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Technical Committee Meeting

CALL TO ORDER

Melissa Dobbs - Co-Chair



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- **Notice of Meeting (March 23, 2022)**
- **Roll Call / Quorum Declarations (per sign-ins)**
- **Recognition of First-Time Attendees**



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ANTI-TRUST / NON-DISCRIMINATION POLICY

Jim Juneau



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- **Review / Enter Minutes – April 11, 2019**
- **Recognition of the Meeting Sponsors**



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**FIRE &
RESCUE** GROUP



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ASSOCIATION UPDATE REPORT

Oran McNabb





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TECHNICAL COMMITTEE REPORT



Roger Lackore
Melissa Dobbs





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ARFF



Paul Powell
(Rosenbauer)



Sarah Peck
(Akron Brass)

PUMP



Pete Lauffenburger
(Akron Brass)



Mike Sulmone
(Trident)

CHASSIS



Chris Crowel
(Cummins)



Dale Katz
(E-ONE)

BODY



John House II
(Danko)



Wyatt Compton
(Spartan ER)

ELECTRICAL



John Doperalski
(Harrison)

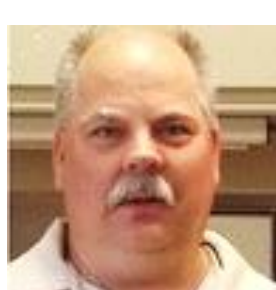


Peter Luhrs
(Fire Research)

AERIAL



Jim Garver
(Sutphen)



John Brady
(KME)

FOAM



Mike Dupay
(Fire Research)



Gregg Geske
(Waterous)

AMBULANCE



Mike Franckowiak
(Akron Brass)



Steve Rowland
(Hale)



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Buyer's Guide Progress

**Thank you to the Board, Marketing Committee and
Clarion for promoting the Buyer's Guides**

Pending	12
Draft	3
To Board	0
Published	34



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Body

John House
Wyatt Compton

TC072	Buyers Guide - Brush Truck Apparatus	Bill Davidson - Skeeter	Pending
TC073	Buyers Guide - Tanker and Tender Apparatus	???– Midwest Fire	Draft
TC074	Buyers Guide - Wildland Apparatus	Bill Davidson - Skeeter	Pending
TC075	Buyers Guide - Cold Environment Apparatus Design	Rick Suche – Fort Garry Fire Trucks	Pending
TC065	Buyers Guide – Hose Bed Sizing	Jay Farrell – Smart Power Systems	Draft

Chassis

Chris Crowell
Dale Katz

TC048	Buyers Guide – Suspensions – Front	Bob Albano, Chad Radtke	Pending
	Buyers Guide – Apparatus Electrification		Pending
	Tire Life Guidelines	Patricia Meisenholder	Pending



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Peter Luhrs
John Doperalski

Electrical

TC038	Buyers Guide – Line Voltage Generators	John Doperalski – Harrison	Draft
TC040	Buyers Guide – Headlights	Sam Massa – Hi-Viz	Pending
TC069	Buyers Guide – Vehicle to Vehicle Communications	Cory Haas – Haas Alert	Pending

John Brady
Jim Garver

Aerial

TC068	Buyers Guide – Aerial Rope Rescue Systems	John Brady	Pending
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Foam

Gregg Geske
Mike Dupay

TC067	Buyers Guide – CAFS	Jeremy Fox -- IDEX	Pending
TC030	Foam and Water Additive Proportioning Systems	Greg Geske	Revision Needed

Pump

Peter Lauffenburger
Mike Sulmone

TC070	Buyers Guide – Pump Primers	Mike Sulmone – Trident	Needs Photos or Illustrations
TC071	Buyers Guide – Deck Gun and Aerial Monitors	Pete Lauffenburger – Akron	Pending
TC076	Buyers Guide - Pump Control Location	Wyatt Compton – Spartan	Pending
	Buyers Guide – Apparatus Tethered Drones		Pending



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FDSOA Apparatus Conference - 2023

Chandler Arizona

Sun Jan 9 thru Wed Jan 12



- Quality presentations with dynamic speakers
- Eliminate breakout sessions until attendance increases
- Target topics to audience



