

GEM-Dandy

Spry Little Vehicle Contributes to Cleaner Air While It Zips Around China Lake

No, it's not coin-operated; no, it doesn't have an extension cord; and, no, a dozen clowns won't burst out when it stops. But this snazzy little car has still managed to make folks who are concerned with clean air happy.

Naval Air Weapons Station (NAWS) China Lake received ten Global Electric Motorcars (GEMs) recently,

courtesy of DaimlerChrysler, as part of the State of California's new requirement that automobile manufacturers sell a percentage of alternative fuel vehicles. In addition, Executive Order 13149, signed by former President Clinton in April 2000, mandates that 75 percent of new vehicles purchased by the government be alternative fuel vehicles. The ten new vehicles bring the total up to 27 GEMs at NAWS China Lake. In California, the inex-

pensive, quiet cars are certified as zero emission vehicles.

The GEM is a purely electric vehicle that can travel 35 miles on a single six- to eight-hour charge from a 110-volt outlet. Although they look like golf carts, the vehicles are equipped with front-wheel drive, four-wheel hydraulic brakes, rack and pinion steering, an automotive safety glass windshield, turn signals, mirrors, wiper blades, head- and taillights and three-point anchored seatbelts. Hard doors, soft doors and heaters may be added. In addition, with a top speed of 25 miles per hour, the vehicles can legally drive

Two employees at Naval Air Weapons Station (NAWS) China Lake use the long-back model of the Global Electric Motorcar (GEM) to transport computer parts around the base. These all-electric vehicles contribute significantly to NAWS China Lake's and California's clean air.



All-electric Global Electric Motorcars (GEMs), like this one, help contribute to the clean air of Naval Air Weapons Station (NAWS) China Lake and California. NAWS China Lake has 27 GEMs.

on roads whose speed limit is posted as 35 miles per hour or slower.

Luke Air Force Base (AFB) in Goodyear, Arizona, which uses 144 GEMs among its 430 electric vehicles, conducted a study using figures from 1998. Luke AFB's Trip Reduction Program study found that, with each electric vehicle running an average of 1,300 miles per year, it avoided expelling 9.5 tons of pollution per year that would have otherwise been released through driving gasoline-



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powered vehicles, and also avoided expelling five tons of pollution per year just by eliminating cold starts.

At NAWS China Lake, the GEMs have been assigned as “B-pool,” or permanent, vehicles and serve two basic functions: moving people quickly around the base and hauling small loads, such as parts and supplies.

Of the latter task, CAPT Randy Jackson, Public Works Officer at NAWS China Lake, said, “We find this use to be extremely handy.”

GEMs are produced at the Fargo, North Dakota facilities of Global Electric MotorCars LLC, a subsidiary of DaimlerChrysler. Four models are available: two- and four-passenger

cars, and short-and long-bed utility vehicles. The first GEM was produced in April 1998.

In addition to a good rate of acceleration and nimble handling, the GEMs are easy to operate and recharge. And, yes, it has been reported that the vehicles are fun to drive.

“All in all, I prefer to use my GEM over my Jeep when traveling around mainside,” Jackson said.

In an effort to further save energy, the Public Works and Energy Program offices may use photovoltaic, or solar power, cells to charge the GEMs. This would make recharging the cars “free” and also reduce conventional energy requirements for operating them.

“Anytime you replace diesel or gas with electric, it’s going to benefit clean air,” said Rich Varenchik, deputy communications director with the California Air Resources Board. “That’s certainly something the Navy is to be commended for.” ⚓

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