



David Gary, left, and Norman Doyle, Tidewater Community College engineering students, display at TCC's

Virginia Beach campus on Friday the model car they built for less than \$200.

CHARL E. MACS

# As the little engine that could, TCC students capture race title

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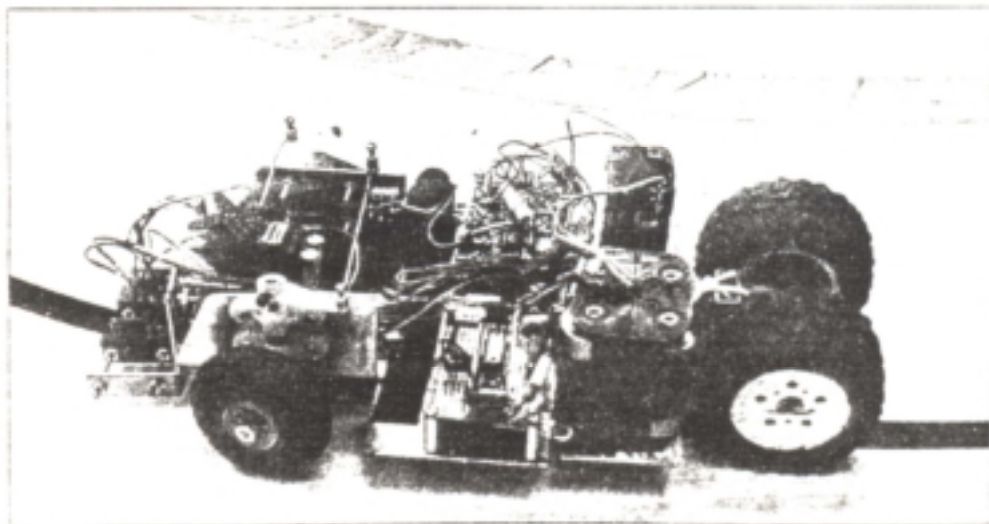
**VIRGINIA BEACH** — It moved deliberately around the small, oval track, its infrared sensors tracing a line of black tape as it went round and round. It looked more like a lunar rover than a NASCAR racer, but this contraption of wires, circuits and wheels was, in the eyes of its creators, a thing of beauty.

In the end, the little battery-powered car beat out a small field of competitors, allowing a group of engineering students from Tidewater Community College to capture the first national title in model design sponsored by the American Society for Engineering Education.

"We had to design it from scratch. We couldn't use anything prefabricated," said Norm Doyle, 22, a member of the engineering club at TCC's Virginia Beach campus.

So they scrounged for material. A plastic board served as a frame. They recycled tires from an old radio-controlled car. They bought a few things, including sensors, wires and gears. They spent less than \$200 — far below the \$300 limit.

Powered by household batteries and built from components bought from a hobby store, the little car smartly navigated turns, climbed inclines and rolled down the slope of the regulation track without the aid of remote controls.



Powered by household batteries, the model car has a plastic board as a frame, recycled tires from an old radio-controlled car, and it moves without a remote control.

It can run in the dark, too, said David Gray, 27, a former Navy electrician, now an engineering student at TCC.

The car spun around the 28-foot oval track in two minutes and 34 seconds — the fastest of any of its competitors.

Only three other cars managed to enter the race. A few others fell apart at arrival. Other teams didn't make it to the competition, held in Charlotte, N.C., two weeks ago.

The TCC team's pit consisted of a small tackle box filled with electronic components.

The purpose of the competition is to get engineering students to apply what they learn in the classroom. It's a lesson in innovation and creativity.

The rules required that entries be capable of navigating the course without the aid of remote controls. Once the vehicle starts moving, it's on its own.

The TCC students spent months — since November — designing their car with the help of their teachers. They had to scrap a few of their earlier designs. One couldn't climb a slight slope; another went too fast downhill.

The competition will be held in St. Louis next year, and the TCC team is determined to defend its title.

"We've now got a reputation to uphold," said Doyle, who also won top prize for his design presentation.