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## Commentary: Lunar Court Operational and Constitutional Considerations

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## COMMENTARY: LUNAR COURT OPERATIONAL AND CONSTITUTIONAL CONSIDERATIONS

MEGAN SIEFFERT\*

UNTIL RECENTLY, SCHOLARS anticipated that private actors would have limited opportunity to intersect as part of outer space activities.<sup>1</sup> However, the beginnings of 2021 and 2022 proved to be years where significant amounts of interactions among private individuals and entities with unique interests and rights began to raise the question raised by Mr. Lee in his article, *The Future of the Law on the Moon: What will happen when disputes arise in the course of private industry in outer space?*<sup>2</sup> Like my esteemed colleagues, despite my enthusiasm for private activities on the Moon, I am skeptical of the likelihood of private actors intersecting on the Moon without a major national entity being involved and dictating the applicable jurisdiction (a point for enumeration below). However, in anticipation of the potential for an unexpectedly accelerating need for dispute resolution between private actors on the Moon, Mr. Lee

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<sup>1</sup> Frans von der Dunk, *Effective Exercise of In-Space Jurisdiction: The US Approach and the Problems It Is Facing*, 40 J. SPACE L. 147, 147–48, 151 (2015–16) (“However, the orbital space tourist trips from there on were, and likely will remain for the foreseeable future, one-off occasions never resulting for instance in two tourists being on board the *ISS* at the same time.”).

<sup>2</sup> See *3 Ways the Private Sector Is Changing the Space Industry*, U.S. CHAMBER COM. (Dec. 16, 2021), <https://www.uschamber.com/on-demand/space/3-ways-the-private-sector-is-changing-the-space-industry> [<https://perma.cc/JSG4-4P7V>].

issues a proposal for the establishment of a U.S. jurisdictional body on the Moon. As such, my initial impression is that this article is significantly ahead of its time due to the resources required to stand up extraterritorial courts to respond to space-related issues. However, in the hopes that I am proven wrong, consideration of the proposal of a court on an extraterrestrial body merits review and further elaboration with a focus on the following elements of Mr. Lee's article: (1) the application of U.S. constitutional rights to such courts; (2) applications of the Outer Space Treaty and other intergovernmental agreements; and (3) the impact of personal jurisdiction and the intersection with the commercial contracts that would drive expansion to the Moon.

Underlying this conversation, however, are a few assumptions that require significant review.<sup>3</sup> One major assumption that requires evaluation and impacts the author's arguments regarding the need for courts on the Moon is the assumed cost of transport to the purported Moon base. While it is optimistic to believe that a cost of \$7 million to the Moon is achievable in the time frame needed for the establishment of a space court, current pricing for commercial transportation to low Earth orbit sits at about an order of magnitude higher.<sup>4</sup> The author argues, based on this assumption of cost, that the distance of the Moon from the Earth justifies distinction from existing jurisdictional rules. And based on the distinction of this distance from similar environments (the author calls out the *International Space Station* (ISS) and Antarctica), the author argues that a lunar court is essential for decreasing litigation costs, increasing litigation and enforcement convenience, providing local knowledge and ju-

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<sup>3</sup> A few other major factual and legal arguments also merit significant review, which are understandable mistakes for young lawyers entering the aerospace industry. Having been one such young lawyer, I have confidence that Mr. Lee's enthusiasm will open doors to the information required to update this article in future editions. However, one matter does merit response in particular: the assertion that the Shuttle was a largely unsuccessful program. Where the evidence of success lies in the operations of the ISS (which was built with heavy reliance on the Shuttle) for over two decades and the operation of the Hubble telescope, which has provided immeasurable value to astronomers and space scientists, the success of the program is self-evident. Granted, the current Author is biased based on the dedication to supporting commercial efforts in low Earth orbit stemming from the utilization of the ISS, which could skew the assessment of the success of the program.

