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POWER, POLITICS AND PRIVATE PROPERTY RIGHTS IN OUTER SPACE**ABSTRACT**

An important series of political actions were recently taken regarding the hotly contested, yet unresolved issue of property rights regarding outer space. Although subtle, they serve to weigh in favor of legalizing the grant of private property rights to entrepreneurs to develop outer space as a territory. For several years now, members of the IISL, IAF, attorneys, academics and others have participated in a fierce debate over whether international space law allows for granting private property rights in outer space. A recent dissertation research project, relying on insights from Gramsci and critical international relations theory, has revealed that recent U.S. legislation, policy, and the new popularization of space have been put into place to encourage further direct investment in outer space territory by promising property rights. The problem is that this hot issue has not been definitively dealt with by the international community. Ignoring the need to arrive at an international consensus on this issue will inevitably create international conflict. Dialog must occur between the various factions within the International Astronautical Federation (space lawyers, the

established space industry, new space entrepreneurs, the international community, and the general public. Otherwise, the customary practice of allowing industry practice to influence space law may have the effect of legalizing private property claims due to rapid private space tourism and connected industries.

INTRODUCTION

I earned a Juris Doctorate in law from the University of Missouri-Columbia in 1987 and worked as a legal researcher until 1998 with various entities including the Public Defender's Office, a Barrister, a Federal Magistrate, various laws firms and corporations. Around 1992, while working on a research project in a law library, I noticed a book entitled *Space Law: Past, Present and Future*.¹ This changed my life and set my focus on a new path – understanding and explaining space law. For several years as a hobby I studies space law. I watched as the post Cold War era began to shape much of the discourse on outer space.

In 1998 I pursued a Ph.D. in political science/international relations for

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the sole purpose of getting a handle of this elusive field of law. From the beginning of my program of study, I focused on learning about the various political science theories and writing and presenting conference papers on how these theories applied to the field of outer space. I realized that I had to devise a way to explain the complex interrelationship between international politics, global economy, the five outer space, various UN declarations, a vast myriad of industries, facilitated primarily through U.S. domestic legislation and policies, along with the International Astronautical Federation Congresses, the International Institute of Space Law and the United Nations Committee on Peaceful Uses of Outer Space. I further realized that a key factor in this analysis was change. A major change occurred at the international structural-ideological level with the fall of the Soviet Union as a superpower.

I watched this field closely and was invited to present papers at the International Space University's 7th Annual symposium. A week later I attended United Nations Committee on Peaceful Uses of Outer Space Conference, 45th Session in Vienna Austria and arranged a meeting with space lawyers at the German Aerospace Center in Cologne Germany. Also in the summer of 2002 I conducted Research at the European Center for Space Law in Paris and at the Institute of Air and Space Law in Cologne, as well as at the United Nations library Geneva. By interacting with the space community, I learned of the International Astronautical Federation Congresses. I participated in World Space Congress in Houston, Texas in 2002 and interacted with the Space Law community for the first time. I subsequently presented a paper in Bremen, Germany in 2003 which was published in the International Institute of Law Proceedings, and again for the Vancouver, Canada

Proceedings. In 2004, I was elected into the International Institute of Space Law. This was the greatest honor of my life. My interest became even more inspired. During this same period, I continued to present papers of outer space themes at the International Studies Association conferences. I constantly noticed the lack of awareness about current events regarding outer space at all of the other academic conferences. Only members of the outer space community seemed to know about what was happening with outer space.

For several years I analyzed the various social, behavioral, ideological, economic and political patterns which I noticed interacting within what the outer space development regime. While closely observing this regime, a new change emerged. New actors became key factors in regime change – space entrepreneurs. In 2001 political lobbying activities began, and new images of outer space as a fun place to travel for anyone with the money to pay for a trip began to appear in the mass media. Business moguls/space entrepreneurs began participating in the IAF Congresses and speaking at plenary events. At the same time several new U.S. laws and the New Vision for U.S. Space Exploration Policy were initiated. In 2006 I presented a research paper at the IAC Congress in Valencia, and a few months later I defended my dissertation. My dissertation involved explaining these new activities and new actors which had become relevant in the outer space development regime.

