



**MINUTES
FIRE APPARATUS MANUFACTURERS' ASSOCIATION
TECHNICAL COMMITTEE MEETING
APRIL 26, 2018
INDIANAPOLIS CONVENTION CENTER,
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 – by Doug Miller at 7:30 a.m.

Proof of Notice – Notice of this meeting was provided to all Technical Committee representatives and FAMA members on March 9, 2018 via email.

Roll Call – A quorum was declared with 52-member companies present at the start of the meeting. [See attendance and sign-in sheets attached to these minutes.]

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.

The meeting sponsors were recognized for their support of the committee and FAMA: Spartan Emergency Response, W.S. Darley & Co., Whelen Engineering Co., Inc., and PennWell Fire Group.

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

VOTED: That the minutes of the October 18, 2017 Technical Committee Meeting (Nashville, TN) are approved and be entered into the records of the association.

Welcome /Association Update – 2018 FAMA Board President, Steve Toren provided a brief update on recent FAMA activities and the recent successful Hill Day event with 47 FAMA member representatives participating. For 2018 the AFG and SAFER grants were funded at \$350 Million each. The goal for 2019 is to increase funding to \$405 million each. Mr. Toren encouraged members to develop and maintain relationships with their local and state legislative offices to reinforce the funding.

Chairman's Award – Mr. Miller presented the 2018 Chairman's Award to Peter Luhrs for his outstanding work on the Electrical Sub Committee and multiple Buyers Guides.

Technical Committee Highlights – Mr. Lackore reported recent Technical Committee Meeting Planning sessions held in conjunction with the Spring and Fall Meetings have enabled the committee to make great strides. The planning meetings provide a more in-depth working opportunity and have proven to be productive. He encouraged member representatives to stress their importance and try to attend.

Mr. Lackore reviewed the Subcommittee Leaders and expressed his appreciation for their continued focus and accomplishments towards the development of the Buyer's Guides.

New FAMA FDSOA Board Representative – Mr. Lackore congratulated Grady North on his retirement and recognized him for his many years of service as the FAMA representative on the FDSOA Board of Directors. Mr. Lackore also congratulated Mr. Doug Kelley, who has agreed to represent FAMA on the FDSOA Board.

2019 FDSOA Support Plans – Mr. Lackore provided a review of the initial planned presentation topics and suggested presenters. The Committee needs presentation topic ideas and volunteers to present.

FAMA Forum Schedule for 2018 – October 2019 – Mr. Lackore reviewed current FAMA Forum schedule thru October 2019 and requested the members to provide article topic suggestions and volunteers to write the articles.

New Graphical Symbols – Mr. Lackore presented six new graphical symbols for approval.

Hose Bed Capacity Test Standard Project – After review of the project initiative, Mr. Lackore reported little progress has been made. The Committee needs hose manufacturers to provide the required data using the test method provided.

Mr. Lackore reviewed the NFPA 1901/1906 2021 Revision Cycle and meeting dates.

NIOSH Seating for 1901 – Through Mr. Lackore and Mr. Crowel working directly with Mr. Gordon Routley and Mr. Mike Wilber to revise and develop an acceptable NIOSH Seating Proposal. Comment and justification will be submitted as a public comment from FAMA.

NFPA 1500 Standard on Fire Department Occupational Safety, Health, and Wellness Program – Mr. Lackore reported NFPA 1500 is currently reviewing the public comments and provided the dates for first and second drafts. He also reviewed the apparatus related topics.

Mr. Lackore reviewed the verbiage revisions to the NFPA standards on Aerial Ladder Climbing, Clean Cab standards, and ANNEX.

A video on the Firefighter Cancer Initiative was shared: www.sylvesternewbadgeofhonor.com

The Committee has added a Clean Cab Buyers Guide to the plan for production.

Buyer's Guide Status Report – Mr. Miller reviewed the overall status of the project by subcommittee. Several have been published, several are in various stages of draft, and many need a draft copy created. The subcommittees were tasked with pushing all Buyer's Guides forward to completion. The goal is to have all guides completed by the fall FAMA/FEMSA meeting in October.

The overall status report for Buyer's Guides follows:

- 10 Drafts
- 17 Published
- 14 Planned / to be developed

Mr. Miller expressed his appreciation to all those that have helped toward this very important goal.

The attendees broke to meet as subcommittees until 9:00 AM then reconvened and provided brief reports. [Additional Subcommittee breakout session notes follow.]