<sup>4</sup> NASA, OFF. OF INSPECTOR GEN., REP. NO. IG-20-005, NASA'S MANAGEMENT OF CREW TRANSPORTATION TO THE *INTERNATIONAL SPACE STATION* (2019), <https://oig.nasa.gov/docs/IG-20-005.pdf> [<https://perma.cc/2V6N-7Y6P>].

ries, and building lunar precedent and jurisprudence. However, establishing a lunar court would require not only sufficient numbers of attorneys and judges to avoid any kinds of conflicts of interest but also enough jurors to enable “the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed.”<sup>5</sup>

However, terrestrial courts already struggle to find resources to support their operations, so furnishing the resources necessary to afford all the rights under the U.S. Constitution to any litigant (particularly for any criminal trial) would likely become rapidly unworkable.<sup>6</sup> In particular, to find a jury of unbiased peers, one would assume there would have to be more than six individuals (assuming only three jury members in addition to the two litigants and a judge) on the lunar surface on a semipermanent basis to support a fair trial, a capability that is not currently available and may not be for many decades. Opening the pool to more jurors could require the transportation of prior lunar settlers back to the lunar surface to act as jurors, which (even at a cost of \$7 million) would become exorbitant, particularly if voir dire were conducted on the lunar surface. While the author argues that having a local understanding of life on the Moon would be critical to jury selection, the term “peers” has not typically been challenged in court.<sup>7</sup> And any challenges to the utilization of lunar courts would likely lie in challenges to the term “impartial,” which would be difficult to establish in communities that are likely small enough and contained enough where extrinsic evidence would be readily available and would impair the jury’s ability to “decide the case solely on the evidence before it.”<sup>8</sup> One can imagine an environment where a lunar court would be rendered irrelevant through the utilization of forum non conveniens, removing all disputes to terrestrial-based courts where fair trials could be rendered.

As a further consideration, as noted by the author, a number of licensing entities are currently involved in the determination

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<sup>5</sup> U.S. CONST. amend. VI.

<sup>6</sup> See generally Robert J. Derocher, *Crisis in the Courts: Bars Take Steps to Stave off Judicial Funding Cuts*, 34 BAR LEADER 6 (2010) (discussing the decline in judicial funding).

<sup>7</sup> Toni M. Massaro, *Peremptories or Peers?—Rethinking Sixth Amendment Doctrine, Images, and Procedures*, 64 N.C. L. REV. 501, 548 (1986).

<sup>8</sup> *McDonough Power Equip., Inc. v. Greenwood*, 464 U.S. 548, 554 (1984) (quoting *Smith v. Phillips*, 455 U.S. 209, 217 (1982)).

of jurisdiction and application of law to launching entities.<sup>9</sup> Until such time that objects are built on orbit or *in situ* on other celestial bodies, the United States will continue to act as the licensing authority for any U.S. entities and through such mechanisms will levy U.S. jurisdiction, requiring the application of standard legal principles for the determination of the particular court in which the case is tried.<sup>10</sup> It is ostensible, however, that in the buildup to a lunar economy where sufficient individuals would permanently occupy an alternative celestial body, the United States would stand up a separate governing body with sufficient administrative jurisdiction to hear and try cases on another body. At such time, the author's recommendations regarding specific language for the application of long-arm jurisdiction would be applicable and likely quite valuable.

The author next lays out a comprehensive reading of related space doctrines applicable to the establishment of an *in situ* court. In particular, pulling on Articles II, VI, and VIII of the Outer Space Treaty, the author examines whether the establishment of an *in situ* court would constitute an appropriation by claim of sovereignty in violation of the Treaty.<sup>11</sup> As has been determined by other scholars in examining jurisdiction in the context of U.S. licensing regimes through the Federal Aviation Administration, the Federal Communications Commission, and the National Oceanic and Atmospheric Administration, the application of jurisdiction over commercial actors licensed by the United States is not violative, but, in fact, is required by the Outer Space Treaty.<sup>12</sup> However, the establishment of a governmental entity beyond the simple exercise of jurisdiction does merit additional consideration under the principles of the Outer Space Treaty's restriction that appropriation cannot oc-

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<sup>9</sup> See Joanne Irene Gabrynowicz, *One Half Century and Counting: The Evolution of U.S. National Space Law and Three Long-Term Emerging Issues*, 4 HARV. L. & POL'Y REV. 405, 415, 421 (2010).

<sup>10</sup> *Id.* at 421.

<sup>11</sup> See Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies arts. II, VI, VIII, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty].