1. OUTER SPACE DEVELOPMENT

The term used herein, “outer space development” involves a culmination of forces – historical, legal, ideological, institutional, political, economic, psychological and structural all operating

together in the post Cold War era so that space commercialization and privatization are widespread accepted norms.² Space activities are not being called “development”, at least not yet. Given all of the various phenomena including the various legal, political, economic and ideological factors and their patterns of operation, as discussed in this paper, I believe that humankind is at the dawn of what will soon become outer space development.

2. DISSERTATION FINDINGS

2.1 Trends, Patterns and Norms

Political activities regarding outer space have occurred across three distinct historical epochs. The United States has been a trendsetter during each epoch - influencing periods of change within the outer space development regime.³ A pattern exists whereby U.S. space legislation and policies have set the pace for space commercialization trends. Over time, space commercialization and privatization patterns became ideological and institutional norms. Satellite telecommunications, remote sensing, space transportation and launch systems, space stations and commercial spaceports have now become prevalent industries in the global economy.

2.2 Emerging Space Industries

Recently, a new trend is being set by U.S. policy. In 2004 a new policy was instituted in accordance with the President’s Commission Report which lays the foundation of U.S. development of the outer space territory.⁴ Also in 2004 a new U.S. law⁵ was passed facilitating the legality of private space travel as a new industry being called “space tourism”. In addition the NASA Authorization Act of 2005 made

funding available to carry out the New Vision U.S. Space Exploration Policy.⁶ This policy, to a large extent calls for more participation from the private-sector in space exploration and other programs. Already a critical number of space entrepreneurs have paved the way towards new space industries, as they did during the satellite telecommunications revolution during the 1980s and 1990s. This is only the beginning of a new trend towards further space commercialization and privatization.

Although outer space is an international concern, practices have been influenced by U.S. domestic space laws to a great extent. Therefore, it is important to focus on U.S. space law and policy. New U.S. laws and policies have been put into place to influence the hyper-privatization⁷ of outer space. This is occurring today at a historical epoch where globalization, capitalism and free market ideology are dominant operators in the global arena. Historically the U.S. has led the process of change in the outer space development regime. Today private-sector interest groups and business moguls have taken political action to secure laws and policies to hyper-privatize outer space development.

In addition, there is a new interest in outer space involving private entrepreneurs and global corporations. For example, in 2001, Dennis Tito, a multi-millionaire and former NASA engineer was highly publicized for paying \$20,000,000 to be the world’s first private space tourist. Few people are aware that Dennis Tito is the founder and CEO of Wilshire Associates, a multi-trillion dollar global investment firm. Dennis Tito was one of several entrepreneurs who testified before the joint hearing between the Senate Science, Technology, and Space Subcommittee and the House Subcommittee on Space and

Aeronautics suggesting a new direction for outer space activities.⁸

From 2001 to 2003, influential members from the business community lobbied the U.S. Congress and the Senate for legislation which will cause a change in direction for the U.S. space activities.⁹ These political activities occurred prior to the passage of the New Vision policy in 2004 and the new laws in 2004 and 2005 aforementioned. In addition, both the U.S. government and the private-sector began offering incentives to encourage further commercialization and privatization of outer space development with a greater role being played by the private-sector. In addition in 2004 five hearings were held by the special President's Commission on Moon, Mars and Beyond. Ninety-six witnesses were invited to provide testimonies on which direction the U.S. space program should take. Many of those testifying were space entrepreneurs, business moguls and industry leaders.¹⁰

The result so far has been millions of dollars are being offered through various prizes to spur increased privatization of space. Prizes and incentives include the \$10,000,000 annual Ansari X Prize, the \$100,000,000 NASA Centennial Challenges Prizes program, the \$50,000,000 America's Space Prize, the \$500,000 Heinlein Prize for Practical Accomplishments in Commercial Space Activities, and the \$1,000,000 NASA Ralph Steckler/Space Grant Space Colonization Research and Technology Opportunity program. Famous business moguls from other industries have also started to form for-profit space companies. For example in 2004 Sir Richard Branson of Virgin Airlines and Virgin Records formed Virgin Galactic – a private space tourism company. Also in 2004, Robert Bigelow founder of Budget Suites of America, recently announced the “America's Space

Prize” to award \$50,000,000 million for the first company to develop a commercial space hotel by the end of the decade.¹¹ Given the influence of free market ideology and globalization in the post Cold War era, these empirical realities are new and distinct from commercialization and privatization activities during the first and second epochs.