Subcommittee Breakout Session Reports:

- A. **Aerial/Quint** – Mr. Jim Salmi reported the subcommittee discussed the requested Buyer's Guide revisions, decals on aerial devices, and loads (including wind and ice) for aerial devices.
- B. **ARFF** – Mr. Paul Powell talked about the ARFF Working Group event in Memphis, TN. A Buyer's Guide will be developed and produced.
- C. **Ambulance** – no attendees/no report

- D. **Body** – John House of Danko Emergency Equipment reported the subcommittee discussed two possible new Buyer's Guide topics Step Surface Standards and Chevron Striping.
- E. **Chassis** – Mr. Chris Crowel reported the subcommittee is planning to produce Buyer's Guides on Apparatus Seating and Intake. Drafts are in process for Specifying Apparatus for Maintenance, Front Suspension, and Tires.
- F. **Electrical** – Mr. Pete Luhrs presented for the subcommittee. See detailed report provided below.
- G. **Foam** – no attendees/no report
- H. **Pumps & Plumbing** – Mike Sulmone reported the subcommittee. They discussed the NFPA 1901 revision cycle and noted the June deadline is quickly approaching.

New Business – none

Old Business – none

Next Meeting Notice – The next meeting of the Technical Committee will be held Wednesday, October 17, 2018 at 3:00 p.m. at the Music City Center in Nashville, TN. Refreshments will be served at 2:15 p.m.

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 9:48 a.m.

A true copy, attest:

Sonya Kelly

Attachments:

Member Company Attendance
Sign-In Sheets

Additional subcommittee breakout session notes submitted after the meeting:

- A. **Aerial/Quint** – Mr. Jim Salmi
 - Reviewed the NFPA process steps and timing of the public inputs for 1901
 - Discussed envelope control devices and the need for changes in the standard
 - Reviewed wind load and ice loads for aerials and how to consider them in the standard
- B. **Body** – John House of Custom Fire Apparatus reported the subcommittee discussed two possible new Buyer's Guide topics Step Surface Standards and Chevron Striping.
- C. **Chassis** – Mr. Chris Crowel
 - NFPA1901 Seating Language Proposal
 - Provided background - After San Diego, Tech Committee was asked to rereview language with Routley/Wilbur

- Routley/Wilbur agreed in principle with FAMA concerns, they mentioned two concerns and asked to change 3" to 2" driver offset
- Concern that standard would allow 4 across seating in 74" minimum interior width cab
- Roger explained 2" offset would not be possible in 88" interior width cab, Routley/Wilbur okay with keeping 3"
- Added language for 22" minimum shoulder width for each seating position
- **Chassis subcommittee was okay with the revision to add 22" minimum shoulder width at each seating location**
- Clean Cab
 - Provided background (more OEMs starting to focus, FF Cancer Support Network, etc.)
 - Chassis subcommittee thinks there may be value in a white paper, Scott Beecher agreed to lead the team to draft the white paper
- Other suggestions for Technical Committee to Focus on after Buyers Guides
 - Instructional videos on how to tilt cab, operate aerial
 - helps repair locations that may not be familiar with apparatus controls increase technician safety and prevent damage
 - Tire and Wheel video to help departments assess condition

Chassis Buyers Guide Status Report

- TC033 Aux Vehicle Brake Systems – complete and published
- TC034 Winches – complete and published
- TC036 Seats – draft in progress, waiting on pictures from 2 suppliers (IMMI, Bostrom)
- TC046 Engine Air Intake Systems – SCRATCH, remove from list (no OEMs offer optional specification)
- TC047 Specing Apparatus for Maintenance – draft in progress, Drew reviewed with team and will send revised draft
- TC048 Suspensions – Front – not started Bob Albano has agreed to help. Michael Baldwin and Woody willing to help
- TC049 Suspensions – Rear – draft complete, submitted to Miller for approval
- TC051 Crew Compartment Storage – draft complete, submitted to Lackore/Miller
- TC057 Occupant Protection – draft complete, submitted to Lackore/Miller
- TC062 Tires – Crowel/Johnson/Woody Savage meeting scheduled to draft Friday 5/4
- TC063 Wheels – draft complete, submitted to Lackore/Miller
- TC064 HVAC – draft in progress, Mark Bartlett will submit 5/17
- TC066 Engine Exhaust Removal systems – draft in progress, Crowel review

D. Electrical – Mr. Pete Luhrs presented for the subcommittee.

- The meeting was in Indianapolis and we had ~24 people participate in the electrical group breakout.
- NFPA - The Next revision of NFPA is awaiting public and FAMA comments by mid-June. The Electrical group is committed to send up through FAMA comments prior to the end of May. Any individual can submit public comments to NFPA on their own. The FAMA Technical Groups are required to have a unanimous vote in order to forward comments from the FAMA group. Further, any FAMA member not in the technical sub-committees can object prevent comments from moving out of the FAMA group and up to NFPA.
- Buyers Guides - We reviewed the buyer's guides. Printed out one of each copy and circulated this around the group, people made notes on them. Then we updated them and posted them to basecamp.

