

DEPARTMENT: Public Works/Fleet Services

BY: Dana Hertfelder
PHONE: 966-5356

RECOMMENDED ACTION AND JUSTIFICATION:

Approve requested changes by the Fire Department to the specifications for 11 Fire Engines.

At the delivery inspection of the new FEMA engine some issues were raised regarding the specifications. However it was too late to make the changes to the additional 11 fire engines as the bid had been awarded to Golden State and accepted. The attached changes are minor; however, in order to ensure no net increase in cost, additional changes have been requested which will provide credits to offset the cost increases.

BACKGROUND AND HISTORY OF BOARD ACTIONS:

The Board approved the specifications and awarded the bid on May 06, 2008.

ALTERNATIVES AND CONSEQUENCES OF NEGATIVE ACTION:

If no changes are made the engines will be constructed per the original specifications.

Financial Impact? (x) Yes () No	Current FY Cost: \$	Annual Recurring Cost: \$
Budgeted In Current FY? () Yes () No () Partially Funded		
Amount in Budget: \$		List Attachments, number pages consecutively
Additional Funding Needed: \$		1. List of changes
Source:		
Internal Transfer		
Unanticipated Revenue	_____ 4/5's vote	
Transfer Between Funds	_____ 4/5's vote	
Contingency	_____ 4/5's vote	
() General () Other		

CLERK'S USE ONLY:

Res. No.: 09222 Ord. No. _____
 Vote - Ayes: 5 Noes: _____
 Absent: _____
 () Approved
 () Minute Order Attached () No Action Necessary

COUNTY ADMINISTRATIVE OFFICER:

Requested Action Recommended
 No Opinion
 Comments:

The foregoing instrument is a correct copy of the original on file in this office.

Date: _____
 Attest: MARGIE WILLIAMS, Clerk of the Board
 County of Mariposa, State of California

By: _____
 Deputy

CAO: [Signature]

ATTACHMENT #1

Proposed Changes In Fire Engine Specifications

Cost Increases

Backboard Brackets	\$345
Add one (1) step to PS rear. Same as previous job #21141.	\$255
Add micro switch on front monitor to prevent cab from tilting.	\$279
Cover to protect Auxillary Pump	\$1,575
EMS cabinet behind driver seat with "D" handled latch.	\$649
More aggressive tire tread on rear tires (XDN2 tread)	\$531
Air activated front monitor switch in cab (AUX. PUMP to TANK)	\$495
Recessed back up lights-body mount.	\$313
Handle on hosebed cover	\$59
8" spot mirrors on both sides.	\$134
Locate air eject outside near shore line eject.	\$78
Locate lanyard in the center for both the driver and officer.	\$8
Provide ice chest rack behind captain's seat.	\$375
SCBA seat pads.	\$134
Water tank gauge in cab.	\$478
TOTAL ADDITIONS	\$5,708

Cost Reductions

Reduce horsepower from 370 to 360	(\$4,195)
Non-SCBA officer's seat.	(\$195)
Remove Generator	(\$1,319)
TOTAL REDUCTIONS	(\$5,709)

Engines for the Interface

California's OES uses custom-built wildland/urban interface rigs



By Bob Vaccaro

One of more than 21 vehicles built on the HME 1871-SFO chassis for the California Governor's Office of Emergency Services (OES).



Each year, many of us on the East Coast or in the Midwest closely follow the devastation caused by wildfires in California. Most likely, you've seen Office of Emergency Services (OES) engines in operation fighting these fires.

Currently, 120 OES fire engines are stationed with fire districts at strategic locations throughout California and can be dispatched as needed. Unlike California Department of Forestry and Fire Protection (CAL FIRE) rigs, the OES engines are manned by local firefighters, which creates a unique response resource critical to wildland and wildland/urban interface (WUI) firefighting in California.

SPREADING THE RESOURCE

OES vehicles are given to individual fire departments in exchange for their agreement to respond when called to any statewide alert. The department must respond with three firefighters on the engine.

Initially, the vehicle comes fully equipped with hose and tools, at a cost of approximately \$314,000. When called to assist in a statewide operation, all expenses related to the rig and crew are paid by OES, the U.S. Forest Service or the Bureau of Land Management. According to Paul Beckstrom, assistant chief of the Fire & Rescue Branch of OES, the OES also provides training and all manuals for the vehicles. The departments are free to use the vehicles for regular calls as well.

