

Overview of United States Laws Governing Space Activities

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Introduction

- U.S. law applies to governmental and non-governmental space activities through, inter alia:
 - Commercial Space Launch Act
 - Land Remote Sensing Policy Act
 - Communications Act of 1934
 - National Aeronautics and Space Act
- Address international obligations of the U.S. and promote exploration and use of outer space

Commercial Space Launch Act (CSLA) 49 U.S.C. §§ 70101-70121

- Administered by the Office of Commercial Space Transportation, Federal Aviation Administration of the U.S. Department of Transportation
- Purposes:
 - Safely open access to space and encourage private sector development
 - Simplify and expedite issuance and transfer of launch and reentry licenses
 - Promote safety
 - Strengthen and expand space transportation infrastructure

CSLA: Licensing Requirements

- FAA license required for:
 1. Launch/reentry in U.S.;
 2. For launch/reentry by U.S. citizen outside U.S.;
 3. For launch/reentry by U.S. citizen outside U.S. and outside territory of foreign country, unless foreign country's government has an agreement with U.S. on jurisdiction over the launch or operation; and
 4. For launch/reentry by U.S. citizen in foreign country if U.S. has jurisdiction by agreement with government of foreign country
- Pre-application consultation required

CSLA: Other Requirements

- License application subject to policy, safety and environmental impact reviews
- Must provide information to FAA for compliance with Registration Convention
- Orbital debris mitigation
- Flight crew qualifications, training, safety and waiver of claims against U.S.

CSLA: Insurance and Financial Responsibility

- Licensee must obtain third party liability insurance or demonstrate financial ability to pay maximum probable loss (MPL) arising from third party claims
 - MPL established for each license by FAA (maximum \$500 million; \$100 million for loss or damage of U.S. government property)
 - U.S. government to pay damages that exceed amount of third party liability insurance, up to \$1.5 billion (adjusted for inflation)
 - Licensee must include reciprocal waiver of claims in contracts with contractors and subcontractors

Land Remote Sensing Policy Act of 1992 (LRSPA) 15 U.S.C. §§ 5601-5672

- Administered by the National Oceanic and Atmospheric Administration of the Department of Commerce
- Purposes:
 - Stimulate commercial marketing for unenhanced data
 - Furthering the long-term role of commercialization of land remote sensing
 - Promote international trade and access to unenhanced data on a nondiscriminatory basis

LRSPA: Licensing and Oversight

- License required to operate private remote sensing satellite systems
- Provide NOAA with orbit and data collection characteristics and any deviations
- Proper post-mission disposal
- Government approval required for any “significant or substantial agreement” with a foreign entity

LRSPA: Data Sharing Obligations

- To extent consistent with national security, foreign policy and international obligations:
 - Make available to government of any country unenhanced data related to territory under jurisdiction of that government
 - Make unenhanced data designated by the Secretary of Commerce available to all users without preference or special arrangement regarding delivery, pricing or technical considerations
 - May make data available at reduced prices for noncommercial purposes, such as education or research

Communications Act of 1934

47 U.S.C. §§ 151 et seq.

- Administered by the Federal Communications Commission
- Licensing and operating requirements for satellites and associated ground stations
- Purposes:
 - Avoid radio frequency interference
 - Coordinate commercial satellite operations in U.S.
 - Coordinate international satellite operations and use of the frequency spectrum, along with the National Telecommunications and Information Administration, through the International Telecommunication Union

Communications Act: Orbital Debris Mitigation

- Purposes:
 - Preserve continued affordable access to space
 - Continue provision of reliable U.S. space-based services
 - Help ensure the continued safety of persons and property in space and on Earth
- Submit mitigation plan with license application
- End-of-life operation requirements
 - Consistent with ITU requirements
 - Ensure discharge of energy sources

National Aeronautics and Space Act of 1958

42 U.S.C. §§ 2451-2487

- Authorized creation of NASA
- Objectives and Responsibilities:
 - International cooperation
 - Expand knowledge of Earth and space
 - Disseminate information on NASA activities
 - Encourage commercial use of space and use by the U.S. Government of commercially provided services and hardware
 - Improve usefulness, performance, speed, safety and efficiency of aeronautical and space vehicles
 - Establish studies on the benefits from and problems involved in the use of space for peaceful and scientific purposes
 - Conduct aeronautical and space activities
 - Arrange for participation by the scientific community in scientific measurements and observations

National Aeronautics and Space Act: Liability and Insurance

- Subject to certain restrictions, NASA:
 - May provide liability insurance for any user of a space vehicle
 - May provide that the U.S. will indemnify such user against claims by third parties
 - For amounts in excess of insurance
 - May be limited to claims resulting from other than the actual negligence or willful misconduct of the user
 - Similar provisions for experimental aerospace vehicles
 - May reciprocally waive claims, on behalf of the USG, in cooperative agreements (cross-waiver)

Other Statutory Provisions Relevant to the Commercial Use of Space

- 15 U.S.C. § 5807: Access to NASA and DOD space-related facilities
- 35 U.S.C. § 105: U.S. patent laws apply to inventions made in space on a space object under U.S. jurisdiction or control
- 42 U.S.C. §§ 14713 and 14715: Acquire space science and Earth science data from commercial providers