

InterDrone 2018

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Tucson Computer Society

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This Las Vegas conference was the fourth in the series about the dramatic growth and technological advances in the drone industry.

This industry has changed from somewhat of a hobby profile to a very industry-oriented perspective.

Drones are used today in many ways:

- Humanitarian aid
- Emergency services: search and rescue, inspecting critical infrastructure, locating missing persons
- Journalism: news reporting, viewing areas not available to the public, disaster reporting
- Fire service: viewing areas burning, using FLIR ("Forward Looking Infrared") to identify if persons are in a building
- Farm: survey crop areas, plan for crop dusting, find lost animals
- Inspecting cell towers and inspecting other hard to access structures
- Assist in evaluating insurance claims
- TV and film production
- Surveying and mapping
- Document crime scenes



Figure 1 Mavic 2 from DJI

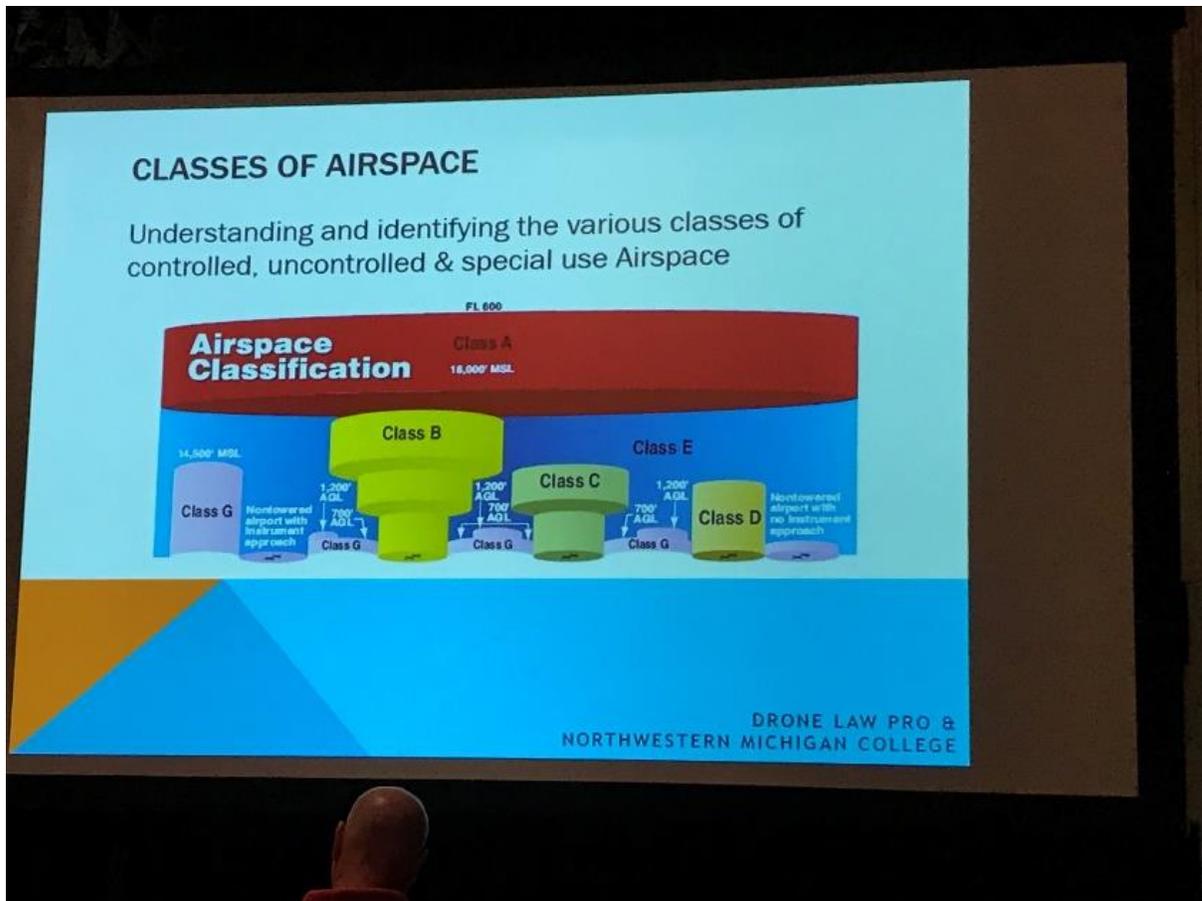
Commercial drones must comply with a number of requirements:

- Weigh less than 55 lbs.

- Visual line of sight only
- No operation over people or under a covered structure
- Daylight only
- See and avoid
- Maximum altitude 400 feet
- Minimum visibility 3 miles
- These may be waived upon application
- Must conduct preflight inspection before flight
- Must have a remote pilot certificate (Part 107 license)
- Register UAS with FAA
("UAS" stands for "Unmanned Aerial System")

The Part 107 license is administered by FAA. The test for it covers a number of subjects, is administered by computer and is multiple choice. The subjects are;

- Regulations-----15-25%
- Airspace and requirements-----8-15%
- Weather-----11-16%
- Loading and performance-----7-11%
- Operations-----13-18%
- Total 60 questions, pass rate 70%



The conference offered a day-long class to prepare the attendees for the test.

Most of the conference, however, was devoted to panels explaining how drones are used in various ways.

One of the primary uses is in Search and Rescue. Here, a drone can easily go places that are difficult or impossible to reach. It can show the degree of the accident and, perhaps, of injury, making deployment of rescuers and equipment appropriate to the problem.

Fire fighting is another use that can point out where the fire is concentrated and, with the use of FLIR (forward looking

infrared) drones can let you “see” outlines of people inside the building, aiding rescue.

Drones can be time-saving when you need to survey your corn field to find out what locations need more water. Similarly, solar cell fields may have non-functioning banks that would be difficult to find without drone help.

It’s hard to think of an industry or situation where drones would not save time or would not help workers in their work, or would not be instrumental in public safety.

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www.interdrone.com

Fees ranged from \$100 to \$900, depending on the events that the attendee selected.