3. LEGAL PRECEDENT AND PRIVATE PROPERTY RIGHTS

3.1 Widespread Acceptance as Custom

I understand that it is improper to speak of legal precedent when discussing international law. However, lawyers understand the importance of precedence and knowing the rule of law. In the case of space law and how it has changed and is changing, this pattern and its significance must be grappled with in terms familiar to the legal community. The U.S. legal system has legislation which consists of statutes passed by Congress, Executive Branch policies, and case law – created and culminated as the result of various lawsuits petitioned before the court, argued and ruled upon by judges and juries. Together, these various sources make up the law. Cases adjudicated through the court system usually demonstrate some sort of predicable patterns to demonstrate what one can expect in terms of how laws will be applied given certain facts scenarios.

The term legal precedent, within this context involves the rule of law derived from habits and customs from patterned decisions made by courts. Precedent is the way in which courts have typically applied the various statutes and other laws to various actions and sets of facts. This type of law fills the holes often left by statutory laws, with real life facts and an assessment of how certain facts related to certain prongs of the

law. Statutes set forth what legislators would like people to do, or not to do, case law measures and analyzes what people have done in light of an analysis of how those actions match or contradict the legal rules contained in the statute. It is not uncommon for Executive Branch policies to take precedence over statutory law and/or case law if to do so would be deemed to be in the public interest or in the interest of justice due to some overarching concern.

International treaties are in many ways similar to legal statutes. Clauses and statements contained in treaties set forth the various prongs of the law which were agreed to by the signatories. However, real life scenarios do not always line up perfectly with treaty clauses. Holes must be analyzed and interpreted in order to authoritatively decide whether the law has been complied with. The basic foundation of international space law exists in the five (arguably four)¹² international space treaties. The main one being The Outer Space Treaty of 1967 ("The Constitution"). The Outer Space Treaty is vague in terms of when is an act "appropriation", how much "freedom to use" outer space exists and to what extent, and what does benefiting all mankind really mean. Practices which are accepted by the international community may eventually determine the outcome of how the terms of the space treaties are applied, based on real life practices and the acceptance of practices by states and industry.

There is a realm of international law where treaty law is limited by state power, power politics and international relations. Within the realm of international law there is the International Court of Justice which makes decisions similar to legal precedent in the U.S. However, Goldsmith and Posner (2005: 3) explain that international law "has been burdened with the charge that it is not

really law". For example, sometimes state power determines how laws are applied and it is often difficult to get states to comply with international laws. In addition, there are situations where treaty law is trumped by custom. Goldsmith and Posner (2005: 23) explain that a custom arises, having the effect of law when there is a "widespread and uniform practices of states and states must engage in the practice out of a sense of legal obligation". Widespread acceptance of practices can be treated as law and failure to contest practices can result in losing the right to contest once the practice has been established as custom.

The main point is that a widespread pattern exists within the outer space community whereby U.S. laws and policies foster industry growth, followed by international acceptance. Hager¹³ argues that the only way to understand the development of space law is to understand it as a function of international politics. In this vein, international acceptance of U.S. led space commercialization practices began in the 1980s; it became widespread during the 1990s. Since the end of the Cold War, globalization and free market ideology have been dominance. With this, international acceptance of commercialization of space became increasingly stronger. This widespread uniform international acceptance is operating similar to legal precedent. Commercialization of space activities has arisen to the level of an international custom. The geostationary orbit, then, might be said to be already colonized or "developed". Based upon these phenomena, it is my contention that the first phase of outer space development has already occurred. In addition, several new space industries are in the process of emerging - private space tourism, private space travel, commercial spaceports, commercial space

hotels (space stations) and eventually commercial space settlements.

