



U.S. (Federal and State) Regulation of Spaceports

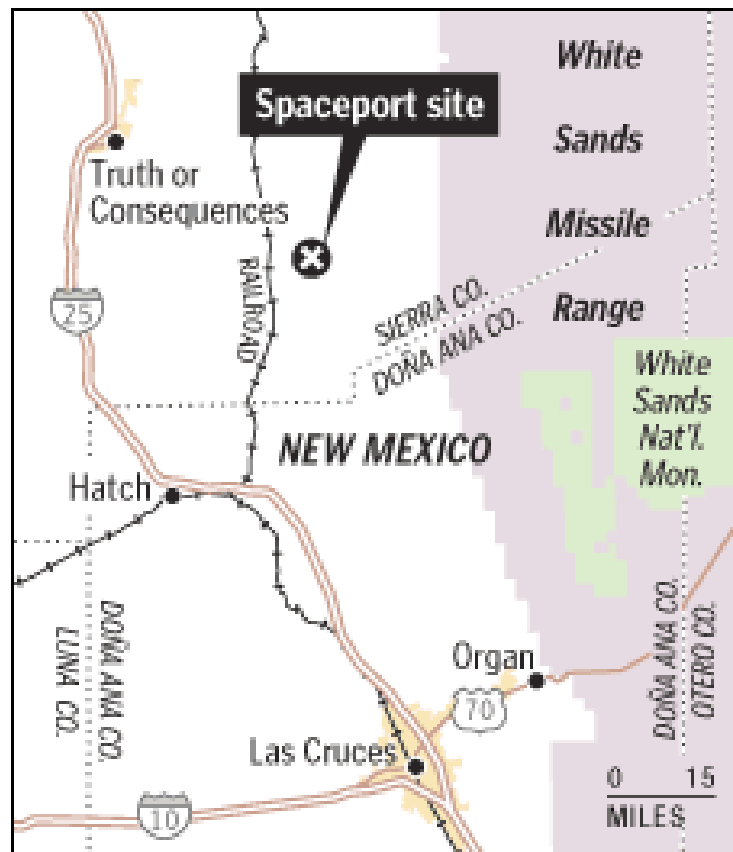
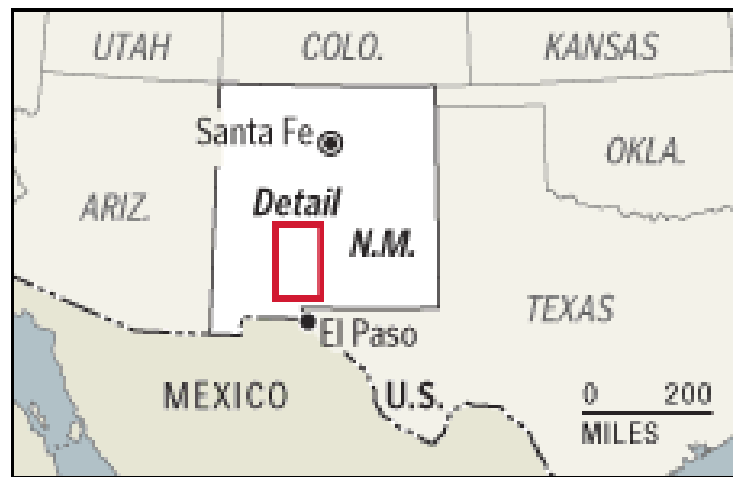
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Introduction: Major Areas Covered

