

Turning technology inside out

This power distribution panel provides **circuit breakers** for all major subsystems of the vehicle. At the bottom right of this section is an **antenna controller** for the smaller satellite dish on the roof of the UCV.

This area contains primary antenna controller/tracker and modems for the UCV. These components provide the truck's **primary satellite connectivity**.

This section contains the patch panel, spectrum analyzer and primary power amplifier control for the UCV's **satellite communications system**.

The **Land Mobile Radio (LMR)** section contains the different LMRs that are part of the truck's interoperable communications capability.

The **smaller triple screens** at the top of this area can display a wide array of the camera images or video sources. The **larger screens** connect to a keyboard/video matrix that allows users to tap into any computer resource in the vehicle.


Mobile Command

Chicago's Unified Command Vehicle delivers emergency operations center functions to disaster sites.



IN 2006, THE CHICAGO Office of Emergency Management and Communications (OEMC) unveiled its Unified Command Vehicle (UCV), a technology-packed truck designed to deliver the functions of the city's emergency operations center (EOC) directly to disaster sites. Satellite equipment mounted atop the vehicle gives it video and voice over Internet protocol (VoIP) capabilities, as well as secure Internet access. The OEMC essentially owns and operates its own telephone company that connects all agencies critical to first response. The OEMC owns more than 500 miles of fiber-optic cable and 850 miles of copper cable that connects

every police, fire and strategic government location to OEMC headquarters. The vehicle's satellite connects to the OEMC's self-healing fiber network, which carries VoIP signals back to agencies participating in the response. The truck also has its own cellular switch, which can utilize the satellite for cellular functionality. That becomes especially useful if Chicago's normal telecommunications infrastructure fails. The truck pulls a 16-foot trailer, carrying a tent that self-erects in four and a half minutes, and accommodates up to 100 staff, who won't exactly be roughing it — the tent is outfitted with heating

and cooling equipment, and power from the truck can supply 120 laptops and VoIP phones, along with 35 cellular phone connections. The truck can access 128 responder frequencies for the areas surrounding Chicago. The vehicle's users can tap into those frequencies to communicate with the regional responders using them. Lastly, the vehicle can house dozens of rack-mount servers, giving it the ability to serve as a redundant data center and remote command facility, as an alternative to traditional brick-and-mortar facilities. 

To read more about the Chicago Office of Emergency Management and Communications, visit www.govtech.com.