



**Milner Motors: The Best Of Both Worlds  
200 mph AirCar and a 100 mpg ElectricCar**

“Aura Tower, Milner Motors Aircar November 34521 over Your-town, with ATIS Tango, request touch-and-goes.” Roger that... Let’s face it, roadable aircraft were certified to fly and drive the U.S. transportation routes fifty years ago. There hasn’t been a new certification for a roadable in while, but that may be about to change. Seen at the 2008 New York International Auto Show, Milner Motors, an American Company, debuted two exhilarating vehicle prototypes; the AirCar and the ElectricCar.

The patented Milner AirCar, as demonstrated in the drive-able but non-flying prototype, will be a completely self-contained four-door, four to five-seat advanced-composite roadable aircraft. Historically, roadable aircraft have been called flying cars but in today’s advanced world of technology a roadable aircraft has to be equally comfortable with FAA certifications as with D.O.T. safety regulations. The AirCar is being created with a foldable 28-foot main wingspan in the rear of the vehicle and a canard in the front. About the same size as the Toyota Corolla or a Honda Civic, the AirCar will be equipped with two 160 hp ducted fans to carry the aircraft at cruise speeds of 200 MPH for up to 900 nautical miles. A separate 40 hp engine and transmission powers the wheels on the ground.

The AirCar fulfills the vision of being able to leave your home, drive to the nearest airport take off and fly to your destination airport, then land and drive to your final destination. Daniel Goldin—NASA Director and Administrator—said, “If you can enable doorstep-to-destination travel at four times the speed of highways to just 25% of the nation’s suburban, rural and remote communities, that in ten years, more than 90% will be enabled for doorstep-to-destination travel.” There are 5,000 airports in the U.S. capable of handling light airplanes, within 20 miles of 98% of our population. Is there a market about to be tapped?

Henry Ford once said, “I am looking for a lot of men who have an infinite capacity to not know what can’t be done.” Henry Ford, the great inventor, and Milner Motors may have some common beliefs. Milner Motors is one of a small group challenging widely-held assumptions about what can and can’t be accomplished and about what is and isn’t possible to achieve. Their aircraft design objectives were to create a roadable aircraft that can cruise at 25,000 feet at 200 MPH TAS and have a useful load of about 1,200 lbs and a range of about 1,000 statute miles. The airplane will be eventually be pressurized, have normal deicing equipment allowing the pilot to get above a majority of the weather without getting into the more atmospheric hostile airspace above 25,000 feet.

Upon landing, the same vehicle quickly transforms, to drive to your destination or home to park in the garage. You can avoid hangar rental fees and significantly reduce your travel time. A big advantage of a roadable aircraft is that the pilot can drive through the weather that is marginal or not flyable then fly the remainder of the

trip. Worst case is that the pilot will drive the entire distance, an alternative much better than staying at the location until the weather clears or forging ahead in marginal weather.

The second prototype vehicle debuted at the auto show was the Milner Motors 100 mpg, ElectricCar. The automobile will be a four-door, four-person, plug-in hybrid electric with gasoline assist. Using rack-and-pinion steering and four wheel disc brakes, the design is based on years of engineering and technical research. The Milner ElectricCar incorporates a progressive electric engine with battery capacity of 15 KWH and a 125cc gasoline generator set to charge to batteries en route. The specific combination of engine technologies and vehicle design set the ElectricCar apart from its competitors.

The ElectricCar seating provides 56” front shoulder room, the same as two first-class airline seats and an aerodynamic design with less drag than a 2006 Corvette. Imagine packaging this four seater automobile to run for two hours on battery and when needed, automatically engage with the high efficiency gasoline engine that achieves over 100 mpg. The ElectricCar is planned for initial delivery as a kit car for under \$40,000. Looking at the ElectricCar, you’ll see it is as stunning visually as it is technologically advanced.

Like any fun automobile the ElectricCar looks like it is racing down the street without even running. The ElectricCar could almost appear to be flying while it stands still, and that is because both the ElectricCar and the AirCar use the same advanced aerodynamics in base body design. Using the construction style of Indianapolis race cars allows Milner Motors optimum aerodynamic shape with a steel cage construction for strength underneath its body. Advanced-composite body construction is used to produce a vehicle skin which allows a 50% reduction in body structure weight while providing improved crash protection, improved stiffness and less than half the number of body parts compared to a typical car.

James Milner is the founder and leads the Milner Motors team from his offices in Vancouver, Washington. He was a pilot with United Airlines and has founded and run two successful businesses starting back in 1972. Chris Milner, an instrument rated pilot, joined Milner Motors in 2006. He focuses on the onboard vehicle control systems, power train engineering, government relations, and industry partnerships from his offices in Bethesda, Maryland. Together they believe that a truly clean-sheet approach to vehicle design can produce commercially viable vehicles that will respond to today’s environmental and energy needs in a way never before possible.

The current driveable prototypes are being used to test handling, efficiency, and practicality, and demonstrate solutions developed thus far. 2008 will be a busy year for the Milners as they further refine their prototypes and perform studies to analyze the manufacturability of the vehicles.

The 2008 New York International Auto Show debut of the Milner Motors roadable vehicles is a long way, technologically, from the days of the first certified flying car, Robert Fulton’s Airphibian. Interesting, both had their debut less than 100 miles apart. Even with New York traffic, that would be a short hop in any roadable.

*John Cilio is an aviation historian and freelance writer. You can contact John at: [questions@vintageflyer.com](mailto:questions@vintageflyer.com). The Atlantic Flyer is an Aviation Newspaper. Visit our web site [www.Aflyer.com](http://www.Aflyer.com) or call Richard at 203-458-3348 for more information.*

