & Controls Study Group

Spec’ing the Cab & Sleeper for Driver Comfort and Safety

It’s both office and home away from home. In fact, most drivers spend more time in their truck than down on the family homestead. Long gone are the days when the cab and sleeper more resembled a hunting cabin than a cross between a modern place of business and a rolling condo.

During the current boom times for the industry, drivers have a choice of where to work, and there is fierce competition among fleets to attract the best — along with the positive impact that reduced turnover brings to the bottom line. When the final choice goes beyond compensation and comes down to whether the truck gives the driver a feeling of productive well being, and connectivity with information and family, will they choose your fleet over the one in the next terminal over?

Find out how the latest trends in spec’ing onboard creature comforts and current technology can make a difference in driver recruitment, retention and productivity.

Tuesday, March 19
4:45 – 6:15 pm

“(TMC) is yet another way to interact with our industry, and to be a part of change is something I don’t take lightly. The knowledge within TMC that I get to take back and incorporate into my company’s culture, only benefits us at every turn. I’ve begun to get more involved each year…trying to help where I can, all the while gaining an unbelievable amount of knowledge to take back to my organization to ensure we stay up to speed with the industry challenges and progressions. I could talk about VMRS for days and the value it can and will bring to an organization. At the end of the day, it’s all about what you want to get from it. If you operate under the continuous improvement mindset, it will catapult your operation.” — Jarit Cornelius, V.P. maint. & compliance, Sharp Transport Inc.
Successful fleets measure their maintenance operations by the numbers, and knowing what metrics upon which to base the analysis is the trick of the trade. Smart fleet executives rely on key performance indicators (KPIs) to develop cost-per-mile calculations and other important maintenance metrics; but which ones are correct for your operation?

TMC has developed a useful recommended practice — entitled RP 529, Key Performance Indicators for a Maintenance Cost-Per-Mile Metric — to help fleet managers make such decisions. TMC’s S.5 Fleet Maintenance Management Study Group also has a specific task force dedicated to assessing KPIs.

A useful KPI benchmarking program improves asset availability while guiding choices for improving maintenance effectiveness and efficiency. It identifies fleet issues that impact maintenance performance and helps select the right strategy to either support or correct the failing actions that produce poor results. TMC’s Vehicle Maintenance Reporting Standard (VMRS) can be used to track these maintenance KPIs through a fleet’s VMRS-enabled maintenance management software. It is the only way to determine one fleet model to another of similar qualities for benchmarking the maintenance metric.

During this session, a panel of fleet representatives will present various approaches to using KPIs in assessing maintenance operational efficiency. We’ll also present the latest findings from the TMC/FleetNet America Vertical Benchmarking Program, covering roadside breakdown data for truckload and less-than-truckload operations. Join us for this valuable session and find out just how your operation stacks up to your peers.

Thursday, March 21
7 – 8:30 am

Smart trailer” technology is redefining the capability of trailers. More than just a box in which goods are hauled, smart trailers are mobile treasure troves of data; containing information on many different aspects of the freight logistics process.

Thanks to sensor technology, fleets have new visibility on load monitoring and condition, delivery status, vehicle health, maintenance status, and location, reducing the need for breakdown maintenance and roadside repairs as well as improving CSA compliance and boosting driver productivity and retention.

Smart trailers integrate sensors and data collection onboard the trailer from a variety of manufacturers and suppliers, providing the collective information into useful consolidated reporting for the fleet. Some of the data points include exterior and interior temperature, door open status, tire pressure monitoring, ABS events, wheel hub vibration and hub temperature, tire temperature, cargo monitoring, light-out monitoring, and more.

In 2018, TMC’s S.7 Trailers, Bodies & Material Handling Study Group provided an overview of “what” smart trailer technology is and what it promises to deliver for fleets and their customers. In 2019, S.7 will now present “how” this technology is being implemented and some of the important challenges in doing so.

During this session, panelists will discuss how data is transmitted from the various monitored functions to the telematics provider and ultimately to the driver or back office. The tried and true CAN bus is an obvious transmission method, but there are competing alternatives — USB, wireless, proprietary options, etc. Do all solutions work across all trailer platforms? Is it important that they do?

The smart trailer information highway is being built today; attend this session and learn what standards are being developed and what opportunities and challenges await fleets in this new digital era.

Wednesday, March 20
4:15 – 5:45 pm
S.14 Light- & Medium-Duty and Specialty Trucks Study Group

Propane: The Unsung Alternative of Alternative Fuels for Light/Medium Trucks

All-electric, hybrid-electric, and natural gas get a lot of media attention when it comes to credible alternatives to diesel, but did you know none of these surpass one other option when it comes to actual usage as a motor vehicle fuel? Propane outpaces them all and truly is the unsung alternative fuel for light- and medium-duty trucks.

Propane/liquefied petroleum gas — or autogas as it is known when used as a motor fuel — substantially reduces vehicle emissions, costs less than mainstream motor fuels and is almost entirely domestically produced. It is the third most widely used vehicle fuel in the world, with over 23 million autogas-powered vehicles used worldwide. However, its use in North America is not as prevalent as it is in other parts of the globe — powering approximately 143,000 vehicles.

According to industry sources, autogas has historically cost much less than either gasoline or diesel, averaging $1.00 less per gallon than regular gasoline for instance. And there are maintenance advantages, too. Vehicles operating on autogas require less frequent maintenance, meaning fewer oil changes, extended engine life, and reduced vehicle downtime, reports the Alternative Fuels Data Center of the U.S. Department of Energy.

Attend this session and learn what advantages propane may have for your fleet operation. We’ll cover what’s needed to adapt to this fuel alternative when it comes to vehicle spec’ing, maintenance, fueling, and facility management. If you haven’t given propane a second thought before, this is your opportunity to take another look with the help of fleet and supplier industry experts.