OES has been purchasing vehicles from Hendrickson Mobile Equipment (HME) since 1992; 90 percent of its WUI fleet is manufactured by HME. In all, the State of California awarded HME a multi-year contract to build more than 120 vehicles, not only for OES, but also for CAL FIRE, the Department of Corrections and the Sonoma Center. The vehicles are available for purchase by local governments through the HME Municipal Fire Apparatus Cooperative Purchase Program.

BUILT FOR THE WUI

"We formed our apparatus committee back in the 1990s to come up with a new design for our vehicles," Beckstrom says. "The OES mission was the deciding factor in how to build the current vehicles. CAL FIRE had model specs on paper; we basically took that ▶

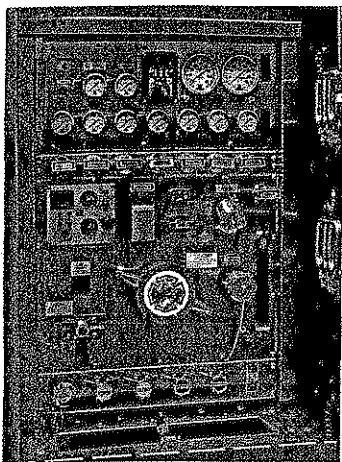
WUI Engine Specs

- HME 1871-SFO custom four-door chassis
- 40,540-lb. gross vehicle weight rating
- Stainless-steel body
- Cummins ISL 365-hp diesel engine
- 5-speed Allison EYS transmission
- 65-gallon fuel tank
- Jake Brake
- 270-amp Leece Neville alternator
- Hale 1,250-gpm Q-Flo Plus single-stage pump
- W.S. Darley 1 1/2 AGE diesel pump (cab and pump panel controls)
- 850-gallon water tank with through-the-tank ladder storage
- Hale FoamLogix 2.1 Class A foam system with 20-gallon tank
- 200 feet of Njedner Hot Stop booster reel hose
- Class I ESKet multiplexed electrical system
- NFPA-compliant ladder complement: 10', 12' and 24' ladders
- Cab, body, side and rear scene lights
- Aluminum hosebed covers
- 3" deck gun riser
- Front bumper 1 1/4" truck protection line
- Painted roll-up doors

APPARATUS IDEAS

design, tweaked it and made it work for OES. Also, by listening to the end users—the firefighters, officers and chiefs—we made it better in the field.”

Each department that has an OES engine in service tries to replace it every 17 years. The vehicle then operates in reserve for another 5 years, used as a fill-in vehicle if the department has a unit out of service.



The rigs sport a simple pump panel design with easy to read gauges, crosslays, booster reel and hose tray.

“The current vehicles were built for the wildland/urban interface, in which most of the fire departments that operate these vehicles will respond,” Beckstrom says. To meet the challenges of WUI firefighting, the engines were designed with two pumps, a Hale 1,250-gpm Q-Flo Plus single-stage pump and a Darley diesel auxiliary pump.

They also feature a 162” wheelbase, a 56’ turning radius and a 21-degree angle of departure. “The departments that staff OES vehicles all have small cul-

de-sacs and dirt roads,” Beckstrom notes. “The small wheelbase and turning radius is a big help. The low hosebeds are also a plus, as well as ladder storage through the water tank, which gives more compartment space.”

Other features include a Hale FoamLogix 2.1 Class A foam system and an 850-gallon T-shaped water tank. The vehicles also incorporate progressive hoselays with 1,000 feet of 1 1/2” hose and 800 feet of 1” hose so a four-person team can handle a quick attack. “Even though the vehicle was built as a Type I vehicle, it has Type III capabilities,” Beckstrom notes. Also included is a Type III USAR tool compartment, which enhances the vehicle’s ability to respond to a variety of calls.

To date, the OES has taken delivery of 21 vehicles on the current contract, and it expects to sign a new contract in 2009 for an additional 21 rigs. Beckstrom notes HME’s excellent warranty and says OES found virtually no flaws in any of the vehicles after delivery. “The vehicles are working well in all areas in the field and are well received by firefighters around the state,” he says.