3.2 Private Property Rights in Outer Space?

On the touchy subject of private property rights in outer space, President Bush's New Vision for U.S. Space Exploration Policy, Recommendation 5-2 of the Commission report¹⁴ reads:

The Commission recommends that Congress increase the potential for commercial opportunities related to the national space exploration vision by providing incentives for entrepreneurial investment in space, by creating significant monetary prizes for the accomplishment of space missions and/or technology developments and by assuring appropriate property rights for those who seek to develop space resources and infrastructure.

(President's Commission Report of 2004 at pg. 32)

For years now, space lawyers have debated the issue of whether or not private property rights are allowable in accordance with international space law.¹⁵ Often quoted is Article II of the Outer Space Treaty¹⁶ which states: "outer space, including the Moon and other celestial bodies, is not subject to national appropriation [emphasis added] by claim of sovereignty, by means of use or occupation, or by any other means." Many space lawyers cite Article II in support of the argument that international space law permits private property rights because it does not explicitly prohibit them.¹⁷ This argument is often intermingled with the argument that since the Outer Space Treaty does not explicitly mention private appropriation, there is legal uncertainty. This uncertainty is said to create

disincentives to private commercial sector investment in space endeavors.¹⁸

In taking this position, some argue that previous drafts distinguished between national and private appropriation and prohibited both, and that the final draft only contains explicit prohibition against national appropriation. Therefore, they assume that a decision must have been made to permit private appropriation.¹⁹

Other space lawyers argue that "appropriation" of outer space resources, by any entity or individual, strictly is prohibited.²⁰ They argue that the term "national appropriation" includes all forms of appropriation whether national, private or otherwise. Some taking this position include the very concept of private property rights as "appropriation".

The CHM principle is treated as an integral part of the private property rights debate. Some space lawyers support the Common Heritage of Mankind (hereinafter referred to as CHM) principle.²¹ Others complain about it arguing that it inhibits commercial development of outer space.²² Some space lawyers argue that space law's flaw is its uncertainty on the issue of private property rights.²³ Some space lawyers complain about the Outer Space Treaty.²⁴ Others complain about the CHM principle.²⁵

Now it appears from a reading of the above passage of the President's Commission report that the U.S. may have, arguably, sided with the position to allow private property rights in outer space. Many lawyers believe that at the international level, there is no such thing as precedent; however, custom is its equivalent. Given the historical pattern of U.S. trendsetting behavior regarding space law, if left unchallenged, this could institute a new

trend, which could amount to a legal custom, which is the equivalent of international legal precedent.

CONCLUSION

Based upon careful review, observation, thinking and analysis about various combined activities, laws, policies, conference presentations, discussions, industry patterns, articles and books, I have concluded that space law is headed towards being used as an instrument to facilitate the next phases of outer space development – space tourism, commercial space hotels and commercial spaceports, private commercial space travel, commercial space settlements. This hasn't happened yet, However, new U.S. laws and policies have been enacted to encourage these new industries, and historically U.S. commercial space law and policy have established space industry trends. It is likely that humankind is on the brink of colonizing the outer space territory. In other words, outer space development is gradually becoming a reality, and it is starting to turn in a direction facing the free market and private property rights. Once investors have invested in new industries and this gains widespread acceptance internationally this pattern of practices could convert into a custom.

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Goldsmith, Jack L. and Eric A. Posner, *The Limits of International Law* (New York: Oxford University Press, 2005)

ENDNOTES

¹ See Carl Q. Christol, *Space Law: Past, Present, and Future* (Deventer, The Netherlands: Kluwer Law and Taxation Publishers, 1991).

² See Dissertation of Edythe Weeks, *The Politics of Space Law in a Post Cold War Era: Understanding Regime Change*, Northern Arizona University, December, 2006.

³ The term regime is used here in accordance with the literature in international relations to imply the “implicit or explicit principles, norms, rules, and decision making procedures around which actors’ expectations converge in a given area of international relations” (Krasner, 1995: 2).