Thursday, March 21
7 – 8:30 am

Study Group Business Sessions

Several TMC study groups will not hold separate educational sessions at TMC’s 2019 Annual Meeting, but they still need your input. Study Groups S.6 Chassis & Brakes, S.11 Sustainability & Environmental Technologies, S.16 Service Provider, S.17 Corrosion Control, S.18 Automated & Electric Vehicles, and Educator Committee will hold business sessions in Atlanta at which they will update attendees on their task force activity, as well as solicit input and approval for new task forces to study pressing issues facing today’s fleets.

Your attendance and participation is important. These meetings will be 30 minutes in length.

Tuesday, March 19
4 – 4:30 pm

Maggie Condon, fleet territory mng. Midwest, Alcoa Wheel & Transportation Products—

“My first TMC meeting was the 2014 fall meeting, just a few months after I started with Arconic. It was a little intimidating at first — considering everyone’s level of knowledge and expertise. But as the meetings went on, I became more and more comfortable,” she said. Condon explained that once she began to understand the meeting and organizational structure of TMC Study Groups and Task Forces, her apprehension faded. “They don’t teach this stuff in college so I literally knew nothing. Meeting folks who have infinite amounts of knowledge is exciting and exhausting all at once. Customers are always going to have questions and issues, so it’s helpful to have TMC’s RP Manual as a reference. I like having paper in front of me, but for the sake of a quick conversation, we pull out a tablet and go to TMC Connect for the RP library. Most times we can solve the problem right there and then.”
**Other Features of Interest**

**TMC Kickoff Breakfast**
*Featuring: Marc Bedard, president and founder, The Lion Electric Company*

Marc Bedard, president and founder, The Lion Electric Company, has always been passionate about technology, innovation and the world of finance. He decided to follow his dream and passion to become an entrepreneur after many years as an M&A partner at PricewaterhouseCoopers and senior vice president at a major manufacturing company.

He founded the Lion Electric Company in 2008 with the objective to make advanced technology in the transportation industry accessible to all. Today, Lion manufactures innovative electric buses and trucks for a healthy breathing environment. In the past 10 years, Lion has delivered over 1,000 heavy-duty commercial vehicles of which more than 150 have been fully electric since 2015. The company has 125 employees at three facilities — St-Jérome, Quebec, north of Montreal; Sacramento Calif., and Newton, Pa.)

Bedard will share with us his perspective as an electrical vehicle manufacturer and his insights as to what the future holds for electric vehicles, their maintenance, and maintenance management within the various vocations in the trucking industry.

**Tuesday, March 19**
6:45 – 8:15 am

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

TMC’s best-attended event is always its Town Meeting & 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. The first TMC of Tomorrow graduating class — Class of 2019 — will also be recognized during the Town Meeting.

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 tmc@trucking.org

**Monday, March 18**
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, 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, March 18
4 – 5 pm

**Shop Talk & Fleet Operators’ Forum Wrap-up**
Wednesday, March 20
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, Peggy Fisher Study Group Leadership 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. TMC will also recognize its current TMC of Tomorrow classes during this event.

**Wednesday, March 20**
12:45 – 2:15 pm
Other Features of Interest

Full Associates Meeting

Open to all fully 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, March 18
4 – 5 pm

Press Conferences

Press conferences will be held on Sunday, March 17 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, March 17. [NOTE: Additional press conferences will be held the afternoon of Saturday, March 16, and during specified exhibit viewing times on Monday, March 18 and Tuesday, March 19 — if needed.]

Sunday, March 17
9 am – 5 pm

TMC’s Annual Reception and Banquet

TMC’s Annual Banquet will feature the traditional changing of the guard at which our new leadership will be installed for 2019-2020. The event will take place at the Georgia World Congress Center and feature Frank Caliendo.

Comedian, actor, and impressionist Frank Caliendo has been making people laugh his entire life. He is well known for his impressions of famous personalities including Donald Trump, Morgan Freeman, Al Pacino, Robin Williams, Robert DeNiro; politicians George W. Bush, Bill Clinton, Barack Obama; broadcasters John Madden, Charles Barkley and Jon Gruden; and talk show hosts Dr. Phil, Jay Leno, and David Letterman.

On stage, Caliendo’s high energy act is a blend of observations, impressions, characters and anecdotal stories that start at a frenetic pace and never let up. Appropriately described by the Hollywood Reporter as “a combination of Robin Williams and Jim Carrey,” Caliendo is one comedian that should not be missed.

A veteran of television sketch comedy as a cast member on “Mad TV” and starring in his own series “Frank TV”, Caliendo has been a fixture on television for over a decade. He has comedy specials with TBS and Comedy Central and routinely makes surprise and guest appearances on radio and TV shows. Starting with over 15 combined appearances between the “Tonight Show with Jay Leno” and “The Late Show with David Letterman”, Frank continues to be revered for his exuberant appearances on morning news and late night talk shows.

Wednesday, March 20
7 – 10:30 pm

‘Advanced Technology’ Pavilion Featured at 2019 Exhibition

For 2019, TMC’s Transportation Technology Exhibition will feature a special pavilion for manufacturers and/ or suppliers of advanced technology. Appropriate technologies for this area of the exhibition include: cybersecurity, automated driving and platooning, drone/quadcopter applications for transportation and related specification/maintenance, alternative fuels, telematics/over-the-air programming, and advanced fuel economy solutions.

TMC’s 2019 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 in front of the right audience by reserving a spot in TMC’s 2019 Advanced Technology Pavilion today.

Exhibit to Feature Expanded Technology Showcase for 2019

TMC is enhancing its 2019 Annual Meeting & Transportation Technology Exhibition by implementing a “TMC Technology Showcase” that will feature 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. TMC exhibitors with offerings in those areas of interest will be approached to demonstrate as part of this meeting segment.

Showcase Sponsorship is required to participate—$15,000 for theatre presentation; $20,000 for ride/drive presentation. The Showcase is not a traditional TMC educational offering, which has strict rules regarding commercialism, but rather a supplemental activity of our Transportation Technology Exhibition. The Showcase is to be dynamic, involving interaction with the audience.

The Showcase 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 about TMC’s Technology Showcase, Director of Exhibits and Sponsorships Dan Duggan at (703) 838-1756; dduggan@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.
Meeting Registration Fees & Policies

To attend all business sessions, exhibition viewing periods, breakfasts, lunches, 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 conference 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.