- ▶ Explanation of U.S. Regulatory Regime governing Commercial Spaceports
 - ▶ Assessment of Liability Issues related to Commercial Spaceport Operations
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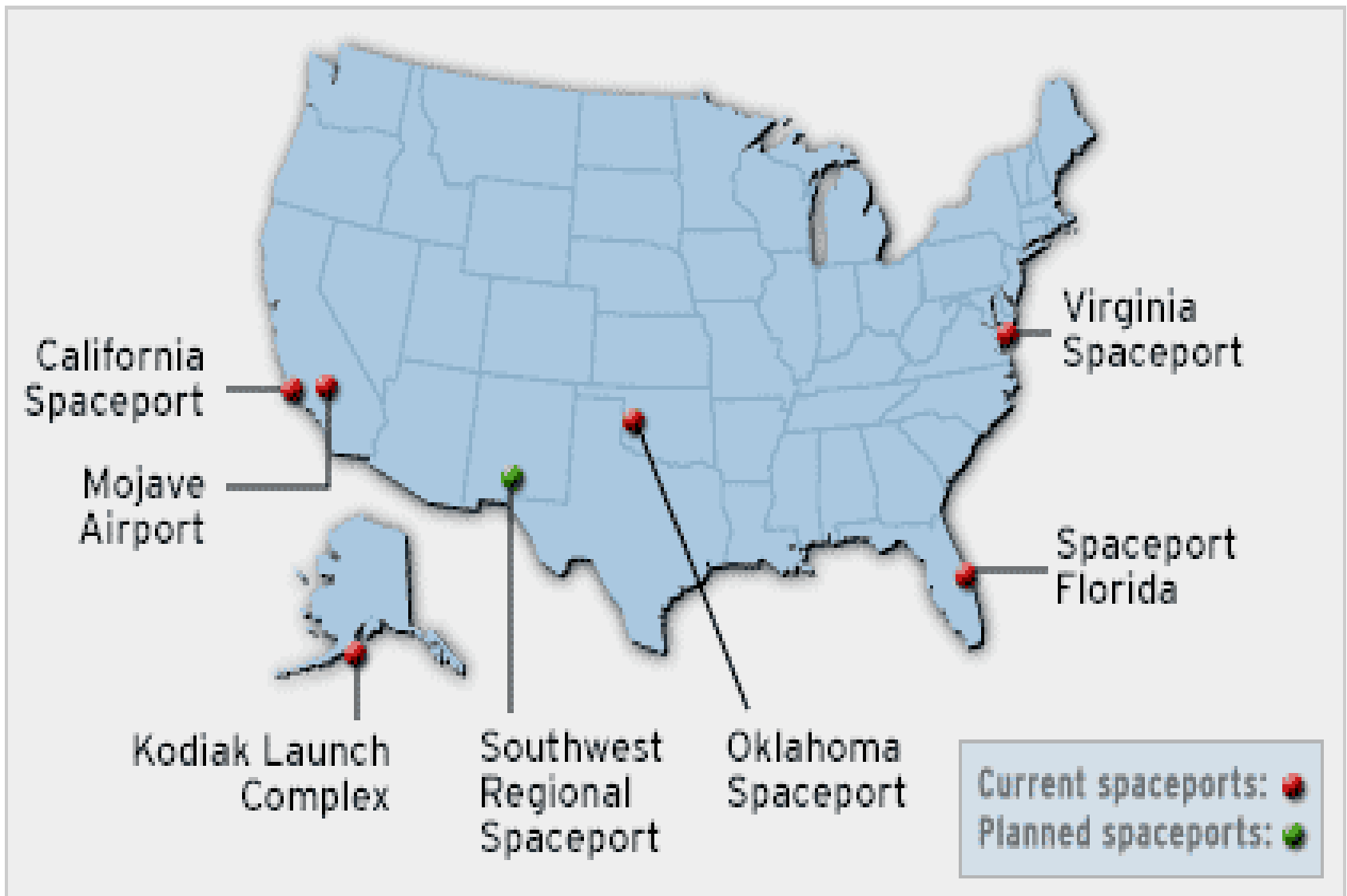
Breaking News – Spaceports

- New Mexico Governor Bill Richardson (Jan 5th 2009) announced that Virgin Galactic has signed a 20 year lease agreement with the State of New Mexico. Virgin Galactic's world headquarters will be established in New Mexico and its operations will be located at New Mexico's Spaceport America, the nation's first purpose-built commercial spaceport.
- The signing of the lease agreement comes *just days after the Federal Aviation Administration issued a launch license* to the New Mexico Spaceport Authority. The *lease agreement* with an anchor tenant was the final requirement set by the New Mexico Legislature to release the *next level of funding* for Spaceport America and it has cleared the way for construction to begin early next year.



