

RECREATION

THE ROAR OF THE ENGINE, THE GLOW OF THE SCREEN

David Barcelou's computer-fueled 'Stimulator' makes simulated auto racing terrifyingly real

There are those among us who just can't resist the latest thrill. So when Los Angeles Correspondent Eric Schine heard that a local entrepreneur was developing an amusement-park race-car ride that relies on the high-tech gadgetry used to train pilots, he quickly signed on for a test ride.

Having recently completed a course in race-car driving, I felt smugly ready for the Stimulator. The experience turned out to be more than I bargained for. Developed by Driver Seat Inc., the Stimulator is a new kind of high-tech amusement-park ride that lets thrill-seekers actually control the action, not just tag along passively.

The basic idea is similar to Disneyland's wildly successful Star Tours. That ride adapts flight simulation to create the sensations—sights, sounds, and motions—that future space tourists might experience on a visit to some distant galaxy. But unlike Star Tours, the Stimulator is interactive. You climb into a simulator, slide behind the controls of a Formula One racing car, and roar off—in what's almost a real race. By remote control, you drive a half-scale car with its own gasoline engine, barreling around a track at speeds equivalent to 200 mph.

Everything that happens to the car is instantly transmitted to the Stimulator and translated by a computer into movements of the cockpit. And every twist of the steering wheel is instantly relayed to the race car. Your "windshield" is a video screen that shows the track from miniature color-TV cameras inside the car. You even hear the roar of your car's engine through an audio hookup.

NASTY END. From the outside, the Stimulator is a windowless capsule suspended from a large steel arm that can whirl in circles at 25 revolutions per minute. Next-generation versions will have four capsules attached to four arms. By tilting a spinning capsule outward or in, the

combination of forces mimics the sensation of flooring the accelerator or slamming the brakes.

The capsule can also spin like a car skidding out of control. If your car, which is built to withstand crashes out on the track, has a serious accident, the capsule will follow its motion, rolling over sideways or even flipping end over end. About the only thing you can't do in

for training Navy pilots, cost \$200,000, and each car runs \$25,000. Add an enclosed race track, a grandstand, and concessions for paying spectators, and the total investment comes to \$15.8 million.

It is early morning when I arrive for a test spin. Up a 10-foot ladder I go, then ease into the cramped cockpit. A technician helps me strap in. "Whatever you



SERIOUS FUN: BARCELOU'S 'TELECAR'S' COST \$25,000 EACH—AND THE COMPUTER IS 10 TIMES THAT

the capsule is actually crash and burn. Says three-time Indianapolis 500 winner Johnny Rutherford: "This is about as close to the real thing as you can get."

This not-so-cheap thrill is the brainchild of David M. Barcelou, a 35-year-old entrepreneur in Long Beach, Calif. As a kid, he was obsessed with slot-car racing. Now he's betting \$325,000 of his own money (he developed Chexx, a video hockey game), that his childhood fantasy will also turn grown-ups on.

A stunning array of electronics comes into play: Proprietary software running on a minicomputer powers each Stimulator. Roughly \$250,000 worth of computer equipment is required for a theme track with 40 Stimulators, each with a corresponding car. The Stimulators, which are

do, don't turn your head to the side," he warns. If I do, he says, I'll probably vomit. I can communicate to the ride's supervisor through a headset-mounted microphone—and hit a glowing red panic button if I can't take any more. On this short test ride, alas, I am only a passenger. The computer will do the driving.

SILENT SCREAM. The canopy closes. Total darkness. I feel the thing moving. Later, I learn that the ride orients the balance system in your inner ear with a few low-speed turns before each race. Finally, the image of a racetrack appears on the TV screen. I hear my car's engine start. I feel bumps in the roadway as the car moves onto the track.

Then the car takes off, leaving my stomach somewhere far behind. Accel-