The March of Progress?

Years ago, with the advent of photogrammetry, surveyors lamented the impending loss of work. Heretofore, large scale mapping projects involved multiple-person survey crews, working days and weeks on end, followed by days and often weeks of office work reducing the field notes and then plotting the data.

Today, drones are replacing photogrammetrists and their expensive equipment. Everyone maps and everyone measures. A couple of friends of mine, former electronics wizards, recently started a new business building and flying drones for commercial applications, developing accurate imagery of residential properties and inventorying things like street lights, roof systems, and other features inaccessible from terra firma.

Drones are everywhere, literally and figuratively. Virtually every conceivable sort of magazines is filled with advertisements about these fascinating devices. A quick Google search reveals 28,400,000 hits for “drone iPhone,” while “photogrammetry” produces 784,000 hits. For $104.35 you can purchase a “New long flight time drone 898B 2.4GHz 4CH HD FPV Camera 6 Axis RC Helicopter Quadcopter Gyro IOS/Android Phone TF Card with 2MP Camera.” If you buy them in bulk (10 or more) they’ll cost you $95.00. As to what you are buying, if you don’t understand the shorthand technical gibberish, you’re in trouble.

Because of the wonders of rapidly developing technology, drone-developed imagery is rapidly becoming a common, everyvry commodity the same way Lidar has. At least with photogrammetry, it passed through the hands of surveyors and engineers where it was controlled and managed by licensed individuals. This was supposed to happen with GIS and GPS, the former dealing with making maps and the latter, positioning. It wasn’t that long ago that these two sciences were called land surveying.

One of the things that is supposed to distinguish a professional such as a land surveyor from a lay person is licensing and, more importantly, protection under the laws. Bits, bytes, and satellites have eliminated more mapping work than can be imagined. Sadly, as this evisceration continues, the profession and its associations and licensing boards have done little to protect the land surveying profession.

On a regular basis, surveyors from across the country ask my opinion about BIM work. According to Wikipedia:

“Building information models (BIMs) are files (often but not always in proprietary formats and containing proprietary data) which can be exchanged or networked to support decision-making about a place. Current BIM software is used by individuals, businesses and government agencies who plan, design, construct, operate and maintain diverse physical infrastructures, such as water, wastewater, electricity, gas, refuse and communication utilities, roads, bridges and ports, houses, apartments, schools and shops, offices, factories, warehouses and prisons.”

Did you notice there is no reference to “surveying” in that definition? What answer does one give when a Land Surveyor complains because he/she just lost a mapping project to a run-of-the-mill contractor or a small business who invested in some Lidar equipment so they can map buildings, bridges, and parking lots. “Is that surveying?” they want to know.

I used to do accident surveys, usually involving cars. I would prepare a certified exhibit showing where everything was—the cars, the traffic stripes, and the path of view while calculating stopping distances. I don’t do that work anymore. I do though watch the news and every time I see an automobile accident, there is inevitably a couple of police officers mapping everything with total stations and other devices.

Hey, why not? It’s not surveying.