By Richard Furno, The Washington Post

U.S. COMMERCIAL SPACEPORTS



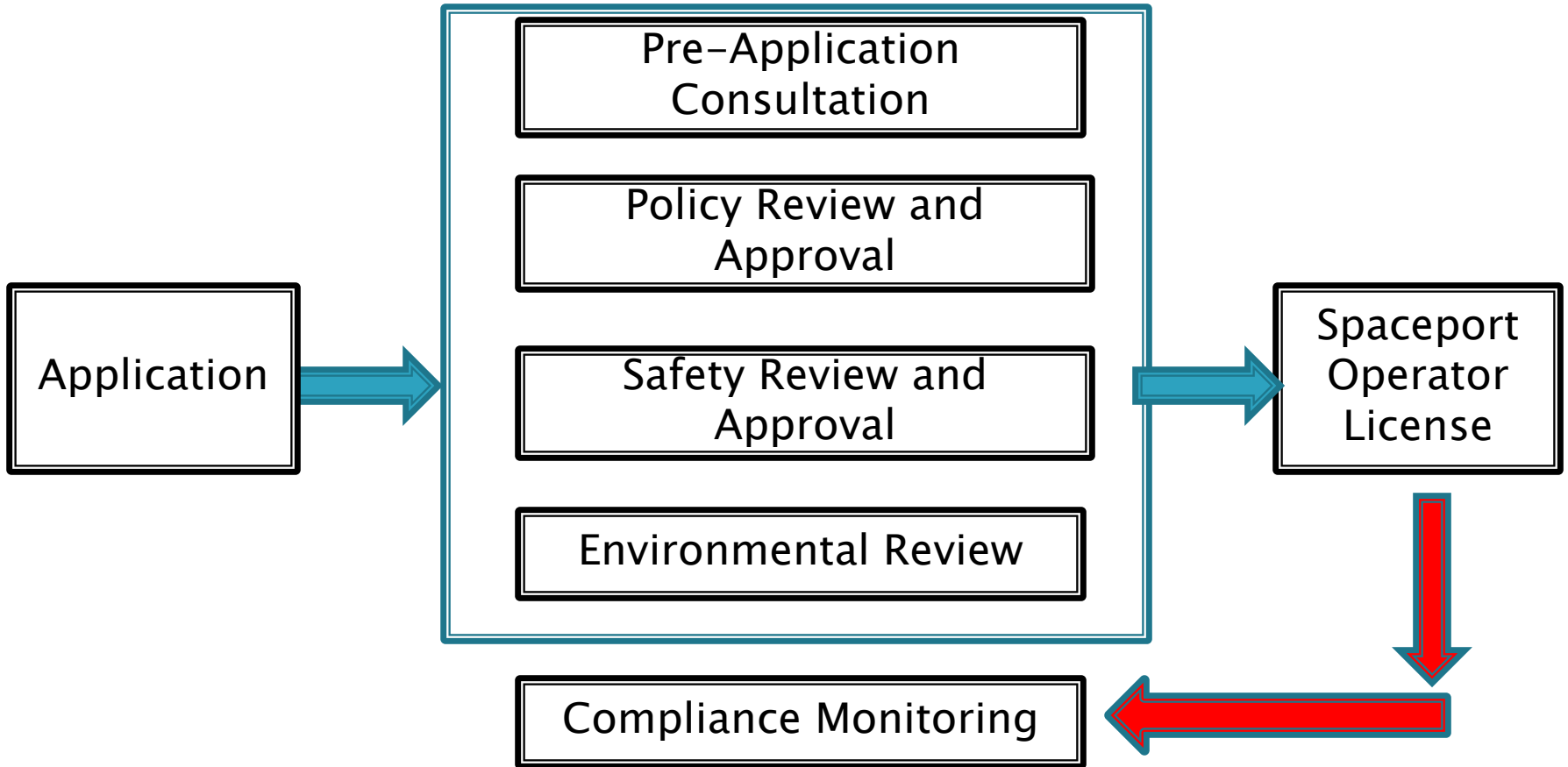
Commercial Space Launch Act 49 U.S.C. Sec.70101

- ▶ The CSLA is the principal law governing the licensing and regulation of commercial space transportation in the United States, including commercial spaceports.
- ▶ The Act does not apply to spaceport operations or other space activities the U.S. government carries out for the government.
- ▶ Regulatory authority is granted to the Department of Transportation (“DOT”).
- ▶ To implement this authority, the DOT established the Office of Commercial Space Transportation and, later, the Associate Administrator for Commercial Space Transportation (“AACST”) under the administration of the FAA.