For your username and password, if you need assistance registering online, or if you need to make changes to conference registration please call ATA Registrations at (866) 821-3468 from 8:30am - 5:30pm ET or email: tmc@trucking.org.

By FAX/MAIL
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 be received at:
ATA Events Services, P.O. Box 101360, Arlington, VA 22210; or Email: registrations@trucking.org or before February 22, 2019, and you will receive a refund less a $100 person administrative fee. No refunds for registration cancellations made at any time so please be certain of your housing needs prior to booking a reservation, as all cancellations incur a fee. NOTE: There will be a $30.00 cancellation fee for any bookings made through ConferenceDirect LLC. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”.

By Mail

Registering by mail (with completed credit card information) or mail (with 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 be received at:
ATA Events Services, P.O. Box 101360, Arlington, VA 22210; or Email: registrations@trucking.org on or before February 22, 2019, and you will receive a refund less a $100 per person administrative fee. No refunds for registration cancellations made at any time so please be certain of your housing needs prior to booking a reservation, as all cancellations incur a fee. NOTE: There will be a $30.00 cancellation fee for any bookings made through ConferenceDirect LLC. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”.

Registration Fees

Full Meeting Registration Fees include all business sessions, food functions and social events. Please be sure to complete the section of the meeting registration and spouse registration form, if you wish to register your spouse for this separate program. This will ensure admittance at evening functions, viewing periods, etc. For membership information, call 703-838-1761, email tmc@trucking.org, or visit http://tmc.trucking.org.

Fully Registered Meeting Attendees:

Early Bird Registration Fees
(On or before February 15, 2019)

- Full Meeting Registration (TMC or ATA member) $675
- Full Meeting Registration, First-Time Fleet Attendee (member/non-member; subject to verification) $475/$575
- Full Meeting Registration (non-member) $775
- Spouse Program (2-day event plus Annual Banquet) $400

Regular Registration Fees
(After February 15, 2019)

- Full Meeting Registration (TMC or ATA member) $775
- Full Meeting Registration, First-Time Fleet Attendee (member/non-member; subject to verification) $575/$675
- Full Meeting Registration (non-member) $875
- Spouse Program (2-day event plus Annual Banquet) $500

Invoices

ATA Events Services, P.O. Box 101360, Arlington, VA 22210, or Email: tmc@trucking.org, or visit http://tmc.trucking.org. 

Refund Policy

If your plans to attend TMC's meeting change, you may receive a refund — less a $100 administration charge — up until February 22, 2019. There will be no refunds or credits after February 22, 2019! Cancellations notices accepted at registrations@trucking.org or by fax. NOTE: There will be a $150 administrative fee for those Associate Attendees who downgrade their badge status from “Blue” (fully registered) to “Orange” (exhibitor only) after having so registered.

Housing

Only individuals registered for the conference will gain access to a hotel reservation link through their conference confirmation email. The deadline to complete your room reservation is February 15, 2019.

Headquarters Hotel:
Omni Atlanta Hotel at CNN Tower $215 (single/double)

Host Hotels:
Embassy Suites by Hilton at Centennial Park $215 (single/double)
Hilton Garden Inn Atlanta Downtown $212 (single/double)
Westin Peachtree Plaza $212 (single/double)

NOTE: Rates may increase with additional occupancy. Rates do not include 16.9% Sales Tax + $5.00 GA Tourism Tax, per room, per night (subject to change without notice). If you need to make changes to your hotel reservation (arrival/departure/cancellation), please contact ConferenceDirect at 833-638-6496 or tmc@conferencedirect.com Monday – Friday 8:30am – 9:00pm ET.

TMC's Annual Meeting & Transportation Technology Exhibition housing bureau, ConferenceDirect, will charge a $30.00 cancellation fee for any room reservation cancellations made at any time so please be certain of your housing needs prior to booking a reservation, as all cancellations incur a fee. Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”. Additionally, a deposit equal to one night's room and tax is required to hold each individual's reservation. This deposit will be charged by the hotel on or after February 15, 2019 (subject to change without notice). Should you cancel, this charge will appear on your credit card statement as “ConferenceDirect LLC”.

Special Discount Offered for First-Time Fleet Attendees

First-time fleet attendees may take advantage of a special discount registration rate of just $475— a $200 savings! 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. Non-member first-time fleet attendee registration is $575.

Substituting for a TMC Member

Non-members may substitute for a TMC Member if they are from the same company. Otherwise, you will be charged the non-member rate.

Attire

Attire for TMC's 2019 Annual Meeting is business casual.
In Atlanta, TMC will offer the following for its traditional Spouses’ Program:

**MONDAY, MARCH 18**  
**Spouse Meet and Greet**  
8:30 – 9:30 am  
Mix and mingle with other spouses and guests. Morning snacks and refreshments will be available.

**Southern Hospitality Tour**  
10 am – 3 pm  
The tour begins with a narrated drive down Atlanta’s most famous street – Peachtree Street. The “fabulous” Fox Theatre is one of the most lavish performing arts venues in the country and the site for numerous movie premieres, visiting Broadway shows and concerts. Guests explore the mysterious interior of the Fox Theatre, one of the few remaining exotic movie palaces of the 1920s. Next, is a visit to the treasured place that helped put Atlanta on the map. The story of Margaret Mitchell and her work is crucial to understanding the history and culture of the city she loved. The Margaret Mitchell House and Museum stands as a testament to the past. This historic day concludes with lunch at the famed Mary Mac’s Tea Room.

**TUESDAY, MARCH 19**  
**Atlanta Foodie Tour**  
10 am – 2 pm  
Enjoy Atlanta historic sites and landmarks while cruising in an electric car parallel to the Beltline, the sidewalk that has changed the city. From colorful murals, live music to new breweries, guests will be in awe of the city’s culture and transformation. During this foodie tour, guests will visit the Curb Market first followed by two of Atlanta’s hottest food halls – Krog Street Market and Ponce City Market and indulge in five tasting items. Come hungry — leave happy!

