

The Law Surrounding Drone Use at UW

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Legal Issues the Working Group Should Consider

- ◆ The FAA's interim ban on civil drone use, and its exemptions.
- ◆ The agency's new draft rules and its timeline for promulgation.
- ◆ FAA rules and allowances for recreational drone flights.
- ◆ Recent case law on FAA authority to regulate drones.
- ◆ Constitutional issues – First and Fourth Amendments.
- ◆ State law – A number of drone bills are being debated right now.
- ◆ Local city law – City Council considering SPD enforcement.
- ◆ National security limitations and export controls.

FAA Regulatory Background and History

- ◆ 2007: The FAA unilaterally prohibited the commercial use of drones.
- ◆ 2012: Congress passed the FAA Modernization and Reform Act (FMRA), forcing the FAA to figure out how to regulate drones.
 - ◆ Sept. 2015 deadline for permanent rules, but GAO says 2017.
- ◆ June 2014: FAA issued a Notice of Interpretation of the FMRA.
 - ◆ Narrowed the definition of “recreational” drone uses and clarified that the ban applies to all civil, non-recreational uses.
- ◆ Aug.-Nov. 2014: Suit fought the FAA’s authority over drones, but lost.
- ◆ Feb. 15, 2015: FAA publishes draft rules for public comment.

FAA's Ban on Civil Drones and its Exemptions

- ◆ Bans non-recreational, “civil” use of drones in interim of permanent rules.
 - ◆ But, there are many exemptions.
- ◆ “Public operation” requires Certificate of Waiver or Authorization (COA)
 - ◆ Applies to publicly-funded research and educational uses.
 - ◆ The UW has a handful of COAs for drone flights.
- ◆ “Private civil operation” requires either:
 - ◆ An Exemption under Sec. 333 of FMRA AND a “civil” COA.
 - ◆ Or a Special Airworthiness Certificate AND a “civil” COA. Harder to get.
- ◆ “Recreational” uses of drones are NOT banned, but limited.

Recreational Use Rules

- ◆ FMRA Sec. 336 defines Model Aircraft as for “recreation” or “hobby”.
 - ◆ All recreational drones fall under Model Aircraft rules – AC 91-57 (1981).
- ◆ Recreational drones must be flown strictly for recreational purposes.
- ◆ Must be flown under 400 feet. | Can't weigh more than 55 lbs.
- ◆ Must remain within “line of sight” of the operator.
- ◆ Can't fly within 5 miles of an airport without notifying ATC.
- ◆ Exceptions for Model Aircraft flying under the rules of a “nationwide community-based organization”. May exceed 55 lbs., fly above 400 feet.

The FAA's Forthcoming Rules for Civil Use

- ◆ Draft rules were submitted by the FAA on Feb. 15, 2015.
 - ◆ UW Working Group should consider commenting.
- ◆ Permanent rules were due by Sept. 30, 2015, but the GAO has recently indicated that they won't be ready until 2017.
- ◆ Ban on civil use will remain until FAA promulgates permanent rules.
- ◆ This means Section 333 Exemptions and COAs will remain the name of the game for another two years.

FAA's Draft Rules for Civil Use

Operational limitations for civil drones:

- ◆ Stay within “line of sight” of operator. No first-person view (FPV) cameras.
- ◆ Remain under 500 feet. Passenger aircraft fly above this threshold.
- ◆ Under 55 lbs., inclusive of any payload. | Cannot exceed 100 mph.
- ◆ Cannot fly over passerby's, unless a “microUAS” (under 4.4 lbs.).
- ◆ May only fly in daylight and in conditions with 3-mile visibility.
- ◆ Can fly in Class G airspace. Need permission for B, C, D, and E.
- ◆ Can never fly in class A airspace (above 18,000 feet).

