



**MINUTES
FIRE APPARATUS MANUFACTURERS' ASSOCIATION
TECHNICAL COMMITTEE MEETING
APRIL 27, 2023
HYATT REGENCY INDIANAPOLIS
REGENCY AB BALLROOM,
INDIANAPOLIS, IN**

[A copy of the full meeting power point presentation may be found in the secure documents of www.fama.org]

Call to Order – Ms. Melissa Dobbs, Technical Committee Co-Chair called the meeting to order at 7:32 a.m.

Proof of Notice – Notice of this meeting was provided to all Technical Committee representatives and FAMA members via email on March 17, 2023.

Roll Call – A quorum was declared with 47 member companies present at the start of the meeting. [See attendance and sign-in sheets attached to these minutes.]

A special welcome was provided to Aearo Technologies, a new FAMA member company.

Antitrust Guidelines and Non-Discrimination Policy – Legal Counsel Jim Juneau stressed that it is FAMA's policy to abide by the antitrust laws of the United States and the strict non-discrimination policy at all meetings of the Association.

Meeting Sponsors – The meeting sponsors were recognized for their support of the Committee and FAMA. The meeting sponsors were Cummins and SoundOff Signal. The Corporate Sponsor, Clarion Fire & Rescue, was also recognized for their support.

Review/Enter Minutes – After discussion and upon motion duly made and seconded, it was:

VOTED: That the minutes of the April 28, 2022, Technical Committee Meeting (Indianapolis, IN) are approved to be entered into the records of the association.

Welcome/Association Update – Mr. Bert McCutcheon, 2023 FAMA Board President, welcomed the FAMA member representatives to the meeting and thanked the members for their involvement in the Technical Committee. Mr. McCutcheon encouraged the members to attend the upcoming Fall Conference in New Orleans.

Technical Committee Report –

- Mr. Lackore encouraged the Committee Members to develop initiatives and to help accomplish the missions of the association for the betterment of the members and the fire service.
- Mr. Lackore presented the Chairman's Award to Ms. Melissa Dobbs. This was the first presentation of the award since 2019.
- A review of the Subcommittee Chairs was provided.
- Ms. Dobbs provided a status report on the progress of the Buyer's Guides. The report covered the pending documents by the responsible Subcommittees.
- Dates and location details for the 2024 FDSOA Apparatus Conference were announced.
- The schedule for the FAMA Forum Articles was reviewed.
- The meeting attendees were asked if they would like future Technical Committee Meetings to be held in person or virtually.
- If in person and in conjunction with FDIC, should the meeting be held Wednesday Afternoon or Thursday Morning?
- Four new approved graphical symbols were presented.
- The FAMA Apparatus Safety Guide has been updated and the new version is available. The members were asked to review the new version and provide their revisions for future updates.
- NFPA updates:

- NFPA Link access is available.
- NFPA 1900 replaced all the previous standards.
- The current FAMA representatives on seven NFPA Standards were reviewed.
- An initiative regarding Aerial Ladder Spacing was presented.
- The Canadian ULC Standard S515 has not been updated since 2013. The committee is considering following NFPA 1900 rather than maintaining S515.
- A transition from R134 and R-1234YF Air Conditioning Refrigerants is in progress. The Truck and Engine Manufacturers Association is developing an application that will include fire apparatus.
- It was announced that PFAS Free Foam may not work with some foam systems due to its thickness. The industry needs guidance.
- The following are new initiatives being considered:
 - A guide for Fire Stations covering EV Charging Infrastructure
 - Clean Cab Guide
 - NHTSA Fire Apparatus Recall Guide
 - Engine Emissions & GHG Guide
 - Buyer's Guide Videos
 - Size and weight by state update

Assistant Director of Montreal Fire Department, J. Gordon Routley, spoke on Aerial Ladder Ergonomics and the NIOSH report. NIOSH is recommending smaller aerial rung spacing to improve ease of climbing and safety.

EPA and CARB Emissions – 2027 Highlights

Future Emission Regulations – Emission regulations are getting more complicated based on the upcoming changes to EPA regulations for Heavy Duty and Medium Duty vehicles. Additional comments were provided by Mr. Chris Crowel of Cummins Inc.

CARB Engine Emissions 2024

In California, emergency vehicles are exempt from CARB. There is an initiative to determine if six other states plan to adopt the CARB emergency vehicle emissions exemption.

Emergency Vehicles are exempt from driver inducements caused by Low DEF.

EPA2024 Engines & Aftertreatment

Transition to EPA24 is similar to the 2021 transition.

The attendees broke into subcommittee meetings at 8:33 AM. [Additional Subcommittee breakout session notes follow.]

New Business – none

Old Business – none

Next Meeting Notice – The next meeting of the Technical Committee Planning Meeting will be held at 1:00 PM CT on Tuesday, September 26, 2023, in conjunction with FEMSA/FAMA Annual/Fall Conference at the JW Marriott New Orleans, New Orleans, LA.