**WEDNESDAY, MARCH 20**  
**Spouse Program Planning Committee Meeting**  
10 – 11 am  
All spouses and guests are invited to this meeting. We will provide information on TMC’s 2019 Fall Meeting in Raleigh, N.C., and discuss spouse program options for 2020 TMC Annual Meeting again in Atlanta.

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**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 21-22 in Atlanta, Ga., at the Georgia World Congress Center in conjunction with TMC’s 2019 Annual Meeting.

**COURSES**

- **Essentials of Fleet Maintenance Management**  
  will be held on Thursday, March 21, 2019

- **Cost Containment Strategies for Fleet Maintenance Managers**  
  will be held on Friday, March 22, 2019

  **Certification Exams** will take place on Friday, March 22, 2019

  These courses are applicable toward NATMI’s nationally recognized, university accredited certification programs. Taking the courses are the first steps 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:**

TMC members may register at the NATMI member rate!  
For more information, or to register, visit NATMI’s website at [www.natmi.org](http://www.natmi.org).

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FOR MORE INFORMATION, VISIT HTTP://TMCANNUAL.TRUCKING.ORG
S.1—Electrical

RP Updates (S.1)
Chairman: Albert Mihic, Delco Remy, (765) 778-6541
The RP Updates Task Force determines which S.1 (Electrical and Instruments) Study Group Recommended Practices are current and which ones are in need of update for inclusion in future editions of TMC's Recommended Practices Manual.

Fifth Wheel Ground Strap Installation Guidelines
Chairman: Aaron Pucket, Fontaine Fifth Wheel, (205) 915-4854; Larry Rambeaux, Purkeys, Inc., (479) 531-7769
This Task Force will develop a Recommended Practice to provide a systems approach to properly install ground straps on heavy-duty truck fifth wheels and truck frames. The proposed RP will provide specific guidelines for the top selling fifth wheel product lines in the North American market and general guidelines for all fifth wheel product lines.

Forklift Voltage Drop Test Procedure
Chairman: Bob Jeffries, Delco Remy, (765) 602-2631
This Task Force will develop a procedure for measuring voltage drop in forklift starting/charging circuits. (Joint task force with S.7)

Video Camera/Sensor Connector Cabling Guidelines
Chairman: M. Zimmerman, Momentum Fuel Technologies, (817) 767-6004
This Task Force will develop a Recommended Practice offering performance guidelines for service and maintenance of video camera/sensor connector and cabling for use on medium- and heavy-duty commercial trucks.

Standards for Establishing Alternator Efficiency
Chairman: Bob Jeffries, Delco Remy, (765) 602-2631
This Task Force will provide guidelines for establishing a method to plot efficiency metrics so fleets can compare alternators on an equal basis.

RP 110C Update (Low-Tension Cable For Heavy-Duty Truck-Tractor Wiring Systems)
Chairman: Fred Kelley, General Cable/Prestolite Wire, (586) 764-5422
This Task Force will update RP 110C Low-Tension Cable for Heavy-Duty Truck-Tractor Wiring Systems.

Electrical Infrastructure Safety and Interoperability for High-Power Electrical Refrigeration
Chairman: Matt Srnec, Thermo King Corp., (952) 464-4392
This Task Force will develop a Recommended Practice for high-power electric trailer refrigeration unit plug-in standby trailer and ground-based infrastructure for safety and interoperability.

Liftgate Electrical Usage Profile (Joint S.1/S.7 Task Force)
Chairman: Arnold Kowal, Maxon Lift Corporation, (562) 464-4392
This Task Force is developing guidelines for determining electrical usage of liftgate systems to determine recharging requirements.

Troubleshooting 12-Volt Cranking and Charging Systems Equipped with Electrochemical Capacitors
Chairman: Jeff Brakley, Maxwell Technologies, Inc. (619) 248-2935; Dan Cox, Ioxus, (630) 842-2427
This Task Force will develop starting and charging system diagnostic procedures for vehicles equipped with 12-volt electrochemical capacitors as opposed to conventional batteries.

High-Voltage Cable for Heavy-Duty Truck-Tractor Wiring Systems
Chairman: Fred Kelley, General Cable/Prestolite Wire, (586) 764-5422
This Task Force is developing recommended practices for high-voltage cable used in heavy-duty commercial vehicles.

Non-Connector Based Wiring Repairs
Chairman: Bruce Purkey, Purkeys, (470) 419-4800
This Task Force is developing recommended guidelines for wiring repairs not involving connectors.

Diagnostics Related to Lightning Strikes
Chairman: Chris Disantis, Aim National Lease, (330) 759-0438
This Task Force will develop guidelines for diagnostic procedures to conduct electrical system inspections following a lightning strike.

S.2—Tire & Wheel

RP Updates (S.2)
Chairman: Peggy Fisher, Tire Stamp, (248) 373-0312

Tire Asset Management (Cradle to Grave)
Chairman: Jim Ricapito, FedEx Ground, (412) 209-1946
This Task Force will develop a recommended practice on tire asset management—cradle to grave.

Tire Shop Tools and Procedures
Chairman: Randy Patterson, Bridgestone Americas Tire Ops., (601) 209-1946
This Task Force will develop a recommended practice on tools and procedures used in tire shops.

Demountable Tire Shop Tools and Procedures
Chairman: Kevin Rohlwing, Tire Industry Assn., (301) 430-7280
This Task Force will develop a recommended practice on demountable tools and procedures used in tire shops.

Rim Flange Wear
Chairman: Brandon Uzarek, Accuride, (270) 827-7696
This Task Force will develop a recommended practice concerning understanding of causes and criteria for out of service conditions in aluminum and steel wheels.

Specification of Tires for Heavy-Duty Electric Vehicles
Chairman: Jim Mueller, Team Torque, Inc., (888) 682-8675
This Task Force will study and evaluate the need for a recommended practice covering specification of tires for heavy-duty electric vehicles.