<https://basecamp.com/1821746/projects/817424>

Electrical Buyers Guide Status Report

<u>Guide #</u>	<u>Guide Name</u>	<u>Authors</u>	<u>Status</u>
TC035	Batteries, Alternators and Chargers	Pete Sremac – Niehoff	Complete
TC037	Scene Lighting	Sam Massa – Hi-Viz	Complete
TC038	Line Voltage Generators	Daune Fisk – Cummins / John Doperalski – Harrison	Draft
TC040	Headlights	Sam Massa – Hi-Viz	Draft
TC044	Warning Lights	Matt Pitzer - Code 3 / Paul Demers - Whelen	Complete
TC050	Audible Warning Devices	Derek Zarembo – Whelen	Complete
TC060	Light Towers	Drew Newman – Wilburt	Complete
TC045	Electrical Systems	Jeff Zook – Weldon / Peter Luhrs – Safe Fleet	Complete
TC061	Camera Systems	Grady North	Complete
	Response Vehicle to Civilian Alerts	Cory Hohs – Haas Alert	Started
	Glare on screens	Sam Massa	Started

- Warning lights too bright - We reviewed this topic again and Whelen has volunteered to draft an outline by reviewing FMVSS and other standards and post the outline to the basecamp electrical group. We hope to have a draft complete in time for NFPA comments to provide to FAMA by the end of May.
- Safety Related Items, Backup Cameras and Blind Spot Sensors - Peter Luhrs is going to look into some of the existing safety information, blind spot sensors, etc... Draft an outline and post it to Basecamp. The electrical group will review / comment on the draft and then vote to move comments to up through FAMA to NFPA.
- Vehicle to Vehicle communications aka First Responder to civilian - Cory Hohs is going to draft an overview of what this technology is and post it on basecamp. The electrical group will review / comment on the draft and then vote if this should move up through FAMA to NFPA. At this point I think the group is still gray on what burden would be placed on the OEM if some sort of communication standard was pushed into NFPA. The group is looking forward to Cory's draft.
- Measurement of Scene Lighting - Sam Massa is going to look into some of the existing information available within Ambulance and other standards. Sam will draft a method to measure scene lighting. He will then post this to basecamp for the electrical committee to review / comment. The group can then vote to move comments up through FAMA to NFPA.
- Review NFPA Electrical and Lighting Sections - The Electrical group is going to review the pertinent sections of NFPA 1901 for any need for clarification or removal of outdated sections. This needs to be completed by May.

E. **Foam** – no attendees/no report

F. **Pumps & Plumbing** – Michael Sulmone

- Attendance sheet circulated
- Doug moved up to a lead role to replace Wes; Pete Lauffenburger new P/P Subcommittee Co-chair
- Everyone should be on Basecamp. If not, please sign up
- Governor Guide is up on the FAMA website; Thank you Dave
- TFT, Safefleet and Akron put together a presentation @ FDSOA on monitors / Deck guns – They volunteered to turn it into a whitepaper (Keith)
- The Hose testing paper needs to be updated from a narrative to our whitepaper format
- Driveline Phasing issue whitepaper in process – Wayne

- Primer whitepaper in process – Trident
- Pump controls whitepaper in process – Safefleet and Darley
- Pump mounting methods whitepaper in process – Wayne
- Pressurized Pump Performance position paper – Wayne (Darley) and Jeff (Idex)
- Brought up NFPA 1901 revision cycle and we should be mindful for comments, UHP section concerns raised
- Roger brought up some thoughts on OK to pump, interlock and pump engages issue for discussion

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

Akron Brass Co.	Michelin North America
Alexis Fire Equipment Co.	Navistar/International Truck & Engine
AMDOR, Inc.	Pierce Manufacturing, Inc.
C.E.T. Fire Pump Mfg., Inc.	Pro Poly of America, Inc.
Cummins Inc. - Engines	RealWheels Corporation Inc.
Cummins Inc. - Generators	Rescue 1
Custom Fire Apparatus Inc.	ROM Corporation
Danko Emergency Equipment Co.	Rosenbauer America, LLC
Dynatect Manufacturing, Inc. (A&A)	Safetek Emergency Vehicles Ltd.
Elkhart Brass Mfg. Co., Inc.	Sam Carbis Solutions Group, LLC
E-ONE, Inc.	Seagrave Fire Apparatus LLC
Fire Lion Global LLC	Smart Power Systems
Fire Research Corporation	Spartan Emergency Response
Freightliner Trucks	Sutphen Corporation
H.O. Bostrom Company, Inc.	Task Force Tips, Inc.
HAAS Alert	The Will-Burt Company
Hannay Reels, Inc.	Trident Emergency Products, LLC
Hansen International, Inc.	U.S. Fire Pump Company
Harrison Hydra-Gen	Valor First Responder Seating
Hendrickson	Vista Brake Lock LLC
HiViz LED Lighting	VT Hackney
IMMI	W.S. Darley & Company
KME Fire Apparatus	Ward Diesel Filter Systems
Maintainer Custom Bodies	Warn Industries
Marion Body Works, Inc.	Waterous Company
Metalfab Ltd.	Whelen Engineering Co., Inc.