

Focus on Mobile Mapping Newport Beach (CA) Fire Department



Mobile mapping: Newport Beach Fire Battalion Chief Ron Sutherland gets real-time mapping and routing with the GST Mapper.

Soon the old-fashioned paper grid maps in three-holed binders will be things of the past at the Newport Beach Fire Department.

The department, which numbers 300 with seasonal lifeguards, has begun to use a real-time mapping and routing system in two of its vehicles - a truck and a battalion chief's vehicle. The GST Mapper, developed by the Santa Ana-based company GeoSpatial Technologies, Inc. (www.geospatialtech.com), cuts response time, says Battalion Chief Ron Sutherland, a 26-year veteran of the department.

And time, in the fire rescue business, could be the difference between life and death. "If this saves us 30 seconds, well 30 seconds is a lot when it comes to a kid who is drowning," Sutherland says.

With GST Mapper installed in his Motorola MW-520, Sutherland can instantaneously get incident addresses and routing information from the CAD (computer-aided dispatch). The map automatically displays the quickest route and re-centers itself when the route goes off the computer screen. When Sutherland is within blocks of the incident, he can look at the map on the screen and see the locations of the nearest fire hydrants and potentially hazardous materials.

"I think we're the first one to have this kind of mapping system," says Sutherland. "I think some others have the old Thomas gude, but the difference is we don't have to input the data. I don't have to sit here,

get the call and type in the address. It just comes through the CAD. Before we'll get a grid and a street. Then we have to look at the City Map Book and figure out where we're going. Usually, we'll start driving because we know the general area. The captain sits in the passenger seat with the book and says turn left, turn right."

But with the mapping software, all the manual components of finding an incident address are eliminated, Sutherland says. "We don't even use grid system anymore. We have no need for it," Sutherland says. "A call comes in and, boom, there it is. It tells you where to go."

Sutherland says he welcomes the hands-free technology because he drives solo to the scenes in the BC car. "This is the problem that I have. I'm it. I don't have an aide. A lot of cities will have two people in the BC (battalion chief's) car, they have a driver and the BC can look at the map. I don't. I would be sitting here with the map, look at it and be driving. I've been here for 26 years so I know about where I'm going. But when you are talking about address breaks, am I going to go left or right, that's when it gets tough. Unless I see smoke and fire, I need that. But now I don't even pull the map book out."

For those in the engines and trucks, Sutherland, says the new technologies will give them time to prepare for the task at hand. "If they're looking at a map book, they are looking at a map instead of thinking about what I'm going to do when I get to the fire or what kind of building this is. So it's really going to change their focus. They won't have to focus on how to get there. It's going to be simple."

Sutherland says eventually every unit in NBFD will have a MDC with the mapping system.

The next BC unit, a Chevrolet Suburban 2500, will not only have the beefed-up MDC, it will also have two computers in the back, a thermal imager and a TV that can receive feeds from the fire rescue helicopters, Sutherland says.

Sutherland credits Newport Beach Fire Chief Tim Riley and Assistant Chief Tom Arnold for their unflinching support in letting the department try new things that will help the firefighters do their jobs better and safer.

He says the NBFD was one of the first fire departments in the county to be wired for the Internet. "We've had some people say, 'You're going to give them Internet access? What are they going to do on the Internet?' Well, for example, the other day, one of the captains sent me an article about the level of protective clothing that we need for the different types of calls. We had an incident at University of California-Irvine six months ago where a lab blew up and there was a lot of concerns about contamination. He gets on the Internet and he gets this site and finds this article and sends it to me."

NBFD is also looking into transferring all its paper pre-plans (plans of buildings that contain floor layouts, locations of hazardous areas, information on how to fight fires in that particular building, etc.) onto CD-ROMs. "What we do now is we keep boxes and boxes of these things on paper and we pull them out when we need them," Sutherland says. "It's pretty antiquated. We're going to put these on CD-ROMs and we'll not only going to be able to bring it up on the screen but then click and print and hand them out to the crews and say, 'OK, you are going out to the 15th floor and here is what the layout is.'"

Sutherland says he's a fan of technology to a point. "I think the problem with technology is the learning curve. I give somebody a new computer program and they'll say, 'Holy cow, this will take days to learn it.' But once you learn it, it'll save you hours and hours for the rest of your career," he says. "My philosophy is: Show me first. Show me that it's going to work. Show me that it's going to make my job easier."



Hands-free: NBFD Capt. Middlebrough no longer flips pages of the City Map Book. Real-time turn-by-turn directions are displayed right on the screen of the truck's MDC.