

PROTOTYPE

Cooking the Getaway Car

A two-second blast of microwave energy could stop a car in its tracks—and bring an end to Rosco P. Coltrane—style hot pursuits

DRAMATIC HIGH-SPEED CAR CHASES MAKE FOR GOOD TELEVISION, but in reality they're awfully impractical. Later this summer the Los Angeles County Sheriff's Department will test a safer, though equally electrifying, way to stop fugitive cars—with the blast of a microwave beam.

The technology exploits a hidden weakness in most modern cars: microchips. Microwave energy causes a voltage spike in sensitive silicon circuitry, potentially crippling chips wired into everything from hydraulic steering columns to fuel-injection systems. After a few seconds bathed in the beam, an engine would simply stall and the car coast to a stop, says CEO James Tatoian of Eureka Aerospace, the Pasadena, California-based firm developing the prototype with funding from the U.S. government.

That built-in protection makes microwaves potentially safer than makeshift roadblocks, tire-popping spike strips and the other crude tools that authorities employ to catch bad boys on the run, says Commander Charles "Sid" Heal of the L.A. County Sheriff's Department. "We are not going to chase these guys all over the streets, endangering lives, if we can help it," he says.—MICHAEL STROH