Courts Affirmative Wave 1

Courts 1AC – Inherency and Plan 3

Courts 1AC – OST Advantage (1/6) 4-10

Courts 1AC – Competitiveness Advantage (1/7) 10-17

Courts 1AC – Disease Advantage (1/2) 17-19

Courts 1AC – Judiciary Advantage – Courts Clog (1/3) 19-22

Courts 1AC – Judiciary Advantage – Independence (1/8) 22-30

Courts 1AC – Solvency (1/3) 30-32

**\*\* Extensions \*\*** 33

Cooperation- Scenario- Japan 34

Cooperation- Scenario- China 37

Cooperation- Scenario- Russia 40

Cooperation- Internals into other Advantages 42

Cooperation- Internal- Heg 44

Cooperation- Internal- Competitiveness 45

Cooperation- Solvency- Modeling 46

Cooperation- No Support for Current Treaties 47

Extensions- Treaty 48

Treaty- Advocate- Property Treaty 49

Treaties- OST done 50

Treaties- OST bad 51

Exploration- Extensions- Get off the Rock 52

Exploration- Extensions- Leads to Exploration 56

Exploration- Extensions- Boosts NASA 58

Exploration- Extensions- Leads to Colonies 59

Exploration- Extensions- Clean Energy 60

Exploration- Extensions- Solves Threats 61

Exploration- Extensions- Key to Rationality in Modern Era 62

Exploration- Extensions- Solves Natural Disasters 63

Exploration- Extensions- Solves Heg 64

Extensions- Economy 65

Economy- Extensions- Uniqueness 66

Economy- Extension- Bizcon Key 71

Economy- Extensions- Key to Heg 72

Economy- Extensions- Property Rights Key 73

Extensions- Mining 74

Extensions- Hegemony 76

Hegemony- Extensions- Plan Solves 77

Hegemony- Extensions- Plan Key 78

Hegemony- Extensions- Econ Internal 79

Hegemony- Extensions- Research Internal 80

Court Clog- Extensions 82

Court Clog- Extensions- Terror Impact 83

Court Clog- Extensions- CRR 85

Extensions- Judicial Independence 86

Judicial Independence- Extensions- Independence Shaky 87

Judicial Independence- Extensions- Bad suits clog courts 89

Extensions- Solvency 90

Plan --> Development Floating island theory --> development 91

Property rights key to development of space 94

Extensions- Solvency- Reverse Causal 99

Lack of rights stops development- OST 100

Lack of rights stops development 101

Solvency- Extensions- Mixing Bad 105

Solvency- Extensions- OST not cool 107

Solvency- Extensions- Current patent law isn’t cool at all 110

Solvency- Extensions- 111

Current patents--->flags of convenience 111

Flags of convenience bad 112

Solvency- Extensions- Plan Action Spills over 113

Solvency- Extensions- Floating Island Good 114

No plan --> Bad things 116

Limits R&D 117

Solvency- Extensions- Plan good 119

Settles Conflicts/Leads to Certainty and Development 120

Reduces Collision/Debris/Enters Field 121

Plan good- Private ownership would be quality controlled 122

Plan good- Environment 123

Plan good- prevents landrush 124

Plan god- Resolves IP rights and competition conflicts 125

Plan good- innovation 126

Plan good- NASA 127

Plan good- tourism 128

Plan good- war 129

Plan Good- laundry list 130

Plan doesn’t violate things 132

Plan good- Ilaw 133

Plan good- common heritage principle 134

Plan good- OST 135

Plan good- Functional property rights don’t violate ilaw 140

Plan good- COPUOS 141

Plan good- Functional sovereignty v. territorial 142

Functional Sovereignty 143

Functional rights best 144

Functional property rights okay- Gangale 145

Functional Jurisdiction 146

Courts Advocate 147

Fed key warrant- controls space commercialization 149

Fed key warrant- infrastructure 151

Resources after removal can be owned 153

Solvency advo: law of the sea analogy 154

AT: Topicality – Development 162

AT: OST DA 163

Plan’s Precedent = Good 165

Courts 1AC – Inherency and Plan

Contention One – the Status Quo:

Courts have been contradictory in their application of the Gardiner precedent of floating island territoriality to space -- need clarity to bring private investment on board.

Twibell 97. (Ty S. Twibell, JD Candidate at UMKC Law, "Space Law: Legal Restraints on Commercialization and Development of Outer Space", University of Missouri-Kansas City School of Law, 65 UMKC L. Rev. 589, Spring 1997, lexis)

The holding in Gardiner v. Howe extended jurisdiction of United States patent law to cover infringement aboard a United States flagged vessel on the ocean 201 and has been followed by more recent decisions. 202 However, some courts have disagreed on the Gardiner rationale, which supports U.S. jurisdiction on extraterritorial application of its patent laws via territorial jurisdiction or a "floating island" theory of U.S. territoriality. 203 The analogy of spacecraft floating in international space and ocean vessels floating in international waters should be apparent. The analogy in law should be the same (at least until property rights in space/celestial bodies are permitted) and there does not appear to be any reason why courts should be hesitant to bring an analogous legal structure into outer space. 204 Unfortunately, private firms planning on investing in space cannot rely on Gardiner because they "cannot be certain courts will apply its rule." 205 In sum, courts appear willing and likely to apply U.S. intellectual property rights in space, 206 however, court approval remains uncertain 207 until more disputes over discoveries in space can spawn new case law or prompt Congressional action.

Thus the plan: The United States Supreme Court, citing the Gardiner v. Howe precedent, should apply the floating island doctrine beyond the Earth’s mesosphere.

Courts 1AC – OST Advantage (1/6)

Contention \_\_ is Outer Space:

Outer Space Treaty fails- lack of specificity and inability to regulate

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

C.The Outer Space Treaty Fails to Accommodate the Post-Modernist World in Using the Medium of Outer Space The Outer Space Treaty should not be applied to the medium of outer space. n77 The biggest stumbling block of the Outer Space Treaty is Article II's non-appropriations clause and the designation of the use and benefit of space as belonging to the "province of all mankind." n78 These terms of art have been interpreted in various ways by developed and developing states. n79 Independent of either interpretation, such uncertainty in the law will not encourage the costly investments required. n80 With the privatization of outer space, investors will not seek ventures where there is inadequate or no return on investment. n81 The Outer Space Treaty's non-appropriations clause will discourage the private sector from traveling and performing appropriation activities in outer space. Although the Outer Space Treaty addresses some potential novelties in outer space exploration, its premise, as reflected in Article I, is antithetical to the realities of this market-driven world. The treaty does not encourage active commercial exploitation of space travel, but limits its influential impact to the realm of scientific exploration by governmental agencies for the common good of humankind. The Outer Space Treaty's biggest and most [\*593] profound failure is its lack of prospective thought on the impact of privatization of outer space ventures. This theme has been propounded upon by academics that view outer space's potential as truly the final frontier of humanity and wish to be there. n82 Therefore, the treaty will serve as a bar to extraterrestrial appropriations by juridical persons, and will impede outer space travel by tentatively barring space tourists, cargo ships, colonists, for-profit science, etc., from outer space. The other major problem with the Outer Space Treaty is its failure to address a wide range of issues. As the title indicates, the treaty addresses "Principles Governing the Activities of States in the Exploration and Use of Outer Space." n83 Principles serve as a guide to rule-making, but do little to provide practical solutions for space-faring nations. The Outer Space Treaty cannot serve as a proper basis for the corpus juris spatialis. The treaty fails to deal with many anticipated issues for outer space exploration. For example, the Outer Space Treaty fails to propose laws for environmental standards, immigration, distribution of appropriated materials for the benefit of mankind, role of juridical persons and/or governmental contractors in outer space, space pirates, colonization, penalties for actsagainst the Outer Space Treaty, and various jurisdictional issues. Many of the rules propounded by the Outer Space Treaty are vague and problematic. For example, Article VII states that the launch state, or state that procured the launch, retains jurisdiction and control over the launched object; n84 however, Article VII fails to anticipate launches by global corporations into outer space. n85 Likewise, astronauts are considered envoys of mankind, n86 but it is unclear if space tourists, [\*594] contractors, or juridical persons are also considered "envoys." Therefore, the Outer Space Treaty's "principles" do not adequately deal with a wide-range of potential issues, especially as they pertain to non-governmental entities.

Violations of OST inevitable- no enforcement and already happening in squo

Davidson '98 [Jim Davidson, former president of Houston Space Society, 1998, "Property in Space", http://indomitus.net/space/moon.html|AF]

Article IX A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Forget for a moment that some of the personnel within an object launched into outer space might wish to defect. Consider only the issue of how "control over such object, and over any personnel thereof" can be established and maintained. Space is very large. As Douglas Adams has said, it is really, really tremendously large. Much larger than a walk to the corner pharmacy. It takes radio frequency communications many minutes to reach Mars. During the interval while control statements are being sent, objects and people on the surface of Mars are not under the control of any nation on Earth, no matter whether that nation is a State Party to the Treaty or not. Right now, today, there are objects outside our Solar System put there by the United States. It takes radio communications hours to reach the Voyager spacecraft. There are strong indications that NASA won't keep those channels open indefinitely. There are already dozens of spacecraft placed into outer space whose power supplies have failed. The US is already in violation of the Treaty, because it does not control many of the objects placed into space. And it cannot control people and objects lightyears away, or even light minutes away. The idea is ludicrous. It suggests a power beyond reason. There is no hope of enforcing this Treaty obligation, and no penalty for failing to enforce it, so why allow it to exist?

Courts 1AC – OST Advantage (2/6)

Attempts to maintain OST will only cause nations to withdraw

Dinkin 4 – Writer for thespacereview.com, PhD, Economist (5/10/04, Sam, “Don’t wait for property rights http://www.thespacereview.com/article/179/1)

The Outer Space Treaty may be altogether moot. If an entity is first to the Moon or Mars, they have little to worry about from the perspective of pirates and free riders. No one will be there at first. If someone does take your space station, there are no cops you can call yet. It might be that the more important worry is that there are no enforcement teeth in the Outer Space Treaty. States are forbidden from the “establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers on celestial bodies”. So if someone decides to violate the Treaty and start marauding around the Moon, who will stop them? The Outer Space Treaty is not much help or hindrance to near-term development. The most likely outcome of any reasonable attempt to conduct commerce according to the treaty is that countries with any reasonable amount of space activity will withdraw from the treaty. Article 16 foresees this, “Any State Party to the Treaty may give notice of its withdrawal from the Treaty one year after its entry into force by written notification to the Depositary Governments. Such withdrawal shall take effect one year from the date of receipt of this notification.” Maybe the Outer Space Treaty is ready for us to grow up after all.

The ambiguities of the OST leave the door open for the US to interpret property rights

Alan Wasser and Douglas Jobes, \* Alan Wasser is the Chairman of The Space Settlement Institute and a former CEO of the National Space Society. He is a former member of the AIAA Space Colonization Technical Committee, former member of the Board of Directors of ProSpace, and a former Senior Associate of the Space Studies Institute. His “Space Settlement Initiative” was featured in the 2005 book RETURN TO THE MOON (Apogee Books). \*\* Douglas Jobes is the President of The Space Settlement Institute and a promoter of space exploration and settlement. He has been published in The Space Review and in the American Astronautical Society’s (AAS) SPACE TIMES magazine. For more details, see <http://www.space-settlement-institute.org/>, Journal of Air Law and Commerce Volume 73 Winter 2008 Number 1, pg. 58-61, <http://www.space-settlement-institute.org/Articles/jal73-1Wasser.pdf>, JPW

Regardless of their views on the questions raised so far, the one observation on which nearly every expert agrees is that, as space lawyer Ezra Reinstein states: The Outer Space treaty is riddled with ambiguities. It is silent, outside of affirming freedom of “exploration and use,” as to what sort of rights parties can claim in celestial bodies. It is silent as to the circumstances under which these unspecified property rights might vest, that is, what a person must do to gain whatever property right are available. 94 In fact, the framers of the Outer Space Treaty were deliberately ambiguous about private property, as opposed to nationally owned property, to allow ratification of the Treaty by both the U.S., which wanted to encourage private enterprise in space, and the U.S.S.R., which did not. 95 The U.N.’s Dr. Ogunsola Ogunbanwo, a space lawyer, is one of those who declares that the ambiguities were not only deliberate but also the right thing for the time—“This was not a pressing concern in 1967, when the Outer Space Treaty was ratified. It was perfectly acceptable at the time to consign a deeper discussion of property rights to future negotiation, as the United Nations did.” 96 As prominent space lawyer Rosanna Sattler wrote in the University of Chicago Law Review, “The provision of the Outer Space Treaty which has caused the greatest controversy and discussion is found in Article II . . . . The appropriation provision of the treaty is arguably unclear and undefined and therefore unwork- able.” 97 There is even some argument that this provision conflicts with the requirements of other multi-lateral treaties. 98 Kurt Anderson Baca goes even further. He points out that Article II’s provision on use and appropriation conflicts with other multi-lateral treaties, contradicts other parts of the Outer Space Treaty, and is so vague and ambiguous that it can only be considered an expression of a wish, rather than a binding rule on anyone. 99 The most obvious of those self-contradictions is that the very first words of the Outer Space Treaty are, “[The States Parties to this Treaty], Inspired by the great prospects opening up before mankind as a result of man’s entry into outer space, Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes . . . .” 100 Yet, by confusing the question of private property and thereby discouraging private investment, the Treaty itself has blocked that “common interest of all mankind” for more than three decades now. Unfortunately, in this kind of international law, unlike normal domestic law, there is no judge nor court with the authority to provide a binding ruling, so the difference of opinion and ambiguity will persist. 101 When a treaty is ambiguous, each signatory must interpret for itself what its obligations are. 102 Therefore, regarding the ques- tion of whether the U.S. should recognize a settlement’s claims, the opinion of the U.S. government matters most. If the government decides it would not be an exercise of sovereignty, then it would not be an exercise of sovereignty. **White points out that** The Law of Treaties states: “A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” 103 Clearly, the ordinary meaning of the term “national appropriation” is appropriation by a nation.

