

Members in attendance 3-D airspace subcommittee, October 12, 2015

Steve Wackowski, chair

Steve Colligan

Steve Strait

Representative Hughes

John Parker

Dan Wayne, Legislative Legal Svcs

Ginger Blaisdell, staff

Absent: Bob May, John Binder, Senator Micciche

At the last meeting of the UAS Task Force in Fairbanks, there was concern expressed by a member of the public who experienced low flying manned aircraft and was concerned about UAS flying over his private property.

Slide #2

Cuius est solum, eius est usque ad coelum et ad inferos

("For whoever owns the soil, it is theirs up to Heaven and down to Hell.")

- Until the early 1900's, this legal clause established precedence for managing airspace for landowners.
- Times have changed so airspace management has changed during the industrial era.

Slide #3

Is the US code that gives the FAA the mandate to manage the airspace

- Declares that a citizen, but not his property, can navigate the airspace.

Slide #4

The court held that all of the navigable airspace in this country is within the sole domain of federal regulation.

- "The United States government has exclusive sovereignty of airspace of the United States."
- Recommends clicking on the link provided and reading about the court case of US vs. Causby
 - Causby was a farmer with farmland next to a WWII training ground where aircraft were interfering with his farming activities (his chickens)

Slide #5

Shows an image of flight zones by altitude – this airspace chart was proposed by Amazon (similar to Google X)

- The X axis (bottom of the image) shows the model flying, rural, suburban, urban and airport airspace
- This concept is still in its infancy and will need more vetting and is predicated on sense and avoid technology

Slide #6

Generally, from the industry, “everyone stressed that one set of standards is preferred – even if state laws may be more favorable to industry.

- Big industry have and will likely lobby against any state that tries to introduce its own airspace standards/rights that differ from the FAA/national rules.
- E.g. lobbied for the Governor of California to veto latest drone bill

Maybe Leg Legal could research what Alaska could do to gain sovereignty over airspace?

Shelley Hughes – can we explore an ‘opt in’ clause

- ‘down to the ground’ isn’t substantiated in slide #4 because it states “The act defines navigable airspace as airspace above the minimum altitudes of flight...including airspace needed to ensure the safety in the takeoff and landing of aircraft.”
- Dan Wayne – statute says the US govt has exclusive sovereignty of airspace of the United States but that the citizen has right of transit through the navigable airspace – so it seems that the govt has authority over all airspace and citizens can transit above 500 feet (in some places it would be 1,000 feet)
- John Parker – the FAA claims domain to all airspace to the ground but they are relinquishing the non-navigable airspace (400’ and below) through the 333 exemptions – we may need to talk with the FAA (RTCA) to better understand their intent over this airspace
- Steve Wackowski – assumes that the FAA would not be willing to give up their powers over safety in the airspace but understands that one concern is privacy rights of citizens. There may be the ability to beef up other laws, such as harassment and stalking, to incorporate UAVs.
- Shelley Hughes – there may not be consistency for industry if individual citizens choose to allow UAS traffic above their private property
- Steve Colligan – my fear is another level of bureaucracy over rights of way and public projects. We need to look at loitering and reasonable expectation of privacy, not to make industry projects more expensive.

Steve Wackowski – discussion on range space that allows industry to fly. Maybe ACUASI could elaborate more on the workings of the test range.

Shelley Hughes – met with law enforcement officials last week and loitering can occur in public and private areas and establishes different tolerances for loitering. Within the parameters of the FAA will there be loitering addressed?

- Can a property owner allow hovering, filming, recording over their private property? Excusing a UAS pilot from a loitering law? Maybe lease airspace to the industry?
- John Parker – wouldn’t work because the cameras will extend beyond the boundaries of the property and it could extend into multiple properties and airspace leases.
- Steve Colligan – swath of data requires a 75% overlap so could extend into other property boundaries.

- Steve Colligan – would like a better clarification of laws regarding audio recording and video recording and loitering infringements whether in public or on private property compared to traveling across the property. Need legal clarification.
- Dan Wayne – one party conversation doesn't violate the law. Eavesdropping could constitute breaking a law. Videoing could be a greater concern.
- Doesn't matter if it's using a cell phone, recorder, camera or drone.

