

Transcending Societal Issues for Space Exploration (12)
Transcending Societal Issues for Space Exploration (1) (1)

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FUTURE SPACE COMMUNITIES: WHICH LAWS APPLY AND CAN AFFIRMATIVE DEFENSES
TO PATENT INFRINGEMENT PREEMPT ENFORCEMENT THAT MAY PREVENT
COLLABORATIVE VISITS BY ASTRONAUTS, COSMONAUTS, GAGANAUTS AND TAIKONAUTS
TO RESPECTIVE FOREIGN FACILITIES

Abstract

Now full on, the race to space for humanity's ascent from Earth to the stars, starting with utilization and colonization of relatively proximal celestial bodies, begs important questions regarding legal logistics of potential collaborative endeavors among nation-states that often view themselves as inherently independent actors. For objects launched to space from Earth, some questions are easily answered by defaulting to jurisdiction of the State of registry under Art. VIII of the Outer Space Treaty (OST) and Art. II of the 1976 Registration Convention (RC). But, with China planning to build a moon base near the lunar south pole and the U.S. Defense Advanced Research Projects Agency announcing on February 5, 2021 establishment of the Novel Orbital and Moon Manufacturing, Materials and Mass-efficient Design program or "NOM4D" to create new, adaptive technologies enabling fabrication of materials and structures for large-scale space and lunar facilities, legal jurisdiction over objects not launched from Earth becomes less clear. Even further muddying the waters are recent claims by prominent space personages, such as Elon Musk and the private U.S. company SpaceX, asserting in the Starlink Terms of Service that "[n]o Earth-based government has authority or sovereignty over Martian activities." As pointed out by various space lawyers, this Clause 9 in the Starlink ToS is likely void and unenforceable under the jurisprudence and legal strictures accorded by OST, the other space treaties (e.g., RC) and the larger body of international space law, which continues to grow and evolve upon the foundations of the OST and related space treaties. However, no requirement to register facilities or bases constructed in space or on celestial bodies exists. Further, OST provides that no State (and by extension no State-chartered companies) may make any territorial claims to space or celestial bodies, thus removing the possible application of territorial jurisdiction. Consequently, we are left with less than ideal arguments, including legal precepts of control and de facto jurisdiction, for application of national laws, including patent laws, which implicate substantial economic penalties for unauthorized manufacture, use, sale or import of patented inventions that may be embodied in life-sustaining and life-saving technologies (e.g., space suits and vehicles). This exposition will consider various hypotheticals to investigate and analyze these important questions, including whether national patent laws apply to facilities built in space or on celestial bodies merely based on nationality of the astronauts (etc.) who constructed them, or who exercise national control over such facilities.