Courts 1AC – OST Advantage (3/6)

And, no country has clarified the OST in its national legal framework – the first country to do so sets a pattern that other countries will follow – this is proven by previous cases in international law

Alan Wasser and Douglas Jobes, \* Alan Wasser is the Chairman of The Space Settlement Institute and a former CEO of the National Space Society. He is a former member of the AIAA Space Colonization Technical Committee, former member of the Board of Directors of ProSpace, and a former Senior Associate of the Space Studies Institute. His “Space Settlement Initiative” was featured in the 2005 book RETURN TO THE MOON (Apogee Books). \*\* Douglas Jobes is the President of The Space Settlement Institute and a promoter of space exploration and settlement. He has been published in The Space Review and in the American Astronautical Society’s (AAS) SPACE TIMES magazine. For more details, see <http://www.space-settlement-institute.org/>, Journal of Air Law and Commerce Volume 73 Winter 2008 Number 1, pg. 47-52, <http://www.space-settlement-institute.org/Articles/jal73-1Wasser.pdf>, JPW

Some experts argue that the very obligation to regulate private space activities authorizes and requires states like the U.S. to establish reasonable interim regulations for private property ownership in space until a new treaty is negotiated that resolves the current ambiguities. 89 Professor Gabrynowicz proposes that the treaty could be modified by the establishment of, . . . national laws that fill in or clarify legal gaps in the international regime. Like the development of the maritime law that preceded it, the national laws of spacefaring and space-using nations can develop space law. This approach has been taken in numerous space activities: launches, telecommunications, commercial remote sensing, Earth observations and astronaut codes of conduct, among others. 90 And, she adds, “[n]ow this is a particularly relevant time for this particular route.” 91 Robert P. Merges and Glenn H. Reynolds suggest that, . . . some purely national law will emerge as a standard, or at least as a model for other countries to follow. In other legal areas, national leaders have effectively established patterns that have been followed by other countries: commercial law in the United States (as seen in the United Nations Convention on the International Sale of Goods) and patent law in Great Britain come to mind. Similarly, in the space context, other countries could adopt the basic framework devised in the pioneer country. Alternatively, private entities could specifically “opt into” coverage under the pioneer country’s laws—for example, by choice of law provisions in private contracts. 92 Thus, they argue a jurisdictionally limited legal regime could emerge as the de facto international standard. 93

New multilateral Property Treaty solves OST problems and revamps i-law

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22]

Many solutions to the problem of private property rights on celestial bodies have been provided by scholars. Unfortunately because technology and funding have not made the issue one that needs immediate resolution, proposed solutions wait until the theories are tested by practice and need in the future. There are plenty of solutions to the problems posed by the uncertainty of property rights in celestial territory that do not require an overhaul of the legal space regime. Slight additions and amendments to the current regime are far more favorable to address property concerns than are drastic upheaval of settled legal norms.121 The International Institute of Space Law advocates for the creation of a specific regime for the exploitation of such resources through the United Nations.122 The Institute states that the purposes of such a creation are clarity and legal certainty.123 As was wisely stated, “[T]he utility of law can be measured in large part by its certainty [. . .].”124 More clarification is needed because the existing treaty system was based on cold war norms, which no longer apply, and because of the growing importance of private enterprises in the space industry as a result of the Obama administration’s new approach to NASA’s funding in favor of private ventures. Creating a new treaty is in line with the practice in this area, i.e. there are a number of treaties that make up the main body of space law. Those advocating for the withdraw of the U.S. from the Outer Space Treaty fail to understand the legal scope of the main principles of the treaty.125 Article II of the treaty has likely passed into international customary law, as discussed earlier. Therefore, even non-parties to the Outer Space Treaty are bound by the principles that have passed into customary international law, one of which being Article II.126 A more practical and appropriate solution would be to create a multilateral treaty, similar to the other space law treaties, dealing particularly with the property rights of private actors. This “Property Treaty” should guarantee property rights to private actors, and craft that content of the property right using the social-obligation norm. Using the social-obligation norm as a more robust, positive theory of property over a “thin” and negative theory of property found in most liberal legal systems would appeal to a wider array of nations prompting more acceptance of the Property Treaty

Courts 1AC – OST Advantage (4/6)

Failure to regulate space would cause national competition over territory

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis]

Although the United States' presence in space is diminishing, the presence of its juridical persons is not. n112 Corporations, such as Lockheed Martin, Virgin Galactic, and the satellite industry, will continue to place valuable assets in outer space. n113 Many of these [\*599] ventures may become so profitable that, like the trade in the Sixteenth and Seventeenth centuries, n114 a small group of states which possess outer space military supremacy will desire to exclude other states, and their persons, from participating in the lucrative market for the benefit of their own citizenry. Although the United States may not lay formal claim to the vacuum of space in fee, the existence of taxes, levies, red tape, n115 and clearances may make a few select players putative owners of outer space. At least one commentator has expressed concern about the United States' possible presence in outer space. n116 Nina Tannenwald argues that the United States' military is poised for dominance by the US Space Command (Spacecom). n117 Spacecom argues that military strength is necessary to protect United States' assets in Outer Space. n118 Spacecom urges that it would protect those assets by "dominating the space dimension . . . to protect U.S. interests and investment[s] . . . and . . . integrating space forces into warfighting capabilities . . . ." n119 Tannenwald also asserts that the Bush administration is implementing procedures to assure that the United States' space assets are adequately protected. n120 With the small amount of outer space players in the world, Tannenwald's concerns are not far fetched. Continuing technological advances in propulsion, and other technological innovations, will raise the stakes to compete for extraterrestrial resources and services. This trend has already occurred within the satellite industry. n121 [\*600] Thus, it is likely that if the vast expanses of outer space are not designated as res communis, then, just as in Grotius' day, states may lay claim to vast regions of outer space in order to capture potential resources. Due to these consequences and the benefits associated with freedom of space, outer space should be considered res communis by the international community.

Space cooperation prevents escalation

Rendleman and Faulconer, **10** [James Rendleman, Col, and J. Walter Faulconer, Col, 2010, “Improving international space cooperation: Considerations for the USA”, Space Policy 26|AF]

4. Global engagement For thousands of years, tribes, then cities, states, and nations, have formed cooperative agreements, partnerships and relationships with others to promote matters of mutual interest, such as security and self defense, commerce, and humanitarian assistance. Cooperation presents an opportunity to develop dependencies among nations that may obviate conflict. Such sharing also gives a nation an opportunity to gain what may be a rare insight into what a competitor or adversary knows about space technologies and how they can be employed. This understanding can help reduce the need to prepare for doomsday scenarios where one imagines or projects the technologies that an adversary could develop, regardless of the technical merit or reality. Today, international cooperation extends to a whole host of scientific endeavors, reflecting the best spirit and intentions of the Outer Space Treaty, whose preamble calls for space to be used for “peaceful purposes.”19 This has been the hope since the beginnings of the space era. In 1955, before the very first successful space launches, cooperation was declared a centerpiece of US foreign policy strategy when the White House announced: The President has approved plans by this country for going ahead with launching of small unmanned earth-circling satellites as part of the United States participation in the International Geophysical .This program will for the first time in history enable scientists throughout the world to make sustained observations in the regions beyond the earth’s atmosphere.20 The full realization of cooperation’s promise occurred nearly four decades later with the end of the ColdWar. Space and Earth science research and space exploration were no longer constrained by an overarching competition between two superpowers. Capitalizing on opportunities and leveraging the expertise of other nations, those seeking to jumpstart or advance their scientific initiatives rushed into the new multi-polar world creating a surplus of international space alliances and partnerships.21 The USA is continuing this trend by reaching out more constructively to large nuclear global powers like India and China, in the hope that such engagement shapes their future space and engineering activities in positive directions. Of course, a nation’s decision to engage in space cooperation is very much a political decision. Nations pick and choose if, when, where, and how they expend their national treasure. They choose the manner and extent of their foreign investments for reasons both known and unknownto other nations. The only constant is that a decision to “join in” cooperation is, in every case, a calculated political decision by each potential member of a

[CARD CONTINUES ON NEXT PAGE… NO TEXT OMITTED]

Courts 1AC – OST Advantage (5/6)

[CONTINUED FROM PREVIOUS PAGE…]

commercial partnership or alliance, or inter- or quasi-governmental structure. Private commercial investments are nearly always controlled at a national level, usually by the force of domestic (municipal) law, regulation, or licensing.22 National decision-making influences commercial and government entity governing structures. Accordingly, some space capabilities will be funded, developed, and offered if and only if they are strictly operated and controlled under specific national direction and within strategic national guidelines. Thus, military space cooperation tends to occur only when overarching national security military and intelligence community interests are satisfied. In contrast, international civil cooperation generally wins internal national political support for a different set of reasons: that is, if the cooperation generates national diplomatic prestige, provides for political sustainability, or enables workforce stability.23 Cooperation provides opportunities for a nation to demonstrate its international leadership and technical prowess. For example, India has used its recent launches to host payloads from a number of international partners. South Korea is leveraging Russian launch technology to attempt space launches of satellites in support of its dream to become a “top ten” space fairing nation. Russia and China launch satellites for much of the global space faring community. Ultimately, support for cooperation and collaboration increases when the perceived utility and diplomatic prestige derived from cooperation increases. A demonstration of the utility of diplomatic prestige gained from space cooperative endeavors can be seen in the Apolloe Soyuz space link-up (1975) and Space Shuttlee Mir docking (1995) missions, though not for reasons contained in the public pronouncements by the participants Their true and complex diplomatic utility was not made apparent for many years. As described by James Oberg: Only with the Soviet program at a standstill did Moscow agree to fly a joint orbital mission. Its fallback position was that if it couldn’t be Number One in space, it could at least pose as the equal partner of the new Number One, the United States. It was better than letting on how far behind its space program had fallen.24 4.2. Political sustainability International cooperation has the wonderful, if sometimes wasteful, capacity to increase the political will to sustain and fund space programs and associated budgets. As noted, cooperation provides a spacefaring state the basis to draw on additional resources. It also enables a program to weather attempts to rein it in even when faced with contentious and devastating cost-growth or budget realities (which most space programs invariably face). Thus, within the USA, a program often wins some sanctuary from cancellation threats or significant budget reductions to the extent that Congress and the administration feel compelled not to break, stretch, or withdraw from international agreements. Political good will is generated by funding these programs. As an example of the power of this good will, one only need look at the politics surrounding NASA’s manned program. Money has been allocated to the program even when the perceived justification has collapsed. Now the new internationalist US president doesn’t care much for the NASA manned mission, and has even less understanding of its science mission. But critics concede that the president sees value in the votes its engineering and contractor community represents, key especially in vote rich states such as Florida which serve as a nexus for manned US launches. Similarly, some reason the political and diplomatic integration of Russia into the ISS program may well have saved it and Space Shuttle programs from cancellation.25 Once cooperation has commenced, canceling a program becomes inconsistent with political sustainability as long as the utility cost associated with the loss of diplomatic benefits and the negative effects on reputation of terminating an international agreement is larger in magnitude than the utility cost that must be paid to maintain the system. In general, any unilateral action sends a signal that the actor is an unpredictable and therefore an unreliable and possibly disrespectful partner. This tends to sabotage the possibility of future cooperation.26 If significant cooperation has never previously occurred, its commencement is thought to be a defining event, delivering specific political rewards and diplomatic utility. This is why the recent pronouncements on space cooperation made by President Obama and Chinese officials during his November 2009 visits are being watched with special interest. The same attention is being paid to the discussions held with the Indian government and its space community. During the height of the Cold War the USA and the USS Rwere able to find common ground to press on with the Apolloe Soyuz mission despite longstanding security concerns. Perhaps similar common ground can be found with the Chinese. Lamentably, space cooperation between the two countries has thus far been only marginal given the strict security controls that needed to be imposed. The Chinese, like many others, are exploiting space technologies to improve missile systems that can deliver weapons of mass destruction and they are stealing every technology they can get their hands on. China has now tested a kinetic-kill anti-satellite weapon system.

Courts 1AC – OST Advantage (6/6)

A strong legal system in space is key to check nuclear conflict

Law Library - American Law and Legal Information, 3/9/10, “Space Law”, <http://law.jrank.org/pages/19073/Space-Law.html>

Coming as it did in the middle of the Cold War, the dawn of the space age created two major fears. The first was that space might become an arena for expanded military conflict, with nuclear bombs stationed in orbit, ready to be dropped at short notice on those below. The second was that a scramble for territory and resources in space, akin to the scramble for African colonies in the late nineteenth century, might increase tensions to the point where they would touch off a nuclear war on earth. These issues were addressed by the 1967 Outer Space Treaty. In addition to addressing a number of important issues regarding liability, registration of spacecraft, and treatment of stranded astronauts, the Treaty had two major provisions. Article II provided that outer space would not be subject to “national appropriation,” meaning that nations could not claim the Moon or other celestial bodies as national territory. And Article IV provided that nations could not place nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies. The provision was drafted this way so as to permit ballistic missiles, which pass through space but do not enter orbit. The Outer Space Treaty prohibited national appropriation, but not private property rights. The 1979 Moon Treaty sought to ban private property rights in outer space, and to subject any resource extraction to international controls. Although that treaty is now in force, its signatories include no space powers, making its impact minimal. At present, although national appropriation is forbidden, private claims to space resources remain possible. This is likely to become an issue of importance by the second decade of the twenty-first century, as private space missions grow more ambitious and more capable.

