

Ohio State Highway Patrol

Monthly Commander's Column



Patrol goes green by equipping fleet with solar panels to save fuel and extend vehicle battery life

The Ohio State Highway Patrol is equipping its fleet of 1,150 Ford Crown Victoria cruisers with 5-watt solar panels in an effort to improve the vehicle's battery performance and conserve fuel consumption.

The Patrol researched and tested the effectiveness of both the 1.5-watt and 5-watt solar panels available and came to the conclusion that the 5-watt would be most efficient in improving the vehicle and battery performance. Due to the magnitude of law enforcement specific equipment installed in each of the Patrol's cruisers a significant amount of drain occurs on the batteries even when the vehicle is off. The Patrol anticipates the life of the vehicle's battery will be extended with the use of the solar panels, resulting in a cost savings.

This green technology will allow the Patrol to not only sustain battery life, but conserve on fuel. Troopers will now be able to have the cruiser off when sitting in stationary patrol. The Patrol has already conserved nearly \$1 million or 16.4 percent in fuel from fiscal year 2007 to fiscal year 2008, with the increase of stationary patrols. With the installed solar panels, troopers will be able to operate the radio system with the vehicle's engine off, saving fuel and with no adverse effect on battery life.

The new solar panels will also aide in officer safety and service to the citizens of Ohio by supporting one of the most important communication tools a trooper on the roadway has: the radio system, which connects troopers with dispatchers. If a trooper shuts off his cruiser during stationary patrol and cannot restart the vehicle due to a dead battery, the trooper may lose the ability to start his engine to respond to incidents.

The solar panels are installed in the rear deck of the cruiser, with direct wiring to the vehicle's battery. The Patrol used recycled misprinted license plates to fashion brackets, which not only saved money, but allowed them to custom fit the panel to the vehicle. The panels cost \$36.99 each and should operate for five years.