

MINING LAW, SALVAGE LAW, AND PROPERTY RIGHTS IN OUTER SPACE

by

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PLUGGERS By Jeff MacNelly

MACNELLY 5-20



Plugger lawyers believe in early settlements.

SPACE LAW: An Overview

- **Most nations are party to the 1967 Outer Space Treaty (OST). This Treaty:**
 - Prohibits territorial sovereignty
 - Nations cannot make territorial claims in space or on celestial bodies, and
 - Nations cannot grant or recognize private territorial claims
 - Requires parties to regulate national entities' activities



SPACE LAW: An Overview

- The Outer Space Treaty:
 - Gives parties jurisdiction over their citizens, and space objects on their registry
 - Ownership of space objects is not affected by the objects' presence in outer space (includes facilities constructed in outer space)
 - Ownership of personal property is not affected by its presence in outer space
 - Parties can enact national laws consistent with the Treaty and international law



SPACE LAW: An Overview

- The 1979 Moon Treaty would have banned real property rights and heavily regulated resource appropriation, but only a handful of nations are party to this treaty (the US and other space-faring nations are not parties).



A Legal Regime for Private Space Activities: General Approach

- The OST is a statement of general principles; more detailed laws and regulations are required to govern private space activities
- The U.N. Committee on Peaceful Uses of Outer Space (COPUOS) operates on basis of consensus. Result: it takes years to reach agreement, and treaties lack definition in order to achieve consensus



A Legal Regime for Private Space Activities: General Approach

- The Inter-Governmental Agreement (IGA) governing the International Space Station has been unwieldy, expensive, and time consuming
- NASA has adopted a philosophy of collaboration and coordination, rather than partnership through international agreements



A Legal Regime for Private Space Activities: General Approach

- Other spacefaring nations are focusing on extraterrestrial resources: minerals, oxygen, water ice, solar power, and He3
- The United States' current civil space goals do not include resource appropriation, but US space policy is certainly subject to change in the near future



A Legal Regime for Private Space Activities: General Approach

- In Situ Resource Utilization (ISRU) will permit space-farers to “live off the land,” greatly reducing the risk and cost of space activities
- Over the long term, access to the resources of near-Earth space, Mars, and the asteroids is a matter of strategic concern



A Legal Regime for Private Space Activities: General Approach

- China's demonstration of space-weapons capability underscores the strategic importance of space activities
- The United States must remain autonomous with respect to future space activities, in order to protect its strategic interests



A Legal Regime for Private Space Activities: General Approach

- The OST not only permits, but in some cases requires the United States to enact laws that are consistent with the OST, the U.N. Charter, and other principles of international law



A Legal Regime for Private Space Activities: General Approach

- The United States can enact legislation that provides incentives for private activities while still remaining autonomous
- The United States can coordinate this effort with its allies to promote international acceptance, cooperation, and collaboration



A Legal Regime for Private Space Activities: General Approach

- National legislation allows greater consistency between space law and terrestrial laws
- Property and mining laws based in part on existing US Code statutes: Deep Sea Mining Act and General Mining Law
- Minimal appropriations required; user fees pay most costs



A Legal Regime for Private Space Activities: General Approach

- Objectives:
 - To promote international cooperation and collaboration
 - To implement existing space treaties
 - To govern private space activities
 - To provide incentives for private enterprise
 - To provide legal certainty for companies and their investors
 - To minimize litigation



Elements of Prospective US Legislation: Jurisdiction

- Update space jurisdiction statute
- Establish safety zones – protect facilities and areas of ongoing human activity, size of zones TBD
- Delineate authority of private entities with respect to space objects and personnel



Elements of Prospective US Legislation: Jurisdiction

- Clarify jurisdiction of federal courts and executive branch departments and agencies
 - Federal courts: litigation of all space disputes
 - DoS: registry of property and mining claims, and objects available for salvage, in conjunction with registry of space objects; insular territory administration
 - DoI: regulation of property and mining claims, dispute resolution
 - NASA: safety, emergency communications
 - USAF / NASA: space traffic control

Elements of Prospective US Legislation: Property Law

- Enact a form of real property rights without territorial sovereignty
 - This approach follows the precedent set by the 1980 Deep Seabed Hard Mineral Resources Act
- Outer Space Treaty and other international laws provide bundle of rights analogous to property rights
- Legislation formally defines and protects these rights



Elements of Prospective US Legislation: Property Law

- Invalidate prior real property claims not based on jurisdiction over space objects and personnel (e.g. “Moon Deeds”)
- Private entities must file preliminary claims which identify the location of their space activities
- Entities may only claim the area encompassed by their space objects and ongoing activities, plus a safety zone



Elements of Prospective US Legislation: Property Law

- Claimants may perfect their claims and obtain deed after 1 year
- Deeds may be transferred in the same manner as terrestrial deeds
- “Use it or lose it” regime



Elements of Prospective US Legislation: Property Law

- Protect areas of historical, scientific and aesthetic interest on celestial bodies (*e.g.* Apollo 11 landing site)
- Include reciprocity provision recognizing other countries' claims, if their laws are substantially the same as the U.S. law (see Deep Seabed Hard Mineral Resources Act)



Elements of Prospective US Legislation: Mining Law

- Clarify that public and private entities can own extracted resources – this is consistent with the majority opinion in the international space law community
- Outer space, including the Moon and other celestial bodies, shall be free for exploration and *use* by all States (OST Article 1, emphasis added)



Elements of Prospective US Legislation: Mining Law

- Protect mining investments – encourage prospecting and mining by recognizing mining claims in a manner similar to the US General Mining Law
 - Prospectors who obtain non-public information regarding mineral resources may file preliminary claims
 - Remote sensing and telepossession may provide basis for preliminary claim
 - Ice is a mineral
 - Prospectors may perfect claim and obtain deed once they begin mining operations



Elements of Prospective US Legislation: Salvage Law

- Provides for both contract salvage and salvage in emergency situations
- If owner abandons property, it is placed on salvage registry
- If owner can no longer afford to operate facility/continue operations, Bankruptcy Trustee or Receiver can have property placed on salvage registry

