

Legal Issues Using Satellite, Aerial and UAV Platforms

Presented by

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National Remote Sensing and Space Law Center

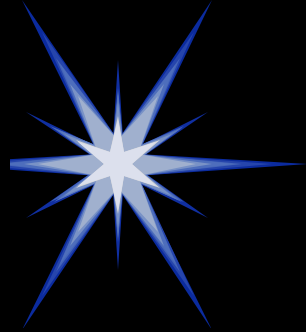
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Overview



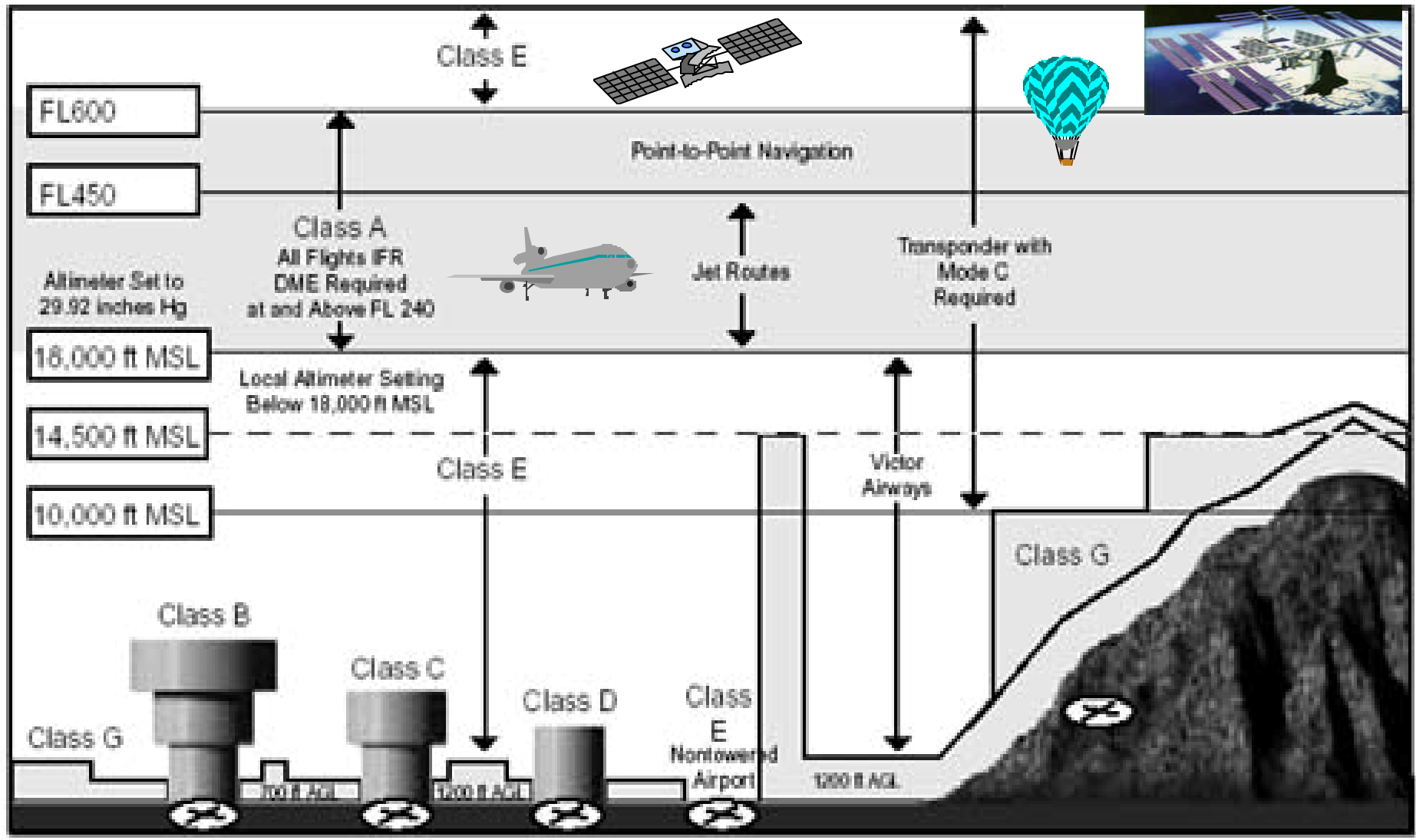
- **Legal and policy regimes**
 - **Satellites**
 - **Aircraft**
 - **Including UAVs**
- **Cross cutting issues**
- **Future research**



