

# The Waning Crescent of Jurisdiction on the Moon

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## I. Introduction

With the recent launchings and future planned launches of more and more private missions into space and the growth of a new space tourism industry, the question of how jurisdiction will be determined for private civil actions arising from incidents that occur in space has come to the forefront. For example, imagine a scenario where a British citizen, launches from American soil, but is injured because of abhorrent and unsafe working conditions at a Moon installation operated by a private company headquartered in the United Arab Emirates. Does our private astronaut have legal personality in space or are we simply trying to apply the laws of specific Earth States to them while they are in space?<sup>1</sup> And, perhaps even more importantly, what rights and duties do they have, under what laws, and can they enforce those rights or be punished for not upholding their duties while in space, or is the only enforcement mechanism back on Earth using our pre-existing but, currently, terrestrially bound judicial systems?

## II. Current International Space Law Does Not Provide a Clear Theory of Lunar Jurisdiction for Private Parties

The most likely place to start our lunar jurisdictional analysis is with the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (the “Moon Agreement”).<sup>2</sup> This agreement creates an international space commons on the Moon by prohibiting States from establishing sovereignty or claiming ownership over the surface or subsurface of the Moon.<sup>3</sup> However, States “retain jurisdiction and control over their personnel,

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<sup>2</sup> See G.A. Res. 34/68, annex, Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Dec. 6, 1979).

<sup>3</sup> See *id.* at art. 11.

space vehicles, equipment, facilities, stations and installations on the moon.”<sup>4</sup> Furthermore, this “control” over installations and other facilities is extended to non-governmental entities as States are required to “ensure that non-governmental entities under their jurisdiction shall engage in activities on the moon only under the authority and continuing supervision of the appropriate State Party.”<sup>5</sup> The Moon Agreement also establishes many international protections, including environmental protections and basic safeguards for the life and health of persons on the moon.

A quick reading of the Moon Agreement might lead one to believe that our private astronaut’s case would be decided under the laws of the United Arab Emirates as the facility they were injured in was controlled by a private company based in the United Arab Emirates. However, the United Arab Emirates is not a party to the Moon Agreement.<sup>6</sup> Alternatively, maybe our private astronaut would be considered “personnel” of Great Britain and therefore be able to sue under the laws of the United Kingdom. But the United Kingdom is also not a party to the Moon Agreement. In fact, the United States, Russia, and China, the three spacefaring States that are mostly likely to set up any initial facilities on the Moon and enable non-governmental entities from their countries to also do so, are not parties to the Moon Agreement.

If we cannot rely on the Moon Agreement to determine jurisdiction, an alternative basis for determining jurisdiction might be grounded in the Convention on the International Liability for Damage Caused by Space Objects (the “Liability Convention”).<sup>7</sup> Article I defines damage as the “loss of life, personal injury or other impairment of health; or loss of or damage to property of States or of persons.” Although strict liability is applied when the damage occurs on Earth or to a traditional aircraft, liability for injuries occurring elsewhere, or on board another space object, is only imposed when the damage is due to the fault of the launched object or the persons who are responsible for it.<sup>8</sup> Under this approach, jurisdiction would be based on what country a space object, which would include a landed facility or even a portion of an installation on the Moon, was originally launched from. And while the Liability Convention discusses joint and

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<sup>4</sup> *Id.* at art. 12.

<sup>5</sup> *Id.* at art. 14.

<sup>6</sup> See Comm. on the Peaceful Uses of Outer Space, Rep. of the Legal Subcomm. on Its Sixtieth Session, U.N. Doc. A/AC.105/C.2/2021/CRP.10 (2021).

<sup>7</sup> See G.A. Res. 2777 (XXVI), annex, Convention of International Liability for Damage Caused by Space Objects (Nov. 29, 1971).

<sup>8</sup> *Id.* at art. III.

several liability for “joint launchings”,<sup>9</sup> it is also possible that different parts of an installation, like the different modules of the International Space Station, could be multi-jurisdictional or even governed by completely different jurisdictions based solely on the original launch sites of the different component parts.

