



# Fire Apparatus—Market Trends and the Dealer Role

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# About Me



- *Fire Apparatus & Emergency Equipment*  
Senior Editor
  - Been with the magazine since December 2010
- *Fire Engineering* Web Editor
  - Served as Web editor of *Fire Engineering* from 2001 to 2006
- Member, Weldon Fire Company, Glenside, PA
  - Joined in August 1993
  - Have served as Second Assistant Engineer and First Assistant Engineer; Second Lieutenant, First Lieutenant, Captain. Currently Assistant Chief

# Objectives

- Discuss fire apparatus purchasing trends
- Discuss fire apparatus design trends
- Discuss the dealer role in the overall process



# Where are we?

- 2008 was the high point with more than 5,000 new apparatus sold in North America
- During economic downturn, by 2011 apparatus sales were down 40% from their peak
- Slight recovery in 2013, but down again in 2014 between 5 and 10 percent
- At the end of 2015, then current numbers had shown a 15% increase



# Where Are We?



- The sales increases coincide with municipal budgets recovering.
- The increases also coincide with what many call pent up demand—basically departments put off apparatus replacement as long as they could.
- What it means for you: fire departments are ready



# Where Are We?

- Data: Departments are getting good at using data
  - Catching up to Police Departments
- Departments are spending more time researching what they want—the what and the why. Department brass getting very good at explaining why.
- When departments can explain why well, they get the money.



# Where Are We?

- Bottom Line: Not many are expecting the peak experienced in 2008.
- Still, departments are ready to buy, and they are looking to YOU to help.
- Fire Departments nationwide have had to make tough cuts.
- Volunteerism is down. The **experience** departments had for buying fire apparatus has diminished.
- This is where **YOU** come in.



# Where Are We?



- Apparatus manufacturers are listening
  - 75-foot rear-mount introduced at FDIC International 2016 a good example
  - Smaller pump panels for more maneuverable pumpers in higher demand
  - Construction materials
  - At the same time, apparatus manufacturers are also innovating



# Fire Apparatus Design

**Multipurpose  
Resurgence of Mini Pumpers  
Electronics  
Seating  
Quick-Response Units  
General**



# Multipurpose Apparatus

- Some love'em, some hate'em
- More with less mentality, and more importantly, more with less reality
- Volunteerism down
  - Some departments that ran three fire apparatus are down to two. Two engines and a ladder down to one engine/one ladder
  - One department has decided that after years of running two engines and a ladder to go down to one engine, a mini pumper, and a quint
  - These are staffing related



# Multipurpose Apparatus



- Career departments forced to combine companies and reduce staffing
  - Expecting engine companies to perform rescue company duties
  - Reduced staffing often means need for an apparatus eliminated
  - More economical to purchase one rig that does more than one function—e.g. a rescue-pumper—than purchasing new engine and new rescue

# Multipurpose Apparatus

- Not limited to rescue-pumpers
  - Quints also still viable option and some departments are building “rescue quints”
- Not always what the customer wants necessarily, but what the customer is forced to purchase by Authority Having Jurisdiction
- Means **YOU** need to be ready to make recommendations and answer many questions about these types of apparatus





# Mini Pumpers



- Enjoying resurgence in some areas
  - Fell out of favor in many places when personnel were no longer allowed to ride the back step
  - Chassis options allow crews of 4-5 to respond
  - Many responses are AFAs or small fires not requiring a full size pumper
  - Wear and tear on full size pumpers reduced
  - Often have enough to get started if the AFA becomes something more

# Apparatus Electronics

- Fire apparatus continue to get smarter
  - Ability to wirelessly communicate vehicle data
  - Multiplexing
  - Acting as wireless hotspots
  - Vehicle data recorders
  - Camera systems
  - Radar
  - Crash Avoidance



# Apparatus Electronics

- Pump Panels
  - Electronic Valves
    - Lots of options
    - Lots of reasons to have them, and lots of reasons not to
    - Not pervasive yet
    - Price point will continue to come down
      - When it does, it will be less expensive for electronic valves vs. manual (traditional)
    - Make sure maintenance personnel are involved with the decision
  - Can now be controlled from almost anywhere on the truck—or off the truck



