



**National Fire Protection Association**  
The authority on fire, electrical, and building safety

# NFPA 1917

## Standard for Automotive Ambulances

Past, Present, and Future

Ron Thackery

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Mark Meijer

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# History – KKK A-F

## Government Services Administration

GSA

- A Purchasing standard for Feds

GSA

- Early requirement for federal block grants

GSA

- Only standard available

GSA

- Adopted by many states to allow for grant compliance



# Why NFPA

GSA no longer wanted to develop and maintain a national standard

GSA looked for a EMS standard setting body

NFPA has a history of developing “consensus” or industry standards



# The FEAR.....

All ambulances  
will be red

All ambulances  
will have a  
water tank

All ambulances  
will be  
medium duty

Fire is taking  
over

We won't be  
able to afford  
the result

Non-fire won't  
have a voice



# The Reality....

## Technical Committee Membership

Enforcer 9%  
(NASEMSO)

Insurance 3% (VFIS)

Installer Maintainer  
3% (EVT)

Labor 12%

Manufacturer 30%  
(AEV)

Research Testing 9%

Special Expert 6%  
(Jim Green NIOSH)

User 27% (Aaron  
Reinert, Mark Meijer,  
Mark Postma, Ron  
Thackery)



# Process

Technical Committee met first in June 2009

Committee charged to convert GSA KKK to NFPA, low hanging fruit only

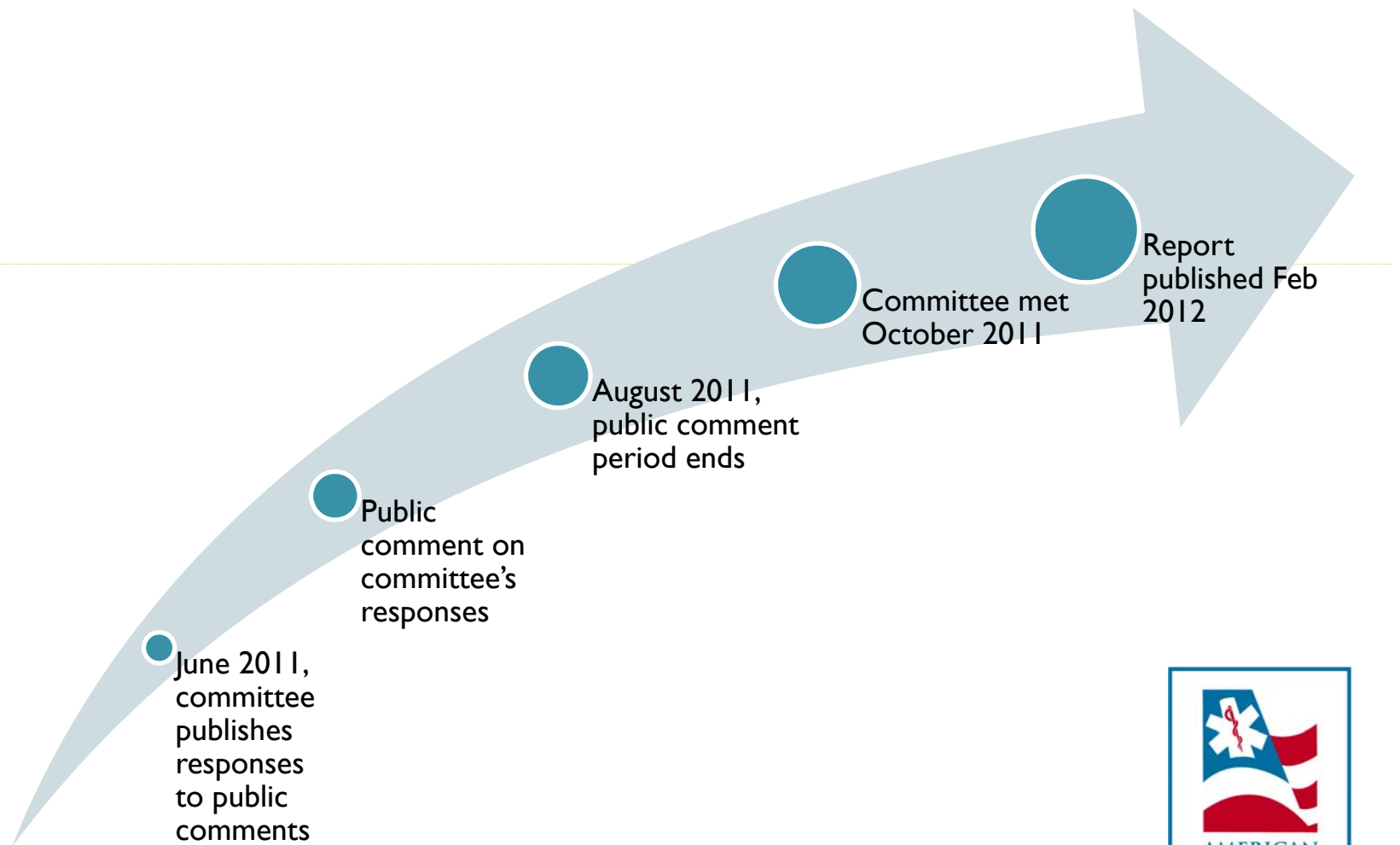
Subject matter committees: Chassis, Electrical, Exterior, Testing, Admin, Patient Function