Now at first, this seems very promising for our private astronaut as the Liability Convention can be applied to any spaceships, facilities, or installations, orbital or grounded, that are launched from Earth, no matter their final space destination. And, the United Kingdom, the United States, and the United Arab Emirates are all parties to the Liability Convention.<sup>10</sup> However, Article VII creates a unique set of limitations for private citizens who are nationals of the launching State or nationals of other States who are invited to participate in the operation of that space object. Article VIII further limits potential claimants to States, and not individuals. And Article IX requires that States attempt to enforce any liability claims through diplomatic means or through the Secretary-General of the United Nations. In short, a private citizen or entity would need to have a State pursue any such damage claims on their behalf and, most importantly, private citizens cannot use the Liability Convention to seek redress against their own States that they are citizens of or ones that have hired or invited them to work aboard the space object that they are injured on.

And that is one of the key “problems” with many of these international space conventions and treaties; they focus largely, almost exclusively, on State, or State controlled, space exploration. At first this might seem like simply an oversight or a lack of imagination, but this focus on States versus private companies and individuals was intentional. States, prior to our current commercial focused race to return to space, had envisioned and desired to keep the cosmos as a State-controlled space.<sup>11</sup> In fact, even newer attempts to create international arrangements among spacefaring States, such as the Artemis Accords, referred to by Kathryn Lueders the Associate Administrator at NASA as “rules of engagement” for the return to the Moon,<sup>12</sup> once again focus on State-controlled space agencies and issues of liability remain

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<sup>9</sup> *Id.* at art. V.

<sup>10</sup> *See supra* note 6.

<sup>11</sup> *See* U.N. Doc. A/C.1/PV.1294.

<sup>12</sup> Smithsonian National Air and Space Museum, *Envisioning a World of Space People: John H. Glenn Lecture in Space History*, YOUTUBE (Sep. 14, 2021), <https://www.youtube.com/watch?v=MTt1AT3Fz-s>.

largely focused on orbital debris versus enforcing liability for injuries sustained by private entities or citizens living and working in space.<sup>13</sup>

### **III. Although Arguments Can Be Made for Expanding Traditional Terrestrial Jurisdictional Jurisprudence to the Moon, this Solution Has Numerous Drawbacks Including Lack of Access to Justice**

As existing space conventions, agreements, and accords provide no clarity for our private astronaut, and focus largely if not exclusively on enforcement mechanisms between States versus between individuals and private entities, we may need to look towards more traditional Earth based legal regimes to determine what jurisdiction might apply. And like how existing international treaties and agreements have been given extraterritorial force outside of the specific physical jurisdiction of a State, so could the individual laws of a State be extended beyond their Earth based territory based on theories of effective or physical control.<sup>14</sup> In this case, the citizenship of a facility or installation could be determined by a State's ability to assert their jurisdiction over it, which is also in keeping with the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (the "Outer Space Treaty"). This treaty states that States are responsible for "national activities in outer space, including the moon and other celestial bodies, whether such activities are carried on by government agencies or by non-governmental entities" and requires both the authorization and supervision of non-governmental entities acting in outer space by an appropriate State.<sup>15</sup>

However, although the three States in our private astronaut example have all signed the Outer Space Treaty,<sup>16</sup> which states at Article II that "[o]uter space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty", and the United

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<sup>13</sup> See generally The Artemis Accords, Oct. 13, 2020, <https://www.nasa.gov/specials/artemis-accords/img/Artemis-Accords-signed-13Oct2020.pdf>.

<sup>14</sup> See generally Ralph Wilde, *Human Rights Beyond Borders at the World Court: The Significance of the International Court of Justice's Jurisprudence on the Extraterritorial Application of International Human Rights Law Treaties*, 12 CHINESE J. OF INT'L L. 639 (2013).

<sup>15</sup> G.A. Res. 2222 (XXI), annex, Convention of International Liability for Damage Caused by Space Objects, art. VI, (Dec. 19, 1966) [hereinafter Outer Space Treaty].

<sup>16</sup> See *supra* note 6.

States recently recommitted to the Outer Space Treaty in the Artemis Accords,<sup>17</sup> any State may unilaterally withdraw from the Outer Space treaty<sup>18</sup> and could potentially claim direct sovereignty over specific portions of space or even the Moon. And given the recent tendency of the Big 3, the United States, Russia, and China to back out of international agreements, their repeated refusals to join international agreements, and, in some cases, their decisions to flout international law, like Russia did with the annexation of the Crimean Peninsula in 2014, it is not impossible to imagine that some States may eventually attempt to actually claim ownership of portions of the Moon's surface in contravention of the Outer Space Treaty. Of course, a direct claim of sovereignty over the land or space on which any facilities or installations were placed would strengthen claims that that State's national laws should be applied in any such facilities or installations, as they would be considered to fall within the "territory" of the annexing State.