Courts 1AC – Competitiveness Advantage (1/7)

Contention \_\_ is Competitiveness:

Economy on downturn now- laundry list of indicators

Blumer 11, [Tom Blumer, 7/23/11, “The Fear-Based Economy”, Benzinga, http://www.benzinga.com/11/07/1795091/the-fear-based-economy#ixzz1T4Pr4O58]

In July 2008, yours truly christened the economic conditions America began facing roughly a month earlier as the POR (Pelosi-Obama-Reid) Economy, named after its primary creators: House Speaker Nancy Pelosi, Democratic presidential nominee Barack Obama, and Senate Majority Leader Harry Reid. In a comment at that original post, I noted that the economy's job and wealth creators were “genuinely frightened by the lack of seriousness and presence of abject irresponsibility in Congress and in Obama.” This fright went viral long ago but remained whispered in carefully chosen company until Wynn broke the silence. When an earnings call participant asked why his firm hasn't expanded its meeting space in Las Vegas, Wynn responded: I'm afraid to do anything in the current political environment in the United States. … my customers and the companies that provide the vitality for the hospitality and restaurant industry, in the United States of America, they are frightened of this administration. And it makes you slow down and not invest your money. … this is Obama's deal, and it's Obama that's responsible for this fear in America. Why shouldn't the economy's key players be afraid? In 2-1/2 years, Barack Obama and his administration have shown that they will do anything in their power — even if not in their constitutional power — to further their far-left redistributionist and science-free environmental goals. If it means subverting the rule of law to favor bankrupt union-dominated car companies, so be it. If it means shutting down oil drilling and exploration in the Gulf of Mexico and restoring it in slow motion at a cost of tens of thousands of jobs, well, that's unfortunate collateral damage. If it means revoking an already-issued permit for coal mining, too bad, so sad. In Wynn's case, if it means demonizing convention and tourist spots when the timing fits, well, as far as Team Obama is concerned, his company will just have to deal with it. Why should Wynn even think about adding meeting rooms when at any politically convenient moment, Obama can and has shown at least twice that he will demonize a key travel destination? More broadly, Wynn was speaking for the entire economy's most productive participants: the businesspeople, entrepreneurs, and investors who drive commerce, create wealth and create jobs. As long as Barack Obama is president and his apparatchiks remain in control of their expanding bureaucracies and unaccountable czardoms, fear and intimidating uncertainty will rein. Wynn's stated indisputable truth must be at the core of the current debt ceiling, tax, and spending negotiations taking place in Washington. It has long been known and accepted, with proof going all the way back to Herbert Hoover's ill-conceived actions in the early 1930s, that tax increases will at a minimum prevent an economy attempting a recovery from reaching its full potential. At worst, they will send it back into recession. Additional tax increases in the current economy will create an overwhelming danger of another recession and a subsequent malaise which could rival the Great Depression. Did I say, “additional tax increases”? Well, yes. The Wall Street Journal helpfully reminded us on July 11 that tax hikes associated with Obamacare amounting to $438 billion over the next 10 years will begin taking effect in 2013. Of course, these impending levies, the legislation's stifling bureaucracy and disastrous work disincentives have been hanging over employers' growth and hiring plans since Pelosi, Reid, and Obama made it law 16 months ago. As if we needed more problems, make no mistake: The economy, which has failed to grow at the brisk pace required for a genuine recovery in employment since the end of the recession, has shown signs of serious deterioration in the past few months. Here are just a few of the indicators: •In May and June combined, seasonally adjusted employment grew by only 43,000, while the unemployment rate rose in both months. •The new-home market has barely budged from its historic lows. •Consumer confidence is at its lowest level since March 2009, one of the worst months of the recession. •The director of the widely read Consumer Reports Index stated his belief last week in a radio interview that that seeing the unemployment rate hit 9.6% in the next few months “is not out of the question.” •In mid-July, announced U.S. layoffs and terminations at Cisco and Borders alone were within striking distance of the number of seasonally adjusted jobs the whole economy gained in June. •On Friday evening, July 15, the better to avoid attracting much attention, Goldman Sachs dropped its annualized second- and third-quarter growth forecasts to 1.5% and 2.5%, respectively, and indicated that another recession is “clearly a possibility given the recent numbers.” Putting its employment practices where its predictions are, Goldman announced on Tuesday that “it might lay off as many as 1,000 employees globally.” •Most germane to the Washington discussions is the fact that federal collections, after rising steadily if not spectacularly for about a year, suddenly fell on a year-over-year basis in June.

Courts 1AC – Competitiveness Advantage (2/7)

Extraterrestrial property rights are key to investment needed for space development

Sattler ‘4 Rosanna Sattler Chair of the firm’s Space Law and Telecommunications Group Esquire, [“TRANSPORTING A LEGAL SYSTEM FOR PROPERTY RIGHTS FROM THE EARTH TO THE STARS”]

In addition to financial incentives, the report recommends protecting and securing the property rights of private industry in space. However, the report offers little specific direction as to how property rights in space are to be created and protected, though it does point out that two treaties, the Outer Space Treaty and the Moon Treaty,17 exist that may make such ownership difficult. In fact, the report states: Because of this treaty regime, the legal status of a hypothetical private company engaged in making products from space resou rces is uncertain. Potentially, this uncertainty could strangle a nascent space-based industry in its cradle; no company will invest millions of dollars in developing a product to which their legal claim is uncertain. The issue of private property rights in space is a complex one involving national and international issues. However, it is imperative that these issues be recognized and addressed at an early stage in the implementation of the vision, otherwise there will be little significant private sector activity associated with the development of space resources, one of our key goals.18 (Emphasis added) The implementation of the President’s vision requires an overhaul of the current treaties and laws that govern property rights in space in order to develop better and more workable models that will stimulate commercial enterprise on the Moon, asteroids and Mars. The expansion of a commercial space sector to include activities on celestial bodies requires the establishment of a regulatory regime designed to enable, not inhibit, new space activity. The development of specific laws, which are consistently applied, will create a reliable legal system for entrepreneurs, companies and investors. The establishment of a reliable property rights regime will remove impediments to business activities on these bodies, and inspire the commercial confidence necessary to attract the enormous investments needed for tourism, settlement, construction and business development, and for the extraction and utilization of resources.

4 internals into growth. First, space property rights are key business confidence and space development

Cherian & Abraham ‘7 Jijo George Cherian & Job Abraham [National University of Advanced Legal Studies, Kerala, India]

In January 2004, the US President George W. Bush announced his vision for the future of space exploration and the development of space resources and infrastructure and created the Commission on Implementation of United States Exploration Policy which recommends that Congress increase the potential for commercial opportunities related to the national space exploration vision by: 1) providing incentives for entrepreneurial investment in space; 2) creating significant monetary prizes for the accomplishment of space missions and/or technology developments; and 3) assuring appropriate property rights for those who seek to develop space resources and infrastructure. The report also recommends protecting and securing the property rights of private industry in space and recognizes that the issue of private property rights in space is a complex one involving national and international issues (Presidents Comm., 2004). A general view in this regard is that the implementation of this vision requires an overhaul of the current treaties and laws that govern property rights in space in order to develop better and more workable models that will stimulate commercial enterprise on the moon, asteroids, and Mars. The expansion of a commercial space sector to include activities on celestial bodies requires the establishment of a regulatory regime designed to enable, not inhibit, new space activity. The development of specific laws, which are consistently applied, will create a reliable legal system for entrepreneurs, companies, and investors. The establishment of a reliable property rights regime will remove impediments to business activities on these bodies and inspire the commercial confidence necessary to attract the enormous investments needed for tourism, settlement, construction, and business development, and for the extraction and utilization of resources (Rosanna S., 2005). The working of the International Space Station (“ISS”) and the International Telecommunications Union (“ITU”) is showcased as the steps to be emulated in order to achieve a workable framework, so as to recognize some form of property rights in space. The Antarctica Treaty model (Antarctica Treaty System, 1959) is also another approach that is said to be adaptable with regard to space laws. All these developments showcase a growing need to address the concept of property rights in space law. In addition, space exploration is no more limited to nations alone, and neither confined to realm of science fantasy only. Commercial activities in space are gaining momentum, (Micheal C., 2004) and more and more participation of private individuals is the need of the hour, for which an explicit recognition of property rights is a necessity.

Courts 1AC – Competitiveness Advantage (3/7)

Bizcon key to economy

Boston 03, [Thomas D. Boston, Boston Research Group, member of the Black Enterprise Board of Economists and conducts research for the ING Gazelle Index, 2003, “Confidence is key: economist cites the important of business outlook to recovery- The Economy & You”, http://findarticles.com/p/articles/mi\_m1365/is\_6\_33/ai\_95845058/]

Trying to jump-start the economy by reducing interest rates even further is like pushing on a string. Despite the fact that the Federal Reserve has lowered the federal funds rate to 1.75%, its lowest level in 40 years, the Index of Leading Economic Indicators (the measure used to gauge the future health of the economy) has declined for four consecutive months. Why is the economy so anemic? One major reason is declining consumer and business confidence. Think of it this way: Suppose you decide to make a major purchase, such as a house or automobile. If the price has been determined, two additional factors are likely to figure prominently in your decision to make the purchase. The first factor is the interest rate, which is nothing more than the cost of borrowing money. The second factor is how confident you are about your future earnings. For example, if you are concerned about job security, you are not likely to make the purchase, no matter how low interest rates might be. The same logic holds for business owners deciding whether to undertake a new investment. While interest rates are important because they affect the total return on capital invested, if business owners are pessimistic about future economic activity, even low interest rates will not be attractive enough to make them invest. Over the past year, business owners have been more wary than consumers, so investments have lagged. Fortunately, consumer spending has carried the economy forward--even though consumers are facing record levels of debt. But the situation has changed over the last three months. The growing number of job losses has caused consumers to become cautious. As a result, if the economy is to improve, investment must pick up. But low interest rates alone will not get the job done. Rather, the key index to watch is business confidence. The Gazelle Index, a survey of 350 of the nation's fastest growing black-owned businesses as measured by workforce growth rates, took a sharp drop, from 67.7 to 49.5, between the second and third quarters. An index value below 50 indicates that business owners are more negative than positive about economic conditions. Why is the index value important? When business leaders are concerned about the economy, they reduce hiring, which contributes to higher unemployment rates. The ING Gazelle Index has identified several factors contributing to this trend. These factors include revelations about corporate fraud, gyrating stock market values, and the fear of a double-dip recession. As these factors improve, investors are likely to gain more confidence in the economy.

Second, world economy is dependent upon space resources from commercial space ventures

Collins & Autino ‘8 Patrick Collins PhD, well known and respected authority on space economics, space tourism, reusable launch vehicles Adriano Autino President of the Space Renaissance Initiative. 2008 “What the Growth of a Space Tourism Industry Could Contribute to Employment, Economic Growth, Environmental Protection, Education, Culture and World Peace”

The continuation of human civilisation requires a growing world economy, with access to increasing resources. This is because competing groups in society can all improve their situation and reasonable fairness can be achieved, enabling social ethics to survive, only if the overall "economic pie" is growing. Unfortunately, societies are much less robust if the "pie" is shrinking, when ethical growth becomes nearly impossible, as competing groups try to improve their own situation at the expense of other groups. Continued growth of civilisation requires continual ethical evolution, but this will probably be possible only if resources are sufficient to assure health, comfort, education and fair employment for all members of society. The world economy is under great stress recently for a number of reasons, a fundamental one being the lack of opportunities for profitable investment—as exemplified by Japan's unprecedented decade of zero interest-rates. This lack of productive investment opportunities has led a large amount of funds in the rich countries to "churn" around in the world economy in such forms as risky "hedge funds", causing ever greater financial instability, thereby further weakening economic growth, and widening the gap between rich and poor. Increasing the opportunities for profitable, stable investment requires continual creation of new industries [16]. Governments today typically express expectations for employment growth in such fields as information technology, energy, robotics, medical services, tourism and leisure. However, there are also sceptical voices pointing out that many of these activities too are already being outsourced to low-cost countries which are catching up technologically in many fields [20]. Most of the new jobs created in the USA during the 21st century so far have been low-paid service work, while the number of US manufacturing jobs has shrunk rapidly [21]. It is thus highly relevant that aerospace engineering is a field in which the most technically advanced countries still

[CARD CONTINUES ON NEXT PAGE… NO TEXT OMITTED]

Courts 1AC – Competitiveness Advantage (4/7)

[CONTINUED FROM PREVIOUS PAGE…]

have a substantial competitive advantage over later developing countries. Hence, if a commercial space travel industry had already been booming in the 1980s, the shrinkage in aerospace employment after the end of the "cold war" would have been far less. Consequently it seems fair to conclude that the decades long delay in developing space travel has contributed to the lack of new industries in the richer countries, which is constraining economic growth and causing the highest levels of unemployment for decades. The rapid economic development of China and India offers great promise but creates a serious challenge for the already rich countries, which need to accelerate the growth of new industries if they are to benefit from these countries' lower costs without creating an impoverished under-class in their own societies. The long-term cost of such a socially divisive policy would greatly outweigh the short-term benefits of low-cost imports. The development of India and China also creates dangers because the demands of 6 billion people are now approaching the limits of the resources of planet Earth. As these limits are approached, governments become increasingly repressive, thereby adding major social costs to the direct costs of environmental damage [22]. Consequently, as discussed further below, it seems that the decades-long delay in starting to use the resources of the solar system has already caused heavy, selfinﬂicted damage to humans' economic development, and must be urgently overcome, for which a range of policies have been proposed in [23,24].

