

Enhancing Operations

Greater Naples (FL) takes a chance on Pierce's Ascendant aerial

By Bob Vaccaro



As if creating a brand new fire district by combining two districts in Collier County, East Naples, Golden Gate, and Isles of Capri back in 2014 wasn't enough, the Greater Naples (FL) Fire District embarked on designing a new quint for its operations. The fire district is the second largest in the state of Florida as far as land mass, at 1,200 square miles.

"Apparatus selection is something we don't take lightly," says Deputy Chief of Logistics Rob Low. "For this new purchase, our command staff and planning chief just went through a planning process to determine our future needs in our enlarged fire district. They performed an accurate assessment of the current fleet to see what our costs were presently and how new purchases would affect our financial status, now and in the future."

APPARATUS REPLACEMENT

The apparatus replacement program consists of reviewing maintenance records and associated costs, age of the apparatus, and mileage put on the vehicles. The team determined that a new aerial that could also act as an engine would enhance operations.

The department was looking to replace a 2003 85-foot tower ladder that had significant mileage on the apparatus and was having some maintenance issues as well. This particular ladder ran a significant amount of runs throughout the fire district, and the team made a choice to replace at the current time.

The choice would be a smaller, quicker apparatus that could be operated more efficiently at all fireground operations. "What is nice about our arrangement in apparatus purchases is that as long as a certain manufacturer is on the State of Florida Buying Program, we don't have to go out for competitive bidding," Low says. "We chose to go with Pierce for this purchase because we are familiar with their apparatus. We have six in our inventory presently and the local dealer, Ten-Eight, has given us great service in the past."

Another reason the team went with Pierce is that last year it introduced the new Ascendant 107-foot aerial. "We had heard about the new



Above: Pierce Ascendant ladder delivered to Greater Naples Fire Department on an Enforcer chassis.

Below: Driver's side compartments showing engine company and ladder company fittings and tools.



vehicle but weren't able to see it or operate it until at the local dealer during a demo tour," Low says. "After operating the vehicle and seeing it perform, we were sold. We would purchase the vehicle as a quint. It was small, and maneuverability around our district was great. It also had a 107-foot ladder on a short wheelbase chassis with a single rear axle."

Dealing with Pierce during the process was great. The service after the sale with the local dealer was also positive. What saved the department a great deal of time was that the dealer also mounted all of their tools and equipment before they took delivery. The plan is to have it respond as an engine from one of the stations in the North Battalion. It would also respond as a truck in other instances.

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Above: Officer's side compartments showing fans and additional tools.

Below: The rear of the vehicle showing easy access to ladder and controls.



VEHICLE SPECS

"As with all of our engines," Low says, "it has a full complement of Hurst rescue tools." The vehicle was designed to carry a 6-kW Harrison hydraulic generator, cord reels, electrical outlets, a Hurst combination tool, and LED lighting. The vehicle also carries a full complement of truck company tools.

"The complement of hose that we carry on the rig would be 1,000 feet of five-inch large-diameter hose, 600 feet of three-inch, two 1¾-inch crosslays, 300 feet of 2½-inch in a crosslay, and on the extended front bumper 150 feet of 1¾-inch," Low adds.

The apparatus gives personnel a great deal of versatility in their operations. The aerial delivers a full 107-foot vertical reach and a 100-foot horizontal reach with a below grade operation of -10 degrees. Its 100-foot horizontal reach is a big plus for operations.

The single rear axle will enable the department to get into tighter spaces such as narrow driveways and other areas of concern. And the aerial can be put into operation with a single operator on the fireground.

"From what we understand, this is the first Pierce Ascendant in the state of Florida," Low says. "We gave Ten-Eight permission to show our new vehicle around the state for a few weeks."

Taking a proactive approach to designing and purchasing was what the Greater Naples Fire District did with this new addition to the fleet. They identified a cost factor in fleet replacement as far as

Greater Naples Fire District

- 1,200 square miles. Covers parts of the Florida Everglades and WUI.
- 60-percent rural area also has strip malls, hotels, schools, tourist areas, and residential areas.
- 1,500 firefighters, 100 percent paid.
- 11 fire stations.
- 10 engines, four paramedic engines, six brush trucks, three water tankers, one 75-foot quint, one 107-foot quint.

Ascendant Specs

- Pierce Enforcer chassis.
- Cummins ISL9 450-hp engine, Allison EVS 3000 transmission.
- 500-gallon water tank.
- Waterous 1,500-gpm pump.
- Harrison Hydraulic 6-kW generator.
- Whelen LED light package.

maintenance and age of apparatus was concerned and also designed for operation and maneuverability of this new quint in their response district. Having a 107-foot ladder on a single rear-axle chassis was a plus for them.

RISK AND REWARD

While some may say that purchasing a new design from any manufacturer may be a risky endeavor, Greater Naples chose Pierce because of its record in the past. According to Pierce, the vehicle also had extensive testing before it was released.

The Ascendant aerial passed all National Fire Protection Association structural and stability testing requirements prior to its launch and, since that time, Pierce's research and development team successfully completed three phases of a fatigue test that demonstrate the equivalent of 20 years of service life. Phase one included lifting a 750-pound tip load weight, plus the equivalent of 100 pounds of equipment, off the floor 60,000 times at full horizontal extension. Phase two repeated all steps in phase one for another 60,000 cycles, which substantiated there are no fatigue issues in the design. A third phase included 10,000 additional cycles with the load increased to 1,125 pounds plus the equivalent of 100 pounds of equipment. To put the 130,000 cycles into perspective, that's simulating 17 uses at rated tip load per day, every day, for 20 years.

So far, Pierce has 60 orders for the new aerial since its introduction at last year's Fire Department Instructors Conference International. Not too shabby, if you ask me. **FR**

Bob Vaccaro has more than 40 years of fire service experience. He is a former chief of the Deer Park (NY) 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. He is a life member of the IAFC.