National Space Law

The United States

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U.S. Space Law: A Complex System

- Is consistent and compliant with international space obligations and the UNGA 68-74
- Detailed regulations for all U.S. non-government launches, payloads, and activities
  - Emphasizes safety of operations and financial responsibility
  - Involves many Agencies and entities
- Detailed and published operational rules developed for Government space activities
- A flexible system that can incorporate formal changes as needed
United States Constitution establishes Three Branches of Government

1. Legislative (Senate and House of Representatives)
   - Develops and enacts legislation that empowers different agencies to operate and/or regulate
     - President of the United States must sign Bills for them to become law
     - Congress has the power to override a Presidential veto
   - Allocates funds to agencies
2. Executive
   - Carries out the laws
3. Judicial
   - Determines Constitutionality of Laws
   - Administers Courts and Appeals Process
Selected U.S. Legal Milestones in Space Law

- 1950s: No specific space law but concerns about space; Congressional reports
- 1958: NASA created
- 1980s: Commercial space first addressed in U.S. law
  - 1984 Commercial Space Launch Act
- 1990s: Outsourcing, privatization, industry consolidation
- 2000s: Telecom; tourism; debris concerns
- 2010s: Private launch companies; Space Act Agreements
- Beyond: New private sector activities in outer space
U.S. Space Legal Framework

- Title 51 of the U.S. Code (consolidated space-related sections of other Titles)
  - (Other laws also apply to space: Example: export controls)
- Many agencies acting somewhat independently of each other, but
- Interagency coordination on major space policy issues
- Some issues not yet codified or regulated
Making U.S. Space Law

Involves A Large Number of People and Organizations

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<thead>
<tr>
<th>Congress</th>
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<tbody>
<tr>
<td>Committees of the Senate and House of Representatives</td>
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<tr>
<td>Regulatory and advice: FCC, GAO, CBO report to Congress directly</td>
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<tr>
<th>Executive Branch</th>
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<tr>
<td>Office of the President: OMB, OSTP, NSC</td>
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<td>Regulatory Agencies: DOT/FAA, DOC/NOAA, and others</td>
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<th>Industry, Trade Associations, Academia, Others</th>
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<td>Investments, expertise, policy, etc.</td>
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Legislative Actions are not the Only Way to Regulate Space Affairs

- Legislation cannot and does not cover all aspects of regulations
  - Detailed regulations written to enact and enforce laws
  - Presidential Directives
  - Budget priorities
  - Judicial decisions
  - International agreements and cooperative programs
Who’s in Charge of Space Affairs?

- Structure within the United States Government has changed over the years
- No one Agency oversees all of space activities in the United States
- Very complex relationships, coordination through the interagency process
- Agencies may have different regulations for similar activities
- Some proposed future space activities currently lack a clear regulatory path
Today’s New Economic Challenges

- Unmistakable changing market trends in space activity
- Government civil space budgets will remain level or decline
- Space applications will become necessary for efficient use of critical infrastructure.
- Space is not always a “global commons,” nor is space a public good or a free good
- Access to space will become less expensive, but mainly because space assets will be smaller and lighter
- Space services will also compete with high altitude and terrestrial capabilities

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New Technologies and Private Sector Space Capabilities

- Satellite servicing of various kinds
- Active debris removal
- Planetary defense—moving NEOs
- Resource utilization including mining of celestial bodies
- Launches (cube-sats) from space platforms
New Legal Challenges

- Technology may differ but legal issues are similar for many on-orbit activities.
- Need to treat on-orbit legal issues systematically, not program by program.
- Private firms think differently from governments.
- Space treaties—won’t change but must consider new interpretations that don’t violate the words or spirit (principles) of the treaties
- Current national regulatory systems are not equipped to meet these challenges

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Examples of Past U.S. Adaptations to New Technology and New Market Conditions

- Communications Satellite Act of 1962 established a corporation (Comsat) for R&D and operations of U.S. telecommunications and to be U.S. interface with Intelsat
- Amendments to the NASA Act for 3rd party indemnification of Shuttle (1980) and X-33 experimental spacecraft (2000)
- The Commercial Space Launch Act and its Amendments
  - Regulations for re-entry (1998)
National and International Issues to be Resolved

- Consistency with United States treaty obligations
  - Adhering to no declarations of sovereignty (OST-Article II) while recognizing the differences between sovereignty, ownership, and liability.
  - Defining state responsibility and continuing supervision (Article VI)
  - Resolving new pressures on the relationship between a launching state (Art. VI and VII) and “control and jurisdiction” in the registration system (Art. VIII)

- Obtaining international recognition and acceptance of regulatory actions
Summary: Role of National Law

- Changes in rules related to on-orbit activities will originate in national law, not in treaties or international forums.
- Enabling legislation will define new regulatory authorities.
- Old cultures of protectionism and national security dominating space regulatory affairs must change to meet new markets and technologies.
- New era of trust between industry and governments and among governments internationally will be essential for coordinated and consistent legal approach to space.

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