



**MINUTES
FIRE APPARATUS MANUFACTURERS' ASSOCIATION
TECHNICAL COMMITTEE MEETING
APRIL 28, 2022
HYATT REGENCY INDIANAPOLIS
COSMOPOLITAN 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 7:31 a.m.

Proof of Notice – Notice of this meeting was provided to all Technical Committee representatives and FAMA members via email on March 23, 2022.

Roll Call – A quorum was declared with 54 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 the First-Time Attendees of the meeting.

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, SoundOff Signal, Sutphen, and Ziamatic Corporation. 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 11, 2019, Technical Committee Meeting (Indianapolis, IN) are approved to be entered into the records of the association.

Welcome /Association Update – Mr. Oran McNabb, 2022 FAMA Board President, welcomed the FAMA member representatives to the meeting and provided a very brief update on the health of the Association and the focus of the 2022 Board of Directors.

Technical Committee Report – Mr. Lackore and Ms. Dobbs presented.

- A review of the Subcommittee Chairs was provided.
- A status report on the progress of the Buyer's Guide program was reviewed. The current drafts and pending documents by the responsible Subcommittees were covered.
- The 2023 FDSOA Apparatus Conference dates were announced, and the proposed FAMA presentation topics were presented.
- A list of proposed FAMA Forum Topics were presented for the Board of Directors Review.
- Seven new safety signs and a new graphical symbol for Engine Idle were presented.
- A review of the planned updates for the FAMA Apparatus Safety Guide was provided. Beyond coverage of several new safety topics, the updates include adding illustrations and a fresh cover design.
- The current FAMA representatives on seven NFPA Standards were reviewed.
- The NFPA Consolidation Process was reviewed. The names of the new Standards that are pertinent to FAMA are NFPA: 1900, 1910, 1550, and 1400.
- The DEF Sensor Guideline is now complete and posted on the FAMA website.
- FAMA has provided comments to NFPA 1900 on Electric Apparatus.
- The Service Guide covering Frame Corrosion Repair Guidelines is currently under Board review.

- The Chassis Subcommittee is currently developing a Tire Life Guideline.
- CARB Engine Emissions 2024 – FAMA’s initiative to engage with nine states to determine if they will adopt the CARB emergency vehicle emissions exemption is pending.
- The AIMS Act (American Innovation and Manufacturing Act) was reviewed. The Act directs EPA to phase down the use of hydroflourocarbons (HFC).
- R134 and R-1234YF Air Conditioning Refrigerants were discussed. R-1234YF is the only practical option for fire apparatus but, an EPA application and approval is required for the use of YF. For the pending EPA application, confidential and anonymous AC leak warranty data needs to be gathered.
- The following are new initiatives being considered:
 - EV Charging Infrastructure for Fire Stations Guide
 - Clean Cab Guide
 - NHTSA Fire Apparatus Recall Guide
 - Engine Emissions & GHG Guide
 - Buyer’s Guide Videos
 - Size and weight by state update

NPFA 1900 – Mr. Lackore and Mr. Massa presented a preliminary review of the pending 2024 revisions plans for NFPA 1900.

The attendees broke to meet as subcommittees at 8:35 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 6:00 PM MT on Tuesday, September 20, 2022, in conjunction with FEMSA/FAMA Annual/Fall Conference at the Hilton Salt Lake City Center in Salt Lake City, Utah.

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 –**
 - Suggested Apparatus Symposium Topics
 - Aerial Maintenance and Inspection
 - Basic Operations
 - Suggested FAMA Forum Article Topics
 - Educating End Users
 - Safety Checks for Aerial Operations
 - Apparatus Safety Guide Updates
 - Aerial Operation and Safety Checks
 - Is the subcommittee willing to support an Apparatus Symposium in the Fall of 2022?
 - No
- **Ambulance –**
 - Suggested Apparatus Symposium Topics
 - Electrical Vehicle Preventative Maintenance
 - Using Technology to Simplify Maintenance Operations
 - Benefits of Preventative Maintenance in Reducing Repair Costs
 - EVOC (Driver) Training
 - Suggested FAMA Forum Article Topics
 - None
 - Apparatus Safety Guide Updates
 - None
 - Is the subcommittee willing to support an Apparatus Symposium in the Fall of 2022?
 - Yes
- **ARFF –**
 - Suggested Apparatus Symposium Topics
 - FAA A/C 5220-10 F Update
 - IFSTA 7th Edition is being developed
 - NFPA ARFF Committee has completed the Public Comment Phase. The Committee's proposed amendments will be released soon in a Notice of Intent to Make a Motion (NITMAM).
 - Suggested FAMA Forum Article Topics
 - Advisory Circular Update
 - Apparatus Safety Guide Updates
 - None
 - Is the subcommittee willing to support an Apparatus Symposium in the Fall of 2022?
 - Yes