This solves resource wars and neo-con war mongering

Collins & Autino ‘8 Patrick Collins PhD, well known and respected authority on space economics, space tourism, reusable launch vehicles Adriano Autino President of the Space Renaissance Initiative. 2008 “What the Growth of a Space Tourism Industry Could Contribute to Employment, Economic Growth, Environmental Protection, Education, Culture and World Peace”

Although the use of extra-terrestrial resources on a substantial scale may still be some decades away, it is important to recognise that simply acknowledging its feasibility using known technology is the surest way of ending the threat of resource wars. That is, if it is assumed that the resources available for human use are limited to those on Earth, then it can be argued that resource wars are inescapable [22,37]. If, by contrast, it is assumed that the resources of space are economically accessible, this not only eliminates the need for resource wars, it can also preserve the benefits of civilisation which are being eroded today by "resource war-mongers", most notably the governments of the "Anglo-Saxon" countries and their "neo-con" advisers. It is also worth noting that the $1 trillion that these have already committed to wars in the Middle-East in the 21st century is orders of magnitude more than the public investment needed to aid companies sufficiently to start the commercial use of space resources.

Third, Space industry is key to employment – solves the econ

Collins & Autino ‘8 Patrick Collins PhD, well known and respected authority on space economics, space tourism, reusable launch vehicles Adriano Autino President of the Space Renaissance Initiative. 2008 “What the Growth of a Space Tourism Industry Could Contribute to Employment, Economic Growth, Environmental Protection, Education, Culture and World Peace”

In most countries, most of the population do not have economically significant land holdings, and so employment is the economic basis of social life, providing income and enabling people to have stable family lives. The high level of unemployment in most countries today is therefore not only wasteful, it also causes widespread poverty and unhappiness, and is socially damaging, creating further problems for the future. One reason for investing in the development of passenger space travel, therefore, is that it could create major new fields of employment, capable of growing as far into the future as we can see. As of 2001, the hotel, catering and tourism sector was estimated to employ 60 million people world-wide, or 3% of the global workforce, and 6% of Europeans [15]. Hence we can estimate that the passenger air travel industry, including airlines, airports, hotels and other tourismrelated work, indirectly employs 10–20 times the number of people employed in aircraft manufacturing alone. Likewise, passenger space travel services could presumably create employment many times that in launch vehicle manufacturing—in vehicle operations and maintenance, at spaceports, in orbiting hotels, in many companies supplying these, in services such as staff training, certification and insurance, and in a growing range of related businesses. This possibility is particularly valuable because high unemployment, both in richer and poorer countries, has been the major economic problem throughout the world for decades. Consequently the growth of such a major new market for advanced aerospace technology and services seems highly desirable, as discussed further in [16].

Courts 1AC – Competitiveness Advantage (5/7)

Space industry solves all impacts

Collins & Autino ‘8 Patrick Collins PhD, well known and respected authority on space economics, space tourism, reusable launch vehicles Adriano Autino President of the Space Renaissance Initiative. 2008 “What the Growth of a Space Tourism Industry Could Contribute to Employment, Economic Growth, Environmental Protection, Education, Culture and World Peace”

The authors argue that the creation of a popular new industry of passenger space travel could be economically and socially very beneficial in creating new employment in aerospace and related fields in order to supply these services. In doing so, the application of nearly a half-century of technological development that has yet to be used commercially could create many new aerospace engineering business opportunities. In addition, by growing to large scale, space tourism has unique potential to reduce the cost of space travel sharply, thereby making many other activities in space feasible and profitable. The paper discusses the scope for new employment, stimulating economic growth, reducing environmental damage, sustaining education particularly in the sciences, stimulating cultural growth, and preserving peace by eliminating any need for "resource wars".

Fourth, Space tech leadership ensures economic strength for the future

**NASA ’11** National Aeronautic and Space Administration “Fiscal Year 2012” NASA

Space Technology creates new space technologies that enable exploration, scientific discovery, and a stronger economic future. The FY 2012 budget request for Space Technology is $1,024.2 million. Technology improves our lives every day, and yet, U.S. leadership in technology development is under attack, a fact that has serious implications for the Nation’s global competiveness and economy. Recognizing that a technology-based economy is a robust one, the President has challenged Federal agencies to strengthen their investments in new technology development and innovation. NASA’s Space Technology develops critical space technologies through multi-phased technology development efforts, demonstrations, competitive opportunities, and partnerships. These strategies engage the creativity and problem-solving nature of the Nation’s brightest minds, whether they work in Government, industry, academia, or a backyard workshop. Space Technology provides the technological advances required for NASA's future missions in science and exploration while also creating advances that can lower costs and improve capabilities of other government agency and commercial space activities. These investments will stimulate the economy and build the Nation's global economic competitiveness through the creation of new products and services, new business and industries, and high-quality, sustainable jobs. NASA history of technology transfer proves that that space-derived technologies, tools, and processes have applications for commercial markets. NASA’s Small Business Innovation Research and Small Business Technology Transfer programs encourage small businesses to participate in the Agency’s technology research and development work. In FY 2012, NASA will increase maximum award levels to $150,000 for Phase 1 research, and to $1 million for Phase 2 activities. This increased Agency commitment to engaging small business in research and development will encourage creativity and innovation in companies that might not otherwise be drawn to NASA and space exploration. Increased engagement by U.S. industry will improve the technological position of the U.S. and help to build a robust space commercial market.

Courts 1AC – Competitiveness Advantage (6/7)

**Continued economic downturn will lead to wars and extinction**

**Mead 09.**

### [Walter Russell, Senior Fellow in U.S. Foreign Policy at the Council on Foreign Relations, New Republic, February 4, [http://www.tnr.com/politics/story.ht...83915f5f8&p=2]](http://www.tnr.com/politics/story.html?id=571cbbb9-2887-4d81-8542-92e83915f5f8&p=2%5d)

So far, such half-hearted experiments not only have failed to work; they have left the societies that have tried them in a progressively worse position, farther behind the front-runners as time goes by. Argentina has lost ground to Chile; Russian development has fallen farther behind that of the Baltic states and Central Europe. Frequently, the crisis has weakened the power of the merchants, industrialists, financiers, and professionals who want to develop a liberal capitalist society integrated into the world. Crisis can also strengthen the hand of religious extremists, populist radicals, or authoritarian traditionalists who are determined to resist liberal capitalist society for a variety of reasons. Meanwhile, the companies and banks based in these societies are often less established and more vulnerable to the consequences of a financial crisis than more established firms in wealthier societies. As a result, developing countries and countries where capitalism has relatively recent and shallow roots tend to suffer greater economic and political damage when crisis strikes--as, inevitably, it does. And, consequently, financial crises often reinforce rather than challenge the global distribution of power and wealth. This may be happening yet again. None of which means that we can just sit back and enjoy the recession. History may suggest that financial crises actually help capitalist great powers maintain their leads--but it has other, less reassuring messages as well. If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, butthe Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

Experts agree – privatization is key to space power

Nelson ’11 Steven Nelson writes for the Daily Caller ews website based in Washington, D.C., United States with a focus on politics, original reporting, breaking news “Fiscal conservatives call for increased privatization of space” The Daily Caller

Members of the task force issued several recommendations to Congress, including finding an American replacement to the Space Shuttle (so to minimize the costly expenditures on use of Russian spacecraft) and encouraging more private investment in the development of manned spacecraft. Former Republican Rep. Robert S. Walker of Pennsylvania said, “If we really want to ‘win the future’, we cannot abandon our commitment to space exploration and human spaceflight. The fastest path to space is not through Moscow, but through the American entrepreneur.” Task Force chairman Rand Simberg, of the Competitive Enterprise Institute, said, “By opening space up to the American people and their enterprises, NASA can ignite an economic, technological, and innovation renaissance, and the United States will regain its rightful place as the world leader in space.”

Courts 1AC – Competitiveness Advantage (7/7)

US military power prevents escalation and all scenarios of global conflict.

Thayer 6 (Bradley A., Prof of Defense and Strategic Studies @ Missouri State University, “In Defense of Primacy.,” National Interest; Nov/Dec2006 Issue 86, p32-37)

Throughout history, peace and stability have been great benefits of an era where there was a dominant power--Rome, Britain or the United States today. Scholars and statesmen have long recognized the irenic effect of power on the anarchic world of international politics. Everything we think of when we consider the current international order--free trade, a robust monetary regime, increasing respect for human rights, growing democratization--is directly linked to U.S. power. Retrenchment proponents seem to think that the current system can be maintained without the current amount of U.S. power behind it. In that they are dead wrong and need to be reminded of one of history's most significant lessons: Appalling things happen when international orders collapse. The Dark Ages followed Rome's collapse. Hitler succeeded the order established at Versailles. Without U.S. power, the liberal order created by the United States will end just as assuredly. As country and western great Ral Donner sang: "You don't know what you've got (until you lose it)." Consequently, it is important to note what those good things are. In addition to ensuring the security of the United States and its allies, American primacy within the international system causes many positive outcomes for Washington and the world. The first has been a more peaceful world. During the Cold War, U.S. leadership reduced friction among many states that were historical antagonists, most notably France and West Germany. Today, American primacy helps keep a number of complicated relationships aligned--between Greece and Turkey, Israel and Egypt, South Korea and Japan, India and Pakistan, Indonesia and Australia. This is not to say it fulfills Woodrow Wilson's vision of ending all war. Wars still occur where Washington's interests are not seriously threatened, such as in Darfur, but a Pax Americana does reduce war's likelihood, particularly war's worst form: great power wars. Second, American power gives the United States the ability to spread democracy and other elements of its ideology of liberalism: Doing so is a source of much good for the countries concerned as well as the United States because, as John Owen noted on these pages in the Spring 2006 issue, liberal democracies are more likely to align with the United States and be sympathetic to the American worldview.( n3) So, spreading democracy helps maintain U.S. primacy. In addition, once states are governed democratically, the likelihood of any type of conflict is significantly reduced. This is not because democracies do not have clashing interests. Indeed they do. Rather, it is because they are more open, more transparent and more likely to want to resolve things amicably in concurrence with U.S. leadership. And so, in general, democratic states are good for their citizens as well as for advancing the interests of the United States.

Courts 1AC – Disease Advantage (1/2)

Contention \_\_ is Disease:

Patent law limits development- reduces incentives for companies to innovate

Kurt G. Hammerle is an intellectual property attorney for the National Aeronautics and Space Administration et al. i 3-18-2011 [Matthew Kleiman is Corporate Counsel at the Draper Laboratory, Theodore (Ted) Ro is an intellectual property attorney at Johnson Space Center ,“PATENT INFRINGEMENT IN OUTER SPACE IN LIGHT OF 35 U.S.C. § 105: FOLLOWING THE WHITE RABBIT DOWN THE RABBIT LOOPHOLE”, http://bujostl.org/content/WORKING\_PATENT\_INFRINGEMENT\_IN\_OUTER\_SPACE.pdf]

The foregoing discussion has shown how the §105(a) Exceptions have created a loophole in U.S. patent law that could permit private entities to insulate themselves from patent infringement liability in the United States for their outer space operations under circumstances wherein they might otherwise be liable under current U.S. extraterritorial principles. This loophole poses at least two problems. First, allowing companies to avoid liability for infringing U.S. patents could hamper the effectiveness of the U.S. patent system. Patents traditionally play an important role in promoting high technology research and innovation. An ineffective patent system could reduce incentives for private space companies to innovate and cause space companies to protect their inventions as trade secrets instead of disclosing them to the public in patent filings. 78 Second, while a purpose of Exception 2 is to recognize and defer to the United States’ obligations under the Outer Space Treaty and the Registration Convention, it is unclear whether completely deferring to the Registration Convention was actually required in order to accomplish this goal. In fact, entirely ceding responsibility for patent infringement by space objects that . are operated by U.S. persons or companies may be inconsistent with the United States’ obligations under the Outer Space Treaty. To examine this view further, consider, as stated supra, that the Outer Space Treaty provides that “a State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space.” 79 Although the language “shall” suggests a mandatory edict is being placed on the launching State, with respect to “retain jurisdiction,” neither the Outer Space Treaty nor the Registration Convention requires that the designated launching State exercise exclusive jurisdiction over its registered space objects. The failure of the Outer Space Treaty to vest a single state with exclusive jurisdiction over space objects seems intentional when compared with language in the 1959 Convention on the High Seas, which provides that “Ships shall sail under the flag of one State only and, save in exceptional cases expressly provided for in international treaties or in these articles, shall be subject to its exclusive jurisdiction on the high seas.” 80 By contrast, the language in article VIII of the Outer Space Treaty is much less restrictive. Further support in the view that the State of Registry does not necessarily have exclusive jurisdiction over its registered space objects can be found by the fact that the Registration Convention seems to encourage creative jurisdictional arrangements when there are multiple potential launching States. Specifically, the Registration Convention states that the determination of the launching State shall be made “without prejudice to appropriate agreements concluded or to be concluded among the launching States on jurisdiction and control over the space object and over any personnel thereof.” 81 A 1986 report by the U.S. Congressional Office of Technology Assessment even speculated that this provision of the Registration Convention could be a basis upon which to establish joint jurisdiction under the Registration Convention for the then‐proposed international space station. 82

**Independently, Private space research is key to medical breakthroughs – government fails**

Taylor Dinerman, 4/23/07, The Space Review, <http://www.thespacereview.com/article/856/1>

The US space agency is just not in the business of developing new medicines. It conducts a lot of biomedical research, but it does so more for the sake of science than with any well-defined business goals in mind. The messy and disorganized nature of basic research is hard to fit into the disciplined, step-by-step procedure mandated by the FDA. To criticize NASA for this is like blaming a bear for not being a gazelle. Only the private sector has the right set of motivations and resources to effectively exploit the medical research possibilities inherent in the ISS. The SPACEHAB corporation, based in Texas, aims to be the premier space medical manufacturing company. After nearly being delisted from the NASDAQ exchange and flirting with bankruptcy after the Columbia disaster, this company hopes to reinvent itself as entrepreneurial space manufacturer, rather than as a NASA service provider.

