

# Jasper Engines Shaves Miles, Cuts Costs with Mertech's Innovative Fleet Routing System

## HIGHLIGHTS

- Created a ruggedized delivery fleet monitoring device connected to GPRS networks
- Allowed for more efficient route planning and easier commerce law compliance

#### Background

Founded in 1942, Jasper Engines and Transmissions is the nation's largest remanufacturer of gas and diesel engines, transmissions, and other motor parts.



## **Business Challenge**

In 2007, Jasper sought a better way to monitor its 250 truck delivery fleet and communicate with drivers. Staff at their Indiana-based corporate headquarters had to page or wait for calls to receive updates on drivers' location and progress, and the drivers themselves had no information on traffic or weather conditions en-route to their destination.

Wanting to create a more efficient system within the year, Jasper turned to Mertech. Having worked with the Mertech team in the past, Jasper knew Mertech would be able to create a system on-time and within the company's finite budget, despite the inherent challenges.

# **Solution: Mertech Services**

Two key problems quickly presented themselves to our team. The first was network capability. At the time, 3G was not widespread, which meant trucks traveling through rural areas might not be able to report their location. The varying temperatures of travel also threatened to disrupt the components in whatever tracking system Mertech created.

Enter the Carputer. Custom-designed by our team, the Carputer was built to withstand temperatures of 0-50°C (32-120°F). Typically, this kind of ruggedization is found only in military devices, units that cost up to \$2,500 per device. However, Mertech researched and negotiated with suppliers to create a unit that cost less than \$750.

The finished Carputer consisted of a computer installed underneath drivers' seats connected to dashboard-mounted screens and GPS/radio antennas. Essentially, Mertech created an early tablet, a powerful mobile device with the capabilities of a Windows desktop system. To handle the rural connectivity issue, Mertech piggy-backed on General Packet Radio Service (GPRS) networks, which are reliable throughout the country and less expensive to use.

#### Impact and Future

With the Carputers installed, Jasper's central office can effectively monitor and report on almost all aspects of deliveries. For drivers, this means real-time route adjustments, less time spent calling data in to the home office, and increased productivity. For management, it means easier compliance with interstate commerce laws, more efficient route planning, and less money spent on gas and travel fees.

Additionally, because the Carputer's data overhead is so low, Jasper's still reaping the benefit of using older, cheaper GPRS connections that provide connectivity in the country's last non-3G/LTE areas.

#### Contact Information

Jasper Engines and Transmissions P.O. Box 650 Jasper, IN 47547 812.482.1041 jasperengines.com