



February 2021 | Case Study | Sidescan® Backscan® Ultrasonic Obstacle Detection

Stephens Pneumatics Chooses Brigade Electronics to Fit Obstacle Avoidance System for The US Department Of Defense

The Department of Defense is crucial to maintaining national security in the United States. With nearly 1.3 million active-duty members, it coordinates the country's military departments and security agencies, including the US Army, US Navy, and US Air Force. With safety the top priority for the military, equipment must be produced to extremely high standards and meet stringent specifications. For military vehicles, this includes fitting the necessary vehicle safety systems.

Stephens Pneumatics, which is based in Fort Worth, TX, manufactures refueler trucks for the Department of Defense. Established for more than 20 years, its expert engineers use a high level of design and manufacturing to produce custom fabricated refuelers that meet exact Government specifications. Its latest project will span two years and involves building and delivering up to six R-11 refuelers per month – 113 in total.

US Government requirements stipulate that all military vehicles should be fitted with vehicle safety technology to support safe vehicle operations and driver behavior. This includes obstacle avoidance systems. Stephens Pneumatics approached Brigade Electronics for assistance.

Justin Stephens, Program Manager, of Stephens Pneumatics said, "We needed an obstacle avoidance system that met the Government's specification. We had heard about Brigade Electronics through other companies. They are well known throughout the industry so we were confident they would be able to deliver the products we needed to the right technical specifications."

Complex blind spots on large vehicles, along with poor visibility due to bad weather conditions, are a major contributing factor to collisions and are often the main reasons why vulnerable road users, such as pedestrians and cyclists, are killed or injured.

Brigade's complementary range of safety devices helps prevent collisions by assisting the driver while protecting workers, pedestrians, and cyclists.

To date, Stephens Pneumatics has installed Brigade's ultrasonic obstacle detection system on five vehicles. This includes Sidescan® on both sides of each vehicle and Backscan® on the rear.

Perfect for road-going vehicles operating in confined spaces or maneuvering at low speed, the detection system alerts drivers of obstacles close to the vehicle, whether moving or stationary. An audible and/or visual in-cab warning display warns of distance, while an optional external speaking alarm can be added to alert those outside the vehicle that it is turning. Justin added, "Brigade's technology helps our end consumer drive a large piece of equipment safely and assists those who might not have driven a vehicle like this before feel more confident behind the wheel. Essentially it provides drivers with 'extra eyes' so they feel more comfortable operating the vehicle."