Courts 1AC – Disease Advantage (2/2)

Strong patent protection is the key internal link to solving lethal diseases

Roger Bate, and Richard Tren, resident fellows at the American Enterprise Institute and director of Africa Fighting Malaria, July 2001, International Policy Network, “TRIPS and Healthcare: Rethinking the Debate-Malaria and Patents”, http://www.policynetwork.net/sites/default/files/rethinking\_the\_debate\_0701.pdf

The public sector and donor organisations in wealthy countries are providing substantial funding for malaria research, especially for vaccine development. In the past six months Johns Hopkins University received an anonymous donation of $100 million dollars, and the Gates Foundation gave at least $45 million to the London School of Hygiene and Tropical Medicine for vaccine and drug research . And these are not the only initiatives. This is great news for basic research and is certainly welcome, but breakthroughs in basic science will not lead to innovative new products that are thoroughly tested without the right incentives being in place for the companies that specialise in that part of the drug development process. Governments have shown themselves to be largely incapable of bringing new drugs to market. Although as the public private partnership involved in Mefloquine discovery discussed above demonstrates, they can play a critical role in the early stages. But in addition to this role, governments can change incentives for those better placed to transform relatively untested chemicals into viable pharmaceuticals. In addition to strong product patent protection, such incentives include tax breaks, guaranteed markets and prizes (see Morris 2001 for a discussion of these possibilities). Speeding up the process for approval of medicines also encourages development of new drugs - just as slowing it down hinders it. Some pharmaceutical companies are withdrawing drug trials from South Africa largely because of the inordinately long time that the South African Medicines Control Council (MCC) takes to approve the trials (Kirkman, 2001). Also removal of taxation on drugs would substantially lower prices and increase effective demand. Governments can in principle provide the right institutional environment for research and development. That includes strong product patent protection and swift regulatory approval procedures. Even though AIDS is a major disaster, and solutions must be found (although prevention may be the only solution for the foreseeable future), it would be a greater disaster to remove the incentive for drug companies to develop new drugs for AIDS and other diseases that primarily affect people in poor countries. In short, patent protection is a necessary, although not sufficient, condition to drive drug development.

Pandemics cause extinction

Frank Ryan, M.D., Virus X, 1997, p. 366

How might the human race appear to such an aggressively emerging virus? That teeming, globally intrusive species, with its transcontinental air travel, massively congested cities, sexual promiscuity, and in the less affluent regions — where the virus is most likely to first emerge — a vulnerable lack of hygiene with regard to food and water supplies and hospitality to biting insects' The virus is best seen, in John Hollands excellent analogy, as a swarm of competing mutations, with each individual strain subjected to furious forces of natural selection for the strain, or strains, most likely to amplify and evolve in the new ecological habitat.3 With such a promising new opportunity in the invaded species, natural selection must eventually come to dominate viral behavior. In time the dynamics of infection will select for a more resistant human population. Such a coevolution takes rather longer in "human" time — too long, given the ease of spread within the global village. A rapidly lethal and quickly spreading virus simply would not have time to switch from aggression to coevolution. And there lies the danger. Joshua Lederbergs prediction can now be seen to be an altogether logical one. Pandemics are inevitable. Our incredibly rapid human evolution, our overwhelming global needs, the advances of our complex industrial society, all have moved the natural goalposts. The advance of society, the very science of change, has greatly augmented the potential for the emergence of a pandemic strain. It is hardly surprising that Avrion Mitchison, scientific director of Deutsches Rheuma Forschungszentrum in Berlin, asks the question: "Will we survive!” We have invaded every biome on earth and we continue to destroy other species so very rapidly that one eminent scientist foresees the day when no life exists on earth apart from the human monoculture and the small volume of species useful to it. An increasing multitude of disturbed viral-host symbiotic cycles are provoked into self-protective counterattacks. This is a dangerous situation. And we have seen in the previous chapter how ill-prepared the world is to cope with it. It begs the most frightening question of all: could such a pandemic virus cause the extinction of the human species?

Courts 1AC – Judiciary Advantage – Courts Clog (1/3)

Contention \_\_ is Judiciary: Subpoint A is Courts Clog

Property claims in space are inevitable. The absence of an effective legal regime cause IP lawsuits to proliferate

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

Another possible argument, based on the “inevitable” future, is that there is no need to push the legal envelope by passing Lunar land claims recognition now, because once a space settlement is established, a property rights regime will evolve naturally. It certainly is true that, if a permanent space settlement were established without prior legislation, there would be claims of property ownership in space that would have to be litigated at length in the courts of the United States and other countries. In fact, if no advance legislation has been passed, there will be **outrageous property claims** based on much lesser bases than actual settlement. 156 This legal uncertainty **scares off space developers** who fear that, after they have spent a fortune developing space, **they will only win the right to spend another fortune on legal bills**. 157 Worse, it would force unqualified judges to legislate in haste from the bench, possibly producing very bad rules

Federal court clog undermines legitimacy

Bassler 96. (William G. Bassler, Judge @ US District Court of New Jersey and Adjunct Prof of Law @ Seton Hall, *Rutgers Law Review*, 48 Rutgers L. Rev. 1139, Summer 1996, lexis)

In addition to the delegation of opinion writing to clerks, the delegation of authority in general [**92**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n92) is a major cost of the  [\*1157]  caseload explosion. "The caseload per federal judge has risen to the point where very few judges, however able and dedicated, can keep up with the flow without heavy reliance on law clerks, staff attorneys, and sometimes externs too." [**93**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n93) This bureaucratization [**94**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n94) of the federal judiciary can only serve to erode its effectiveness, independence, and public respect, as well as the morale of the federal bench itself. The sheer volume of cases erodes the ability of the judge to give personal and individual attention to each case. [**95**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n95) In order to stay abreast of his or her docket, a judge may be tempted to resort to forced settlements, excuses to remand to state courts, and aggressive dispositions by summary judgments rather than carefully weigh the arguments of both sides. The ever-increasing criminal docket with its requirements for early disposition of cases under the Speedy Trial Act [**96**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n96) prevents careful pretrial management of the civil docket by the judge and mandates reliance on the magistrate. The ever-increasing docket will, by necessity, invite more court administrator involvement with the inevitable erosion of the traditional independence of the federal judge. [97](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n97) Increased pressure to dispose of ever in-  [\*1158]  creasing backlogs also invites well-intentioned efforts to find better ways to manage the docket. This in turn requires judges to attend an ever increasing number of committee meetings [98](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n98) which naturally takes away from time on the bench. [**99**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n99) While "the federal courts do not exist for the purpose of clearing their dockets," [**100**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n100) the current caseload crisis does at least require those advocating the expansion of federal jurisdiction [**101**](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n101) to justify the need for federal action. Considering the  [\*1159]  public expectations of the federal judiciary, impaired performance and diminished independence are costs the country cannot afford. [102](https://www.lexis.com/research/retrieve?cc=&pushme=1&tmpFBSel=all&totaldocs=&taggedDocs=&toggleValue=&numDocsChked=0&prefFBSel=0&delformat=XCITE&fpDocs=&fpNodeId=&fpCiteReq=&expNewLead=id%3D%22expandedNewLead%22&fpSetup=0&brand=ldc&_m=51cc7ed00eed3f3e03333b01e842d01e&docnum=5&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzt-zSkAz&_md5=15541cfbe693174d18d5c68cf329a188&focBudTerms=bassler+AND+the+delegation+of+authority&focBudSel=all#n102)

Courts 1AC – Judiciary Advantage – Courts Clog (2/3)

Judicial legitimacy is key to prevent terrorism.

Shapiro '03 (Jeremy Shapiro, Associate Director and Research Associate, Brookings Institute, March 2003, "French Lessons: The Importance of the Judicial System in Fighting Terrorism <http://www.brookings.edu/fp/cusf/analysis/shapiro20030325.htm>)

The unique nature of terrorism means that maintaining the appearance of justice and democratic legitimacy will be much more important than in past wars. The terrorist threat is in a perpetual state of mutation and adaptation in response to government efforts to oppose it. The war on terrorism more closely resembles the war on drugs than World War II; it is unlikely to have any discernable endpoint, only irregular periods of calm. The French experience shows that ad-hoc anti-terrorist measures that have little basis in societal values and shallow support in public opinion may wither away during the periods of calm. In the U.S., there is an **enormous reservoir of legitimacy**, established by over 200 years of history and tradition, **in the judiciary**. That reservoir represents an **important asset** that the U.S. government can profit from to maintain long-term vigilance in this type of war. Despite the unusual opportunity for innovation afforded by the crisis of September 11, the U.S. government has not tried to reform American judicial institutions to enable them to meet the threat of terrorism. **To prevent the next wave of attacks**, however far off they might be, and to avoid re-inventing a slightly different wheel each time **will require giving life to institutions that can persist and evolve, even in times of low terrorist activity.** Given the numerous differences between the two countries, the U.S. cannot and should not simply import the French system, but it can learn from their mistakes. Their experience suggests a few possible reforms: A specialized U.S. Attorney tasked solely with terrorism cases and entirely responsible for prosecuting such cases in the U.S. Direct and formal links between that U.S. Attorney's office and the various intelligence agencies, allowing prosecutors to task the intelligences agencies during judicial investigations Special procedures for selecting and protecting juries in terrorism cases and special rules of evidence that allow for increased protection of classified information in terrorist cases Creating a normal, civilian judicial process that can prosecute terrorists and yet retain legitimacy is not merely morally satisfying. It may also **help to prevent terrorist attacks** in the long run. Not incidentally, it would demonstrate to the world a continuing faith in the ability of democratic societies to manage the threat of terrorism without sacrificing the very values they so desperately desire to protect.

Courts 1AC – Judiciary Advantage – Courts Clog (3/3)

Unchecked terrorism will expand and cause extinction

Alexander '03 (Yonah Alexander, professor and director of the Inter-University for Terrorism Studies in Israel and the United States, August 28, 2003, The Washington Times l/n)

Last week's brutal suicide bombings in Baghdad and Jerusalem have once again illustrated dramatically that the international community failed, thus far at least, to understand the magnitude and implications of the terrorist threats to the very survival of civilization itself. Even the United States and Israel have for decades tended to regard terrorism as a mere tactical nuisance or irritant rather than a critical strategic challenge to their national security concerns. It is not surprising, therefore, that on September 11, 2001, Americans were stunned by the unprecedented tragedy of 19 al Qaeda terrorists striking a devastating blow at the center of the nation's commercial and military powers. Likewise, Israel and its citizens, despite the collapse of the Oslo Agreements of 1993 and numerous acts of terrorism triggered by the second intifada that began almost three years ago, are still "shocked" by each suicide attack at a time of intensive diplomatic efforts to revive the moribund peace process through the now revoked cease-fire arrangements [hudna]. Why are the United States and Israel, as well as scores of other countries affected by the universal nightmare of modern terrorism surprised by new terrorist "surprises"? There are many reasons, including misunderstanding of the manifold specific factors that contribute to terrorism's expansion, such as lack of a universal definition of terrorism, the religionization of politics, double standards of morality, weak punishment of terrorists, and the exploitation of the media by terrorist propaganda and psychological warfare. Unlike their historical counterparts, contemporary terrorists have introduced a new scale of violence in terms of conventional and unconventional threats and impact. The internationalization and brutalization of current and future terrorism make it clear we have entered an Age of Super Terrorism [e.g. biological, chemical, radiological, nuclear and cyber] with its serious implications concerning national, regional and global security concerns. Two myths in particular must be debunked immediately if an effective counterterrorism "best practices" strategy can be developed [e.g., strengthening international cooperation]. The first illusion is that terrorism can be greatly reduced, if not eliminated completely, provided the root causes of conflicts - political, social and economic - are addressed. The conventional illusion is that terrorism must be justified by oppressed people seeking to achieve their goals and consequently the argument advanced by "freedom fighters" anywhere, "give me liberty and I will give you death," should be tolerated if not glorified. This traditional rationalization of "sacred" violence often conceals that the real purpose of terrorist groups is to gain political power through the barrel of the gun, in violation of fundamental human rights of the noncombatant segment of societies. For instance, Palestinians religious movements [e.g., Hamas, Islamic Jihad] and secular entities [such as Fatah's Tanzim and Aqsa Martyr Brigades]] wish not only to resolve national grievances [such as Jewish settlements, right of return, Jerusalem] but primarily to destroy the Jewish state. Similarly, Osama bin Laden's international network not only opposes the presence of American military in the Arabian Peninsula and Iraq, but its stated objective is to "unite all Muslims and establish a government that follows the rule of the Caliphs." The second myth is that strong action against terrorist infrastructure [leaders, recruitment, funding, propaganda, training, weapons, operational command and control] will only increase terrorism. The argument here is that law-enforcement efforts and military retaliation inevitably will fuel more brutal acts of violent revenge. Clearly, if this perception continues to prevail, particularly in democratic societies, there is the danger it will paralyze governments and thereby encourage further terrorist attacks. In sum, past experience provides useful lessons for a realistic future strategy. The prudent application of force has been demonstrated to be an effective tool for short- and long-term deterrence of terrorism**.** For example, Israel's targeted killing of Mohammed Sider, the Hebron commander of the Islamic Jihad, defused a "ticking bomb." The assassination of Ismail Abu Shanab - a top Hamas leader in the Gaza Strip who was directly responsible for several suicide bombings including the latest bus attack in Jerusalem - disrupted potential terrorist operations. Similarly, the U.S. military operation in Iraq eliminated Saddam Hussein's regime as a state sponsor of terror**.** Thus, it behooves those countries victimized by terrorism to understand a cardinal message communicated by Winston Churchill to the House of Commons on May 13, 1940: "Victory at all costs, victory in spite of terror, victory however long and hard the road may be: For **without victory, there is no survival**."

