

# COMBATING AUTO THEFT

Tracking stolen vehicles from the air helps to speed the recovery of the vehicles and the arrest of car thieves and chop-shop operators.

**By Christian Shepherd**

A Cessna 182 Skylane belonging to the Illinois State Police was airborne conducting a mission unrelated to vehicle theft two years ago when it began receiving a signal from the LoJack tracking computer fitted into its avionics. The pilot located and then followed a stolen Chevrolet Corvette to a residence located in the city of Grand Detour. Illinois State Police officers aboard the Cessna then directed officers on the ground to the address where the vehicle was parked.

An arrest was made and several stolen vehicles and other property were recovered at the house. An investigation that resulted from the incident led to additional arrests and uncovered a professional auto theft ring that specialized in stealing high-end sports cars. In the end, a multi-jurisdictional taskforce recovered \$1 million in stolen property and assets, along with 23 pounds of marijuana and 20 firearms.

The airborne law enforcement unit wasn't looking to find car thieves or drug dealers. But, because they were supporting the LoJack Stolen Vehicle Tracking and Recovery System, they caught onto the bad guys and made the bust.

A motor vehicle is stolen in the U.S. every 26 seconds, according to statistics published by the National Insurance Crime Bureau. That translates to more than one million vehicles stolen each year. Vehicle theft ranks as the number one property crime in the U.S. in monetary terms with an estimated loss of nearly \$9 billion annually. Motor vehicle theft is a crime committed for a variety of reasons by a diverse group of criminal offenders. The vehicles are often used to commit other crimes, such as robberies, drug trafficking and drive-by shootings. As a result, prosecuting offenders and recovering stolen vehicles is a top priority for law enforcement.

Airborne law enforcement units can play a part in recovering such vehicles by installing the LoJack Stolen Vehicle Tracking and Recovery System. The LoJack system already is in service with law enforcement agencies throughout the U.S. and has an impressive record of successfully recovering stolen motor vehicles.

The LoJack Corporation is a Massachusetts-based company that works closely with law enforcement in locating and recovering vehicles equipped with their Stolen Vehicle Tracking and Recovery System, which is a consumer product that is installed in the vehicles and other property items of LoJack subscribers. The LoJack is a small radio transceiver device that is approximately the size of a deck of playing cards. Transceivers can be installed in hidden locations inside automobiles, trucks, motorcycles and other commodities.

Each transceiver has a unique subscriber code, which is entered into a company database. If a subscriber's vehicle is reported stolen, an activation signal is transmitted to the transceiver. The transceiver then begins to transmit a radio homing signal. The homing signal is detected by equipment provided to law enforcement by LoJack Corporation at no cost. The responding agency then uses radio direction locating technology to lead officers to the stolen vehicle.

The equipment provided to law enforcement agencies is known as the Police Tracking Computer 3, or PTC-3. PTC-3 can be used in ground vehicles and in aircraft. PTC-3 can be, and has been, installed in virtually all of the helicopters and fixed-wing aircraft model types in airborne law enforcement service. Numerous federal, state and local aviation units have the PTC-3 installed in their aircraft.

The PTC-3 is made up of three components. They are the display unit, receiver and antennae array. The antennae array is made up of four antennae that are mounted to the belly of the aircraft. The receiver is usually mounted adjacent to other aircraft avionics. The display unit is mounted inside the cabin at a location convenient for unit operators. Although there are slight variations due to mounting hardware and wiring, the complete PTC-3 usually weighs in at five pounds or less.

LoJack Corporation uses only properly certified technicians to install the equipment and pays for all of the installation costs. Federal Aviation Administration Form 337, Major Repair and Alteration for airframe, powerplant, propeller or appliance, is completed in compliance with applicable Federal Aviation Regulations. Weight and balance and operating limitations must also be entered in the appropriate aircraft operations manual and maintenance records.

On a daily basis, LoJack provides the means for law enforcement agencies across the U.S. to recover stolen vehicles. Some agencies in major metropolitan jurisdictions even make multiple recoveries in a day.

## **SIDEBAR:**

### **Radio Direction Finder**

**By Lon Arnold, Becker Avionics, Inc.**

As technology advances, systems like LoJack play an ever-increasing role in law enforcement activities. Technological ability can add weight and take valuable panel space in the aircraft. To help alleviate the problem, Becker Avionics, Inc. has upgraded the SAR DF 517 radio direction finder to include bearing LoJack signals.

Now with one radio direction finder, agencies can track LoJack, ELTs, PLBs, EPERBS and MOB transmitters. The SAR DF 517 fits in a standard 3 1/8-inch instrument hole and can be equipped for NVG if needed.

In the past, aircrews have only received an indication showing the direction to a transmitter. Today, LoJack, as well as emergency beacon signals, can be plotted in real time on a moving map system. The ability to triangulate the signal on a moving map gives azimuth and range information greatly enhancing situational awareness.

Agencies that currently have the Becker SAR DF 517 can have their current equipment upgraded to include LoJack. Bad guys can run, but it's getting harder to hide.