**Applying Drones & Imagery for Disaster Management**

**Question:** How can we address citizens who think, "the drone is spying on me"?

**Answer:** This is always a difficult question and it varies from state to state on the legal requirements of overflight of private property. The Civil Air Patrol (CAP) must follow Department of Defense (DoD) requirements regarding personally identifiable information (PII). Each jurisdiction must develop policies regarding how the obtained imagery is held and where it is stored. A policy is also needed regarding how PII is scrubbed or removed.

**Question:** How do you manage the public perception issue of a drone overflying crowded disturbance areas (Richmond)?

**Answer:** Maintain open and transparent information about the program in advance. Be sure to advise the media of why the drone is being flown and that it is about safety not surveillance.

**Question:** How quickly are you able to get a warrant for SWAT and observational situations, if needed?

**Answer:** This depends on where you are and the local and state rules/regulations/laws. Generally, you do not need a search warrant to fly over property. However, some localities and states require a search warrant for law enforcement missions.

**Question:** What software do you use for mission planning? What about for transmitting and viewing drone imagery? How do you manage data and records retention?

**Answer:** CAP uses a variety of software packages, primarily ESRI’s Site Scan, and ARUDU Pilot. CAP does not retain imagery. We deliver them to our requesting agency and then scrub them. It is the receiving agency’s responsibility to manage that imagery and the PII associated with them.

**Question:** I understand how you handle the PII and policy aspects behind the scenes of public trust, but how do you actually supply that information to the public, exposing it so the trust is created? Especially among populations in which there may be inherent distrust?

**Answer:** DRONERESPONDERS will be releasing a Community Outreach Model that can be customized for each user.
**Question:** What does AFAM stand for?

**Answer:** Air Force Assigned Mission

**Question:** Is the use of lower cost 3-D apps to provide 3-D imagery effective?

**Answer:** The cheapest program that is effective is called Metashape. Our field teams use Metashape to start with on the most basic end. We use Site Scan for higher end AGOL exportable 3D/2D orthomosaic images. On the highest end we use Skyline to process our Waldo data and GeoX for the AI.

**Question:** Has there been an analysis on the cost offset for using remote damage assessments (e.g., # of billed hours by inspectors, etc.)?

**Answer:** Analysis shows remote damage assessments are much more cost effective than traditional means of damage assessments.

**Question:** Are there any repositories available to U.S. government entities of UAS imagery data over areas affected by disasters?

**Answer:** Yes, FEMA maintains a repository for images from disaster sites.

**Question:** Is your staff made up of volunteers or paid staff?

**Answer:** AIRT and DRONERESPONDERS are all volunteers. CAP has 66,000+ volunteers with a small paid staff.

**Question:** Do you have advice on Part 107 training, including the viability of online training courses?

**Answer:** One panelist had great success with pilotinstitute.com and remotepilot101.com. DRONERESPONDERS is working on one of its own to combine in public safety aspects. There are many commercial programs out there to provide that training. You can self study for the 107 test. There are many cheap test programs/apps (Sporty’s Pilot Shop) that are available. Part 107 currently requires no practical skills exam. Be sure you do a lot of flying; this is a degradable skill.

**Question:** What is the best place to find a grant for a drone itself?

**Answer:** DHS pass-through grants through FEMA is one source. These are often managed by each state. The Fire Act Grant can also be used. DOJ also has some funding available.

**Question:** May we post a link to this recording on our web site?

**Answer:** Yes, please feel free to circulate the materials link, once available. Thank you!