Courts 1AC – Judiciary Advantage – Independence (1/8)

Subpoint B is Judicial Independence

Obama is combating judicial activism now

Jakubic ’10 Mark Jakubic Jakubic Law Firm 2010 “Obama’s Disingenuous Attack on “Judicial Activism”

One of the longest running debates in American politics – and one on which the conservative side has fairly consistently prevailed – involves the proper role of the courts in our Constitutional system. Polls have consistently shown that a solid majority of the electorate agrees that the courts should limit themselves toppling the law, and should refrain from creating rights. The latter is a function that is, under traditional American political theory, properly reserved to the legislature. This notion – that courts should not involve themselves in creating new positive rights – has often been labeled with the shorthand term “judicial restraint.” Recognizing that they’ve lost the debate as currently framed, and fearful that the more ambitious aspects of the “progressive” agenda may not fare so well in the courts, the Obama Administration, and its friends in legal commentary circles, are now seeking to change the terms of the debate, or, perhaps more accurately, to change the meaning of the terms about which we are debating. Obama’s new riff, designed to make himself appear to be the true “conservative” and to paint the current Supreme Court as radical activists, is that “judicial restraint” requires courts to defer to the legislature when reviewing duly enacted legislation even, presumably, when the legislation under consideration plainly violates the Constitution. Jeffrey Toobin, a consistent Obama ally, adds his voice to the left’s newfound love for “judicial restraint” in a piece in the May 24 issue of The New Yorker. Toobin quotes Obama to the effect that “an activist judge was somebody who ignored the will of Congress, ignored democratic processes, and tried to impose judicial solutions on problems instead of letting the process work itself through politically.” Toobin then opines that the Roberts Court has betrayed itself as an “activist” court through its decisions striking down portions of the McCain-Feingold law, certain pieces of local legislation imposing quotas in public school enrollment and the District of Columbia’s ban on handgun ownership. The clear objective of Toobin, and those who write in a similar vein, is to discredit these decisions and the jurisprudential principles underlying them, as “activist,” and to lay the groundwork for a defense of the “progressive” agenda in part based on a plea for judicial restraint. Toobin – and Obama – however, are advancing a flawed argument, and are doing so disingenuously.

Property rights rulings stir judicial activism

Cole ‘5 Daniel H. Cole [Bruce Townsend Professor of Law, Indiana University School of Law at Indianapolis] 2005 Supreme Court Economic Review “POLITICAL INSTITUTIONS, JUDICIAL REVIEW, AND PRIVATE PROPERTY: A COMPARATIVE INSTITUTIONAL ANALYSIS”

At its base, Epstein’s theory of takings is motivated by a distrust of democratic government that Locke did not share. According to Epstein,“[t]he argument for judicial activism rests on the perception that flaws in the democratic process lead to the deprivation of individual rights, including those of property have pointed out the imperfections of any one body (such as a legislature) always make another body (such as the judiciary) appear superior. The problem is that all organizations and institutions, including governments, courts, and markets, are imperfect. Consequently, the imperfections of one cannot automatically justify a preference for another. Comparative institutional analysis is required to determine the institutional/organizational choice that, in the circumstances, fails least. Emphasis upon the imperfections of government leads to strict scrutiny and more extensive judicial action.”23

Court rulings with wide compliance boost judicial independence

David S. Law, Professor of Law and Political Science – Washington University, March 2009, Georgetown Law Journal, “A Theory of Judicial Power and Judicial Review”, 97 Geo. L.J. 723, Lexis

Part IV of this Article discusses a counterintuitive implication of a coordination-based account of judicial power. Conventional wisdom suggests that courts secure compliance with their decisions by drawing upon their store of legitimacy, which is undermined by decisions that are unpopular, controversial, or lack intellectual integrity. 25 Part IV argues that precisely the opposite is true: an unpopular or unpersuasive decision can, in fact, enhance a court's power in future cases, as long as it is obeyed. Widespread compliance with a decision that is controversial, unpopular, or unpersuasive serves only to strengthen the widely held expectation that others comply with judicial decisions. This expectation, in turn, is self-fulfilling: those who expect others to comply with a court's decisions will find it strategically prudent to comply themselves, and the aggregate result will, in fact, be widespread compliance. Part IV illustrates these strategic insights--and the Supreme Court's apparent grasp of them--by contrasting [\*734] Bush v. Gore 26 with Brown v. Board of Education 27 and Cooper v. Aaron. 28

Courts 1AC – Judiciary Advantage – Independence (2/8)

Government support can’t sustain independence- judicial action is key

Office of Democracy and Governance, ‘2 (Office of Democracy and Governance, branch of the United States Agency for International Development Bureau of Democracy, Conflict, and Humanitarian Assistance, “Guidance for Promoting Judicial Independence and Impartiality,” January 2002, http://www.usaid.gov/our\_work/democracy\_and\_governance/publications/pdfs/pnacm007.pdf|AF)

While placing administrative and budgetary responsibility with the judiciary creates a framework that encourages substantive independence, it is by no means sufficient. Problems can arise when administrative authority is transferred without first, or simultaneously, developing the interest and capacity of judicial leaders to discharge their increased responsibilities effectively, with attention to the needs of the lower as well as the higher courts. For example, the lack of professional court management in the Basque region in Spain resulted in transfer of administration back to the ministry of justice. Throughout the commonwealth, administrative responsibility for the courts has traditionally rested with the chief justice and senior judicial officers. Where the chief justice has been independent, the responsibility for administration has tended to strengthen this independence. In the absence of such leadership, it is perceived to have been irrelevant.

Emerging democracies model the US and need a strong judiciary- SCOTUS legitimacy sends a key signal

The Center for Justice and Accountability et al, March 1, 2004

(Amici Curiae in support of petitioners in Al Odah et al. v USA, "Brief of the Center for Justice and Accountability, the International League for Human Rights, and Individual Advocates for the Independence of the Judiciary in Emerging Democracies," <http://www.jenner.com/files/tbl_s69NewsDocumentOrder/FileUpload500/82/>AmiciCuriae\_Center\_for\_Justice\_Int\_League\_Human\_Rights\_Adv\_For\_Indep\_Judiciary2.PDF, ldg) accessed 5/26/10

Many of the newly independent governments that have proliferated over the past five decades have adopted these ideals. They have emerged from a variety of less-than-free contexts, including the end of European colonial rule in the 1950's and 1960's, the end of the Cold War and the breakup of the former Soviet Union in the late 1980's and 1990's, the disintegration of Yugoslavia, and the continuing turmoil in parts of Africa, Latin America and southern Asia. Some countries have successfully transitioned to stable and democratic forms of government that protect individual freedoms and human rights by means of judicial review by a strong and independent judiciary. Others have suffered the rise of tyrannical and oppressive rulers who consolidated their hold on power in part by diminishing or abolishing the role of the judiciary. And still others hang in the balance, struggling against the onslaught of tyrants to establish stable, democratic governments. In their attempts to shed their tyrannical pasts and to ensure the protection of individual rights, emerging democracies have consistently looked to the United States and its Constitution in fashioning frameworks that safeguard the independence of their judiciaries. See Ran Hirschl, The Political Origins of Judicial Empowerment through Constitutionalization: Lessons from Four Constitutional Revolutions, 25 Law & Soc. Inquiry 91, 92 (2000) (stating that of the “[m]any countries . . . [that] have engaged in fundamental constitutional reform over the past three decades,” nearly all adopted “a bill of rights and establishe[d] some form of active judicial review”). Establishing judicial review by a strong and independent judiciary is a critical step in stabilizing and protecting these new democracies. See Christopher M. Larkins, Judicial Independence and Democratization: A Theoretical and Conceptual Analysis, 44 Am. J. Comp. L. 605, 605-06 (1996) (describing the judicial branch as having "a uniquely important role" in transitional countries, not only to "mediate conflicts between political actors but also [to] prevent the arbitrary exercise of government power; see also Daniel C. Prefontaine and Joanne Lee, The Rule of Law and the Independence of the Judiciary, International Centre for Criminal Law Reform and Criminal Justice Policy (1998) ("There is increasing acknowledgment that an independent judiciary is the key to upholding the rule of law in a free society . . . . Most countries in transition from dictatorships and/or statist economies recognize the need to create a more stable system of governance, based on the rule of law.")

Courts 1AC – Judiciary Advantage – Independence (3/8)

Scenario 1- Ukraine

Ukraine models judicial independence from the United States

Other examples: Argentina and Chile

The Supreme Court of Ohio ‘8 (The Supreme court of Ohio and the Ohio judicial system, “Ukrainian Judicial Delegation to Study American Judicial System During Week-Long Visit” Nov. 14, 2008 www.sconet.state.oh.us/PIO/news/2008/ukraine\_111408.asp|AF)

The Supreme Court of Ohio will welcome six members of the Ukrainian judiciary on Monday as they begin a week-long visit to study the American judicial system. “The Supreme Court of Ohio, the Supreme Court of Ukraine and the Supreme Rada of Ukraine have been partners for 16 years to exchange ideas and further the ideals of democracy in both countries,” said Chief Justice Thomas J. Moyer. “We are honored to host this Ukrainian delegation and again provide a forum on the rule of law and the democratic electoral processes.” Four Ukrainian judges, one court administrator and one facilitator are at the Court for a five-day visit with judges, attorneys, court personnel and university professors. Their visit is marked by several highlights, including discussions with Chief Justice Moyer and a visit to the Montgomery County Courthouse to observe court proceedings. Their visit will begin with the traditional Ukrainian welcoming Bread and Salt Ceremony at 8:30 a.m., Monday, Nov. 17, at the Ohio Judicial Center. The delegation also will participate in a panel discussion about the role of the courts in a maturing democracy at the John Glenn School of Public Affairs at The Ohio State University and numerous sessions focusing on trial procedures and court policies. During the Bread and Salt Ceremony, the visitors will be presented with bread, which represents hospitality, and salt, which symbolizes eternal friendship, in a custom dating to the Middle Ages. While in Dayton, the delegates will meet with Judge Michael T. Hall, Administrative Judge for the Montgomery County Court of Common Pleas, and other judges. In addition to an overview of the Ohio judicial system by the Chief Justice, the group will learn about the differences and similarities between the United States and Ukraine systems of justice from Elena V. Helmer, a visiting assistant professor of law at the Ohio Northern University Pettit College of Law, who has taught in law schools in Russia, Kazakhstan and the United States. Another aspect of their learning will center on the Ohio judicial branch budgeting process. Leaders from all three branches of government will explain their roles in proposing, developing or considering the budget including Steven C. Hollon, Supreme Court administrative director; David Ellis, assistant director of the Ohio Office of Budget and Management; and State Rep. Scott Oelslager. Several other topics round out the delegation’s lesson plan including a comparison of administrative justice in the United States and the Ukraine, Ohio criminal justice, public accountability cases, dispute resolution assistance and overviews of Ohio’s Criminal Sentencing Commission and the Court’s Domestic Violence Program. The visit to the Supreme Court of Ohio is part of a 10-day visit to the United States organized through the congressionally sponsored Open World Program and the Russian American Rule of Law Consortium (RAROLC). Prior to their arrival in Columbus, the Ukrainian delegation is in Washington, D.C., for orientation meetings with federal officials. Ohio is represented at the Washington meetings by Licking County Common Pleas Court Judge Jon R. Spahr. Managed by the Open World Leadership Center, Open World is the only exchange program in the U.S. legislative branch. Participants get an inside look at the U.S. judicial system and develop ties with the U.S. judges who host them. They also gain insight into how the U.S. political system promotes and protects judicial independence and the rule of law. The Open World Program is a nonpartisan initiative of the U.S. Congress that builds mutual understanding between the emerging political and civic leaders of participating countries and their U.S. counterparts. The Open World Leadership Center has awarded a grant to the Russian American Rule of Law Consortium of Colchester, Vermont to administer this and similar exchanges in 2008. Chief Justice Moyer worked with judicial leaders of Ukraine to develop an independent judiciary after the fall of the Soviet Union. The Ohio Ukraine Rule of Law Project involved numerous exchange trips by Ohio judges and lawyers to introduce Ukraine to concepts related to the rule of law. The Chief Justice also has worked with the U.S. Department of State in conducting education programs for judges and lawyers in Argentina and Chile.