- **Body –**
 - Suggested Apparatus Symposium Topics
 - Corrosion prevention, after market (maintenance / service)
 - Electrification implications on the body of truck access points, disconnects, penetration into high voltage situations, other indicators.
 - How to make business case for maintenance to secure funds:
 - Hypothetical scenarios
 - Calculating “age” based on usage, actual age, geography, and implication on cost
 - Cost at end of life
 - EV Battery considerations, disposal, and replacement
 - Suggested FAMA Forum Article Topics
 - How to make business case for maintenance to secure funds:
 - Hypothetical scenarios
 - Calculating “age” based on usage, actual age, geography, and implication on cost
 - Cost at end of life
 - EV Battery considerations, disposal, and replacement
 - Apparatus Safety Guide Updates
 - None
 - Is the subcommittee willing to support an Apparatus Symposium in the Fall of 2022?
 - Yes, but for Fall 2023
- **Chassis –** No report available
- **Electrical –** None
 - EV Charging Infrastructure for Fire Stations Guide
 - The group needs to understand the requirements in 1900/2024 for EV firetrucks.
 - Suggested Apparatus Symposium Topics
 - Battery Chemistry Low Voltage
 - Load Management
 - 1900 NFPA 2024 Overview
 - Suggested FAMA Forum Article Topics
 - Battery Chemistry Low Voltage
 - Load Management
 - 1900 NFPA 2024 Overview
 - Apparatus Safety Guide Updates
 - None
 - Is the subcommittee willing to support an Apparatus Symposium in the Fall of 2022?
 - No
- **Foam –**
 - Suggested Apparatus Symposium Topics
 - General overview on the types of Foam Systems
 - What to be aware of with F3 Foams

- Suggested FAMA Forum Article Topics
 - How do you go about calibrating a foam system?
- Apparatus Safety Guide Updates
 - Individual sign for Class A Foam and Class B Foam for apparatus.
- Is the subcommittee willing to support an Apparatus Symposium in the Fall of 2022?
 - No answer
- **Pumps & Plumbing –**
 - Suggested Apparatus Symposium Topics
 - Pump Ops Relays
 - Foam Systems
 - Suggested FAMA Forum Article Topics
 - EV's and Pumps
 - Apparatus Safety Guide Updates
 - None
 - Is the subcommittee willing to support an Apparatus Symposium in the Fall of 2022?
 - No

Attachments:

Member Company Attendance
Sign-In Sheets

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INDIANAPOLIS, IN**

Member Company Attendance
[based on meeting registration/sign-in at meeting]

Akron Brass Company	Maxi-Metal, Inc.
AMDOR Inc.	Michelin North America
Apparatus Equipment & Service, Inc.	OFAB Inc.
Blue Sea Systems Inc.	Pierce Manufacturing, Inc.
Cummins Inc.	Pro Poly of America, Inc.
Custom Fire Apparatus, Inc.	PyroUHP
Custom Truck & Body Works, Inc.	RealWheels Corporation
Danko Emergency Equipment, Co.	Rescue 1
Darley	Rosenbauer America, LLC
Elkhart Brass Mfg. Co., Inc.	Safetek Emergency Vehicles Ltd.
E-ONE, Inc.	Seagrave Fire Apparatus LLC
EZ Trac AWD	Seats, Inc.
Federal Signal Corporation	Skeeter Brush Trucks, LLC
Fire Lion Global LLC	Smart Power Systems
Fire Research Corporation	SoundOff Signal
Fouts Bros., Inc.	Spartan Emergency Response
Golight, Inc.	Sutphen Corporation
H.O. Bostrom Company, Inc.	Task Force Tips, Inc.
Hale Products, Inc.	Trident Emergency Products, LLC
Harrison Hydra-Gen	United Plastic Fabricating, Inc.
Hendrickson	United Safety & Survivability Corporation
HiViz Lighting, Inc.	US Fire Pump Company
HME Ahrens-Fox	Ward Diesel Filter Systems
IMMI	Waterous Company
Kussmaul Electronics Co.	Whelen Engineering Co., Inc.
Link Suspensions of Canada LP	Williams Fire & Hazard Control, Inc.
Marion Body Works, Inc.	Ziamatic Corp.