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FDSOA Presentation Topics

Battery Chemistry – AGM vs Lead Acid vs Lithium	Jeff Harper, Kussmaul	
Accident Dynamics and the Human Body	IMMI	
Financial Cost of Apparatus Accidents	Cory Hohs	
NFPA 1900 Update	Sam Massa, Roger Lackore	
Electric Fire Apparatus	Lackore, Schultz	
Trend in Scene Lighting	Sam Massa	
Increasing Apparatus Up-Time	All	
Advanced Pump Controls	Steve Rowland	



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Article Topics for Board Review

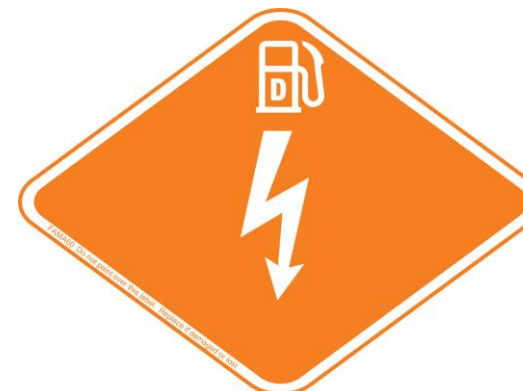
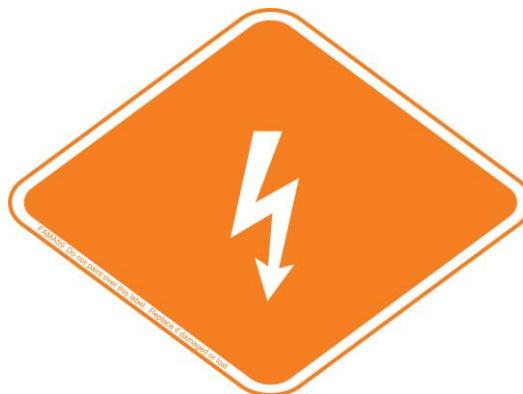
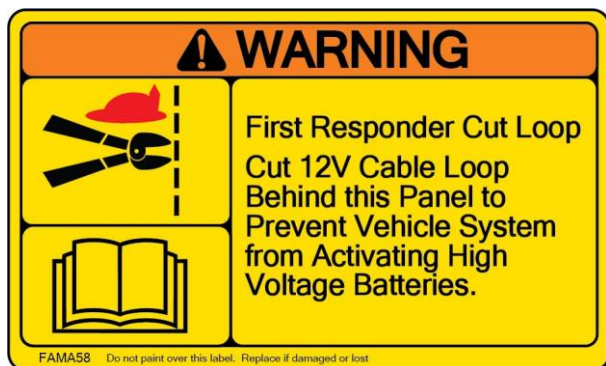
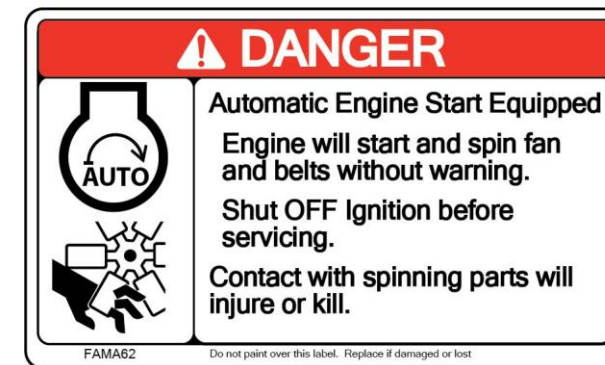
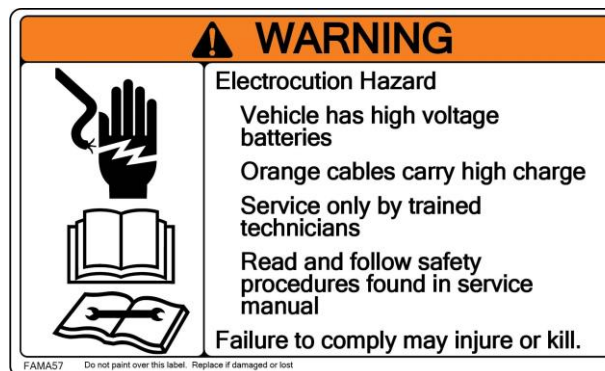
- 1 Turbocharger Life and Engine Shut-Down Requirement
- 2 Frame Corrosion
- 3 Tire Life and Fire Service Ratings
- 4 Battery chemistry pros and cons
- 5 Electrical Load Requirements and Load Shedding
- 6 FAMA Weight and Cube Calculator and Axle Weights
- 7 Rescue or Rescue Engine
- 8 Lavender Ribbon Report update (clean cab)
- 9 New AC Systems Refrigerants
- 10 Electric Commercial Chassis
- 12 Interoperability technology and mutual aid.
- 13 Fire and intelligent transportation systems
- 11 NFPA 1900 update