# Apparatus Electronics

- Age Gap
  - Remember, many of the people responsible for fleet maintenance are not the “millennials” coming into the fire service right now. Although they are young and more accustomed to using electronic devices and touchscreens, they are the newest to the fire service.
  - There will be a period of time before the people responsible for the fleets are comfortable with today’s technology





# Apparatus Electronics

- LEDs
  - Becoming more pervasive
  - Total cost of ownership often helps soften the blow of initial investment
  - Depending on entire setup of the truck, at the very least a less powerful generator will work



# Apparatus Electronics

- Multiplexing
  - Not yet universal
  - Some customers still want traditional hard wiring
  - Important to be able to educate customers on it



# Apparatus Seating

- Seating requirements extremely varied
- Career departments have set crew sizes that dictate seating requirements
- Volunteer departments vary widely.
  - “Monthly Meeting” Theory
  - Can be as few as four seats for the crew to as many as 8 in a typical pumper. Walk-in rescues can have even more
- Needs vs. Wants analysis is critical





# Apparatus Seating

- For NFPA 1901, 2016 ed., a group requested that the minimum seat width for an apparatus seat be increased from 22 inches to 28 inches
  - Did not pass
  - Study determined that 95% of firefighters require a seat that is at least 28 inches to accommodate them in their gear (National Institute for Occupational Safety and Health (NIOSH) study titled, "Safe Seating and Seat Belts in Fire Apparatus: Anthropometric Aspect")
  - Will more than likely continue to be explored
  - Awareness of the issue is key





# Apparatus Seating



- Seating impacts crew cab configurations
- Departments finding new uses for any bit of space on the truck
- Know NFPA 1901 requirements for mounting equipment in a cab
- Think outside the box
- Fire Departments are good at stealing from each other

# Quick-Response Units

- Many departments experimenting with quick response units instead of engines/ladders for responding to medical calls
- Reduce fuel costs, reduce wear and tear on full size fire apparatus
- These can be pickup trucks or sport utility vehicles—both full size and medium



# General Trends

- Low Hosebeds
- Walk-In and Walk-Around Rescues
  - Many rescues carrying some water
- Roll-up doors covering pump panels
- More and more getting into bumpers





# Dealer Role

- Fire Apparatus extremely easy to drive now
  - Easy to drive, yet very complex vehicles
  - NFPA 1901 adds to complexity
    - A lot for fire departments to know
    - Not all department apparatus purchasing committees read the standard
  - Looking to the dealer to consult, not necessarily just sell
  - Know NFPA 1901—not only to help, but also to not provide bad information





# Dealer Role



- Critical element in the entire process
- Don't just be a dealer/seller—be a partner
- Don't sell a Sutphen truck. Sell a Dealer Truck.
  - Assume ownership.
  - Not “after the sale” service. Make it “after delivery service”
    - Fire departments are going to turn to you first if there's an issue
    - Need guidance to get issue resolved
    - Need to know that you are on their side and will do everything to solve the problem

# Dealer Role

- Make sure you stress to apparatus purchasing committees that they run their design ideas by the shop supervisors
  - Serviceability of fire apparatus is huge
  - Out of service time increases as service becomes more complex
  - Impress on apparatus purchasing committee that there is always a tradeoff in apparatus design



# Dealer Role

- Bill Adams: If it's not in the spec, it does not exist
  - Remind customers to ensure that they triple check their specs. Unwritten expectations don't make it into the final product—the customer will thank you.
  - Know the standard and know what you are to provide in terms of documentation
    - Not doing what NFPA 1901 says you “**shall**” do can come back to haunt you





# Dealer Role

- Know the options
  - Know what the options are for your suppliers
    - Pumps
    - Valves
    - Seats
    - Generators
    - Mounting Systems
  - A lot to keep track of, but additional service to your customers
  - Read the trade pubs, stay current





# Dealer Role

- Carrying on a 126-year tradition
- A company doesn't last 126 years without great products and great advocacy
- YOU are the advocate and YOU are the strongest link between customer and manufacturer



# Takeaways

1. Market has been in growth mode since economy started to turn around
2. Make your sales personal
3. Customers need your consultation more than ever.



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## Thank You!

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