Driver Pocket Guide for Tires and Wheels
Chairman: Peggy Fisher, Tire Stamp, (248) 373-0312
This Task Force will develop a pocket guide to assist drivers in evaluating tire and wheel issues.

Repolishing Aluminum Wheels
Chairman: Charles Bartley, Alcoa Wheel and Transportation Products, (814) 319-4051
This Task Force will develop guidelines for repolishing aluminum wheels.

S.3—Engine

RP Updates (S.3)
Chairman: Paul Cigala, ExxonMobil Corp., (856) 404-1342
This Task Force will review existing engine-related Recommended Practices and update them as needed.
Task Force Descriptions

RP 338 Update (Extended Service Interval Coolants)
Chairman: Ronald Schornstein, Acustrip Company, Inc., (973) 698-0173
This Task Force will review RP 338 on extended service interval coolants and update as needed.

RP 371 Update (LNG/CNG)
Chairman: Dan Martin, Dual Green Consulting, (512) 705-3113
This task force will update RP 371, recommended practices pertaining to implementing, specifying and maintaining engines using either liquefied or compressed natural gas as a primary fuel.

RP 326 Update (Recycled Engine Coolant)
Chairman: Greg Mixon, The Penray Companies, (224) 254-7247
This Task Force will update RP 326, which offers guidelines for recycled engine coolant for heavy-duty diesels.

RP 364 Update (Fleet Purchasing Specification for Organic Acid Technology Extended Life Coolant)
Chairman: Peter Woyciesjes, Prestone Products Corp., (203) 731-8105
This Task Force will review and update RP 364, Fleet Purchasing Specification for Organic Acid Technology Extended Life Coolant.

LNG/CNG Thermal Events
Chairman: Dan Martin, Dual Green Consulting, (512) 705-3113; Mark Louzon, Volvo Trucks, (301) 790-6764
This Task Force will develop a recommended practice on thermal events associated with LNG/CNG fueled commercial vehicles.

Guidelines for Smoke Detection
Chairman: Mark Hawkins, Redline Detection, (714) 458-0461
This Task Force will develop a recommended practice for using smoke detection equipment preventative maintenance and detection of conditions requiring repair in diesel engines.

Guidelines for Diesel Particulate Filter Cleaning
Chairman: Wayne Juchno, NARSA (724) 799-8415 and Bruce Balfour, Clean Diesel Specialists, Inc., (714) 276-2020
This Task Force will develop a recommended practice for cleaning diesel particulate filters in Class 8 vehicles.

S.4—Cab & Controls

RP Updates (S.4)
Chairman: John Adami, NW Heavy Duty Component Sales, (425) 633-4309
This Task Force is updating various S.4 Recommended Practices.

RP 433 Update (Truck Washing & Cleaning Guidelines)
Chairman: Mark Winchell, Whiting Systems, (501) 951-0682
This Task Force will update RP 433 which covers recommended practices for truck washing and cleaning.

Power Management Strategies for In-Cab (CPAP) Medical Devices
Chairman: Jimmy Fielding, Purkeys Fleet Electric, Inc., (479) 419-4800
This Task Force will develop a recommended practice for power management strategies for in-cab medical devices such as continuous positive airway pressure machines used to treat sleep apnea.

RP 430 Update (Guidelines for Collision Warning)
This Task Force will update TMC RP 430, which covers collision warning systems used on heavy-duty trucks.

RP 418A Update (Heavy-Duty In-Cab Air Conditioning)
Chairman: Alex Moulantovski, ACC, (574) 320-5586
This Task Force will update TMC RP 418A, which covers heavy-duty in-cab air conditioning systems used on heavy-duty trucks.

RP 414B Update (Truck Air Conditioner Specification Sheet)
Chairman: Alex Moulantovski, ACC, (574) 320-5586
This Task Force will update the TMC Recommended Practice RP 414B Truck Air Conditioner Specification Sheet.

RP 401C Update (Location and Operation of Instruments and Controls in Motor Truck Cabs)
Chairman: Gerald Paolini, WABCO North America, (248) 435-8712
This Task Force will update the TMC Recommended Practice RP 401C, Location and Operation of Instruments and Controls in Motor Truck Cabs.

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 appropriate with a focus on control of bed bugs.

Conversion of Rear View Mirrors to Cameras
Chairman: Mark Kennedy, Swift Transportation, (623) 764-4553
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 417/423 (Tractor-to-Trailer Air/Electric Lines) Update
Chairman: Bruce Mckie, Tectran, (716) 780-1996
This Task Force will update RP 417 regarding Pneumatic Tractor-Trailer Hookup Lines and RP 423, which standardizes colored nylon tubing used in commercial vehicle air brake systems.

S.5—Fleet Maintenance Management

VMRS Codes Committee
Chairman: Paul Moszak, Motor Information Systems, (585) 256-0375 x 203
The VMRS Codes Committee’s purpose is to explain the benefits and to foster the use of the Vehicle Maintenance Reporting System (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.

RP Updates (S.5)
Chairman: Dan Weider, Dossier Systems, (609) 747-8800 x 44
This Task Force will update any RPs as necessary.

Developing Key Performance Indicators
Chairman: Lew Flowers, Flowers Fleet Service, (405) 623-7572
This Task Force will develop a recommended practice on identifying key performance indicators for measuring fleet maintenance operations.
Task Force Descriptions

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 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.

Internet of Things
Chairman: Mari McGowan, LaunchIt Public Relations, (585) 377-9700
This Task Force will investigate issues pertaining to the emerging “internet of things,” including inter-networking of physical devices, vehicles, buildings, and other items that are embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data.

Application of Social Media to Maintenance
Chairman: Brian Dunne, ALCOA Wheel & Transportation Products, (216) 618-6540
This Task Force will explore the development of a recommended practice on the application of social media technologies to fleet maintenance management.

Right to Repair
Chairman: Lew Flowers, Flowers Fleet Service, (405) 623-7572
This task force will update supplementary charging methods for batteries and other items that are embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data.

S.6—Chassis & Brake Systems

RP Updates (S.6)
Chairman: Jack Vander Giessen, Meritor, Inc., (248) 761-3881
This Task Force will update RPs under the S.6 Chassis & Brake Systems Study Group as needed.