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Airspace Regulatory Chart



AGL: Above Ground Level
 IFR: Instrument Flight Rules
 MSL: Mean Sea Level
 DME: Distance Measuring Equipment



Legal and Policy Regimes

Satellites



- **Evolving licensing regime**
- **Focuses on sensors**
 - **Multi-tier regulations**
 - **Based on extent of capability**
 - **Optical vs. non-optical**
 - **Spatial and spectral resolution**
- **Data access**
 - **Case-by-case**
 - **Based on source of funding**

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Legal and Policy Regimes



Aircraft

- **Safety is primary issue**
- **Well-settled regulations regarding piloted aircraft**
- **No sensor issues**
 - **Anything as long as it doesn't interfere with airworthiness of craft**
- **No data access issue**
 - **Vendor chooses access vehicle**
 - **Sale, licensing, rental, etc.**

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Legal and Policy Regimes



UAVs

- Part of aircraft regime
- Not yet certified as "airworthy" for flight in commercial airspace
- Major concern is FAA's "see and avoid" requirement
- Currently
 - On a case-by-case determination
 - Primarily used in restricted airspace
- FAA granted national certificate of authorization to USAF

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Legal and Policy Regimes



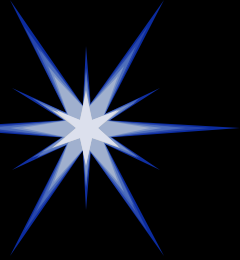
UAVs

- **Commercial, civil use**
 - **ASTM Committee meeting, July 2003**
 - **170 industry and government officials**
 - **Start drafting proposed requirements**
 - **FAA "gatekeeper" to commercial use**
 - **Anticipate draft proposal end of 2003**



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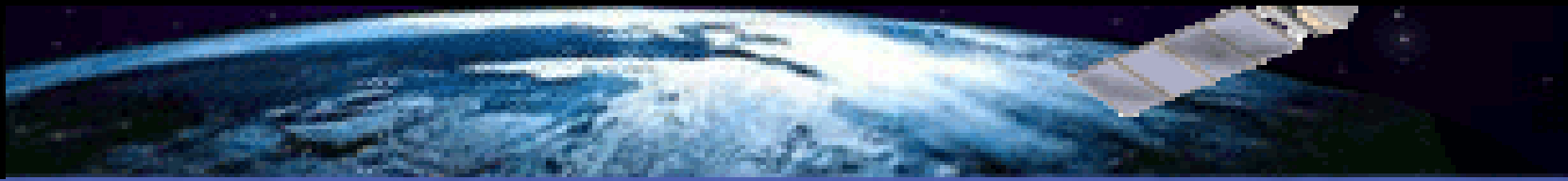


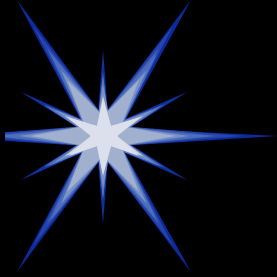
Legal and Policy Regimes



Cross - Cutting Issues

- **Liability**
- **Image taking**
 - Where? When? By whom? For what?
- **Data use**
- **Privacy**
- **Data accuracy, warrantability and representation**





Future Research

Aircraft Regime

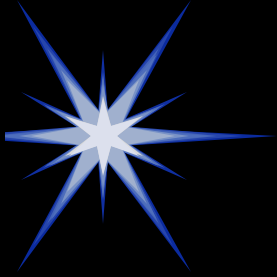


- **Follow, document and analyze evolving UAV regulatory regime**
 - Domestic
 - International
 - Both just beginning
 - US regime will influence international regime
- **Concentrating on**
 - Airworthiness, flight operation, operation quality



