

# SPECIAL APPARATUS

## Mobile Communications

by Battalion Chief John A. Calderone



Field Communications Unit 1 operates this short wheel base Mack with custom built Saulsbury body that is equipped with an array of communications equipment. *photo by John A. Calderone*

Accurate and timely fireground communications are crucial in bringing an operation under control safely and successfully. As an incident expands, communications at the scene, as well as communications to and from the scene, increase exponentially. It is essential for the incident commander to maintain control of these communications networks and to obtain as much information as possible from them.

During the early stages of an operation, the battalion chief initially establishes and maintains the command post, along with a multitude of other functions. Likewise, the battalion firefighter maintains radio contact with the dispatcher, but as an incident escalates, so does the battalion firefighter's duties and responsibilities.

At expanding incidents, there is a need for specific personnel to be assigned as communications liaison, and to command post communications and control functions. At most large scale operations these functions are provided by personnel assigned to Field Communications Unit 1. This unit

is staffed by a company officer and a fire alarm dispatcher from the Computer Assisted Dispatch Operations (CADO) Unit.

The Field Communications Unit is assigned a custom built apparatus that functions as a mobile communications center. In addition to fire department radio frequencies, the unit has the capability to operate on EMS, Coast Guard, marine, Port Authority, and 800 megahertz radio frequencies. The vehicle is equipped with a 6 kilowatt generator, a supply of extra Handie-Talkies and batteries, gang chargers, sound powered telephones, fixed and portable cellular phones, status boards, recording equipment, complete Critical Information Dispatch System (CIDS) data, and high rise Handie-Talkies.

Once on the scene, the officer will set up the status board and assume command post communications and control functions. He also acts as liaison with other agencies at the scene. The fire alarm dispatcher remains in the vehicle and maintains all communications to and from the scene, coordinat-

ing with the command post. The recording equipment in the Field Communications Unit captures all fireground Handie-Talkie transmissions. These are used to document operations.

If an operating unit experiences a problem with a Handie Talkie or a dead battery while operating at the scene, a replacement can be obtained immediately from the Field Communications Unit. An EMS operating position, with 400 and 800 megahertz EMS radios and an EMS Mobile Data Terminal (MDT) has been recently installed. This provides for the assignment of a representative from the Bureau of EMS to operate from within the Field Communications Unit at multiple alarm fires and allows for better coordination of communications between the incident commander and our EMS personnel.

Field Communications Unit 1 is quartered with Engine 233 and Ladder 176 in Brooklyn. The unit responds to all second alarms except brush fires, third alarms for brush fires, incidents where there are multiple fire deaths, major emergencies (10-60), high rise fires (10-76), level 2 or 3 hazardous materials incidents (10-80 Code 2), and 7-5 signals transmitted for fires or emergencies involving below grade subway or railroad facilities. The incident commander can special-call Field Communication Unit 1 to any incident where its services would assist the operation. A van has been retrofitted to operate as a spare but can be staffed and activated as a second field communications unit if conditions warrant.

The department maintains a Mobile Command Center for involved, large scale or extended duration operations. This vehicle is a custom built tractor-trailer unit that is quartered with and staffed by Field Communications Unit personnel as required. It can function as a temporary mobile

headquarters and has separate areas for command post operations, conferences, and personnel.

The command post area is equipped with a two-position console, fire, EMS and 800 megahertz radio capability, programmable scanners, copy machine, cellular phones, cellular FAX machine, and computer. The conference room includes a conference table, six chairs, and presentation materials. The personnel area contains tables, chairs, and a couch. The vehicle is equipped with a closed circuit television system and has a camera mounted on a 30-foot boom that can video tape the scene. This picture is transmitted to monitors located in both the command post and personnel areas where it can be recorded on VCR equipment. The trailer is equipped also with large windows from which personnel can observe the scene.

Operation of this unit requires electrical power that can be supplied by either an on-board generator or shore power. The on-board generator has its own diesel fuel tank and can supply 12 kilowatts, sufficient for all of the unit's internal power requirements and for six 500 watt quartz scene lights mounted on the exterior of the trailer.

For long term operations, shore power can be supplied via an electrical hook-up to a utility street lamp post or the utility company can make a temporary hook-up directly into an electrical manhole.

In addition to fire and emergency operations, the Mobile Command Center is used also at major public events where a commitment of department resources is required. These include parades, New Year's Eve celebration at 42nd Street, the U.S. Open, and similar events where large numbers of people confined to a small area prevent normal response procedures or present a large life hazard. An incident commander can special-call the Mobile Command Cen-



For complex or long duration operations, the Department maintains this Mobile Command Center which can function as a self-contained temporary headquarters and conference center.

*photo by John A. Calderone*

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ter to any operation where its capabilities will be an asset.

The EMS Dispatch Operations maintains a Field Communications Unit also, that can be called to multiple casualty incidents. It is utilized for special events where there are large numbers of people within a designated area and the delivery of medical services may be impeded. This unit provides an on-site command post from which EMS personnel can coordinate operations and resources. This unit serves as a communications liaison between on-scene operating forces and the citywide EMS dispatcher, coordinating radio and telephone communications to and from the scene, and providing resource tracking at the scene.

This apparatus is a recreation vehicle that was retrofitted to serve as a mobile command post. It is equipped with an on-board generator, EMS radios, cellular telephones, a cellular FAX machine, a supply of portable radios which can be issued to personnel at the scene, and battery charging

capabilities. It is quartered at the Bureau of Fire Communications' facility in Maspeth and is staffed by an EMS supervisor, two dispatchers, and administrative personnel detailed to the unit as required.

A second EMS Field Communications Unit, a converted ambulance, is available as either a spare or for activation as an additional command post at simultaneous events or events spread out over a wide geographic area.

Timely communications are critical for the incident commander to effectively manage an operation. These units are extremely effective in carrying out this function.

### About the author...

*Battalion Chief John Calderone is a 23-year-veteran of the FDNY and was the 1978 winner of the Steuben Association Medal. He holds a degree in fire protection from New York City Community College and has written extensively on the subject of fire apparatus.*



Rear view of the Mobile Command Center showing the large windows to view operations from.

*photo by John A. Calderone*

The Bureau of EMS Field Communication Unit is used to coordinate EMS functions at special events and other operations.



*photo by John A. Calderone*