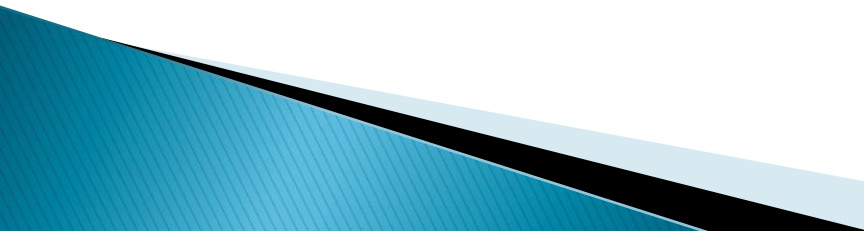
With regards to commercial spaceports, the Act can be conveniently divided into six parts:

- ▶ (1) The Opening Provisions. These consist of a statement of purposes, definitions, and a statement of general authority granted to the SOT.
- ▶ (2) The Licensing Provisions. These explain when a license is required, the conditions to receive a license, the scope of licenses, and under what conditions and to what extent a license can be modified, transferred, suspended, or revoked.
- ▶ (3) Post-Licensing Provisions. These establish SOT authority to monitor licensees and to enforce the Act and Regulations, assess penalties for violations of the Act and Regulations, and issue orders prohibiting, suspending, or ending a licensed activity.
- ▶ (4) Financial Responsibility Provisions. These require licensees to obtain insurance or to demonstrate the capacity to compensate for certain claims and establish federal indemnification provisions for certain catastrophic losses.
- ▶ (5) SOT Regulatory Authority. These provisions establish and define the scope of SOT authority to issue regulations.
- ▶ (6) Other Provisions. The Act also contains provisions regarding interagency consultation, space advertising, preemption of scheduled launches/reentries, acquisition of federal property and services, experimental suborbital rocket permits, human space flight related provisions, administrative hearings/review, and the relationship of the Act to other executive agencies, law, and international obligations.

Example: U.S. Launch or Reentry Site Operator Licensing Process



State Law: Commercial Spaceport Initiatives

- ▶ Several states have enacted or are proposing legislation that fosters the development of commercial spaceports. This type of legislation is known as spaceport initiatives. The ultimate goal of these initiatives “is to generate state economic growth and improve a state’s revenue base.” The CSLA does not prohibit this legislation, so long as the spaceport initiatives are not inconsistent with the Act.
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State Law: Commercial Spaceport Initiatives

- ▶ California, Florida, New Mexico, Oklahoma, Texas, and Virginia have enacted legally binding spaceport initiatives. In addition, during the 2008 legislative session, the Hawaii legislature proposed an initiative to fund the costs associated with applying for a commercial space transportation license with the FAA-AST.
- ▶ Each state's initiative is unique and contains various provisions designed to create, improve, and promote commercial spaceport infrastructure development and use.
- ▶ These include the establishment of spaceport authorities, tax incentives, state and local taxing and bonding authorization, military spaceport infrastructure conversion, trust funds, liability immunity, and spaceport infrastructure development. Legal counsel for spaceport operators and service providers should be aware of these initiatives and advise their clients on the comparative advantages and disadvantages each state provides.