Steve Strait

1. Slide #5 does not provide an allowance for flight over water where there is no minimum altitude consideration
 2. If a state were to take the lead it would be a cause for concern but we should be working with our congressional delegation to be active in the FAA regulations
 3. Privacy, loitering; every incident seems to be unique and we may need to let the courts figure it out.
- John Parker said that he's been working with FAA and looking for ways to agree on airspace rulings

Shelley Hughes

- Private property has laws that have to be followed even on your private property.
- Can the private property owner own any of the space above his property but still follow the rules of the FAA?

Steve Wackowski – how were the federal highway system laws established (driver's licensing and road laws). This might be similar to the path of UAS in the NAS.

Request for Dan Wayne:

Is the ground up considered navigable airspace, court precedence vs statute?

- Causby case
- Does the flight interfere with use and enjoyment of your land? Altitude considerations?
- This is different than the question of privacy. A drone operator could meet the elements of an offense if there was a determination of harassment or stalking (explicit images, etc.).

Does the one party consent rule in Alaska include video as well as audio?

Shelley Hughes

We could introduce a resolution that promotes industry/economic development that declares that certain lands (airspace above lands) are open for UAS testing.

- Economic development driver over state lands.
- Bring in Fish and Game regarding animal harassment.
- Steve Colligan is currently leasing airspace over state lands – includes a COA approval – leasing land space contingent with COA approval for the airspace above that property
- Statements for inclusion in a resolution should be provided to Ginger sooner rather than later for bill drafting completed prior to session start in January 2016.

3-D Airspace Subcommittee Discussion Points

12 Oct 2015

State of Alaska UAS Task Force

Agenda

- Federal Statute
- Thoughts from Industry
- Others?
- Way forward



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("For whoever owns the soil, it is theirs up to Heaven and down to Hell.")

49 U.S. Code § 40103 - Sovereignty and use of airspace

(a) **Sovereignty and Public Right of Transit.—**

(1) The United States Government has exclusive sovereignty of airspace of the United States.

(2) A citizen of the United States has a public right of transit through the navigable airspace. To further that right, the Secretary of Transportation shall consult with the Architectural and Transportation Barriers Compliance Board established under section 502 of the Rehabilitation Act of 1973 (29 U.S.C. 792) before prescribing a regulation or issuing an order or procedure that will have a significant impact on the accessibility of commercial airports or commercial air transportation for handicapped individuals.

(b) **Use of Airspace.—**

(1) The Administrator of the Federal Aviation Administration shall develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace. The Administrator may modify or revoke an assignment when required in the public interest.

(2) The Administrator shall prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes) for—

(A) navigating, protecting, and identifying aircraft;

(B) protecting individuals and property on the ground;

(C) using the navigable airspace efficiently; and

(D) preventing collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects.

(3) To establish security provisions that will encourage and allow maximum use of the navigable airspace by civil aircraft consistent with national security, the Administrator, in consultation with the Secretary of Defense, shall—

(A) establish areas in the airspace the Administrator decides are necessary in the interest of national defense; and

(B) by regulation or order, restrict or prohibit flight of civil aircraft that the Administrator cannot identify, locate, and control with available facilities in those areas.

(4) Notwithstanding the military exception in section 553 (a)(1) of title 5, subchapter II of chapter 5 of title 5 applies to a regulation prescribed under this subsection.

(c) **Foreign Aircraft.—** A foreign aircraft, not part of the armed forces of a foreign country, may be navigated in the United States as provided in section 41703 of this title.

(d) **Aircraft of Armed Forces of Foreign Countries.—** Aircraft of the armed forces of a foreign country may be navigated in the United States only when authorized by the Secretary of State.