Rear Suspension Inspection Procedure
Chairman: John Knutson, Hendrickson Int’l, (630) 910-2688
This Task Force will develop a recommended practice for inspecting rear suspensions on heavy-duty commercial vehicles.

RP 468 Update (Troubleshooting Ride Complaints)
Chairman: James Holman, Dana Holding Corporation, (419) 350-5730
This Task Force is updating RP 468, which offers guidelines on troubleshooting ride complaints.

Proper Diagnosis of S-cam Out-of-Service Criteria
Chairman: Glenn Cram, Meritor, Inc., (314) 651-4657
This Task Force is developing guidelines for properly diagnosing out-of-service conditions for pneumatic S-cam brakes used on heavy-duty vehicles.

Wheel End Thermal Events (Joint S.6/S.7)
Chairmen: Hank Schneider, Sealco Commercial Vehicle Products, (815) 338-8991; Lee Long, Southeastern Freight Lines, (803) 939-3602
This Task Force is conducting research to establish guidelines for investigation and correction of wheel end thermal events.

RP 608B Update (Disc and Drum Brake Integration Issues)
Chairman: Greg Sturdy, Gunite, (815) 490-6416
This Task Force will develop a Recommended Practice for the specification process needed for the selection and integration of disc brakes into existing fleets of vehicles equipped with drum brakes.

RP 638A Update (Heavy-Duty Clutch Maintenance)
Chairman: John Cordes, Eaton, (260) 573-8006
This Task Force is updating information for the proper maintenance of heavy duty clutches, including troubleshooting, installation and removal guidelines.

RP 642 Update (Total Vehicle Alignment)
Chairman: Jim Boyd, Southeastern Freight Lines, (800) 939-3604
This Task Force is updating information regarding total alignment procedures.

RP 605 Update (Brake Shoe Reconditioning)
Chairman: Matt Williams, Mentor, Inc. (248) 435-1096
This Task Force is updating guidelines for reconditioning brake shoes.

RP 652 Update (Service and Inspection of Air Disc Brakes)
Chairman: Randall Petresh, Haldex Brake Products Corp. (816) 801-2338; Matt Karich, Hendrickson Trailer, (330) 489-0122;
This Task Force will update recommendations for the inspection and maintenance of air disc brakes.

RP 602/626 Update (Towing Procedures)
Chairman: Jack Vander Giessen, Meritor, Inc., (248) 761-3881
This Task Force will update RPs 602 and 626 facilitate recovery of vehicles from their immediate location of disablement, and for long term towing of disabled and wrecked vehicles.

RP 614A Update (Air Brake Tubing and Fittings)
Chairman: Jeff Kruse, Camozzi Pneumatics, (214) 727-3505
This Task Force will update RP 614A for fleet maintenance of air brake connections utilizing fractional-inch, non-metallic tubing.

S.7—Trailers, Bodies & Material Handling

RP Updates (S.7)
Chairman: Hank Schneider, Sealco Comm. Veh. Products, (815) 338-8991
This Task Force is updating RPs under the S.7 Study Group as needed.

Liftgate Voltage Drop Test Procedure
Chairman: Bruce Purkey, Purkeys Fleet Electric, Inc., (479) 419-4800
This Task Force will develop a procedure for measuring voltage drop in liftgate starting/charging circuits. (Joint task force with S.1)

Forklift Voltage Drop Test Procedure
Chairman: Bob Jeffries, Delco Remy, (765) 602-2631
This Task Force will develop a procedure for measuring voltage drop in forklift starting/charging circuits. (Joint task force with S.1)

RP 755 Update (Alternative Liftgate and Material Handling Charging Methods)
Chairman: Larry Disque, Leyman Liftgate Company, (336) 210-2604; Larry Rambeaux, Purkeys Fleet Electric, Inc., (479) 419-4800
This task force will update supplementary charging methods for batteries used on Class 6-8 combination vehicles equipped with power liftgates and/or material handling equipment.

RP 708C Update (Trailer Axle Alignment)
Chairmen: Dan Cordier, Hutchens Industries, Inc.; (407) 862-5012
This Task Force is updating RP 708C covering trailer axle alignment.
Task Force Descriptions

**Cryogenic Cooling Systems**
Chairman: Peter Jacobson, Boreas Nitrogen Cooling Systems, (248) 629-9308
This Task Force will develop a recommended practice covering general information and safety attributes of cryogenic cooling systems for the refrigeration of trailers in transportation.

**Wheel End Thermal Events (Joint S.6/S.7)**
Chairman: Hank Schneider, Sealco, (815) 338-8991; Lee Long, Southeastern Freight Lines, (803) 939-3602
This Task Force is conducting research to establish guidelines for investigation and correction of wheel end thermal events.

**RP 746 Update (Drawbar Length)**
Chairman: Chris Lee, Great Dane Trailers, (912) 644-2264
This Task Force will update RP 746, which provides specifications for drawbars used on commercial vehicles.

**Van Trailer Washing Procedures and Testing**
Chairman: Michael Gordon, American Truck Wash, (406) 240-0686
This Task Force will develop a recommended practice for washing van trailers and testing the efficacy of wash practices.

**Heavy-Haul Trailer Issues**
Chairmen: Kevin Tomlinson, South Shore Transportation, (419) 357-2805; Scott Bartlein, Barry Trucking, (414) 397-0955
This Task Force will explore maintenance and specification issues of particular importance to fleets using trailers in heavy-haul operations.

**S.11—Sustainability & Environmental Technologies**

**Alternative Energy Implementation Elements**
Chairman: David Joskolski, Hyndai Translead, (800) 581-0871
This Task Force is developing information for fleets to use in their business justification documentation when considering adding alternative energy assets.

**Smartway Activities**
Chairmen: Doug Johnson, Drivewyze (877) 393-3939 and Sam Waltzer, EPA (202) 343-9175
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.

