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Drones coming to a neighborhood near you

By Jim Nowlan

Drone aircraft may be coming to a neighborhood near you in a couple of years. In addition to all the constructive applications for unmanned aerial vehicles, the UAVs offer powerful tools that can look deep into our personal lives. Vigilance is called for.

Maybe I shouldn't be so concerned. We already have Google maps, which can see into the front window of the building that is my business and home. And security cameras are popping up throughout cities around the world, to record our comings and goings. Then we have cell phones, which track our every move.

We are already caught in the web of the eye-in-the-sky, surveillance society.

The apparent effectiveness, albeit sometimes indiscriminate, of UAVs in Afghanistan, has spurred development of unmanned vehicles that range in size from Boeing 737s to one that looks like a hummingbird and weighs less than an AA battery.

They come in all aerodynamic shapes, from fixed wing to helicopter to four-rotor vertical takeoff and landing vehicles.

The 600 corporate members Association for Unmanned Vehicle Systems International (AUVSI), based in suburban Washington, D.C., trumpet the good uses to which UAVs can be put.

Customs officials are using them, for example, to monitor the border with Mexico. UAVs could assist fire-fighting by going into burning buildings ahead of the fire fighters. Highway

officials could use them to photograph the conditions of the underside of big bridges, which otherwise would expensive manual inspection.

Air freight companies might someday automate the flying of packages from city to city. There is even speculation that pizzas could be delivered to your door via TacoCopter, which is in the conversation stage of development in, where else, San Francisco.

But the primary use of UAVs in the foreseeable future will be for surveillance, as is the case in Afghanistan. Police chiefs are itching to get their hands on small, 40-50 pound UAVs to help them monitor hostage-takings, for example, and all manner of critical situations.

Most departments can't afford manned aircraft. AUVSI puts direct operating costs of UAVs at \$3.36 per hour versus \$250 to \$600 dollars an hour for manned aircraft.

According to an article in Government Technology magazine, at least one police chief could see the possibility of arming UAVs with tear gas and rubber bullets.

At present, the Federal Aviation Agency, which controls American air space, does not allow the use of UAVs except in a few somewhat experimental situations. But the agency has a mandate from Congress to integrate UAVs into our airspace by 2015.

I worry about the potential intrusiveness of UAVs. Cameras with infra-red capabilities can see at night and through walls. Nothing is sacred to sophisticated machines.

I don't worry about how UAVs would be used initially. I worry instead about "mission creep" that could occur over time, in which UAV use is expanded to include broad surveillance.

Information is power and surveillance is about information that can't easily be gleaned otherwise. People, including police chiefs and government officials, are attracted to power. Recall J. Edgar Hoover at the FBI using his agents to spy secretly on celebrities and public officials who were under no suspicion. The American Civil Liberties Union (ACLU) believes that UAVs "pose a looming threat to Americans' privacy." The group notes that the U.S. Justice Department already claims the right to use GPS tracking devices to monitor movements of Americans. With networks of UAVs, the organization could conduct mass surveillance of thousands of people at a time.

The Greek gods intervened from above in the lives of mortals, and so can UAVs and those who direct them. The simple thought of being monitored by UAVs could have the chilling effect of altering our behavior. Maybe I wouldn't have that last beer at an outdoor party, though I desire it, because the UAV video could conceivably cast me in a bad light.

The ACLU recommends that drones not be deployed for spying. Judicial warrants must first be issued, the group declares, based on specific grounds of collecting evidence of criminal wrongdoing, or in cases of fires, lost persons in wilderness and hostage crises.

The pace of change in our brave new world is beyond breath-taking. UAVs will become a part of our lives soon. We need tell all our elected officials: "Don't mess with my private life."