



Don Hogan Charles/The New York Times

An electric car outperformed its predecessors yesterday, traveling to Manhattan at highway speeds without having to stop to recharge.

From Boston to 63d Street, On Single Battery Charge

By ANDREW C. REVKIN

For two decades, builders of electric cars have battled an image problem. Even their sleekest, most pollution-free offerings have been deemed too sluggish, too burdened with bulky batteries or too limited in range to ever be useful in the real world of traffic jams and superhighways.

Usually when these cars get attention, it is at special races, under synthetic conditions, where ultralight, sleek prototypes glide along, silently and slowly, sipping power at the most efficient rate.

But yesterday, one of the pioneers of electric car design drove his newest consumer-ready model from chilly Boston to crowded Manhattan on a single battery charge, negotiating the everyday chaos of traffic, wrong turns and highway speeds up to 65 miles per hour on the 217-mile journey. The trip, which took six hours with a break for lunch and a mid-journey news conference, was a bald effort to overcome the impression that these vehicles remain a "someday" kind of technology.

"This was totally uncontrolled, real world driving," said James D. Worden, chief executive of the Solectria Corporation, the company that built the car. In fact, Mr. Worden said, the trip was lengthened 20 miles when he and a van following behind lost their way in central Connecticut and then again near the Triborough Bridge. "But we made it with power to spare," he said. The car used about 85 percent of its electrical charge, he said.

The car, a Sunrise, is the latest design of Solectria, a company near Boston that each year is selling several hundred smaller cars, with a range of either 50 or 100 miles, to clients like Consolidated Edison and Boston Edison. An important component is a new battery that uses technology like that in laptop computers and cellular phones, Mr. Worden said.

The Sunrise is available now, by order, to anyone ready to part with \$100,000. If enough demand develops to begin mass production, the price would drop to about \$25,000, Mr. Worden said.

The four-door, silver car has a teardrop shape, only marginally

more pronounced than that of many conventional sedans. Many drivers passed it on the Massachusetts Turnpike without a second look, Mr. Worden said. But at least a few drivers noticed, said Sheila A. Lynch, the executive director of the Northeast Alternative Vehicle Consortium, a nonprofit group that helped secure several Federal grants for the development of the car.

"Some drivers pulled alongside and rolled down their windows to ask questions at 55 miles per hour," said Ms. Lynch, who made the trip in the van following the electric car.

At 3:15 yesterday afternoon, the Sunrise turned onto East 63d Street, silently zipping past surprised pedestrians, and slid under a white ribbon strung in front of the New York Academy of Sciences. A cluster of city officials, scientists and engineers involved in developing the car or its battery stood in a cold wind and applauded. The City Parks Commissioner, Henry J. Stern, likened the Boston-to-Manhattan drive to a lower-key version of Charles Lindbergh's pioneering trans-Atlantic flight. He said the car could help in a cleanup of New York City's air.

Unlike earlier prototypes, the car was fully equipped with everything from air-conditioning to a compact disk player, Mr. Worden said. And, as he opened the trunk, skeptics who were prepared to see a broad bank of batteries saw nothing but empty space.

The battery, which sits beneath a hump running down the center of the passenger compartment, was developed by Energy Conversion Devices Inc. Its chairman is Robert C. Stempel, the former chairman and chief executive officer of General Motors.

Mr. Stempel, an engineer who for many years was a central figure in the internal-combustion universe of the major auto manufacturers, said he decided in retirement to focus on the challenge of building a better battery for electric vehicles.

"I got sick and tired of people saying these cars won't go very far or won't work in the cold," he said yesterday, as he examined the motor packed in under the small front hood of the Sunrise. "I'll tell you, it was darn cold in Boston this morning."