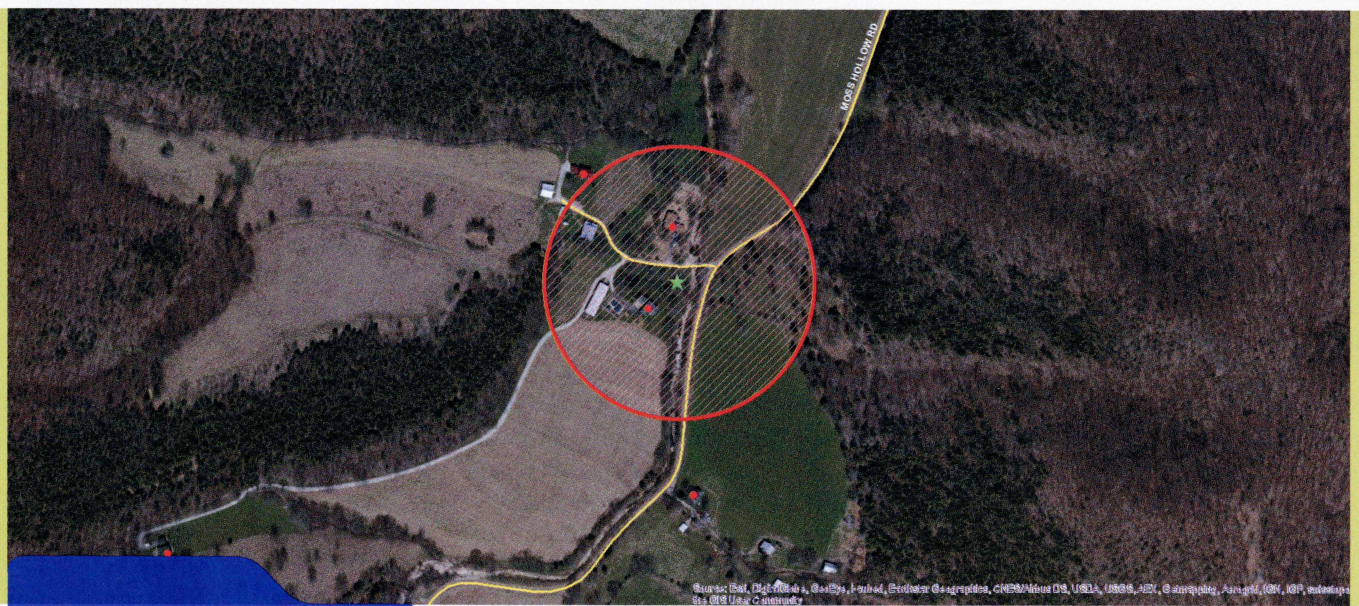
STATE OF THE ART

How 9-1-1 is moving location accuracy into a wireless world

By Susan Cunningham



If the caller was unable to give an address, intersection or other useful location information, a circle with a nearly 500-foot radius in a rural area can be a reasonable search area. It might contain a few addressable structures and a quarter-mile or less of roadway. Working outward from the mapped location, and checking obvious locations first—homes and other buildings, roadways, ditches along roadways—emergency responders would presumably have a reasonably good chance of locating the person even if they couldn't call out for help.

You're driving on the interstate when the car in front of you swerves, hits a deer and careens off the road. You pull off the highway, hitting the brakes, heart pounding. You fumble for your cell phone, and manage to dial 9-1-1.

"9-1-1 What's the location of your emergency?"

What? Adrenaline pumping, you try to think. Eastbound on I-70. You saw a sign for a rest area but did you pass it already? Wasn't there a McDonald's at that last exit?

Wait. Why doesn't 9-1-1 already *know* where you are?

Give it time.

Fifteen seconds. Twenty-five. The system often needs more time to resolve your location. Your cell phone is equipped with GPS you use it all the time. GoogleMaps. Pokemon Go. Facebook. Uber. MapMyRun. When you dial 9-1-1, the GPS coordinates of your phone at the time you placed the call are transmitted