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New Safety Signs





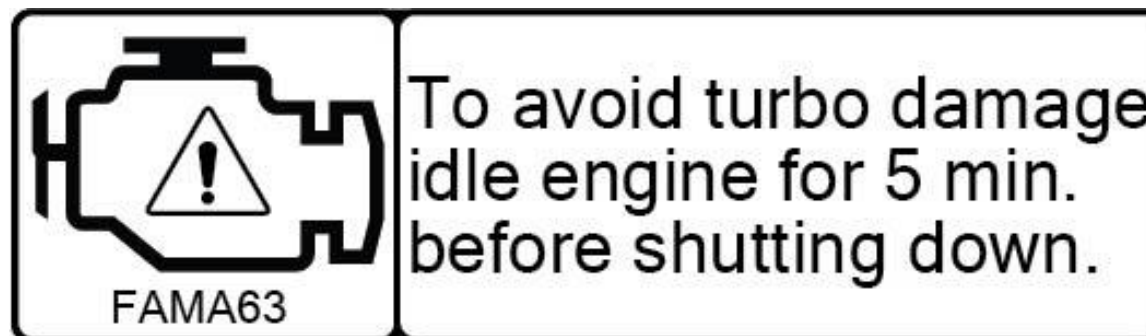
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Engine Idle Label

Cummins engine turbochargers will last longer if the turbo is allowed to cool down prior to shut-down.

Size: 1.75 in. x .50 in.





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FAMA Safety Guide Updates

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- **Cab Occupant Doors**
- **Auto Engine Start**
- **Extra Precautions Around Power Lines**
- **Ladder elevation climbing considerations**
- **Flying Flags from Aerial Devices**
- **EV Apparatus Electric Hazard**
- **EV Apparatus First Responder Loop**
- **Tire Life Clarified**
- **Extra Illustrations**





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FAMA NFPA Representation

18/18A - Standard on Wetting Agents / Standard on Water Additives for Fire Control and Vapor Mitigation

- Principal Jerry Halpin
- Alternate Mike Dupay

414+/ARFF - Standard for Aircraft Rescue and Fire-Fighting Vehicles

- Principal Paul Powell
- Alternate Duane Kann

1451 - Standard for a Fire and Emergency Service Vehicle Operations Training Program

- Principal Roger Lackore
- Alternate OPEN / TBD

1500 - Standard on Fire Department Occupational Safety, Health, and Wellness Program

- Principal Roger Lackore
- Alternate OPEN / TBD

1585 - Standard on Contamination Control

- Principal Scott Beecher
- Alternate Roger Lackore

1901 - Standard for Automotive Fire Apparatus

- Principal Sam Massa
- Alternate Philip Gerace

1917 - Standard for Automotive Ambulances

- Principal Steve Rowland
- Alternate Mike Franckowiak



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NFPA Consolidation Process

www.FAMA.org

New Draft Standard*:

NFPA 470
NFPA 1140
NFPA 1225
NFPA 1990
NFPA 2500

Previous Standard Numbers:

NFPA 472, NFPA 473, NFPA 1072
NFPA 1051, NFPA 1141, NFPA 1143, NFPA 1144
NFPA 1061, NFPA 1221
NFPA 1991, NFPA 1992, NFPA 1994
NFPA 1670, NFPA 1983, NFPA 1858

New Draft Standard:

NFPA 1020
NFPA 1580
NFPA 1850
NFPA 1930
NFPA 1950
NFPA 1955

Previous Standard Numbers:

NFPA 1021, NFPA 1041
NFPA 1581, NFPA 1582, NFPA 1583, NFPA 1584
NFPA 1851, NFPA 1852
NFPA 1932, NFPA 1937, NFPA 1801, NFPA 1802, NFPA 1962
NFPA 1951, NFPA 1977, NFPA 1999
NFPA 1952, NFPA 1953

New Draft Standard*:

NFPA 440
NFPA 460
NFPA 1030
NFPA 1660
NFPA 1900
NFPA 1910

Previous Standard Numbers:

NFPA 402, NFPA 424
NFPA 403, NFPA 405, NFPA 412
NFPA 1031, NFPA 1035, NFPA 1037
NFPA 1600, NFPA 1616, NFPA 1620
NFPA 414, NFPA 1901, NFPA 1906, NFPA 1917
NFPA 1911, NFPA 1912, NFPA 1925, NFPA 1071

New Draft Standard:

NFPA 455
NFPA 990
NFPA 995
NFPA 1300
NFPA 1400
NFPA 1750
NFPA 1857
NFPA 1985

Previous Standard Numbers:

NFPA 450, NFPA 451
NFPA 901, NFPA 950
NFPA 951, NFPA 1401
NFPA 1300, NFPA 1452
NFPA 1402, NFPA 1403, NFPA 1404, NFPA 1407, NFPA 1408, NFPA 1410, NFPA 1451
NFPA 1201, NFPA 1710, NFPA 1720, NFPA 1730
NFPA 1855, NFPA 1877
NFPA 1984, NFPA 1989

New Draft Standard*:

NFPA 1010
NFPA 1550
NFPA 1960
NFPA 1970

Previous Standard Numbers:

NFPA 1001, NFPA 1002, NFPA 1003, NFPA 1005
NFPA 1500, NFPA 1521, NFPA 1561
NFPA 1931, NFPA 1936, NFPA 1961, NFPA 1963, NFPA 1964
NFPA 1971, NFPA 1975, NFPA 1981, NFPA 1982



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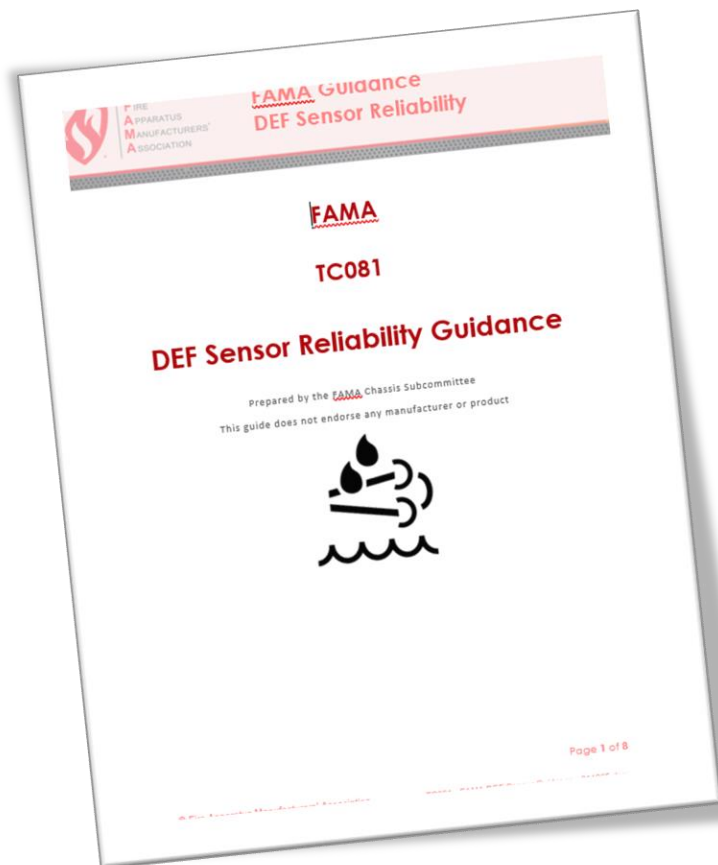
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DEF Sensor Guideline - Chassis Committee

Melissa Dobbs
Chris Crowel

- Explains DEF Sensor shortage
- Provides steps to take if DEF sensor fails and replacement is unavailable.

Complete





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Electric Apparatus and NFPA 1900

Melissa Dobbs
Chris Crowel

- **FAMA comments to NFPA 1900 to make it compatible with electric apparatus**

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Frame Corrosion Repair Guidelines

Chassis Subcommittee

- Guide for departments and service facilities to use when considering old apparatus with frame corrosion
- Out of service criteria
 - Percent of frame thickness lost
- Repair recommendations
 - Fish-plating
 - Corrosion inhibitor
- Prevention
 - Chemicals
 - Oils
 - Undercoating
 - Cleaning schedule

Board Review



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Tire Life Guidelines

Chassis Subcommittee

- Tire life in NFPA 1911 is 7 years
- Michelin fire life is 7 years from service or 10 years from manufacture date
- FAMA Safety Guide is 7 years from date of manufacture

In Process



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CARB Engine Emissions 2024

FAMA initiative to engage with States to determine if they will adopt the CARB emergency vehicle emissions exemption.

