Unmanned Aircraft Systems

Regulatory Environment Update

Presented to: Florida Realtors

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Overview

- Public Law 112-95
- AC 91-57
- FAA Organization for UAS
- FAA Notice N 8900.268
- Exemption No. 11138 (Trudeau)
- 14 CFR Part 107 NPRM
- Select web resources

Public Law 112-95

- Title: FAA Modernization and Reform Act of 2012 (aka "FMRA")
- Comprehensive mandate to fund, modernize FAA through FY-2015
- Subtitle B: Unmanned Aircraft Systems
 - Sec 331: Definitions
 - Sec 332: Integration of UAS into NAS
 - Sec 333: Special Rules for certain UAS
 - Sec 336: Special Rule for Model Aircraft

Provisions of PL 112-95

- PL 112-95 is not FAA Regulations (FAR's)
- Directs FAA to <u>develop</u> UAS regulations
- Due 30 Sep 2015: Final regulations for fitting UAS in US airspace <u>safely</u>
- Created six UAS test sites nationwide
- Section 333 Permits approval of certain UAS ops prior to publication of new reg's
- Pre-exempts most model aircraft ops



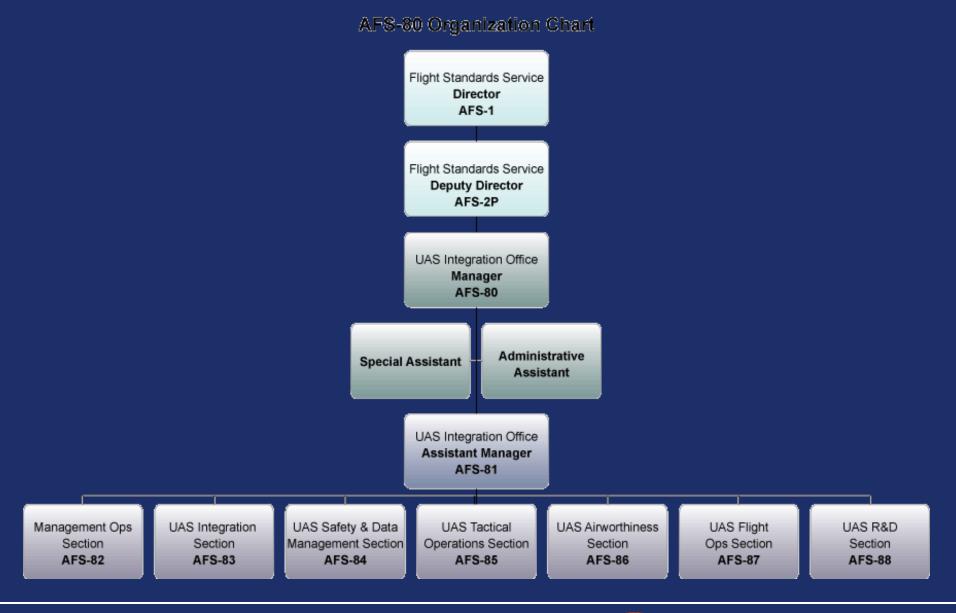
Advisory Circular AC 91-57

- Title: "Model Aircraft Operating Standards"
- 1-page document; very general and brief
- Published 9 Jun 1981
- Foundation for UAS model aircraft ops
- "Advisory" means voluntary compliance



FAA Organization for UAS

- AFS-80: Unmanned Aircraft Systems Integration Office.
- Responsibilities:
 - Regulation of UAS operations
 - Developing UAS policies & procedures
 - Ensuring safe integration of UAS into NAS



Other FAA interfaces

- Headquarters Divisions
- Regional AFS-220 Divisions
- Aircraft Certification Service
- Air Traffic Organization (ATO)
- Flight Standards District Offices (FSDO's)

A Look Ahead for FAA

Today: Accommodation

- Improve FAA UAS approval guidance and process for government and civil
- Plan/oversee research and development activities through the UAS Test Sites
- Gather safety data
- Grant exemptions on case-by-case basis until Small UAS rule

Mid-term: Transition to NAS Integration – Initial

- Increase NAS access through small UAS rule
- Implement advanced mitigations (Ground Based Sense and Avoid (GBSAA), others

Long-term: Integration into the NAS – Routine

- Amend operational regulations
- Accomplish other rulemaking activities, as needed
- Reduce dependency on individual approvals
- Integration into the NextGen environment



FAA Notice N8900.268

- Title: Education, Compliance, and Enforcement of Unauthorized Unmanned Aircraft Systems Operators (15 July 2014)
- Policy guidance for FAA personnel (ASI's)
- Gives ex's of hobby vs. non-hobby ops
- Hobby / Rec ops are narrowly interpreted
- Commercial ops are non-hobby
- Real estate photo ops: non-hobby