Line by line approval by full committee

Simple Majority - approval



# Process



# Process

Technical Committee votes  
on final standard

If passes would be published  
May 2012

Final vote of NFPA  
Association June 2012

Effective January 2013





# Process

2013 – NASEMSO response to GSA

GSA recently indicated it would essentially abandon KKK in 2013

State Regulatory Agencies will need to act to designate applicable Standard

AAA Strategies



# What to know...

## New Standard

- Will be a re-write of KKK

## New Standard

- Will continue to require certified lab testing of new models and certain steps of customer units (not everyone does this now)

## New Standard

- Requires an attendant to be able to reach all controls from a seated position



# What to know...

## NIOSH Testing

NIOSH  
Testing

- Partnership between NIOSH, National Institutes for Standards and Technology and Homeland Security

NIOSH  
Testing

- Looking at human factors for seating, equipment placement, and patient care flow

NIOSH  
Testing

- Some items already making it into new trucks



# What will be Different?

Load capacity – 171 lbs per seated position

Seatbelt monitoring system

Determine whether a seat is occupied and seat belt attached after being occupied

Audible and visible warning device – for cab and patient compartment

Provided that parking brake released and unit not in Park



# What will be Different?

Tire pressure monitors

Designate Health Care Provider seating positions

- Adjustable to within 6” of patient on cot



# What will be Different?

AMD testing standards

Speed – governed for maximum speed of 77 MPH

Chevrons – red and fluorescent yellow or green

Underbody lighting (Side-3 or 4) (Rear-1 or 2)

Establishes “lighting zones” in which all areas of the truck must display certain warning light. Additional emergency lights on the sides of the vehicle, at the rear wheels and the rear side quarter panels.

Interior cabinets marked with max weight rating



# What will be Different?

Items > 3 lbs secured in compartment or by device to withstand 10g force

Carbon monoxide detector

Mud flaps

Additional hand rails at every point of ingress

Certificate of compliance – exceptions to be corrected before placing in service



# What will be Different?

**DO NOT MOVE** – light connected to doors, stowage racks and deployed devices

**NFPA 1917** doesn't apply to Re-mounts or Bariatric units





# Modifications

Hub Caps – easily removable for lug nut view

Vehicle Stability Control – not available on all chassis

Use of science in next version

171 lbs.

Back up alarm – can't be unarmed



# What's Next?

NFPA Specs have already shown up in Vehicle Bids to Manufacturers

Will your state need to change state statute and or administrative rules?

- VT and CT preparing specifications other than NFPA

NFPA 1917 Committee to begin review of published standard immediately after issuance Release revised Standard in 2015

- Committee members – old and new



# What's Next?

## NIOSH Testing (not currently included)

- Seating and restraints for attendants rated to 30 MPH frontal and side impacts
- Stretchers that will stay attached to the floor and the patients will stay on them
  - Testing underway
- Roll testing of box and corner impacts
- Full scale testing (already funded)



# What Can You Do?

## Vehicle Design Standard Implementation

- Engage in the process
- Talk to vendors
- Investigate
- Talk to your State EMS office
- Provide input



# How Much?