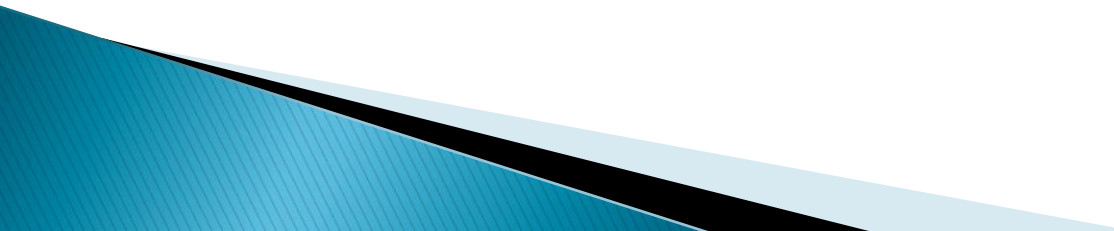
Liability

- ▶ Commercial spaceport operators should pay careful attention and take appropriate steps to mitigate potential liability. Liability for spaceport operators may be established under a variety of legal mechanisms, such as federal and state contract law, common law, or statutory law.
- ▶ The Act contains two provisions relevant to commercial spaceport operator liability: (1) the reciprocal cross-waiver and (2) indemnification provisions.
- ▶ As part of their commercial spaceport initiatives, states are also enacting legislation granting conditional liability immunity to commercial space entities supporting human space flight.

Limiting Potential Liability

There are several practical steps spaceport operators can take to minimize exposure to potential liability arising from spaceport operations:

- (1) Identification: Spaceport operators should identify potential sources of liability based on assessment of operations, either planned or currently underway.
- (2) Design: Spaceports should be designed to minimize potential health, environmental, property, and safety hazards. Spaceport design should consider hazards to persons and property, both on and off site.
- (3) Operations: Spaceport operations should include hazard prevention and emergency response. A division of spaceport operations should be dedicated to this task and focus on vehicle launch operations, emergency response, handling and storage of propellants and materials, environmental monitoring, site security, employee safety, human space flight participant safety, and visitor safety.
- (4) Terrorism/Criminal Activity: Spaceport operators should work with federal, state, and local authorities to prevent and respond to terrorist or criminal activity aimed at disrupting spaceport operations.
- (5) Insurance: Spaceport operators should acquire insurance sufficient to mitigate potential liability arising from spaceport operations.

- (6) Jurisdiction: Spaceports should be sited in legal jurisdictions with favourable laws. Particular focus should be given to laws governing liability, freedom to contract, liability caps, and liability immunities. Spaceports serving SFPs should select a jurisdiction that supports the enforceability of assumptions of risk, waivers of liability, and indemnification agreements.
- (7) Cross-waivers: In *Martin Marietta Corp. v. International Telecommunication Satellite Organization (INTELSAT)*, the court held that while the Act requires licensees to include reciprocal cross-waivers in their contracts, nothing in the Act suggests “that cross-waivers will be imputed into contractual agreements which do not contain express cross-waiver provisions.” As a result, if spaceport operators supporting vehicle licensees want to avail themselves of cross-waivers as mandated in the Act, they must ensure that cross-waiver provisions are included in the contract.
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Recommendations to Law and Policy Makers

- ▶ Finance/Insurance: The federal government could establish a federally-backed loan and insurance program. Loans provided to commercial spaceports could be insured by the federal government. Liability insurance could be provided to spaceport operators at a federally subsidized rate if the liability insurance market is not able to provide insurance at economically feasible rates (as defined by Congress).
- ▶ Commercial Human Space Flight: Congress should hold hearings on spaceports and commercial human space flight to determine what steps should be taken to better facilitate commercial human space flight and commercial spaceport operations.
- ▶ Liability: (A) Congress, under the authority of the Commerce Clause provision, should pass legislation that supersedes state liability laws and places statutory limits on third party liability, absent intentional misconduct. (B)* Amend the Act to allow spaceport operators to contract with launch or reentry licensees without mandating reciprocal cross-waivers.

Recommended Additional Readings

- ▶ Workshop Supplementary Reading Materials
 - ▶ M. Mineiro, “Tort Liability in the Event of a Commercial Human Space Flight Accident” (74(1) J. Air L. & Comm. 2009, forthcoming)
 - ▶ M. Mineiro, “Law and Regulation Governing U.S. Commercial Spaceports” (73(4) J. Air L. & Comm. 759)
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