Exemption No. 11138

- Exemption for UAS ops for Real Estate
- Approved 5 Jan 2015; Expires 31 Jan 2017
- 14th Grant of Exemption awarded by FAA
- First for Real Estate commercial UAS ops!
- Awarded to Douglas Trudeau of Tucson, AZ
 - Trudeau is not a certificated pilot☺
- Can be viewed on-line: (See Resources sec)
 - Exemption + Cert of Auth + compliance = "Permission"

Applying for the 333 Exemption:"Summary Grant"

- FAA on-line resources (see Resources sec)
- Read thru the material before applying
- Typ. less than 120-day review if based on precedent; New uses may take much longer
- Over 1000 grants awarded to date!
 - Streamlined approval process began 23 Mar 2015
- Can apply for amendments at later date
- Expect FAR Part 107 to obviate need for Exemptions / Summary Grants

Select Official Web Resources

- FAA's UAS web site
- Trudeau's Exemption
- FAA's 333 Exemption application site
- Aircraft registration procedures
- Application for Certificate of Authorization

FAA's UAS Web Site:

- www.faa.gov/uas
- Items of general interest
- Press releases from FAA
- Links to Exemption process
- News release of Trudeau Exemption
- Part 107 (Small UAS) NPRM

Trudeau Exemption

 https://www.faa.gov/uas/legislative_progra ms/section_333/media/Trudeau_Douglas-11138.pdf

- Shows Exemption in its final form
- Specifies pilot & training reqmts
- Requires drone registration (N-number)
- Mandates Certif's of Authorization (CoA's)

FAA's 333 Exemption App Site:

 https://www.faa.gov/uas/legislative_progra ms/section_333/

- Contains link to Trudeau, other Exemptions
- Check out the Highlights panel at right

Aircraft Registration web site:

- Aircraft Registry web site: http://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/
- Procedural info for new registrations:
 http://www.faa.gov/licenses_certificates/airc
 raft_certification/aircraft_registry/media/AF
 S-750-94.pdf
- Apply via AC Form 8050-1

Obtaining a CoA:

 https://www.faa.gov/about/office_org/headq uarters_offices/ato/service_units/systemop s/aaim/organizations/uas/coa/

- Grant of Exemption + CoA + compliance = "Permission"
- Need separate CoA for each model of drone
- "Blanket CoA" simplifies paperwork

Howgozit: Douglas Trudeau

- First Exemption for R-E Imaging w / UAS
 - Trudeau is not a pilot of any kind
- Operational enhancements
 - Notifies local <u>law enforcement</u> before ops
 - Notifies the neighbors before ops
- Competition from un-approved operators
- Trudeau's message to this audience:
 - Safety
 - Privacy
 - Responsibility



FAA's Draft UAS Regulations

- 14 CFR Part 107 "Small UAS Rule"
 - Stems from PL 112-95 mandates
- NPRM (Draft reg's) published 15 Feb 2015
- Public comment period closed 24 Apr 2015
- AFS-80 et al have it for re-writes
- Promulgation of Interim Final Rule TBD
 - Expected by Aug 2016; 16 mo after comment pd.

14 CFR Part 107 links:

- Executive summary (2 pages):
 http://www.faa.gov/regulations_policies/rulema
 king/media/021515_sUAS_Summary.pdf
- Full NPRM (195 pages):
 https://www.faa.gov/regulations_policies/rulem_aking/recently_published/media/2120 AJ60_NPRM_2-15-2015_joint_signature.pdf
- Public comments solicited by FAA:
 http://www.regulations.gov/#!documentDetail;D
 =FAA-2015-0150-0017

Summary

- Real Estate UAS ops = Commercial ops
- Exemptions for Real Estate ops now being approved, and you can see on-line!
- Applicants don't have to be pilots!
 - PIC's must be rated Private or higher for now
- Grant of Exemption + CoA + compliance = Permission for commercial ops
- Blanket CoA for certain recurring ops
- 14 CFR 107 "Small UAS Rule" is on the way

Canadian conundrum!

- Canadian Exemptions then (3 Dec 2014)...
 - Drones under 2 Kg OK for commercial ops...
 - At least 5 NM from "built-up area"
- Canadian Exemptions now (c16 Jan 2015)...
 - Populated areas featuring groups of dwellings or buildings; anything larger than a farmstead should be considered a "built-up area" off limits to drones
 - Ruling based on lack of airworthiness std's
 - Puts significant amt of turf off limits to commercial ops
- US rule will establish min airworthiness std's

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