

The Future of Fire Apparatus and Emergency Equipment

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The BEST I can do is tease you.

Shore Line Air-Electric Auto Eject

- Kussmaul Electronics
- 30A, 250V, 175 PSI
- After eject, weatherproof cover snaps into position.
- www.kussmaul.com



Apparatus Body Construction

- Polybilt Body Company (www.polybilt.com)
- Creates a corrosion-free and recyclable truck body
- Integrated water tank and truck body, leading to a lower center of gravity and lighter weight
- Impact resistant- lowers maintenance costs from dents and dings

PolyBilt Truck Body



Wildland StakPak

On Board Water Tanks

- Poly Tank III from United Plastic Fabricating
- Separate tanks for Class A, B, and other foam
- QR Coded “Tanknology™” Tag on pump panel
- Color-coded fill towers
- Won’t rust
- Won’t corrode





HANDS FREE COMMUNICATION SYSTEM

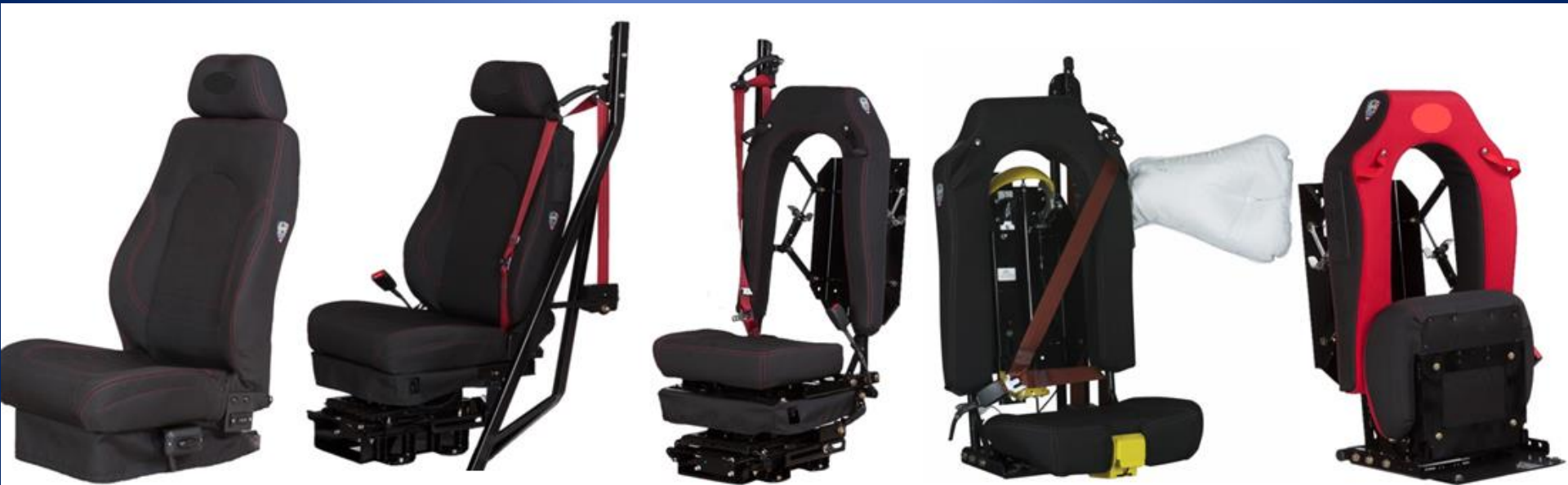
- Setcom speakers and microphone integrated into H.O. Bostrom seat
- Advanced Phase Contouring Technology prevents feedback
- Enhances driving safety with hands free communication
- Reduces maintenance costs of broken or lost headsets



Setcom

Occupant Safety

- USSC Group (USSCGgroup.com)
- Broad choices for apparatus seating
- Dynamic adjustable SCBA bracket
- Integrated SRS



LCD Pump Panel

- Fire Research www.fireresearch.com
- 24" sunlight readable touch-screen LCD
- Push button and slide valve controls
- Video inputs
- Pump governor
- Customized software/Configured to your needs

24" Fire Research LCD Pump Panel



Vehicle Informatics

- ACETECH from Ferno
- Monitors, records, and reports chassis and vehicle events in real time
- Driver feedback (speed, turning, braking forces)
- Customizable reports
- WiFi Hotspot



Driver's Enhanced Vision System

- Rosenbauer EMEREC DEVS
- Tablet computer based & wireless
- An adjunct for the driver in poor visibility
- Forward Looking Infra Red (FLIR) vision
- Assists with navigation & route calculation
- www.rosenbaueramerica.com



Integrated Hydraulic Technology

- Harrison Hydraulics: www.harrisonhydragen.com
- Ability to power many options on a smaller chassis.
- This unit powers: 2 rescue tools and reels
- 10kW Generator
- Light Tower
- 150 GPM pump
- Hose reel
- Electric reel
- All on a Ford F250



- What is the #1 cause of injury in the fire service?

Improved Remote Monitor Operation

- Task Force Tips
- Reduces need for operator to climb on apparatus to adjust stream pattern on monitors
- Hand held or panel mounted control boxes
- Provides information on GPM flow

Monitor Controls



Hand Held



Panel Mount



Not Rod

Water Purification



- Filters fresh and salt water, apparatus-mounted or portable, backpacks and bottles, straws and inline filters
- Dispensing machines
- Both FO and RO technology.
- For deployments and disasters where water is a NEED not a WANT

Where were LED lights invented?

Vehicle Lighting

- Hansen International
- Back-Lit Grab Rail
- (Almost) any color LED





**What if there was technology available for fire apparatus that
was always looking at the road ahead?
And what if it reacted faster than humanly possible?**

A radar-based
driver assistance
system



Continuously monitoring
the road ahead



Collision Warning (CWS)

- Audible & visual warnings provides detection of developing rear end collisions and alerts driver
- Object tracking up to 200m ahead
- Stationary object warning
- Initial Haptic warning (brake pulse)

Avoid accidents as a result of
driving into dense fog or smoke.

Collision Mitigation (CMS)

- “Always on” emergency activation
- Calculates to determine impending collision
- Evasive maneuver check
- Up to 50% brake application (braking occurs very late)
- Functions at speeds > 15mph
- Auto disengage if driver takes appropriate action

React faster to unexpected and sudden vehicle
maneuvers in front of you.

Deployed from the apparatus:

- Traffic Control Boards
- Sets the arrow apart from warning lights
- Similar to DOT lighting boards
- Lessens distraction by apparatus lighting





Deployed from the apparatus:

- LED Light Towers from Command Light
- With the increase in output with lesser power input, more light can be generated without the need for an on-board generator
- Frees up valuable compartment space
- Eliminates generator maintenance
- Increased need to coordinate the alternator output with the vehicle electric load.



Deployed from the apparatus:

- Darley Stinger- untethered HD video-capable
- Thermal Imaging capable
- 20-30 minutes of battery
- MANET/Comm Grid support
- “Eye in the sky”
- Developing a tethered unit for longer flight times and FAA exemption
- Great in-situ video at:
<http://www.darley.com/videos/darley-stinger.html>

Darley Stinger



Deployed from the apparatus:

- The “LittleGuy”- The Robotic Fire Apparatus from Fire Research Corporation
- Battery Powered
- Self-Contained
- Radio Controlled
- Can maneuver stairs
- 1,000 GPM Elkhart RC Monitor
- Video at:
www.fireresearch.com/frcnews/archives/518



THANK YOU for this opportunity!



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