**Cost Modeling for Aerodynamic Devices**
Chairmen: Amy Winfield, Suburban Seating and Safety (973) 778-9227; Doug Memering, Cummins, Inc., (812) 377-2415
This Task Force will develop a calculative tool to evaluate the cost and value of aerodynamic device investments for use by fleet managers and other industry professionals.

**RP Updates (S.11)**
Chairman: Bob Wessels, Retired Silver Spark Plug, (731) 463-4350
This Task Force will update Recommended Practices within S.11 as needed.

**RP 1115 Update (Fuel Economy Benefit Claim)**
Chairman: Sam Waltzer, EPA, (202) 343-9175
This Task Force will update RP 1115 dealing qualifying questions for products that claim a fuel economy benefit.

**RP 1111B Update (Fuel Economy/Component Relationships)**
Chairman: Doug Memering, Cummins, Inc., (812) 377-2415
This Task Force will update RP 1111B covering the relationships between various vehicle components and fuel economy.

**Alternative Energy Implementation Elements**
Chairman: David Joskolski, Hyndai Translead, (800) 581-0871
This Task Force is developing information for fleets to use in their business justification documentation when considering adding alternative energy assets.

**Terminal Tractor Powertrain Options**
Chairmen: Jim Schreiber, Peach State Truck Center, (678) 381-5136; Chris Matheis, Peach State Freightliner, (470) 373-4775.
This Task Force will develop a recommended practice on alternatively fueled spec’ing options for terminal tractor powertrains.

**RP 1105 Update (Idle Limiting Systems)**
Chairman: Brad Wilson, Titan Transfer, Inc., (931) 488-0308
This Task Force will update RP 1105 dealing idle limiting systems for heavy-duty commercial vehicles.

**RP 1112 Update (Lightweight Components Effect on Fuel Economy)**
Chairman: Celeste Herpel, Airodyne Industries, (248) 548-3336
This Task Force will review the current relevance of RP 1112, Lightweight Components Effect on Fuel Economy and the need for revisions, if necessary.

**Future Energy Conservation (Joint S.11/FT)**
Chairman: Kirk Rutherford, Bridgestone Americas Tire Operations, (615) 937-8906
This Task Force will develop position papers that will challenge industry to implement change in practices and performance as it relates to energy conservation.

**S.12—On-Board Vehicle Electronics**

**RP 1210C Update (Windows API)**
Chairman: Ken DeGrant, IMI Precision Engineering, (859) 213-0784
This Task Force will update RP 1210C, Windows Application Program Interface.

**RP 1210 OEM Application Validation Testing**
Chairman: Lee Long, Southeastern Freight Lines, (803) 794-0047
This Task Force will develop a recommended practice to help vendors of vehicle datalink adapters (VDAs) conduct validation testing of their devices to original equipment manufacturer (OEM) vehicles/equipment.

**RP Updates (S.12)**
Chairman: Ken DeGrant, IMI Precision Engineering, (859) 213-0784
This Task Force is updating S.12 Recommended Practices as needed.

**Electronic Logging Devices**
Chairman: Tom Cuthbertson, Omnitracs, LLC, (703) 801-2419
This Task Force is developing recommended practices for emerging electronic on-board recorder devices.

**Connected Vehicle**
Chairman: Tom Cuthbertson, Omnitracs, LLC, (703) 801-2419
This Task Force is developing a technical policy advisory based on the notice of proposed rulemaking on connected vehicle technologies issued by the National Highway Traffic Safety Administration (NHTSA). The task force will attempt to review technical implementation concerns associated with connected vehicle technologies as well as security, driver interaction issues.

**RP 1226 Messaging Standardization**
Chairman: Chuck Villa, Volvo Trucks, charles.villa@volvo.com
This Task Force is developing a recommended practice that defines messages and standards for RP 1226, which covers telematics and on-board diagnostic accessory connectors.

FOR MORE INFORMATION, VISIT HTTP://TMCANNUAL.TRUCKING.ORG
RP 1210 Compliance
Chairman: John Bate, Volvo Trucks, (336) 393-2000
This Task Force will develop recommendations for ensuring industry compliance among manufacturers and suppliers with TMC RP 1210, Windows Application Program Interface.

Mobile Device Communication API
Chairman: Chris York, Cummins, (812) 377-5722
This Task Force will establish a recommended practice for an application program interface (API) between the physical datalink (i.e., CAN/J1939), a vehicle datalink adapter (VDA) and mobile device software applications for onboard electronic control unit communications.

Active Safety System Telematics Guidelines
Chairman: Lou Stumpp, Navistar, Inc., (317) 892-3054
This Task Force is developing a recommended practice for the event and health monitoring of active safety systems, such as stability control and collision mitigation systems for heavy-duty commercial vehicles.

S.14—Light- and Medium-Duty Trucks

RP Updates
Chairman: Rich Winters, Verizon, (717) 771-5312
This Task Force will update Recommended Practices within S.14 as needed.

Work Truck Platform Hybridization
Chairman: Rich Winters, Verizon, (717) 771-5312
This Task Force will explore application of hybrid powertrains to work-performing platforms/systems in Class 2-6 and vocational vehicles.

Technician and Bucket/Utility Truck Safety
Chairman: Paul Wion, Charter Cable, (585) 362-3716
This Task Force will develop recommendations the safety of technicians servicing bucket/utility trucks.

RP 1431 Update (Fuels and Motive Energy Label)
Chairman: Rich Winters, Verizon, (717) 771-5312
This Task Force will update RP 1431 which covers design guidelines for fuels and motive energy advisory annotations and warning labels.

RP 1421 Update (Truck Body Wiring Harness Standardization)
Chairman: Lou Stumpp, Navistar, Inc. (317) 892-3054
This Task Force will update RP 1421 covering truck/body wiring harness standardization for light- and medium-duty vehicles.

RP 1514 Update (Hydraulic System Failure Analysis)
Chairman: Paul Wion, Charter Cable, (585) 362-3716
This Task Force will update RP 1514 which covers hydraulic system failure analysis on light- and medium-duty trucks.