⁴ See the Report of the President's Commission on Implementation of U.S. Space Exploration Policy: *A Journey to Inspire, Innovate and Discover*, ISBN 0-16-073075-9, (U.S. Government Printing Office, Washington, D.C.) (June 16, 2004). In February 2004, President Bush announced a New Vision for U.S. Space Exploration Policy. He also created a commission, the President's Commission on Implementation of United States Space Exploration Policy to advise him on matters of space travel including the Moon, Mars and other celestial bodies, and mandating the holding of a series of public hearings regarding the future of the U.S. space program in addition to creating a new U.S. Space Transportation Policy in January 2005.

⁵ The Commercial Space Launch Amendments Act of 2004, Public Law 108-492, December 2004.

⁶ National Aeronautics and Space Administration Authorization Act of 2005, Public Law 109-155 (109th Congress, 1st Session); former Senate Bill 1281 (and former House bill H.R. 3070) passed on 12/17/2005 was approved by the House with bipartisan support. In delivering a speech on the House floor in support of this bill, Representative Calvert indicated that the bill “represents the first time that the President's Vision for Space Exploration has been fully endorsed by both Houses of Congress . . .” See “NASA Authorization Act Headed to the President's Desk”, December 22, 2005 press release by Representative Calvert at spaceref.com/news.

⁷ I use the term hyper-privatization instead of privatization to suggest that the scale and intensity of divestiture being proposed of large-scale public resources including space assets, natural resources found in space, and territory in outer space. Proposals to carry out these efforts are continuously on the agenda. These types of private-sector actions regarding outer space are unprecedented. Although the second epoch saw the privatization of some space industries, it is only in the third epoch that efforts to secure ownership rights to outer space are being influenced by private-sector actors. I support this hyper-privatization assumption in detail in Chapter 5.

⁸ See Chapter 5 at pg. 339, Table 5.5, Dissertation of Edythe Weeks, *The Politics of Space Law in a Post Cold War Era: Understanding Regime Change*, Northern Arizona University, December 2006.

⁹ *Id.* at pg. 325-327 and 339-341, Tables 5.3 and 5.5.

¹⁰ Hearing testimony transcripts available at President's Commission on Moon, Mars and Beyond website:
<http://govinfo.library.unt.edu/moontomars>.

¹¹ *Id.* at Note 2.

¹² 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, 1967); The Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space (The Rescue and Return Agreement, 1968); The Convention on International Liability for Damage Caused by Space Objects (The Liability Convention, 1971); and The Convention on the Registration of Objects Launched into Outer Space (The Registration Convention, 1976). The questionable one is The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (The Moon Treaty, 1984). Only nine states (Australia, Austria, Chile, Mexico,

Morocco, The Netherlands, Pakistan, Philippines and Uruguay) have ratified it and five states (France, Guatemala, India, Peru and Romania) in addition have signed but not ratified. It only took five nations to enter it into force; however it opened for signature on December 18, 1979 and took five years to get the five requisite signatures. Conversely, The Outer Space Treaty was well received: it was ratified by ninety-six nations and signed by another twenty-seven states. See *Report of the Legal Subcommittee on Its Fortieth Session*, UN Committee on the Peaceful Uses of Outer Space, 40th Session, 22(a), United Nations' Document A/AC.105/763 (2001)

http://www.oosa.unvienna.org/Reports/AC105_763E.pdf. Since the Moon Treaty has garnered such a low level of international support, some space law experts have reasoned it is "obviously unacceptable". Kelly M. Zullo (2002), note 12, citing Eilene Galloway, "Guidelines for the Review and Formulation of Outer Space Treaties", Presentation at the International Astronautical Federation 41st International Colloquium on the Law of Outer Space, Melbourne, Australia, at 2, October 2, 1998.