But assuming States intend to remain bound by the Outer Space Treaty, thus taking off the table the potential of a State's literal territorial expansion into space, one can look towards traditional maritime law, a concept which fits well into the international commons established by both the Moon Agreement and the Outer Space Treaty, to establish a framework for space jurisdiction. Thus, we could end up with a system similar to what we currently have on Earth, where the owners of a seafaring vessel pick the country they want to register with, albeit with that State's approval, and are then bound by that State's exclusive jurisdiction in international waters, or, in this case, international space.<sup>19</sup> The State a "ship" owner chooses to register with thereby determines the "citizenship" of the "ship", or the Moon installation or facility and, thus, the jurisdiction which would control that installation or facility and those living or working there.

There is already some foundation within existing space law for this concept of maritime style registration and citizenship of spaceships, facilities, and other space "objects" based on both ownership and choice of registration under the Convention on the Registration of Objects Launched into Outer Space (the "Registration Convention").<sup>20</sup> The Registration Convention requires a launching State to register the space object in a national registry that is then shared

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<sup>17</sup> See The Artemis Accords, *supra* note 13.

<sup>18</sup> See Outer Space Treaty, *supra* note 15, art. XVI.

<sup>19</sup> See United Nations Convention on the Law of the Sea, arts. 91-92, Dec. 10, 1982.

<sup>20</sup> See G.A. Res. 3235 (XXIX), annex, Convention on Registration of Objects Launched into Outer Space, (Nov. 12, 1974) [hereinafter Registration Convention]; see also Outer Space Treaty, *supra* note 15, art. VIII.

internationally.<sup>21</sup> And when two or more States are involved in the launch they are to determine amongst themselves to whom the object will be registered to, hence there is some choice in the matter.<sup>22</sup> And, like the Moon Agreement, the Registration Convention is extended to non-state entities, albeit just to international intergovernmental organizations.<sup>23</sup> Additionally, there are several examples of States transferring registration between States by one State removing an object from their national registry and another State adding it to their national registry. However, it isn't entirely clear as to whether liability transfers with registration nor has the system, to date, been used by private companies in the same way that they utilize traditional seafaring ship registries back on Earth.<sup>24</sup> And, perhaps more troubling, there does not appear to be any enforcement mechanism for failing to register a space object, as not all current space objects are registered, which could lead to the creation of "pirate" or lawless celestial facilities and installations.

Moreover, this could also result, as it has for traditional seafaring ships, to a race to the bottom with private companies registering their space facilities, installations, and ships with States that have the most favorable laws for them, such as those allowing for more exploitation of labor and less enforcement of safety and pollution violations, thereby expanding the concept of "flags of convenience" to space.<sup>25</sup> It also raises the issue, that if one is required to sue or file a claim in a State that they are not a national of, that the burdens of seeking enforcement or justice are simply too high for an individual to pursue. Not only are there significant barriers in trying to decipher how a foreign legal system works or obtain appropriate representation, but the costs alone involved in travelling or appearing in person to pursue an action outside of the country that one normally resides in are usually prohibitively high. Thus, if enforcement requires suing in a foreign country, back on Earth, it may be impossible for most individuals to seek redress for any violations of their rights or injuries that they sustain while in Space. Now there may be

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<sup>21</sup> See Registration Convention, *supra* note 20, art. II.1.

<sup>22</sup> See *id.* at art. II.2.

<sup>23</sup> See *id.* at art. VII.1.

<sup>24</sup> See generally Frans von der Dunk, *Transfer of Ownership in Orbit: from Fiction to Problem*, 29, in OWNERSHIP OF SATELLITES: 4TH LUXEMBOURG WORKSHOP ON SPACE AND SATELLITE COMMUNICATION LAW, Mahulena Hofmann and Andreas Loukakis, eds., 2017); see also Outer Space Treaty, *supra* note 15, art. VIII.

<sup>25</sup> See *Why so many shipowners find Panama's flag convenient*, BBC NEWS (Aug. 5, 2014), <https://www.bbc.com/news/world-latin-america-28558480>.

opportunities to pursue claims against foreign companies within one's own country, for example if the foreign company also conducts business within the country that our private astronaut resides in, but such jurisdiction is often fairly limited.