Airspace Classes

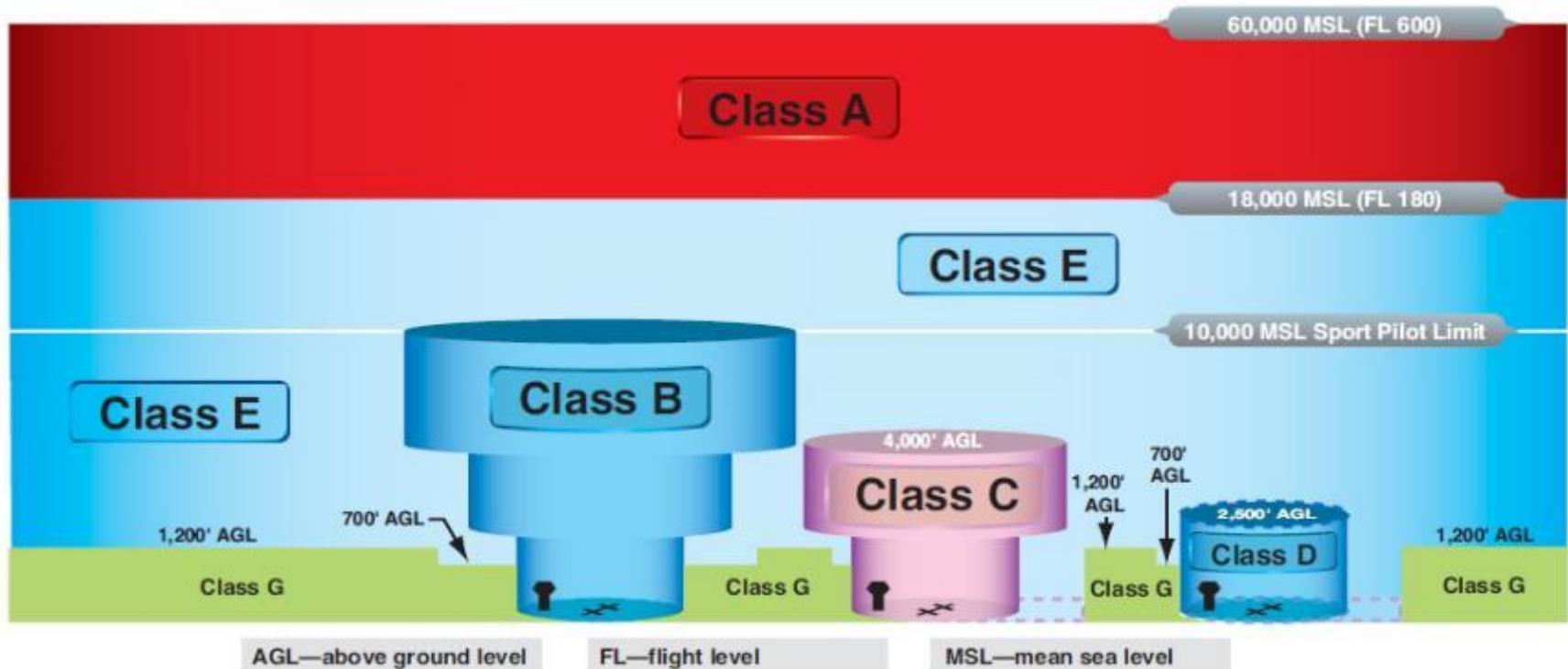


Figure 8-3. Class G airspace extends from the surface to the base of controlled airspace (Class B, C, D, and E).

FAA's Draft Rules for Civil Use

Operator certification requirements:

- ◆ Pass aeronautical knowledge test at FAA-approved center every 24 months.
- ◆ Must obtain a UAV operator certificate (with a small UAV rating).
- ◆ Operators would be subject to TSA vetting.
- ◆ Must make drones available for testing upon request.
- ◆ Report accidents causing injury, property damage within 10 days.

FAA's Draft Rules for Civil Use

Drone aircraft requirements:

- ◆ No FAA Airworthiness Certification requirement.
- ◆ Operator must keep UAV in safe condition, inspect pre-flight.
- ◆ Drones must be registered with the FAA.
- ◆ Aircraft markings required – same requirements as for other aircraft.

FAA Rules Around Stadiums

October, 2014 Notice to Airmen: Drone operators cannot fly within 3,000 feet of any 30,000-person stadium during an MLB, NFL, or NCAA division one football game.

- Obvious implications for UW football games.

Recent Cases on FAA Regulation

- ◆ *Huerta v. Pirker* – An NTSB court held in Nov., 2014 that FAA has authority to regulate drones from ground up, not just passenger aircraft above 500 feet.
- ◆ *Equusearch v. FAA* – D.C. court found in July, 2014 that FAA email to Equusearch urging it to stop search-and-rescue drone flights was not a cease-and-desist order.
 - ◆ Equusearch interpreted this to mean that FAA has no cease-and-desist authority absent permanent rules, so it resumed its flights.
 - ◆ FAA maintains it has authority through the FMRA, *Huerta*, and safety mandate over the NAS to issue cease-and-desist orders, warning notices, and civil penalties.
- ◆ *UAS America Fund v. FAA* – Pending suit brought by hobbyists, universities, and small businesses in Aug, 2014 against FAA’s Notice of Interpretation of the FMRA. Called it “arbitrary, capricious, an abuse of discretion.” Argued:
 - ◆ Research/educational drones should not be treated the same as commercial drones.
 - ◆ *US v. Causby* (1946) supports rights to “immediate reaches” above property.

What Other Universities Are Doing

- ◆ WSU's approach:
 - ◆ Its philosophy is to become a UAV leader, largely in agriculture.
 - ◆ Applied to FAA to be a test site for UAV systems, but was not selected.
 - ◆ Hired a consultant to obtain COAs for faculty, but FAA asserted certificates only apply to aeronautics research, not ag. applications.
- ◆ Last July, Gonzaga banned all drone flights on campus until the FAA promulgates permanent rules. Followed aerial photography incident.
- ◆ Dozens of universities have applied for and received COAs and Section 333 Exemptions for flights on and off campus.

