

## Goodyear used handheld interrogators and embedded tags to keep track of leased racecar tires.

By Claire Swedberg

Nov. 25, 2005—At last weekend's [NASCAR Craftsman Truck Series](#) race at Homestead-Miami Speedway, [Goodyear Tire & Rubber Co.](#) employed radio frequency identification to track leased racecar tires. Thanks to RFID tags embedded in tire sidewalls, Goodyear successfully tracked the tires' movement from the warehouse to the drivers and back again.

According to Goodyear, it had been evaluating RFID tracking applications for its tires since 1984, including those for trucks, to control inventory and maintain compliance with [Wal-Mart's](#) mandate (see [Goodyear Copes With RFID Challenges](#) ). "We've had large-scale field trials," says Goodyear's director of vehicle systems, Stephen Roth. The first trial dates back to 1993, he explains, but this event served as the biggest field test yet—and the first for its RFID application for tracking racecar tires. "It went very well," says Roth. "Goodyear, as a whole, really rallied behind this effort. Everyone took some ownership in it."

Goodyear is the exclusive provider of racecar tires for all NASCAR events, supplying about 200,000 tires to racers annually. Until this year, participants have had to buy their own tires. It's not uncommon for a team to use multiple sets of tires in a single race, and the cost could be prohibitive for many potential racers. NASCAR came to Goodyear seeking a leasing alternative for drivers unable to afford the cost of buying tires for their vehicles. Some drivers with sponsors and large teams may still purchase Goodyear tires.

For this year's Craftsman Truck Series, Goodyear fitted its tires with passive UHF 915 MHz EPC Class 1 tags it had developed and manufactured. The company used handheld interrogators manufactured by a third party to scan the tires before leasing them to racecar teams. The tags' ID numbers, along with information about each driver and vehicle number, were recorded in a tire inventory database. After the race, Goodyear again scanned the tires returned by drivers or driving teams. Altogether, about 400 tires were leased and successfully scanned before and after the race, Roth says, and all were returned by the drivers to which they had been issued.

Goodyear plans to use the RFID tire-tracking system for NASCAR's 2006 races. The company expects that RFID will simplify inventory tracking and ensure racers return the leased tires. Previously, Roth says, Goodyear tried to track racecar tire inventory by applying bar code labels to the sidewalls, but found that the labels could be easily rubbed off.

Goodyear may eventually expand the system to allow NASCAR officials to use the handheld interrogators during the technical inspection that takes place before a race. Goodyear foresees NASCAR officials using the readers to verify that each car is equipped with the correct tires, and thus ensuring that no driver has an unfair advantage by using tires designed for a different track.