Additionally, it also leads to a complete hodgepodge of laws that could differ drastically from one facility or ship to another, or even different parts of larger installations. For example, the International Space Station is composed of numerous modules launched from different countries and, thus, different jurisdictions apply to the different parts of the installation despite the overall size of the station being relatively small. And, if we revert to attempting to enforce our private astronaut's rights via different Earth based jurisdictions, we have to contend with the dilemma that because certain causes of action may only be recognized in some jurisdictions that the rights of private citizens in space may vary drastically from one Moon facility to another or even from one module of a lunar installation to another. Moreover, even when States have similar protections, the differences between those so-called similar laws can lead to completely dissimilar working and living conditions.

For example, if we take a look at employees that are compensated on an hourly basis, in the United Kingdom, one is not entitled to overtime unless you have specifically contracted for it, but the amount of overtime hours you work cannot drop your overall pay per hour to below the National Minimum Wage, and you cannot work more than 48 hours per week unless you agree to do so in writing.<sup>26</sup> In contrast, in the United States, one must be paid overtime of at least a 50% premium if you work more than 40 hours per work week and, in some states, more than 8 hours a day, and many states require double overtime in certain circumstances. But one can end up working significantly more than 48 hours in a week.<sup>27</sup> And the United Arab Emirates takes a somewhat middle of the road approach setting the normal work week to either 48 or 54 hours of work a week, of 8 or 9 hours a day, depending on the industry, setting overtime pay for additional hours worked at a premium of 25% to 50%, depending on when the overtime occurs, and limiting overtime to a maximum of 2 hours a day in most circumstances.<sup>28</sup>

Thus, given the current potential jurisdictional uncertainty in space, private parties may

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<sup>26</sup> See Overtime pay, <https://www.gov.uk/overtime-your-rights>, (last visited Oct. 11, 2021); Compulsory overtime, <https://www.gov.uk/overtime-your-rights/compulsory-overtime>, (last visited Oct. 11, 2021).

<sup>27</sup> See 29 U.S.C. § 207(a); Cal. Lab. Code § 510 (2021).

<sup>28</sup> See U.A.E. Federal Law No. 8 of 1980, as amended, Title 4, arts. 65 and 67-69.

resort to detailed contracts to determine what laws apply, what additional rights might exist for space specific issues if pre-existing laws do not set clear rules or merely set minimum guidelines that the parties want to expand upon, and the location where one can sue or attempt to enforce these rights. And there are numerous terrestrial examples of such contracts, from the infamous forum and venue selection clauses for passengers on cruise ships to the detailed agreements negotiating pay and other rights and duties that were common for “employees” on pirate ships in the 1600s.<sup>29</sup> Likewise, international contracts between various private entities often include venue, forum, and arbitration clauses, which move the jurisdiction for any future disputes from a particular State’s court system, which might potentially be biased, to third-party neutral organizations.

Furthermore, under traditional jurisprudence, when there is no clear understanding as to what laws should apply, which laws take priority, or what venue is appropriate, these issues have to be litigated and determined pursuant to a somewhat grey conflict of law methodology which, although it varies from jurisdiction to jurisdiction, typically involves the consideration of whether the laws in question can be applied extraterritorially, where the harm occurred, whether there is indeed a real conflict between the laws in question, the interests of a particular state or jurisdiction in enforcing such laws, the citizenship of the parties involved, and general public policy concerns.<sup>30</sup> And decisions about which laws are to be applied can have serious repercussions if the rights provided by the conflicting legal systems are different, because it, in essence, becomes a conflict between rights and protections and the determination of jurisdiction can mean whether or not a right or duty even exists.

#### **IV. Prior Space Jurisdiction Close Calls**

To date, there have been relatively few incidents where civil or criminal liability has arisen involving individuals living and working in space. And in those cases, jurisdiction and the ultimate resolution of those disputes turned largely on the leverage that the individuals in space

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<sup>29</sup> See John Coyle, *Forum Selection Clauses and Cruise Ship Contracts*, CONFLICT OF LAWS (Aug. 23, 2021), <https://conflictoflaws.net/2021/critiquing-a-recent-u-s-decision-on-forum-selection-clauses-and-cruise-ship-contracts/>; Pirate code, [https://en.wikipedia.org/wiki/Pirate\\_code#Articles\\_of\\_Bartholomew\\_Roberts](https://en.wikipedia.org/wiki/Pirate_code#Articles_of_Bartholomew_Roberts), (last visited Oct. 11, 2021).