(e) **No Exclusive Rights at Certain Facilities.—** A person does not have an exclusive right to use an air navigation facility on which Government money has been expended. However, providing services at an airport by only one fixed-based operator is not an exclusive right if—

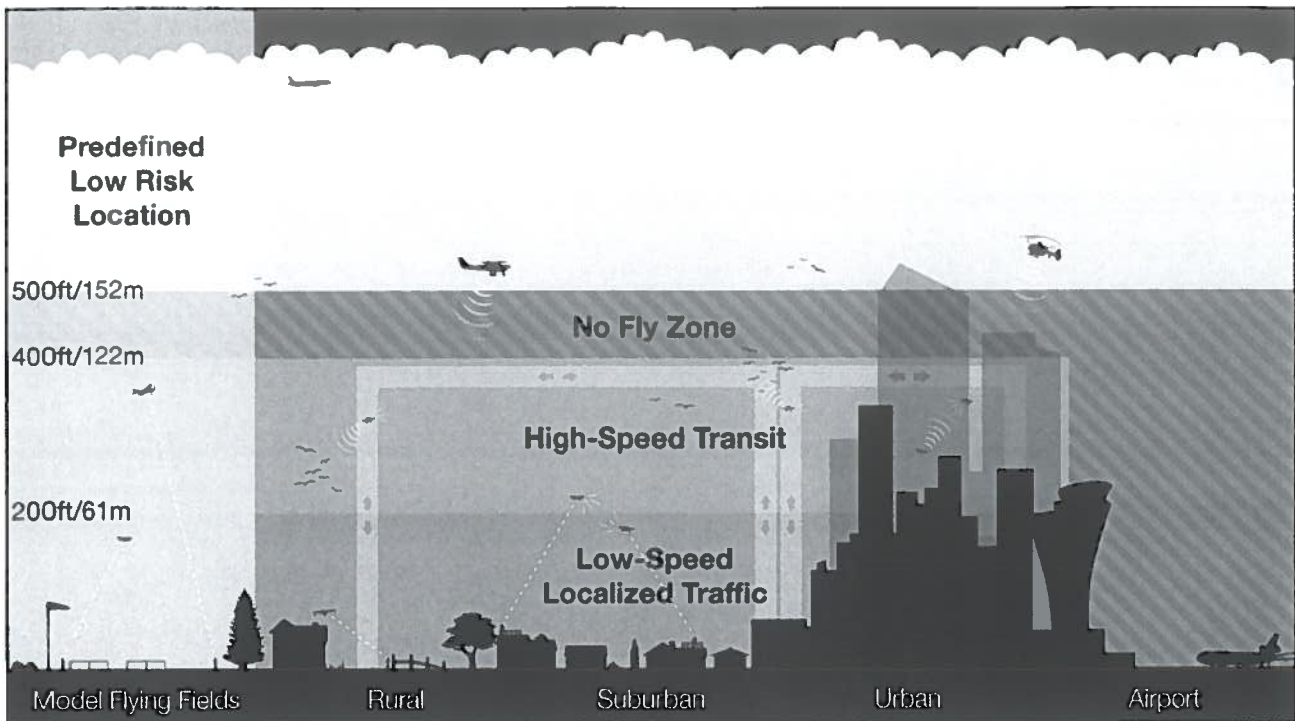
(1) it is unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide the services; and

(2) allowing more than one fixed-based operator to provide the services requires a reduction in space leased under an agreement existing on September 3, 1982, between the operator and the airport.

AOPA: "Small Airports and the Law"

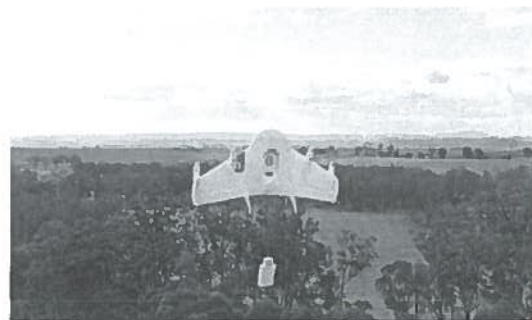
The court held that all of the navigable airspace in this country is within the sole domain of federal regulation. It quoted the Federal Aviation Act that provides: "The United States Government has exclusive sovereignty of airspace of the United States." The act defines navigable airspace as "airspace above the minimum altitudes of flight...including airspace needed to ensure the safety in the takeoff and landing of aircraft."

**[http://www.aopa.org/News-and-Video/All-News/2000/November/1/Pilot-Counsel-\(11\)](http://www.aopa.org/News-and-Video/All-News/2000/November/1/Pilot-Counsel-(11))*



Thoughts from Industry

- Spoke with Google, Amazon, AVUSI and others
 - *Everyone stressed that one set of standards is preferred – even if state laws may be more favorable to industry*



Other Input/Way Forward?