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AMAJORCAE CONSOLDATION

VIEWS FROM THE TOP

ERIC ALSTRÖM ON THE DANFOSS-EATON DEAL HUBERTUS MÜHLHÄUSER ON CNH'S CHANGES

PLUS: CONEXPO-CON/AGG AND IFPE PREVIEW

AIRPORT EQUIPMENT

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STATION

FIRE RESCUE

Oshkosh Striker delivered to San Antonio International Airport. By **Chad Elmore**

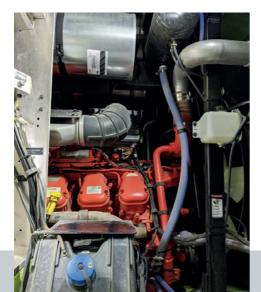
SAN ANTONIO

FIRE RESCUE

The San Antonio International Airport's new Oshkosh Striker sits outside the station.

STRIKER TO THE RESCUE

shkosh Striker aircraft rescue and firefighting (ARFF) apparatus can be found in airport fire stations around the world, but one recent truck delivery really stood out to Scania USA, which supplies diesel engines to Oshkosh Airport Products LLC. That's because the San Antonio International Airport



brought home the first of three new Scania-powered Striker 6x6 ARFF trucks it plans to acquire. The airport is less than four miles from Scania's North American headquarters. So, the company is now not only a customer – it's also a supplier.

Oshkosh began offering Tier 4 final Scania diesel engines in its Striker trucks in 2017. Its 4x4, 6x6, and 8x8 ARFF vehicles can be specified with a Scania DC16 diesel engine rated up to 770 hp. The Striker 8x8 gets two: the pair of rear-mounted Scania low-emission diesel engines create up to 1540 hp.

The ARFF truck uses a Scania DC16 diesel engine in the rear. The engine manufacturer's North American headquarters is located a few miles from the San Antonio airport. The airport sits on 2305 acres with three runways and saw more than 10 million travelers in 2018, a number that is expected to climb.

ARFF DEPARTMENT

Protecting the people and machinery in that space are personnel with a fleet of equipment housed in the Aircraft Rescue Fire Fighting building, operated by the City of San Antonio Fire Department. The on-duty team (three shifts of up to nine firefighters) stay on site for their shift and are trained in aircraft crash fire suppression and passenger rescue, as well as piloting ARFF trucks.

Strikers look nothing like their structural firefighting kin, and there's a good reason for that. "There are regulatory time frames the trucks are required to meet when going to an

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incident," said ARFF Commander James T. Bennett, City of San Antonio Fire Department. "We've got three minutes to get to the midpoint of the furthest runway. Depending on the event, that could require covering a large swath of land. It's important that the trucks have a lot of get up and go."

They also have off-road capabilities as "Not everything's paved here," said Bennett. "The airport has different topographies, so the trucks need the power to make it up the hills. We have been really impressed with the Striker products and its capabilities."

With the new trucks, operators get a five-person cab with a center steering position and 84 sq.ft. of glass and a 238-degree horizontal viewing radius at eye level. The National Fire Protection Assoc. (NFPA) requires drivers to see 20 ft. out from the front bumper; Oshkosh said the Striker does it in 12.3 ft.

Another difference with an ARFF truck is that they're designed to pump and roll. "A traditional fire engine has to stop, switch the PTO over and get to work," said Bennett. "These can pump on the fly. And they do that carrying up to nine times as much water onboard. That weight alone is a huge part of the difference in the performance we need from these trucks. And then we are also carrying multiple extinguishing agents on these aircraft trucks, whereas a typical fire engine has water and may have a foam

ARFF trucks are designed to pump-and-roll as they approach an incident.

tank. Our firefighters don't know what they're going to be dealing with before they get to the incident. We have to be equipped and ready."

TIER 4 SCANIA ENGINE

The Striker 6x6 ordered by San Antonio uses a Tier 4 final Scania DC16 diesel engine rated 700 hp connected to an Allison 4800 EVS automatic transmission with seven speeds. Front and rear axles are from Oshkosh and the truck uses the company's TAK-4 independent suspension. A proprietary Oshkosh-designed power uniter directs engine power to drive components and firefighting systems.

The truck's business end is a Waterous CRQB single-stage centrifugal fire pump good for 2000 gpm that draws from a 3000 gal. polypropylene water tank and a 420 gal. polypropylene foam tank. A joystick-controlled roof turret can put out as much as 1585 gpm while the bumper turret handles between 600 to 1250 gpm.

Airports are categorized by the FAA based on the annual number of passengers and other factors. That rating sets the size of the rescue fleet.

In San Antonio's case, the ARFF department already has three primary trucks and an additional apparatus for backup. The trucks are on a replacement cycle, and Bennett said their goal is to keep trucks for 12 to 15 years.

"They're quite expensive, so we get the



Truck stays ready hooked into shore power, connectors disconnect automatically when the truck moves out.

most out of them as possible," Bennett said, "And we just so happened to be in a spot where we've bought two and then we will get a third one in 2023."

With the long lifespan they need to get from the trucks, Bennett said service and support is key. The department uses third-party ARFF certified mechanics for maintenance, and while Scania's own parts inventory is only a few miles away, they haven't needed to explore that solution with the new Striker.

MUSCLE MEMORY

Bennett said one of the obstacles they are working to change comes from the fact that they have four different trucks. "If you've ever hopped into somebody else's car and you go to hit the blinker and the wipers are going instead, these are no different, except there's 20 times more switches and buttons and levers. When seconds count and you don't have the muscle memory down, it can detract from our performance.

"That's one of the reasons we're currently looking to standardize our fleet. My hope is that someday one of our biggest obstacles will be trying to remember which truck you're in because each one will be identical. That's my goal. And as long as we have these partnerships with suppliers, and we can pick up the phone and reach out to Scania or to Oshkosh when we need them, it really is possible to do that."