Pending

**Oregon
Massachusetts
New Jersey
New York
Colorado
Maryland
Pennsylvania
Maine
Washington**





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AIMS Act

(American Innovation and Manufacturing Act)

Pending

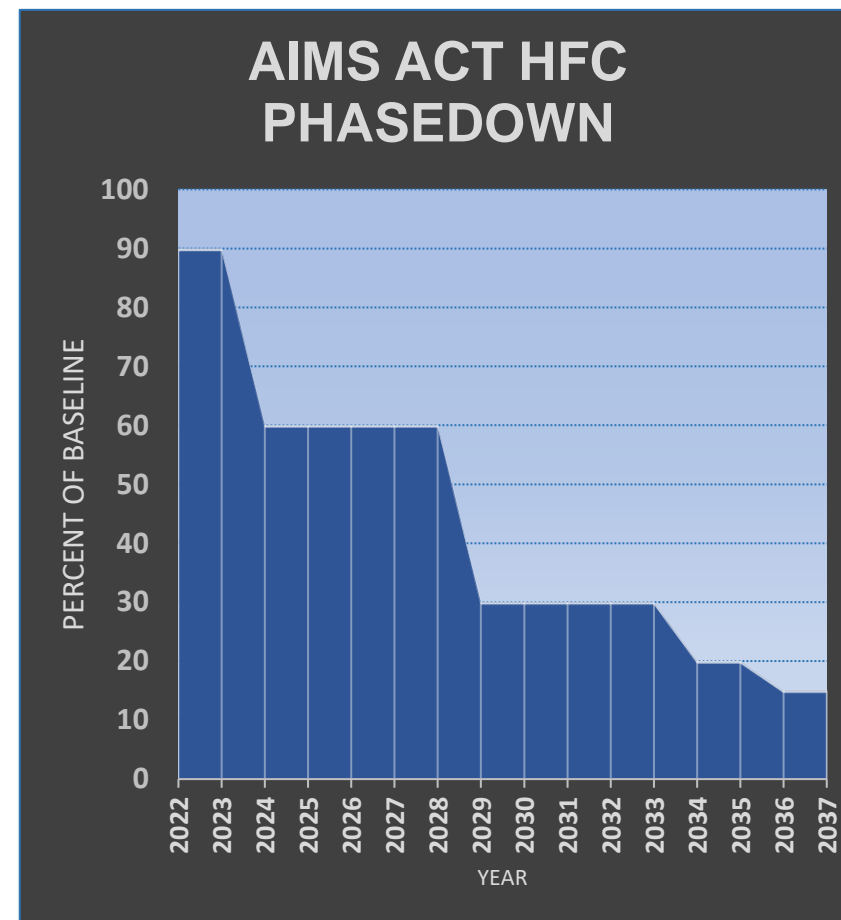
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Directs EPA to phase down use of hydroflourocarbons (HFC) by:

- Phasing down production and consumption
- Improving reclamation
- Minimizing leakage
- Transition to new Technology

Table 1: 18 Individual HFCs Listed in the AIM Act

Chemical Name	Common Name	Exchange Value
CHF_2CHF_2	HFC-134	1100
CH_2FCF_3	HFC-134a	1430
CH_3CF_3	HFC-143	





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Air Conditioning Refrigerant R134 to R-1234yf

Pending

- **R-1234YF is the only practical alternative**
- **Each vehicle vocation must submit an application to the EPA to approve the use of YF.**
- **Applications have been submitted for off-road by AEM, and for heavy truck by EMA.**
- **Bus and Specialty application (would include fire apparatus) needs to be created and processed.**
- **We need AC leak warranty data to be gathered from our industry anonymously to support the application.**



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Air Conditioning Refrigerant R134 to R-1234yf

Pending

Application Details

- Diagrams of typical systems
- Cab size, occupants
- Risk of leaks in occupant compartments
- Estimated leak rates based on warranty claims



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New Initiatives Under Consideration

EV Charging Infrastructure for Fire Stations – Guide

Clean Cab Guide

NHTSA Fire Apparatus Recall Guide

Engine Emissions & GHG Guide

Buyers Guide Videos

Size and weight by state update



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NFPA 1900

Roger Lackore

Sam Massa



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Subcommittee Breakout Sessions



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Thank You