Courts 1AC – Judiciary Advantage – Independence (4/8)

That’s key to the Ukranian stability

URL Project ‘9 (Ukrainian Rule of Law project in cooperation with the United States Agency for International development and the millennium challenge corporation “An expert conference Judicial Reform in Ukraine: Finding Solutions in Line with European Standards” March 23 March 2009, http://www.ukrainerol.org.ua/index.php?option=com\_content&task=view&id=128&Itemid=1&lang=en|AF)

Council of Europe standards should be incorporated in all legislative initiatives of judicial reform in Ukraine – participants of the International Conference organized by EU/Council of Europe Joint Project and USAID UROL Project KYIV – An expert conference ''Judicial Reform in Ukraine: Finding Solutions in Line with European Standards” took place on March 12 and 13 in Kyiv. The Council of Europe in the framework of the Joint Programme between the European Union and the Council of Europe Transparency and Efficiency of the Judicial System of Ukraine together with USAID Ukraine Rule of Law Project, in cooperation with the Council of Judges of Ukraine, the Supreme Court of Ukraine, and with participation of the Committees of the Verkhovna Rada of Ukraine and the National Commission on Strengthening Democracy and the Rule of Law supported the expert discussion on judicial reform in Ukraine in line with European and International standards. The objective of the conference was to open an expert dialogue and to start building a consensus among a variety of stakeholders on a number of issues related to the judicial reform in Ukraine. The issues of the structure of the court system, the functioning of judicial institutions, and judicial self-governance, as well as judicial selection, training and discipline of judges were discussed. Representatives of top judicial institutions, courts, judicial self-governmental bodies, Verkhovna Rada, national governmental officials, European and International experts, academicians, media, and the public exchanged views on the challenges faced by the Ukrainian judiciary today. The participants expressed different approaches to judicial reform in Ukraine. However, they all stressed on the importance of implementation of the Council of Europe standards in organisation of judiciary and principles of its functioning while conducting judicial reform. When becoming the Council of Europe member, Ukraine took obligation to ensure real independence of judiciary and judges. In the opinions of the participants the Constitution of Ukraine should be amended in several positions to ensure enforcement of and compatibility of the judicial system with European standards. Vasyl Onopenko, the Chief Justice of the Supreme Court of Ukraine, stated that there are several systemic issues in Ukrainian judiciary, including state authorities’ attitudes toward courts, judiciary not acting as one holistic system, absence of socially oriented laws. Chief Justice also referred to the need to rapidly elaborate a substantiated strategy for the wider reform of the legal system and professions including advanced institutional and procedural solutions. Speaking about the current issues in Ukrainian judicial system Mykola Onishchuk, the Minister of Justice mentioned that Ukraine has been successful in reforming its judicial system from the Soviet type system to the democratic one, based on European standards instance based judicial system. The Minister of Justice especially emphasized that all reforms of legal professions and legal system in general have to be well prepared and financed. He also mentioned that in some cases the changes to the Constitution are necessary to fulfill European standards. The Minister mentioned in his opening speech that following steps should be taken in order to improve judicial system in Ukraine: adoption of the institutional approach to the judiciary, specialization of courts, improvement of the system of selection and accountability of judges and judicial control over pre-trial investigation. U.S. Ambassador William Taylor pointed out that a fair, independent, transparent, and efficient judicial system is the cornerstone of a democratic society that also promotes investment and economic growth. It is therefore essential that the structure and organization of judicial institutions be clearly and carefully articulated in the law. Head of Operations Section of the European Commission Delegation to Ukraine, Mr. Schieder stressed that in all European countries the cooperation between different actors in solving issues related to the judiciary is highly appreciated. EU also provides help to a number of countries and helps to build up administrative and professional capacity of judiciary. He emphasized that in cooperation, the EC approach is moving from project based cooperation to the sector-wide approach and for successful cooperation the clear and consolidated vision of Ukrainian authorities and political actors must be elaborated. This vision should be based on common European values and respective standards. As it was stressed in the presentation of David Vaughn, Chief of Party of the Ukrainian Rule of Law Project “Public confidence in the judicial system and in the moral authority and integrity of the judiciary is of the utmost importance in a modern democratic society. That is why the UROL Project together with our partners contributes to a consensus on judicial reform in Ukraine”. Stephan Gass, Vice-President of the International Association of Judges, Judge of the Court of Appeal of Basel (Switzerland), emphasized that judicial independence is not the privilege but the tool for achieving and supporting the rule of law and democracy in the widest terms. He also underlined that the Venice Commission in his opinion noted too high complexity of judicial self-government system proposed in the draft laws and proposed to simplify it. Carsten Mahnke, team leader and resident expert of the Council of Europe and European Commission joint project in Moldova stressed that it is important that first the European standards are introduced into the legislation and then implemented in practice. In his summary report Daimar Liiv, resident expert of the Joint Programme between the European Union and the Council of Europe “Transparency and Efficiency of the Judicial System of Ukraine” expressed his satisfaction of high level of discussions. He underlined that clear opinion of experts-participants was formed that there is a real need for high level expert discussion over the next steps in the reform of judiciary and legal professions in Ukraine and that experts clearly supported the idea of introducing relevant European standards into laws. He also mentioned that the need for changes of the Constitution of Ukraine to achieve the reform ultimate goals - better judiciary and higher level of protection of rights of Ukrainian people, was expressed by the vast majority of the participants.

Courts 1AC – Judiciary Advantage – Independence (5/8)

The result is nuclear war with Russia, drawing in the US

Kingston et al ‘9 (Brian Kingston, Peter Loveridge, Joe Sterritt masters paper @ The Norman Paterson School of International Affairs – CIFP “UKRAINE: A RISK ASSESSMENT REPORT February 2009 www.carleton.ca/cifp/app/serve.php/1214.pdf|AF)

Scenarios Worst Case Scenario: WWIII Economics: Ukraine suffers catastrophic economic collapse during the global recession; Ukrainians are plunged into deep economic hardship and revolt against the government. Domestic Politics: The 2010 Presidential elections worsen domestic political stability (i.e. the President and PM can still not work together); economic collapse fractures the domestic political situation; the threat of internal violence increases. Russia: Russia seeks to influence the weakened Ukraine, inflaming ethnic-Russian separatism; Crimea declares independence; Ukraine resists, perhaps seeing an external war as a distraction from internal strife; Russia comes to the aid of Crimea/ethnic-Russians resulting in open warfare between Russia and Ukraine. The West: The West also suffers from the global recession, but (perhaps following a period of inward looking protectionism) realizes that it cannot allow Russian success in Ukraine; open hostilities erupt between Russian and NATO forces triggering World War III and the strong possibility of nuclear war, or at least the drawing in of many other countries.

Russia war most probable scenario for extinction

Bostrom, 2002 (Nick Bostrom, prof of philosophy, Yale, "Existential Risks: Analyzing Human Extinction Scenarios and Related Hazards," 38, www.transhumanist.com/volume9/risks.html|AF)

Risks in this sixth category are a recent phenomenon. This is part of the reason why it is useful to distinguish them from other risks. We have not evolved mechanisms, either biologically or culturally, for managing such risks. Our intuitions and coping strategies have been shaped by our long experience with risks such as dangerous animals, hostile individuals or tribes, poisonous foods, automobile accidents, Chernobyl, Bhopal, volcano eruptions, earthquakes, draughts, World War I, World War II, epidemics of influenza, smallpox, black plague, and AIDS. These types of disasters have occurred many times and our cultural attitudes towards risk have been shaped by trial-and-error in managing such hazards. But tragic as such events are in the big picture of things – from the perspective of humankind as a whole – even the worst of these catastrophes are mere ripples on the surface of the great sea of life. They haven't significantly affected the total amount of human suffering or happiness or determined the long-term fate of our species.            With the exception of a species-destroying comet or asteroid impact (an extremely rare occurrence), there were probably no significant existential risks in human history until the mid-twentieth century, and certainly none that it was within our power to do something about. The first manmade existential risk was the inaugural detonation of an atomic bomb. At the time, there was some concern that the explosion might start a runaway chain-reaction by "igniting" the atmosphere. Although we now know that such an outcome was physically impossible, it qualifies as an existential risk that was present at the time. For there to be a risk, given the knowledge and understanding available, it suffices that there is some subjective probability of an adverse outcome, even if it later turns out that objectively there was no chance of something bad happening. If we don't know whether something is objectively risky or not, then it is risky in the subjective sense. The subjective sense is of course what we must base our decisions on.[2] At any given time we must use our best current subjective estimate of what the objective risk factors are.[3]             A much greater existential risk emerged with the build-up of nuclear arsenals in the US and the USSR. An all-out nuclear war was a possibility with both a substantial probability and with consequences that might have been persistent enough to qualify as global and terminal. There was a real worry among those best acquainted with the information available at the time that a nuclear Armageddon would occur and that it might annihilate our species or permanently destroy human civilization.[4]  Russia and the US retain large nuclear arsenals that could be used in a future confrontation, either accidentally or deliberately. There is also a risk that other states may one day build up large nuclear arsenals. Note however that a smaller nuclear exchange, between India and Pakistan for instance, is not an existential risk, since it would not destroy or thwart humankind's potential permanently. Such a war might however be a local terminal risk for the cities most likely to be targeted. Unfortunately, we shall see that nuclear Armageddon and comet or asteroid strikes are mere preludes to the existential risks that we will encounter in the 21st century. The special nature of the challenges posed by existential risks is illustrated by the following points: ·        Our approach to existential risks cannot be one of trial-and-error. There is no opportunity to learn from errors. The reactive approach – see what happens, limit damages, and learn from experience – is unworkable. Rather, we must take a proactive approach. This requires foresight to anticipate new types of threats and a willingness to take decisive preventive action and to bear the costs (moral and economic) of such actions. ·        We cannot necessarily rely on the institutions, moral norms, social attitudes or national security policies that developed from our experience with managing other sorts of risks. Existential risks are a different kind of beast. We might find it hard to take them as seriously as we should simply because we have never yet witnessed such disasters.[5] Our collective fear-response is likely ill calibrated to the magnitude of threat. ·        Reductions in existential risks are global public goods [13] and may therefore be undersupplied by the market [14]. Existential risks are a menace for everybody and may require acting on the international plane. Respect for national sovereignty is not a legitimate excuse for failing to take countermeasures against a major existential risk. If we take into account the welfare of future generations, the harm done by existential risks is multiplied by another factor, the size of which depends on whether and how much we discount future benefits [15,16].

Courts 1AC – Judiciary Advantage – Independence (6/8)

Scenario 2 is Bosnia-Herzegovina

First, independence in Bosnia-Herzegovina is on the brink- recent challenges prove that the other branches may erase the judicial system entirely

OSCE ‘9(Organization for Security and Cooperation in Europe, “Mission to Bosnia-Herzegovina: Independence of the Judiciary: Under Pressure on BiH Judicial Institutions,” December 2009, http://www.oscebih.org/documents/15868-eng.pdf|AF)

OSCE BiH is deeply concerned about the nature of statements expressed by some prominent political representatives, particularly but not exclusively from the Republika Srpska, in relation to the work of the Court of BiH and BiH Prosecutor’s Office. While the executive and legislative powers may legitimately scrutinize and comment on the functioning of the judiciary, the Mission’s assessment is that these statements, due to their harsh content, unsubstantiated nature, and frequency, overstep the limits of acceptable criticism and constitute undue pressure on these independent institutions. In recent months, judges and prosecutors working in the Court of BiH and BiH Prosecutor’s Office have been harshly criticized as lacking integrity and professionalism. By making explicit reference to the processing of specific ongoing criminal cases, these statements constitute a clear interference with the judicial process. Even more concerning is the fact that some of these statements call into question not only the work of the state level judiciary, but also the very constitutionality of the existence of the Court of BiH and BiH Prosecutor’s Office, and the sustainability of the judicial reforms undertaken in BiH.

Second, the US sets the example for Bosnia and Herzegovina judicially- maintaining their judicial system is key to Bosnian growth and democracy

Boland ‘6 (Bernard, Minnesota State Court Judge for 20 years, “The State Court of Bosnia and Herzegovina: Justice and Prosperity in Conflict?” Abstract, 3-22-06, http://www.lawandpolitics.com/minnesota/default.asp?section=ARTICLES&module=ITEM&id=357|AF)

I didn’t go to Sarajevo as a diplomat, or as a correspondent, nor was I employed at a policy making level. In June 2002, I was one of a number of Minnesota judges who had responded to an invitation to serve as an international judge under the auspices of the United Nations Mission in Kosovo. Because federal judges are not allowed to serve overseas and Minnesota is one of the few states that provides for judicial sabbaticals, the search for international judges to serve in the Balkans was very narrow. In early March of 2003, I received a telephone call from a Justice Department Attorney attached to the U.S. Embassy in Sarajevo. He told me that it was his job to find judges who might be interested in serving in Bosnia, and he had started his search by going over the résumés of the judges who were willing to serve in Kosovo. He asked me to make a one-year commitment to serve as an international judge in the State Court of Bosnia and Herzegovina in Sarajevo. I would serve in a new special chamber hearing cases on organized crime, economic crime and corruption until approximately November 2003, when it was expected that a war crimes chamber would be funded and established. Following a number of telephone interviews and travel arrangements by e-mail, I landed in Sarajevo in July 2003. I was the first American judge to serve in the Bosnian State Court. The “new” State Court of Bosnia and Herzegovina was housed in a run-down Yugoslav Army barracks located on the outskirts of Sarajevo, twenty minutes from downtown. A mine clearing operation, complete with German Shepherds and armored vehicles, was clearing the lawn and adjacent area the morning I arrived. Thankfully, it was mid-summer and the only climactic inconvenience was a leaky roof. By winter, the roof still leaked and heat was scarce. One of the architects, an Austrian, hired by the Office of the High Representative (OHR) under the Dayton Accords to renovate the building, complained that the delay was caused because he couldn’t get the international organizations that funded the building project to release the necessary funds. He suggested telling the U.S. Embassy that Al Qaida operatives had been spotted on the roof, certain that would spark the immediate release of construction funds. Unfortunately, like a lot of things Americans think other people should want, Bosnian judges and lawyers weren’t universally pleased to accept either international judges or international legal principles. Essentially, “legal colonialism” wouldn’t be too strong a term to describe the way they characterized legal reforms suggested by international advisors. I learned quickly that diplomacy, like politics, is very personal. My greeting by the Bosnian Court President wasn’t exactly celebratory. From a politically prominent Croatian family, the first President of the State Court was a distinguished Sarajevo lawyer before being chosen to lead the new Court. Proud and nationalistic, he minced no words. He had opposed the introduction of “foreign” judges into his country. He said that the presence of an American judge was embarrassing to his country and humiliating to its judges. He trumpeted the proud legacy of the Austro-Hungarian legal system dating back to 1878, and he remarked that the United States was a great power, that his country could never repay its debt to us, but they didn’t need and didn’t want international judges. I said nothing, thanked him for his time and cordially left when excused. On the way back to my apartment, I went over in my mind what I should have said. For example, I should have told him the story of how American independence

