


**Saturday, October 18, 2003 - Megawatt Motorworks News**  
**(www.megawattmotorworks.com)**

## World's Fastest Electric Car

[Close Window](#) | [Print Screen](#) 

Source: Ohio State University

At 257 mph, the Ohio State University Buckeye Bullet now holds the official record as the world's fastest electric car. This machine performed very well at the Bonneville Salt Flats this week, traveling as fast as 271 mph!

Ohio State University's Buckeye Bullet electric car today broke the record for the fastest speed by an electric vehicle, with a speed of 257 miles per hour at the Bonneville Salt Flats in Utah. The former national record was 251.3 mph.

The vehicle, which was designed, built and managed by a team of engineering students at the university's Center for Automotive Research-Intelligent Transportation (CAR-IT) traveled to Bonneville this week to attempt to break the record for the fastest speed achieved by an electric car. It is the team's third trip to Utah to make a run at the record.



To break the national speed record, the Buckeye Bullet completed two certified runs reaching speeds averaging 257 miles per hour. For the first of the two runs, the car was clocked at 271 miles per hour.

The streamlined vehicle is 30 feet long, two feet wide and stands less than three feet tall; the 500 horsepower electric motor is powered by more than 12,000 nickel-metal hydride batteries.

The Buckeye Bullet team includes 12 graduate and undergraduate students with majors in a variety of engineering disciplines. In addition to setting a new land speed record, the project to build the car has also created some top-notch engineering students. The exciting and innovative project has offered students hands-on experience along with classroom time.

To build the Buckeye Bullet, OSU students collaborated with both faculty and industry. In addition to the College of Engineering and Center for Automotive Research, a number of businesses have sponsored the car.



Team members will return to campus late Sunday. The car, which will be transported in a trailer, will return early next week.

On Thursday, the team's qualifying run reached 263 mph, and they hoped to certify that record on Friday morning with an equally fast pass as required by the rules, but were faced with a serious setback when, "Unfortunately, while the vehicle was kept overnight in the impound lot designated for provisional record holders, several battery strings shorted and overheated, leaving the Bullet with only about 75% of its battery pack in working order and no time to make any changes," said Giorgio Rizzoni, a Director at the Center for Automotive Research at Ohio State University.

Despite this significant power reduction the Bullet hit a speed of 241 MPH through the 2nd mile before the battery voltage sagged below the AC controller's lower threshold in the 3rd. The system automatically shut down and coasted to a stop.



Above: The team preps the recording-breaking Bullet early on Friday morning. (Photo courtesy OSU)

"This condition can actually be easily rectified, and the team is working with the inverter supplier, Saminco, to change some inverter parameters to avoid low-voltage motor cut-off in the next run," said Rizzoni, "The record had to be certified over the third mile, as this was the fast qualifying mile. As you can see from the numbers listed below, the average of the two runs, roughly 250.5 mph, is less than one mph shy of the existing 251 mph record."

The team was scheduled to make another run later on Friday afternoon with a rebuilt battery pack. According to Rizzoni, "If existing record is surpassed again in the afternoon, we will have another attempt at certifying the record on Saturday morning."

### 2003 Buckeye Bullet Speeds

(Speed in mph)	Mile 1	Mile 2	Mile 3
Thursday	225.201	249.515	262.986
Friday #1	229.619	241.217	237.988
Friday #2	239.328	265.238	271.459
Saturday	232.734	238.301	242.329

### Buckeye Bullet Technical Specifications

Motor	400+ HP
Controller	AC Induction
Batteries	900 Volts
Chassis	4310 Chromoly
Body	Carbon Fiber
Weight	3500 lbs





*Editor's Note: This is a marvelous achievement and one that reflects well upon the OSU, the students, and the program's sponsors!*