Onboard system gives Marines a grip on their fleet

Managing 2,200 light vehicles for the Marine Corps’ Southwest Region Fleet Transportation is a major effort. The region covers Arizona, California and Nevada—and Camp Pendleton, Calif., alone is the size of Delaware.

Just keeping track of mileage is a problem, said regional maintenance coordinator Bill Martine.

“It’s a difficult job getting accurate readings,” he said. Because the vehicles are spread far and wide, he relies on monthly reports from officers responsible for them. “They will give you phony meter readings because they don’t see them either.”

This makes it difficult to schedule maintenance and also creates billing headaches. The cars are leased from the General Services Administration, which requires monthly mileage readings for billing.

The unit is easing its headache with a system that tracks vehicles automatically, improving fleet management and billing.

Martine went to an automotive show two years ago looking for a device to track mileage remotely. He found NetworkCar, a vehicle tracking device with a Web interface that was being marketed to consumers.

“They had never applied it to a fleet application,” Martine said.

But they were excited about the possibilities. So NetworkCar Inc. of San Diego installed one of the devices on a seven-passenger van and provided mileage and location reports to SWRFT. The Marines were so impressed they bought 100 of the devices.

“Immediately, we found we could get not just mileage readings, but we could also track them and find where they were 24 hours a day and see how fast they were going,” Martine said. “It could also provide diagnostic information from the onboard computers.”

From those tests came NetworkFleet, for which SWRFT recently signed a five-year, $1.6 million deal to equip its California light vehicle fleet at the Air-Ground Combat Center at Twentynine Palms, Camp Pendleton, Miramar Air Station, the Mountain Warfare Training Center in Bridgeport and the Recruit Depot in San Diego.

“They have been heavily involved with the development process,” said Ryan Glancy, NetworkCar’s national marketing director.

The Marines had to do their own acquisition of NetworkFleet, but a GSA Schedule contract awarded in January opens up a lucrative federal market for the new tool.

“We’ve had a lot of federal customers waiting for us to get on the schedule,” Glancy said. Martine said he would like to see the tool become an option on GSA vehicle leases.

NetworkCar originally competed with vehicle tracking devices and services such as LoJack and OnStar, and the consumer market still is a major focus for the company.
“The consumer market is much, much larger,” Glancy said. But the rate of adoption in the fleet management market now is much faster than on the consumer side. The device is about the size of a package of cigarettes and has two antennas that are not visible outside the vehicle, one for Global Positioning System signals and the other for communications. It plugs into the engine’s Onboard Data Port on vehicles built since 1996 to gather diagnostic and performance data. Location data is updated every two minutes, and diagnostic data about every hour.

**Cellular data link**

In the past, engine data was proprietary, but the aftermarket for auto repairs and equipment has forced automakers to standardize the output of onboard computers. Information gathered by the device is sent to the NetworkCar data center using Cingular Interactive cellular data service from Cingular Wireless of Atlanta. “Coverage is excellent across the country,” Glancy said.

The Marines sometimes encounter areas without coverage, especially in mountains, but the device will store data for later relay so it is not lost.

Although the consumer product relies on a Web interface, the fleet product also gives managers regular customized reports on each vehicle. The system can send e-mail alerts to supervisors for maintenance problems or for policy violations, such as exceeding a speed threshold or leaving a designated area.

Although SWRFT originally was interested in avoiding year-end billing problems because of faulty mileage reports, it has found numerous uses for NetworkFleet. It lets managers track fuel consumption, schedule maintenance more easily and monitor driver behavior. Military police were among the hardest on the vehicles, said Gary Funk, regional SWRFT manager. “We said, ‘There’s no way you can go through a set of tires or brakes that fast,’ ” Funk said. “And they would say, ‘You don’t know what we do.’ Now we do. We have reduced misuse and abuse to the point it is controllable now.”

That has helped turn fleet management into a disciplinary tool. “We’re big daddy now,” Funk said.

When SWRFT is alerted to misuse of a vehicle, they notify the supervising officer. Speeding was a particular problem. “We knew they were speeding, but we didn’t know how fast or how common it was,” Martine said. The alert threshold for most cars is 75 mph. It was not unusual to get reports of vehicles going 110 mph when NetworkFleet was first installed. Now, it is less common.

The disciplinary aspect is not trivial. “It can affect people’s careers,” Funk said. Several people have been charged with misuse of a government vehicle, and some have lost their jobs.

California also accepts NetworkFleet data for its emissions control program. NetworkCar currently is the only company enrolled in the state’s Continuous Testing Pilot, which exempts monitored cars from biennial emission inspections as long as data shows they are in compliance.

All of this functionality is not cheap. The devices, which can be purchased or leased, cost about $500 each, and the service runs about $20 a month per vehicle. But NetworkCar marketing analyst Sheri Sakagawa says it can pay for itself in less than a year. “We’ve seen fleets where they get a 100 percent return in a month.”
One California Marine Corps base manager has seen monthly fuel bills drop 20 percent since NetworkFleet was installed.

The current NetworkFleet product is designed for light vehicles only, but SWRFT wants to work with the company to develop versions for large diesel vehicles and possibly a battery-powered model for semi-trailers. SWRFT officials want to use the system to monitor the unit’s fleet of 20 tractor-trailers and 20 buses, Funk said.

“We have a vision that we would be able to ping these vehicles every two minutes and display the results on big plasma screens so we could see where they were in California, Arizona and Nevada,” he said.