

National Public Radio

SCOTT SIMON, host:

SIMON: How would you tell a stranger right now exactly where you are in the world? What if your life or somebody's life depends on the directions you give? When Hurricane Katrina hit the Gulf Coast, search and rescue teams discovered that they lacked a common language for explaining where they were or where people needed help. There are area mapping systems that can make rescue and response easier if Americans are willing to use them.

NPR's Dan Charles reports.

DAN CHARLES reporting:

One morning about two and a half years ago, Tom Terry parked his car in this empty five-acre parking lot in Arlington, Virginia, just across from Washington, D.C. He got out and then he heard a crash.

Mr. TOM TERRY (Virginia): I turned to look and saw a motorcycle banging along the guardrail on its side.

CHARLES: Right up there?

Mr. TERRY: Right up there, about a hundred yards away. Of course, I immediately pulled out the cell phone, called 9-1-1.

CHARLES: When the 9-1-1 operator came on the line, Tom Terry had to answer that basic universal question, where. You'd think he'd be good at this; after all, he is the executive director of the Public XY Mapping Project, which promotes the use of high quality maps. But Tom Terry struggled.

Mr. TERRY: Well, I said something to the effect of it's on a freeway coming out of Washington, D.C. it's adjacent to the Pentagon. It's adjacent to Columbia Pike. It's opposite to the side of the freeway from the Pentagon City Shopping Mall. And after a moment, she comes back and says, Are you on Interstate 66?

CHARLES: But Interstate 66 is several miles from here. Terry was frustrated. But then he remembered he had a global positioning system receiver in his pocket.

Mr. TERRY: So I said, Well, ma'am, can you take a coordinate from a GPS receiver? And she goes, No, I can't use that.

CHARLES: So the operator had to wait for somebody else to call, somebody who could name the road where the crash happened. But imagine how much harder it would have been to get help to that motorcyclist if all the street signs had been blown down, and if

the rescue crew was coming from out of state. What if the rescuers were in a helicopter and had never seen the area before? That was the situation for thousands of people stranded and ailing along the Gulf Coast after Katrina.

Mr. TALBOT BROOKS (Director, Center for Geo-Spatial Information Technology, Delta State University): The Coast Guard would come running in the room and say, Okay, we've got a baby with a hole in her neck. They're at this location. Give us the coordinates. We've got to go.

CHARLES: Talbot Brooks is the director at the Center for Geo-Spatial Information Technology at Delta State University in Mississippi. He was volunteering at a command center in Jackson after Katrina ripped through that city.

Mr. BROOKS: But you still can't fly a helicopter to a street address. They don't kind of stop to hover and look at street signs; instead, they need some type of coordinate to fly to. In this case, we were providing them with latitude and longitude.

CHARLES: Brooks became a kind of geographic translator during the crisis. If someone needed to get to Memorial Hospital in Gulf Port, he'd start with the hospital's street address, 4500 13th Street. Then he'd check computer databases to locate the coordinates that the helicopter pilots needed. Gulf Port's Memorial Hospital is at 30-degrees, 22-minutes, three-seconds north, 89-degrees, six-minutes, 53-seconds west.

Then other military units showed up with yet another geographic language, the Military Grid Reference System. Memorial Hospital, according to that grid, is located at coordinates 16R BU 9673 6136. Some civilian parts of the federal government now have adopted the military system for identifying the locations of buildings and streets. They now call it the National Grid.

Brooks says the National Grid is much easier to use than longitude and latitude. For one thing, the coordinates measure actual distances on the ground. Eventually, Brooks says, emergency workers in the path of Katrina used these coordinates to find their way around. And he became a National Grid convert.

Mr. BROOKS: I'm sold hook, line and sinker. It works to put everybody on the same page now. Were this, and I hope to God it doesn't, happen again, I would have the national grid working the first time out of the chute.

CHARLES: But you'll have trouble finding a map at the gas station with National Grid coordinates marked on it. Every one of those maps does have a grid, the letters and numbers that the map companies print along the edge of each page to help you locate obscure streets. But each map uses a different system.

Tom Terry, from the Public X-Y Mapping Project, says that's got to change. Every commercial map should also show the coordinates of the national grid.

Mr. TERRY: You wouldn't go buy maps and expect to have 35 different sets of street names on them. Well, it's the same thing. If you have the same grid on all the maps, it turns out that's a very powerful capability. It's when it's consistent, it's the same one. It's a language of location.

CHARLES: Learning new languages, though, isn't easy. Steve Marzolf, president of the National Association of State 911 Administrators, says when local police or fire trucks head out, all they really want is a street address.

Mr. STEVE MARZOLF (President, National Association of State 911 Administrators: We're very much more vehicle oriented, and cars and everything else. With a street system, you at least know you're on Massachusetts Avenue. And if I hit Massachusetts, I go one way or the other, I'll hit you eventually.

CHARLES: Few emergency responders, right now, are trained to use anything besides a local street address. So, if another disaster should occur, that's how they would have to find their way to the people who need help, eventually.[POST-BROADCAST CORRECTION: The correct coordinates are 77 degrees, one minute, 13 seconds WEST, 38 degrees, 6 seconds NORTH.]

Dan Charles, NPR News, 635 Massachusetts Avenue Northwest, Washington; 77-degrees, one minute-13 seconds north, 38-degrees-6 seconds west, or 18S UJ 2480 0780.