Adjournment – With no further business to come before this meeting, upon motion duly made and seconded and no further discussion, it was:

VOTED: To adjourn at 8:35 a.m.

A true copy, attest:

Sonya Kelly

Subcommittee Breakout Session Reports:

- **Aerial/Quint –**
 - **1 or more New Buyers Guide Topics - None**
 - **Thoughts on Aerial Rung Spacing Change**
 - Commercial standards were suggested.
 - OSHA vs NFPA
 - Re set up manufacturing facilities
 - Concerned about fitting a boot with k-bracing and other necessary obstructions.
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** Thursday Morning
- **Ambulance –**
 - **1 or more New Buyers Guide Topics - None**
 - **Meeting Notes**
 - Good conversation around NFPA, CAAS, and KKK standards
 - Good conversation around insulation (thermal and acoustic)
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** Wednesday Afternoon
- **ARFF –**
 - **1 or more New Buyers Guide Topics - None**
 - **Meeting Notes**
 - Only one person for the ARFF subcommittee was in attendance. No new business.
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** Thursday Morning
- **Body –**
 - **1 or more New Buyers Guide Topics –**
 - Repairability
 - Corrosion protection?
 - **Meeting Notes**
 - FAMA standard for compartment size – an addendum to the compartment door standard?
 - Need total compartment size and useful size. Bruce Whitehouse will look at the Buyer's Guide for doors to see if useable space is defined.
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** Wednesday Afternoon – In person only, not virtual.
- **Chassis –**
 - **1 or more New Buyers Guide Topics –**
 - EPA/CARB/GHG – Chris Crowel of Cummins
 - Acoustics and thermal management – Dino Perin of Aeero Technologies
 - **Meeting Notes**
 - Are rev dates included in Buyer's Guides (i.e. Winches)?
 - EPA/CARB/GHG
 - DEF sensor temperature calls end of day on May 10th.
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** Wednesday Afternoon
- **Electrical –**
 - **1 or more New Buyers Guide Topics – None**

- **Electrical – (continued)**
 - **Meeting Notes**
 - Data Recorders
 - Multiplexing
 - Drones
 - Brock at HAAS Alert is writing a draft.
 - Cory Hohs at HAAS Alert suggested a new project on Diagnostics by Dashboard for fleet managers. To be discussed.
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** Thursday Morning
- **Foam –**
 - **1 or more New Buyers Guide Topics –** None
 - **Meeting Notes**
 - Since the Foam Buyer’s Guide is currently being updated, we will add a warning to address Cps of PFAS free foam and capabilities of existing system. Another avenue of education might be a FAMA Forum Article.
 - Buyer’s Guide should include and refer to state regulations.
 - Apparatus viscosity rating required going forward.
 - The group would like to see the Buyer’s Guide in video format.
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** no response
- **Pumps & Plumbing –**
 - **1 or more New Buyers Guide Topics –** None
 - **Meeting Notes –** None
 - **Subcommittee Consensus Regarding the Meeting Day / Time (options: Thursday Morning or Wednesday Afternoon):** Wednesday Afternoon

Attachments:

Member Company Attendance
Sign-In Sheets

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APRIL 27, 2023
HYATT REGENCY INDIANAPOLIS, AB BALLROOM
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Member Company Attendance
[based on meeting registration/sign-in at meeting]

Advanced Wheel Sales, LLC
Aearo Technologies
AMDOR Inc.
Apparatus Equipment & Service, Inc.
Bronto Skylift, Inc.
Bulldog Fire Apparatus, Inc.
C.E. Niehoff & Company
Cummins Inc.
Custom Fire Apparatus, Inc.
Danko Emergency Equipment, Co.
Darley
Duo-Safety Ladder Corp.
E-ONE, Inc.
Elkhart Brass Mfg. Co., Inc.
EZ Trac AWD
Federal Signal Corporation
Ferrara Fire Apparatus, Inc.
Fire Lion Global LLC
Fire Research Corporation
Fort Garry Fire Trucks
H.O. Bostrom Company, Inc.
HAAS Alert
Hale Products, Inc.
Hendrickson
HiViz Lighting, Inc.
HME Ahrens-Fox
IMMI
Link Suspensions of Canada LP

Mile Marker Industries, Inc.
OFAB Inc.
Pro Poly of America, Inc.
ROM Corporation
Rosenbauer America, LLC
Seagrave Fire Apparatus LLC
Skeeter Brush Trucks, LLC
Smart Power Systems
SoundOff Signal
Spartan Emergency Response
Sutphen Corporation
TOMAR Electronics
Trident Emergency Products, LLC
United Plastic Fabricating, Inc.
US Fire Pump Company
Ward Diesel Filter Systems
Waterous Company
Whelen Engineering Co., Inc.
Williams Fire & Hazard Control, Inc.