



# On the Move

## Factoring ICS into Mobile Command Post Design

BY NATHAN D. McCLURE III, MPA, ENP, & STEVEN E. LOOMIS, AIA

Public safety agencies respond to more than 130,000 life-threatening emergencies every day, according to NENA. And FEMA estimates that 95% of those incidents are routine and handled by the initial response. The remaining 6,500 incidents may require a larger-scale emergency response, including the establishment of a mobile command post.

The use of mobile command posts has increased in recent years largely in response to two factors: 1) the mandated use of the Incident Command System (ICS) as a part of the National Incident Management System (NIMS) at the federal level and 2) strong encouragement from the federal government for state and local governments to adopt NIMS and ICS. Mobile command post designers need to have a thorough understanding of the ICS and its influence on the mobile command post.

Experience has shown that the command function needs to be exercised as soon as the first units arrive on scene. Thus, telecommunicators will hear the first arriving fire apparatus state that they are "assuming command" as part of their arrival report. That fire apparatus becomes the initial command post. Many departments have equipped their command officers' vehicle to function as a command post once an officer arrives on scene and command is transferred.

Unified command is a critical tenet of the Incident Command System. With unified command, those people in charge of each of the responding agencies are physically located at the command post to maximize opportunities for interagency coordination.

Any time there's more than one responder, coordination through effective communications is required. Therefore, many mobile command posts also provide communications facilities and equipment, such as radio caches and

communications gateways.

When designing a mobile command post, it's important to keep in mind the multiple ways the unit could be used. In addition to use during emergencies, mobile command post vehicles are commonly used at special events, such as festivals, sporting events and political rallies. These different uses place different demands on the mobile command post. Building in flexibility is the key to meeting these multiple requirements.

Space is at a premium. Access control is problematic. (Only those who have an absolute need to be in the unit should be allowed in.) Sound management is another critical issue. The use of headsets for all radios should be mandatory in most situations.

Many mobile command posts provide two separate areas: one for the command function and the other for communications. Although some units have additional areas, the more the vehicle is subdivided, the less flexibility it has. Due to motor vehicle laws, a mobile command post is generally restricted to dimensions of no more than 40' long and 8' wide. It doesn't take much to fill those 320 square feet of space. Additional space may be gained by using "pop-outs" that can be deployed once the unit is on site.

Because these units are often used in less-than-ideal environments, the need for self-sufficiency exists. Generators can provide several hours of power. However, special care needs to be taken to adequately dampen the noise and vibration. Some units include toilet facilities. A small kitchenette may help in long deployments.

Discretion must be exercised in equipping the unit. Maximum utilization must be obtained from minimal space. When multiple radios are installed in close proximity, careful engineering is required to minimize

interference. Some desensitization may occur, but it's important to ensure that it doesn't degrade the capabilities of the radio to the point where it's not useable.

The use of computers and video monitors in mobile command posts has also increased significantly in recent years. This places additional requirements on the vehicle designer. In addition to power considerations, connectivity is a major area of concern. Not only must a connection be secured, but adequate bandwidth must be addressed.

Some communities obtain a mobile command post with the idea of it serving as a back-up dispatch center. The concept may be viable in communities with small to moderately sized dispatch centers. One major factor that must be addressed is routing of 9-1-1 calls if the primary center is a public safety answering point (PSAP). If the calls are to be routed to the mobile command post, planners must determine how that will happen, how long it will take for that to occur and so forth. Careful planning is required.

Mobile command posts can be a valuable asset. And attention to detail is required to maximize their effectiveness for each community. ||PSC||



**NATHAN McCLURE III, MPA, ENP**, is an associate and public safety consultant at CTA Communications, part of AECOM. He has more than 40 years of public safety communications experience. Contact him at [mcclure@aecom.com](mailto:mcclure@aecom.com).



**STEVEN E. LOOMIS, AIA**, is an assistant vice president and the director of Justice and Public Safety Design for AECOM Design.

He has more than 20 years of professional architectural practice. Contact him at [loomis@aecom.com](mailto:loomis@aecom.com).