Approaching Legal Challenges - Categorizing Uses

- ◆ Student flights on campus as part of a course
- ◆ Student flights off campus as part of a course
- ◆ Student recreational flights on campus
- ◆ Non-student recreational flights on campus
- ◆ Government-funded UW research flights on or off campus
- ◆ Privately-funded UW research flights on or off campus

Constitutional Issues

- ◆ First Amendment – Freedom of speech and press as well as right to privacy
 - ◆ Photography in public limited only by reasonable “time, place, manner” restrictions.
 - ◆ Right to privacy, informed by the First Amendment, restricts invasive drone use.
 - ◆ View-point discrimination. Problem to allow uses for some groups, but not others.
- ◆ Fourth Amendment – Search and seizure issues (Less important to UW)
 - ◆ Government use of drones that might amount to warrantless “searches”.
 - ◆ Court would likely review a drone search for “reasonableness,” informed by:
 - ◆ Location of the search
 - ◆ Sophistication of the technology used, and
 - ◆ Society’s privacy ideals in the age of rapid technological advancement
 - ◆ Fourth Amendment offers few restrictions on govt. surveillance in public places

The Province of State/Local Law

- ◆ The FAA's mandate starts and stops with *safety* of the NAS.
- ◆ This leaves other issues to state/local common law and regs:
 - ◆ Tort laws
 - ◆ Trespassing – Into the “immediate reaches” of one's property.
 - ◆ Privacy – E.g., Seattle had a “peeping drone” incident in 2014.
 - ◆ Nuisance – Drones make a buzzing noise, can be a nuisance.
 - ◆ Regulation of sale of drones.
 - ◆ Creation of liability and insurance frameworks.
 - ◆ Any other non-safety state interests.

State Proposed Legislation

- ◆ No Washington law yet, but a number of bills are being debated. Privacy is the focus.
- ◆ HB 1639 – ACLU supported, sponsored by Rep. David Taylor (R)
 - ◆ Narrows scope of permissible government use of drones.
 - ◆ Requires search warrant for govt. agencies (including UW) to use a drone to record/photograph someone for an investigation or to collect personal data.
- ◆ HB 2016 – Pertains to State agencies, but is less restrictive than the ACLU bill.
- ◆ HB 1093 – Rep. Jeff Morris (D) sponsored
 - ◆ Applies to all use of drones, both commercial and governmental.
 - ◆ Restrictive: Would prohibit drones with active sensing devices from collecting personal info — images of an individual on private property — without the individual's consent.
 - ◆ Exempts uses that are in compliance with FAA rules (E.g., under a COA).
- ◆ SB 5499 – Focus on criminal use of drones.

Seattle City Regulations

Seattle City Council to explore local enforcement mechanisms for FAA regulations:

- ◆ Announcement followed buzzing of Space Needle by a drone last July.
- ◆ Seattle police would be given authority to arrest or issue citations to violators of FAA rules.
- ◆ Any implementation depends on timing of FAA rules.

Potential Implications in National Security and Export Controls

Major Regulation Regimes:

◆ **International Traffic in Arms Regulations (ITAR)**

- ◆ Department of State, Directorate of Defense Trade Controls.
- ◆ Regulates export of articles, services, and technologies that are weaponizable, as listed on the US Munitions List (USML). “Aircraft and related articles” are on the list.
- ◆ Can limit the ability of foreign nationals to work on drone projects at UW.

◆ **Export Administration Regulations (EAR)**

- ◆ Department of Commerce, Bureau of Industry and Security.
- ◆ EAR regulates export of “dual use” items, with both commercial and military applications, listed on Commerce Control List. Includes “avionics” and “aerospace.”

◆ **Office of Foreign Asset Control (OFAC) Regulations**

- ◆ Department of Treasury
- ◆ Administers penalties/sanctions in the interest of national security.

Potential Implications in National Security and Export Controls

The U.S. Arms Export Control Act and the Roth Case:

Professor John Roth, University of Tennessee, was sentenced to 48 months for violating the Arms Export Control Act by illegally exporting technical info related to Air Force research contracts.

- ◆ He was developing plasma technology for use in advanced UAVs.
- ◆ Gave ITAR technical data to a Chinese and an Iranian student.
- ◆ Downloaded project from a Chinese colleague's computer in China.
- ◆ His laptop and flash drive were confiscated by the Chinese government.
- ◆ The University export control officer had even warned Roth

Potential Implications in National Security and Export Controls

Responsible UW Department for Export/Security Controls:

- ◆ The Office of Sponsored Programs, under Office of Research
- ◆ Additional Export Compliance Information available at:
<http://www.washington.edu/research/osp/?page=ecr>

Next Steps

The UW Law Technology Law and Policy Clinic is happy to help the Working Group develop policies, procedures, practices that make sense in the context of these national, state, and local laws and that align with the Working Group's broader philosophy toward drones.

Thank You



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