WORTH A LOOK

We are seeing more and more WUI vehicles built, in part because of the expansion of the WUI; don’t think this is just a West Coast problem.

But WUI rigs are versatile as well, with a design that’s ideal for a lot of different fireground situations, not just rural firefighting. They can operate on pavement, dirt roads, narrow streets and cul-de-sacs, all while carrying a normal complement of firefighting equipment and tools. And they feature low hosebeds with diverse hoselays.

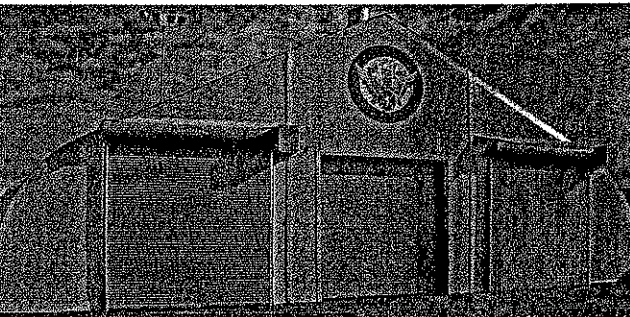
For fire departments fighting the financial crunch, these small, agile rigs might be worth considering. ☺

Bob Vaccaro has more than 30 years of fire-service experience. He is a former chief of the Deer Park (N.Y.) Fire Department. Vaccaro has also worked for the Insurance Services Office, The New York Fire Patrol and several major commercial insurance companies as a senior loss-control consultant. Vaccaro is a life member of the International Association of Fire Chiefs.

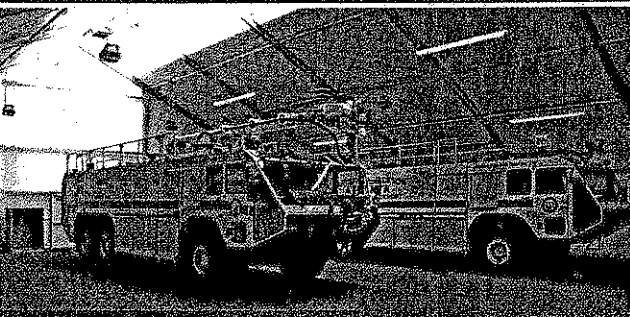
innovation | versatility | reliability

Innovative Building Solutions

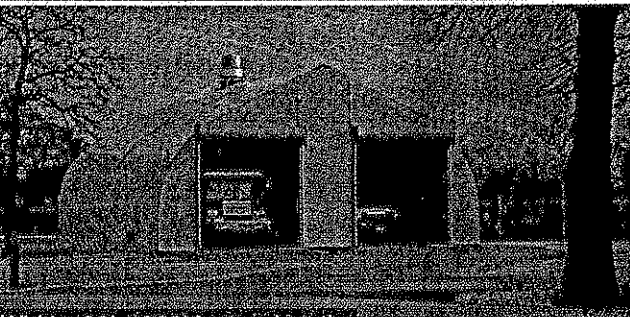
Engineered & Manufactured by Sprung Instant Structures



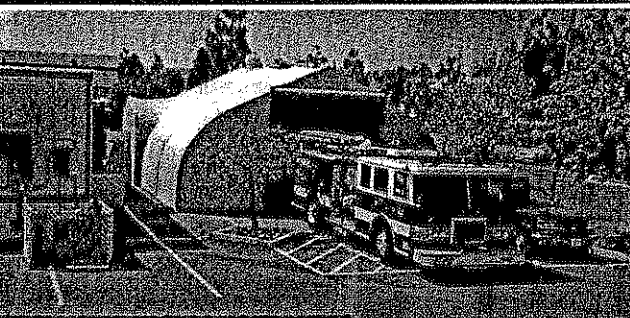
Available immediately from inventory



Large clearspan interior



Widths 30' - 200' by any length



Lease or purchase



1 800 528.9899

Direct Dial:
(801) 280.1555

www.sprung.com



ALL-ENTOWN ATLANTA CALGARY HOUSTON INDIANAPOLIS
LOS ANGELES MANAMA SAN FRANCISCO SALT LAKE CITY TORONTO

Choose 33 at www.firerescuemagazine.com/rs