<sup>30</sup> See generally Donald Earl Childress III, *International Conflict of Laws and the New Conflicts Restatement*, 27 DUKE J. OF COMPAR. & INT’L L. 361 (2017); Christopher A. Whytock, *Conflict of Laws, Global Governance, and Transnational Legal Order*, 1 U.C. IRVINE J. OF INT’L, TRANSNAT’L, & COMPAR. L. 117 (2016).



had over their “employers” back on Earth or the traditional legal enforcement mechanisms that were available back on Earth. For example, let us look at the so-called “mutiny” on Skylab, the precursor to the International Space Station, which allegedly occurred in late December of 1973.

<sup>31</sup> This has come to be described more as an accidental “strike” which occurred when the Skylab 4 crew missed a call from the ground and did not respond for a full orbit. However, leading up to this incident, the crew had made multiple complaints about unreasonable working conditions and prior requests for changes to both their work and rest schedules had been ignored. But after this “mix-up” the crew was able to renegotiate the unreasonable work schedules that had been set for them back on Earth. And these requests included, amongst other things, having one day off every 10 days, reducing scheduled activities before and after scheduled sleep periods, and allowing time between tasks to clean up and set up for the next set of activities. All fairly normal employee side requests that one might see in any number of private settings back on Earth.

And while a strike or a mutiny, if intentional, might seem drastic in space, this is somewhat akin to the scenario of employees making a complaint to HR, having that complaint ignored, and then escalating the complaint, just, in this case, there was no one to escalate the complaint to, and the only option was to simply hold the Skylab and the completion of the mission as collateral in their negotiations. Now, this was something that could only be pushed so far, because failing to fulfill their mission when assistance from Earth was needed for survival meant that the leverage of the crew was somewhat limited, and they also could have faced severe punishment for insubordination upon their return to Earth. However, this is a good test case for how similar labor disputes might play out in the future if there is no other mechanism for employees to enforce their workers’ rights in space.

Another potential space law crisis occurred in August of 2019, when an estranged spouse of a NASA astronaut, who was at the time on the International Space Station, claimed that her astronaut spouse had improperly accessed her bank accounts while in space.<sup>32</sup> These accusations

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<sup>31</sup> See John Uri, *The Real Story of the Skylab 4 “Strike” in Space*, NASA HISTORY (Nov. 16, 2020), <https://www.nasa.gov/feature/the-real-story-of-the-skylab-4-strike-in-space>; Doug Adler, *Was there really a “mutiny” aboard the Skylab space station?*, ASTRONOMY (June 12, 2020), <https://astronomy.com/news/2020/06/was-there-really-a-mutiny-aboard-the-skylab-space-station>.

<sup>32</sup> See Chelsea Gohd, *Astronaut Anne McClain’s estranged wife charged with lying about alleged ‘space crime’*, SPACE (April 7, 2020), <https://www.space.com/astronaut-anne-mcclain-wife-charged-lying-space-crime.html>.

eventually turned out to be false, but it raised interesting jurisdictional issues regarding what laws would apply to the astronaut if the accounts had in fact been improperly accessed from space. The scenario was somewhat simple in that both individuals were United States citizens, a NASA computer had allegedly been used, and there was already a pending divorce. Thus, it was clear at least what country and what potential internal state jurisdictions might apply and there seemed to be no real dispute that some sort of proceedings could be initiated on Earth and that the astronaut would then face trial upon her return. Once again, the legal framework applied was that both the jurisdiction and the means of enforcement remained on Earth, was dependent on the nationality of the parties involved, and that justice could not be served until everyone involved was back on terra firma.

The problem, of course, with relying on solely Earth based jurisdiction and access to justice is that the system does not work for individuals who may be in space for months, years, or may never even return to Earth. In that scenario, how does one enforce their rights in space, seek immediate remedies for potentially inhumane treatment, or stop continuing wrongs? They cannot. And even if there were ways to participate in Earth based judicial systems while in space, which given the remote and virtual nature of many court proceedings during COVID, could theoretically be possible, space presents some additional administrative hurdles, from non-simultaneous communications, to general lack of access to private communication systems, to a lack of any real time enforcement mechanisms.