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Future Research

Satellite Regime

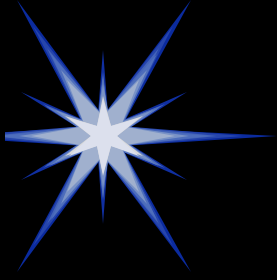


- **Follow, document and analyze evolving remote sensing policy implementation**
- **Commercial systems policy**
 - Issued April 25, 2003
 - Deadline late August
 - Will be late, but substantial draft will be available for agency review
- **Landsat Data Continuity Mission**
 - Still to be determined
 - Down to one bidder



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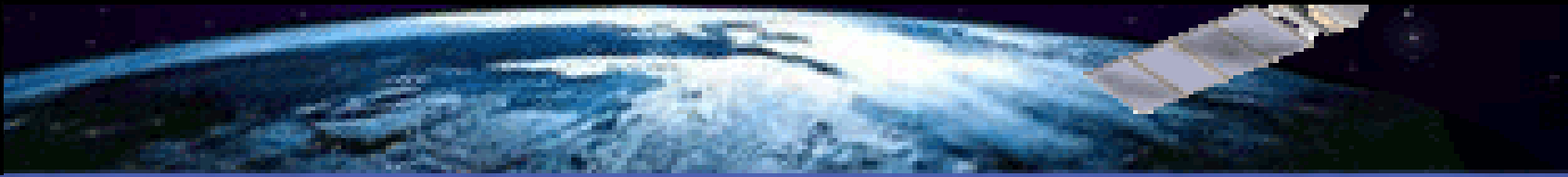


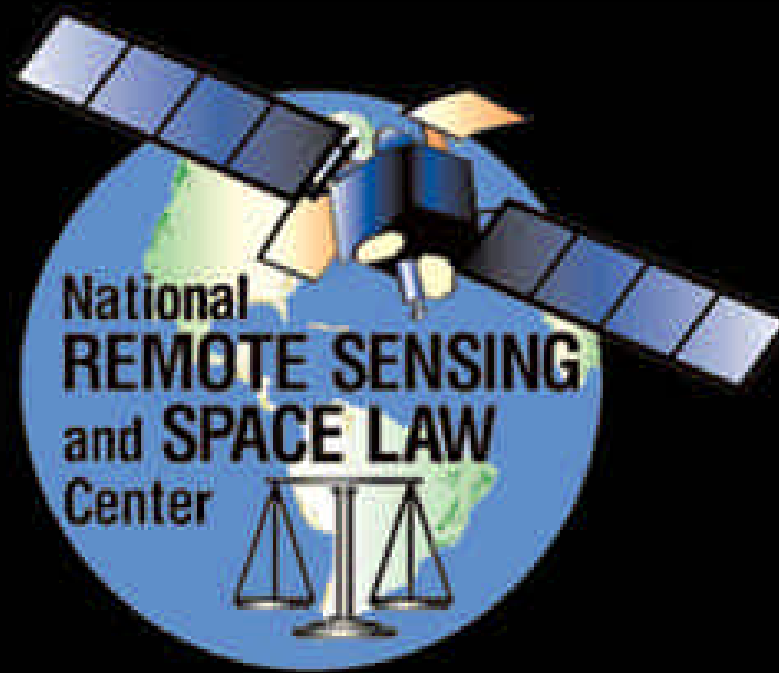
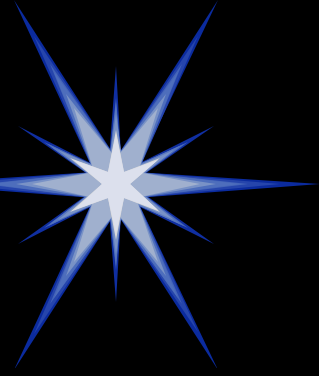
Future Research

Cross - Cutting Issues



- **As they develop**
 - Barbra Streisand case, for example
- **As they arise**
 - Contact us with specific questions
- **Transportation application issues**
 - Rights of way?
 - Easements?
 - Jurisdictional problems: county, state, federal?





Questions? Comments?