RP 1412 Update (Walk-in Van Electrical System Routing/Load Requirements)
Chairman: Lou Stumpp, Navistar, Inc. (317) 892-3054
This Task Force will update RP 1412 covering walk-in van electrical system routing/load requirements for light- and medium-duty vehicles.

RP 1411 Update (Light- & Med.-Duty Auto Transmission Fluid Guidelines)
Chairman: Mark Quinn, Allison Transmission, Inc., (317) 242-5531
This Task Force will update RP 1411 covering automatic transmission fluid guidelines for Class 2-6 and vocational vehicles.

Inspection of CMV Axle and Transmission Fluid Levels
Chairman: Lou Stumpp, Navistar, Inc., (317) 430-3577
Develop a Recommended Practice to correctly inspect fluid levels in axles and transmissions of Commercial Motor Vehicles.

S.16 – Service Provider

RP Updates
Chairman: Peter Savage, Clarke Power Services, Inc., (513) 719-2313
This Task Force will update S.16 Recommended Practices as needed.

Implementing TMC RPs in Fleet and Service Provider Operations
Chairman: Jill Gingrich, Wheeltime Network, (313) 475-3135; Brad Olsen, FedEx Freight, (870) 704-5247
This Task Force will develop guidelines for implementing/utilizing TMC recommended practice in fleet and service provider operations.

Safety Guidelines for Mobile Maintenance
Chairman: Jerry Bodkins, RoadSquad OnSite, (440) 232-8167
This Task Force will develop safety recommendations for vehicle technicians performing mobile maintenance tasks.

Developing and Leveraging Next Generation Leaders
Chairman: Brandon Fackey, Clarke Power Services, Inc., (513) 842-4731
This Task Force will develop recommendations for programs that develop and foster next generation leadership in service provider operations.

Heavy-Duty Collision Repair Guidelines
Chairman: Chris Sterwerf, Fairfield Auto & Truck Svcs., (513) 874-5875
This Task Force will develop recommendations for a program to include Heavy-Duty Collision Repair (HDCR) providers in TMC and identify needs for RPs to improve the safety, quality and reliability of service in the area of HDCR.

Heavy-Duty Collision Repair Roadmap
Chairman: Joey Fassett, Al’s Automotive, (207) 232-8167
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.

S.17 — Corrosion Control

Corrosion and Its Impact on Exhaust and Emissions Systems
Chairman: Michael Chester, Tru-Flex, (630)292-0834
This Task Force will develop a recommended practice on corrosion and its impact on exhaust and emissions systems and develop maintenance guidelines to address these issues.

Cab and Controls Corrosion Control
Chairman: Tim Brune, Automotive International, Inc., (513) 489-7883
This Task Force will develop guidelines for dealing with corrosion as it relates to cab and control systems.

Corrosive Impact of Wash Solutions
Chairman: Dave Walters, Alcoa, (814) 226-7386
This Task Force will investigate the corrosive impact of wash solutions on vehicle components.

Corrosion of Non-Ferrous Materials on Chassis and Suspension
Chairman: B. Herrington, Atro Engineered Systems, Inc., (216) 970-4066
This Task Force will investigate the impact of corrosion on rubber on chassis and suspension components.
Task Force Descriptions

Corrosion Manual Update
Chairman: Dennis Winn, Acuride, (270) 827-7670
This Task Force will update TMC’s Corrosion Manual.

S.18 – Automated & Electric Vehicles
Automated Driving and 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 autonomous truck technologies.

Professional Technician Development Committee

Technician/Student Skills Competition
Chairman: Randy Patterson, Bridgestone Comm. Solutions, (601) 208-1946
This Task Force is developing procedures for implementing a national technician and student skills contest under the auspices of TMC.

Future Technician Scholarships
Chairman: Robert Bazzel, ALCOA, (216) 633-5357
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.

Determining Necessary Entry Level Technician Skills
Chairman: Homer Hogg, TA/Petro, (520) 252-2731
This Task Force is examining means of determining required skills for entry level technicians, and is producing an information report regarding cooperative activities with NATEF.

Educator Committee

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

Curriculum Development
Chairman: Erin Brennan, Cengage Learning, (518) 348-2490
This Task Force will develop recommendations for improvement of technician school curriculum programs.

PMI Manual Updates
Chairman: Sean Bennett, Cengage Learning, (705) 932-3109
This Task Force will update TMC’s suite of preventive maintenance inspection (PMI) manuals in coordination with other council study groups.

NATMI Curriculum Advisory
Chairman: Robert Braswell, TMC, (703) 838-1776
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.

Connecting Fleets With Medium/Heavy Truck Programs
Chairman: Peter Hirt, Barry Trucking, Inc., (414) 491-4744
This Task Force will develop recommendations for connecting fleets with medium/heavy truck educational 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: Phil Arnold, Michelin North America, (864) 316-1568
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 and retread and repair errors—will be addressed.

Future Cab and Driver Interface
Chairman: Jerry Hubbell, Vehicle Enhancement Systems, (828) 279-7514
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.

Sensor-Enhanced Maintenance
Chairman: Wally Stegall, The Morey Corp., (630) 842-0489
This Task Force will explore application of sensor-enhanced maintenance technologies to commercial vehicles.

Future Energy Conservation (Joint S.11/FT)
Chairman: Kirk Rutherford, Bridgestone Americas Tire Operations, (615) 937-8906
This Task Force will develop position papers that will challenge industry to implement change in practices and performance as it relates 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: Andrew Summers, Phillips Industries, ; asummers@phillipsind.com
This Task Force will explore the application of virtual/augmented training simulation software to commercial vehicle maintenance.

Future Alternate Propulsion System
Chairman: Lou Stumpp, Navistar, Inc., (317) 892-3054
This Task Force will explore the future alternate options for vehicle propulsion in commercial vehicles.
Save the Date!

TMC’s 2019 Fall Meeting & National Technician Skills Competitions
September 15-19, 2019
Raleigh Convention Center
Raleigh, N.C.

TMC’s 2020 Annual Meeting & Transportation Technology Exhibition
February 24-27, 2020
Georgia World Congress Center
Atlanta, Ga.

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