Given these limitations, we may end up needing to create entirely new legal systems as we venture farther out into space. This could range from creating new civil tribunals and governments in space that act as extensions of current existing State systems on Earth, such as new circuits for courts or new territories for States, or it could be entirely new nation-states, such as a new Moon or Mars government. And there is also the possibility for the formation of hybrid corporate-government entities. For example, right now in the state of Nevada in the United States, there is legislation being proposed that would allow businesses to function as local governments, literal company towns, and given the expense and costs associated with creating permanent facilities on the Moon and other celestial bodies, this has the potential to really catch

on in space.<sup>33</sup> However, it is unclear how jurisdiction would develop in such situations and what laws, international or otherwise, would apply to such hybrid entities or even the extent of their governmental authority.

## **V. Conclusion**

Without clarity regarding these foundational jurisdictional issues, there remains much uncertainty for private businesses and individuals entering the commercial race to return to space. In many countries, in particularly the United States, most of one's "human" rights, which are most of our constitutionally protected rights, are enforced in the civil courts. Likewise, most of a corporate entity's rights, from contractual to ownership rights, are determined by the laws of the States that they operate in. Thus, to be able to enforce any such rights, there must be jurisdiction. And this uncertainty surrounding jurisdiction can hamper further space exploration efforts if individuals are worried about being exploited without recourse while in space and private companies are worried that they will have no remedy if things go awry with a multi-million- or billion-dollar investment.

Unfortunately, we cannot simply try to cobble together jurisdiction from pre-existing international space law given that these sources of law focus largely, if not exclusively, on States as actors and enforcers and they do not provide mechanisms for individuals or private entities to assert any rights without going through a State agent. And, if we instead simply extend current terrestrial jurisdiction extraterritorially into space, we run into not only the concern that the current race to space will turn into a race for flags of convenience, but also the fact that many of the issues we face in Space are different than those that we face on Earth. Indeed, specific concerns will vary from space habitat to space habitat as the unique problems that will be faced on a spaceship versus those on a grounded facility on the Moon are different in nature and scope. And we are going to need to write new laws that address those issues that are specific to these different space environments, including, but definitely not limited to, minimum environmental and atmospheric habitability requirements, guaranteed access to oxygen, food, and water, protection from radiation, and new guidelines as to what constitutes a workday and work week when we are no longer living on a celestial body that follows an Earth based 24-hour day or

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<sup>33</sup> See Susan Miller, Nevada may invite tech firms to self-governing company towns, GCN (Mar. 4, 2021), <https://gcn.com/articles/2021/03/04/nevada-innovation-zones.aspx>.

365-day year cycle.

Moreover, without any enforcement mechanisms in space, one would be forced to rely solely on terrestrial enforcement, which means that the incentives to “play by the rules” are drastically lessened given that it may take months or years and even a return of all the parties to Earth for any justice to be had. And although the threat of mutually assured destruction and the benefits of cooperation or creating positive business norms could, to some extent, make space more equitable than what we have on Earth, space is itself a classic “prisoner’s dilemma” scenario and, as we have learned based on numerous tragedies of the commons on Earth, including pollution induced climate change despite incredible resources and scientific advancements, many space actors may be willing to take on the risk of significant loss of life and capital for the possibility of large immediate gains presented by opportunities of exploitation, corporate theft, and other bad behavior.

So it makes sense to create new and different judicial systems in space. Ones that will address the unique rules that will eventually develop in different space environments and ones that will offer a way to enforce the applicable rights and duties of all space actors, while they are in space, and in an expedient and fair manner. And an ideal place to start developing these new judicial processes will be on the Moon, which will be the first non-Earth celestial body that humans will make their home and, to date, essentially the farthest out in space that humans have gone. However, the answer does not have to be as complex as creating a new comprehensive legal system from scratch. It could be as simple as creating a mandatory arbitration organization on the Moon and creating a handful of Moon specific health and safety laws that are applied on top of pre-existing terrestrial laws that are applied extraterritorially via traditional choice of law and defined jurisdictional principles. Thus, just as how many within the space industry are viewing the Moon as a testing ground for the development of new technology to take to Mars and for deeper exploration of our solar system,<sup>34</sup> the Moon can serve as a jurisprudence laboratory and help to create the foundation of space law for generations to come.

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<sup>34</sup> See *Envisioning a World of Space People*, *supra* note 12.