¹³ David Russell Hager (1970) in *Space Law: The United Nations, and the Superpowers: A Study of International legal Development and Codification, 1957-1969*, Dissertation, University of Virginia, Ph.D. Political Science, sets forth the central hypothesis that the development and codification of space law and the "nature, scope and pace" were significantly influenced by the variables of political competition and cooperation between the superpowers. Hager (1970: 8) asserts that international law is more accurately characterized as *de lege ferenda* (that which is developing to attain the objectives contemplated for it), rather than *de lege lata* (that which is established). Hager (1970: 8) explains that international law is shaped by all the elements that compose the international system and is "reflective of the structure of the world, transnational forces, the pattern of power and the political cultures of the main actors, and the relations among the units"; also see Tanja L. Masson-Zwaan and Pablo M. Mendes de Leon

(eds.) *Air and Space Law de Lege Ferenda: Essays in Honour of Henri A. Wassenbergh* (Kluwer Academic Publishers, 1992).

¹⁴ See the Report of the President's Commission on Implementation of U.S. Space Exploration Policy: *A Journey to Inspire, Innovate and Discover*, ISBN 0-16-073075-9, (U.S. Government Printing Office, Washington, D.C.) (June 16, 2004). In February 2004, President Bush announced a New Vision for U.S. Space Exploration Policy. He also created a commission, the President's Commission on Implementation of United States Space Exploration Policy to advise him on matters of space travel including the Moon, Mars and other celestial bodies, and mandating the holding of a series of public hearings regarding the future of the U.S. space program in addition to creating a new U.S. Space Transportation Policy in January 2005.

¹⁵ Kelly M. Zullo (2002) "The Need to Clarify the Status of Property Rights in International Space Law" Volume 90 *The Georgetown Law Journal*, 2414 at 2424-2425; Virgiliu Pop (November 2000) "Appropriation in Outer Space: The Relationship Between Land Ownership and Sovereignty on the Celestial Bodies" Volume 16: Issue 4 *Space Policy*, 275-282; Nicolas Mateesco Matte (1984) "Space Activities and Emerging International Law" Report of a major research conducted by The Centre for Research of Air and Space Law, McGill University, p. 279-281.

¹⁶ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 (The Outer Space Treaty of 1967).

¹⁷ Pat Dasch, Michael Martin Smith, and Anne Pierce Director of Programs, National Space Society (1999) "Conference of Space Property Rights: Next Steps", p.174-178 and Wayne White, Jr. "Implications of a Proposal for Real Property Rights in Outer Space" p. 366-372, *Proceedings of the 42nd Colloquium on the Law of Outer Space*.

¹⁸ *Id.*

¹⁹ Wayne White, Jr. "Proposal for a Multilateral Treaty Regarding Jurisdiction and Real Property Rights in Outer Space" p. 245-253, *Proceedings of the 43rd Colloquium on the Law of Outer Space, 2000*.

²⁰ P.M. Sterns and L.I. Tennen (2002) "Privateering and Profiteering on the Moon and Other Celestial Bodies: Debunking the Myth of Property Rights in Space" World Space Conference Paper No. COSPAR 02-A-01933, Houston Texas, October, 2002; Sylvia Ospina (2002) "The Concepts of Assets and Property: Similarities and Differences, and their Applicability to Undertakings in Outer Space", *Proceedings of the 45th Colloquium on the Law of Outer Space*; Arnel Kerrest (2001) "Outer Space: Res Communis, Common Heritage or Common Province of Mankind" *Proceedings of the 10th ECSL Summer Course on Space Law and Policy*, University of Nice, France (August 27 - September 8, 2001).

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²³ Kelly M. Zullo (2002) at note 12; Glenn H. Reynolds (1992) "International Space Law: Into the Twenty-First Century" Volume 25: No. 2

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²⁴ Robert Zimmerman (July-August, 2000) "Brave New World?: American Colonial History as a Guide to Building Space Societies", *Ad Astra* 32-34; Berkley, Richard. "Intellectual Property issues in East Asia Proceedings of the 1997 Symposium: Article and Comment: Space Law Versus Space Utilization: The Inhibition of Private Industry in Outer Space." *Wisconsin International Law Journal*. 15 Spring, 1997, 421; Risley, Lawrence L. (1998) "An Examination of the Need to Amend Space Law to Protect the Private Explorer in Outer Space." *Western State University Law Review* 26: 47.

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