<sup>12</sup> See generally Gabrynowicz, *supra* note 9; see also Frans G. von der Dunk, *The Origins of Authorisation: Article VI of the Outer Space Treaty and International Space Law*, 69 SPACE, CYBER, & TELECOMM. L. PROGRAM FAC. PUBL'NS 1, 1, 3-4 (2011); DANIEL MORGAN, CONG. RSCH. SERV., R45416, COMMERCIAL SPACE: FEDERAL REGULATION, OVERSIGHT, AND UTILIZATION (2018).

cur “by any other means.”<sup>13</sup> Where clarifying language exists in each licensing entity’s issued license, and where even the United States’ special maritime and territorial jurisdiction only grants jurisdiction “pursuant to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies and the Convention on Registration of Objects Launched into Outer Space,” the establishment of any court would require (at a minimum) textual reference to the lack of appropriation.<sup>14</sup> Further steps would also be encouraged to limit the international perception of appropriation that would be inherent to the acquisition of land for public use. Where, in general, actions of the U.S. government to exercise eminent domain were considered “an attribute of sovereignty,” other nations could see the selection of a zone and placement of a vehicle on that zone as an exercise of sovereignty.<sup>15</sup> Despite the claim extending only to the utilization of the facility placed on a celestial body, the appearance of an area within a vehicle at a fixed location would likely appear to be an action of appropriation “by any other means.”<sup>16</sup>

Finally, the most persuasive and comprehensive portion of the author’s article is the examination of the application of jurisdiction in the context of space activities. The author evaluates specific personal jurisdiction, subject matter jurisdiction, and proposed future lunar jurisdiction. At present, focusing on the expansion of commercial entities for the furtherance of activities on the Moon, commercial contracting typically involves the contractual selection of forum and venue in terrestrial courts.<sup>17</sup> It would behoove any commercial entity to draw jurisdiction of a mutually acceptable ground location, particularly given that most individuals procuring a \$7 million flight to the Moon would likely have counsel secured based here on Earth. Through the give and take of commercial negotiations, a solution would likely be arrived at that would involve a private indi-

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<sup>13</sup> See Outer Space Treaty, *supra* note 11, art. II.

<sup>14</sup> 18 U.S.C. § 7.

<sup>15</sup> See *Miss. & Rum River Boom Co. v. Patterson*, 98 U.S. 403, 406 (1878).

<sup>16</sup> See Gabrynowicz, *supra* note 9, at 422 (it has even been argued that the consistent occupation of an orbit could constitute appropriation under these principles); Outer Space Treaty, *supra* note 11, art. II.

<sup>17</sup> *Keeping Current: U.S. Supreme Court Reaffirms That Forum-Selection Clauses Are Presumptively Enforceable*, ABA (Jan. 23, 2014), [https://www.americanbar.org/groups/business\\_law/publications/blt/2014/01/keeping\\_current\\_duffee/](https://www.americanbar.org/groups/business_law/publications/blt/2014/01/keeping_current_duffee/) [<https://perma.cc/UR9Z-USHC>]; *Smith v. Aegon Cos. Pension Plan*, 769 F.3d 922, 930 (6th Cir. 2014).

vidual not seeking to grant a corporate entity a significant upper hand in litigation due to the corporate entity's ability to readily access the lunar court (a right that would not be guaranteed for a private litigant or its counsel). Further, government entities (through Federal Acquisition Regulations (FAR)) levy requirements for the application of federal jurisdiction to commercial contracts utilized to access low Earth orbit and the Moon.<sup>18</sup> Moreover, the application of the comprehensive cross-waiver schemes applied to all activities on and off the *ISS* through FAR 1852.228-76 and 1852.228-78 (statutes intended to be applied broadly to all related entities involved in protected space operations) will likely stave off significant litigation for the time being, limiting the necessity of additional bodies to litigate disputes arising out of activities on the Moon until such time as the U.S. government is not the primary procuring entity for services on the Moon.<sup>19</sup>

In all, the author's forward-looking perspective will likely evolve as new capabilities, entities, and needs arise for dispute resolution on orbit. Though, the analysis should be undertaken with a closer perspective evaluating the implications of the U.S. Constitution, the existing international governance for space activities, and the impact of commercial contracting on lunar activities. In all, the forward-looking nature of Mr. Lee's article will likely spur policy discussions for whichever body governs and controls U.S. commercial activities.

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<sup>18</sup> The author is further recommended to evaluate the position of focusing on only Space Exploration Technologies Corporation and to examine other significant competitors that will be accessing the Moon and landing objects (which could result in litigation) on the Moon, including: Masten Space Systems, Intuitive Machines, Astrobiotic, Firefly Aerospace, and Draper. Further, evaluation of entities developing human launch capabilities including Boeing, Blue Origin, Sierra Space, and Virgin Galactic would also be of merit; see U.S. GEN. SERVS. ADMIN., FEDERAL ACQUISITION REGULATION (FAR), available at <https://www.gsa.gov/policy-regulations/regulations/federal-acquisition-regulation-far> [<https://perma.cc/M55Q-3VWJ>].

<sup>19</sup> FAR subpts. 1852.228-76, .228-78 (2023).