[CARD CONTINUES ON NEXT PAGE… NO TEXT OMITTED]

Courts 1AC – Judiciary Advantage – Independence (7/8)

[CONTINUED FROM PREVIOUS PAGE … NO TEXT OMITTED]

had been won because a German general named Von Stueben had trained General Washington’s troops; how a Polish military engineer, General Thaddeus Kosiusco, had built the fortifications that prevented the British from winning the Battle of Saratoga and occupying West Point. And how a French admiral had blocked the retreat of General Cornwallis at Yorktown, forcing him to surrender the then world-renowned British army to Washington’s ragged militia flanked by troops commanded by French Generals Lafayette and Rochambeau. But then, almost nobody makes the argument they wish they had made. My new chambers were largely without furnishings or equipment. I had a computer, but no soft ware and no Internet connection. I had no translator, so it was difficult to talk with anyone, except the Canadian prosecutor down the hall, who was also alone. Since it was July, my European colleagues, a Belgian and Portuguese judge were on summer holiday. The Belgian returned within a few days. He told me that he had been alone for nearly three months, but was told not to worry because nothing would happen until the American got there anyway. The Portuguese judge surfaced a few weeks later, decided he didn’t like the assignment and resigned. I never saw him again. Within a few weeks we had scrounged furniture and supplies, including computer soft ware (the Internet connection came in early 2004), hired translators, law clerks and borrowed administrative staff from the Bosnian judges. We wrote working rules for the international section of the court, and were participating with the Bosnian judges in the Plenum and management of the court. Another American judge and a French judge came in September, and by November we were hearing our first cases—a human trafficking case and an attempt to smuggle a couple hundred pounds of marijuana across the border from Montenegro. In December of 2003, an Italian judge joined us, and a Finnish judge came shortly after the first of the year. With the two Bosnian judges assigned to our section we now had enough for two trial panels and an appeal panel, and we were getting enough organized crime and corruption cases to keep us busy. Melting the cold reception took longer. Myself and the other international judges faithfully attended local judges’ meetings (Plenums), served on committees and volunteered to chair subcommittees and draft documents. We participated in the ongoing debate about procedure, mostly about the “foreign,” adversary procedures that had become part of their newly adopted Criminal Procedure Code (CPC), which most regarded as an unwelcome gift to their legal system. It had introduced concepts previously unknown to Bosnian law, such as pre-trial conferences, plea-bargaining, cross-examination and bail. There was an endless debate about how to apply the new code. Bosnia’s more senior and respected judges and law professors had been appointed to serve on the State Court. They were tough debaters, and they were disdainful of the adversary principles the new code had engrafted upon their rules. Its legal system had been derived from the Napoleonic Code, and it hadn’t changed significantly since the Austrian-Hungarian Empire had imposed its Civil Code in 1878. Even worse, nearly 50 years of Communist rule under Marshall Josef Tito had purged the country’s legal profession of most creativity and all initiative. For 50 years judges had been merely ciphers, beholden to the iron fist of political commissars under a system where survival depended upon avoiding responsibility and decisions that might make the wrong enemy. Moreover, the system of education emphasized rote and repetitive memorization. Schools prized “memorisation and regurgitation over critical thinking and creativity.”[ii] When applied to the law the system is paralyzing. Statutes are read literally, even if the text dictates an absurd result. Continuances were granted for the asking. Criminal trials drag on until the accused has spent enough time in jail without bail to plead guilty to a sentence of time served. Calendars in the local courts were thousands of cases and years behind, and nobody ever seemed to be in a hurry. Every debate at the Plenum among the judges—and debate is prized in the Balkans—starts and ends with “this has always been our practice.” We began to have one of the interpreters come in early so that we could have coffee before court with the Bosnian judges. We sympathized with their wonderment at American politics and culture, and we laughed with them at their references to “tourist” judges. Occasionally we would be asked to a social event attended by a Bosnian judge, or to a country or vacation home. We always accepted and paid one of the interpreters out of our own pockets to come along. On both a personal and professional level we began to notice a gradual thaw, even some warmth. In January 2004 I drew a high profile embezzlement case involving several former Bosnian officials. The charges included diverting some $250 million from the army payroll to dummy corporations and laundering the proceeds through a bank in which they had the controlling interest. Among the defendants were a former member of the tri-partite Presidency, the Croatian Minister of Defense and the Finance Minister for Defense. They were arrested near the Croatian border, and they all had Croatian passports. I ordered their arrest and detention pending trial. There followed a storm of protest in the press and Parliament with the Croatian caucus adopting a resolution demanding that I be investigated for instituting unlawful legal proceedings and violating the defendant’s civil rights. Representing the three principal defendants were a former president of the Bosnian Bar Association and two former judges. By late May when I issued indictments ordering five defendants to stand trial, a number of demands for my removal had been filed by the defense. Bosnian procedure requires that the entire bench vote on demands for removal. In late May and early June the Bosnian Plenum heard three demands for my removal within ten days. All were unanimously rejected. Finally, near the end of my tour, the votes in the Plenum had signaled our acceptance. The Bosnian judges had reached the point where professional respect and personal relationships had trumped national pride—a new collegiality had taken hold. Maybe now I could use that story about Washington, Von Steuben, Kosciusko and Lafayette on the Court President, but it was no longer necessary.

Courts 1AC – Judiciary Advantage – Independence (8/8)

Bosnian growth solves war

Tanner ‘8 (Adam Tanner, AlertNet through Reuters, “Analysis: Concerns grow over instability in Bosnia,” 11-10-2008, http://www.alertnet.org/thenews/newsdesk/B349555.htm|AF)

Political instability is damaging Bosnia's prospects of joining the European Union and causing some officials to worry that the Balkan country could one day slide back into conflict. The former Yugoslav republic, which was divided into a Serb Republic and a Muslim-Croat entity after the 1992-95 Bosnian war that killed about 100,000 people, is run by a weak central government and some Serbs favour secession. Ethnic quarrels were among problems identified by the EU last week in its annual report on Bosnia's progress towards membership of the wealthy bloc. Political tensions are now running so high that some regional experts and leaders say violence could eventually flare again in the country of about 4 million people. "There could be war," said Sulejman Tihic, the head of Bosnia's largest Muslim political party and former Muslim member of the tripartite presidency. "A year or two ago I would not have said this is possible." The Democratization Policy Council, a non-profit group, said in a report last week that renewed conflict was possible and added: "Bosnia has not only stagnated over the past three years -- it has been sliding backwards at an accelerating pace." Tension has mounted over moves taken by Bosnian Serb Prime Minister Milorad Dodik independently of the central government in Sarajevo, saying he seeks economic prosperity and eventual EU membership for his people. Some experts fear Bosnian Muslims might hit back militarily if the Serb Republic's push for state-like powers goes out of control. "War is not going to break out tomorrow, but if this is allowed to continue, it may break out a year from now, or two years from now, or four years from now," said a foreign diplomat with years of experience of the region. Other experts do not expect renewed conflict, even if tensions are high.

Instability in the Balkans draws in the US and Europe and triggers global war

Baker ’95 (James, former US secretary of State and Treasury, former Chief of Staff, JD@UT-Austin, lawyer, administrative director of the James A. Baker III Institute for Public Policy @ Rice University, “Flash point in the Balkans: Drawing the Line at Macedonia,” LA Times, 4-30-95, http://www.hri.org/news/forpapers/95-04-30.frp|AF)

The first great European conflict of this century began in the Balkans. Unless we are careful, so may the last. Three years after the beginning of war in Bosnia, international attention remains riveted on the fate of that tragic nation. But Macedonia is perhaps an even more dangerous fash point in the Balkans. Unless the international community takes strong action we could see the outbreak of a general Balkan war that could draw in the European powers and even the United States. And there will be no such strong action without firm U.S. leadership. The strategic importance of Macedonia transcends its size, about that of Vermont, and its population, just a fraction more than 2 million. It looms large because of the Balkans' unforgiving geography and Macedonia's own volatile ethnic mix. Tension between the country's Macedonian majority and Albanian minority -estimated at between 20% and 40%- already runs high. Should this tension escalate into civil war, it might prompt intervention from Albania to the west. Conflict could spread across Macedonia's northern border with Serbia -where there is a large and restive Albanian population in Kosovo. Greece, already consumed by an angry dispute with Macedonia, might be tempted to become involved. Turkey, Bulgaria and others could follow. Under such a scenario, the West Europeans, the United States and even Russia could be forced to pick sides -with disastrous consequences for the peace of Europe.

Courts 1AC – Solvency (1/3)

Contention \_\_ is Solvency

The Court can apply Gardiner without Congressional legislation

Reynolds 90. (Glenn H. Reynolds, Associate Professor of Law @ University of Tennessee and JD from Yale," Legislative Comment: The Patents in Space Act", Harvard Journal of Law & Technology, 3 Harv. J. Law & Tec 13, Spring 1990, lexis)

... I. IMPACT OF THE BILL ON UNITED STATES PATENT LAW ... For example, the case of Gardiner v. Howe is often cited for its language that "[t]he patent laws of the United States afford no protection to inventions beyond or outside of the jurisdiction of the United States; but this jurisdiction extends to the decks of American vessels on the high seas, as much as it does to all the territory of the country, and for many purposes is even more exclusive." ... Thus, since the current patent law expresses its jurisdiction in territorial terms, and since it contains no express provision for application to U.S. spacecraft, anyone anxious to see patent protection extend to space objects on the U.S. registry would be well advised to support legislation making such provision. ... Certainly I would hope that a court confronted with this question in the absence of legislation would go ahead and extend patent protection to innovations aboard U.S. spacecraft, since there are no conceivable policy grounds for not placing U.S. spacecraft within U.S. patent law, and since a judgment in favor of extending patent protection to outer space activities would in fact be more in accord with the intent of Congress in passing the patent laws. ...

Legal development of property rights in space is a prerequisite to other forms of space development

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”, http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

The 1967 Outer Space Treaty[1] does not provide a positive regime for the governance of space development. The 1979 MoonTreaty[2] provides a regime for development, but that regime prohibits real property rights. For that and other reasons, most nations have not signed or ratified the Moon Treaty. A development regime which provides some form of property rights will become increasingly necessary as space develops. Professionals foresee an integrated system of solar power generation, lunar and asteroidal mining, orbital industrialization, and habitation in outer space. In the midst of this complexity, the right to maintain a facility in a given location relative to another space object may create conflict. Such conflicts may arise sooner than we expect, if private companies begin building subsidiary facilities around space stations. Eventually large public facilities will become the hub of private space development, and owners will want to protect the proximity value of their facility location. It also seems likely that at some point national governments and/or private companies will clash over the right to exploit a given mineral deposit. Finally, the geosynchronous orbit is already crowded with satellites, and other orbits with unique characteristics may become scarce in the future. The institution of real property is the most efficient method of allocating the scarce resource of location value. Space habitats, for example, will be very expensive and will probably require financing from private as well as public sources. Selling property rights for living or business space on the habitat would be one way of obtaining private financing. Private law condominiums would seem to be a particularly apt financing model -- inhabitants could hold title to their living space and pay a monthly fee for life-support services and maintenance of common areas. Even those countries which do not have launch capability would benefit from a property regime. Private entities from the developing nations could obtain property rights by purchasing obsolete facilities from foreign entities that are more technologically advanced. A regime of real property rights would provide legal and political certainty. Investors and settlers could predict the outcome of a conflict with greater certainty by analogizing to terrestrial property law.

Courts 1AC – Solvency (2/3)

Functional property rights only allow jurisdiction over facilities. It is distinct from territorial

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22|AF]

Functional property rights are a kind of property right distinguishable from real property rights. This is the argument that states that have jurisdiction and control over a facility or vehicle can exercise dominion over the facilities that are attached or constructed onto the celestial land, can be exercised over an area and for a period determined by occupation and use. This control and dominion is described as “functional” property rights.73 Wayne N. White advocates that this limited form of “functional sovereignty” would allow for a form of property rights because it is distinct from territorial sovereignty.74 Problem of interplanetary fixtures: A fixture is a chattel that has been fixed to land and thus has ceased being personal property and has become part of realty. Fixtures pass with the ownership of the land they sit on. The purpose of the attachment generally controls whether it is part of the real property or chattel. The party wishing to make a chattel a fixture to the land must have an objective intention to make the chattel part of the land.

This “functional” rights approach resolves the tension between global and corporate presence in space

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22|AF]

White’s argument that a certain set of “functional” private property rights are permissible in space is likely most accurate and appropriate for the further development of space and its resources. Wasser’s position, that private actors can obtain rights to a large plot of real property seems untenable and to run contrary to overarching principle of shared benefits in space law. His position advocates from broad private property rights over land that is not actively being used, but is prospective. This seems to be no more valid of a claim than the claims of companies that purport to sell land claims on the moon. There must be more than a simple proclamation of ownership; there must be some active element involved. On the other end of the spectrum, Gangle’s theory reads the prohibitions on national apportionment too broadly. It seems unreasonable that no private rights are permissible even when an individual puts their own investment and labor into the acquisition of the property. This complete prohibition on private property rights in extraterritorial property is not found in any of the other legal regimes, namely the law of the sea and the Antarctic treaty system. The functional approach to private property rights in space best balances the interests of the private entity and the interests of the global community in the resources of the universe. It allows claims to rights only in that which is actually being used, not to property “as far as the eye can see.” Nonetheless, because the legal regime currently stands, there is too much ambiguity and no court or body to clarify the provisions. Therefore some clarification on whether private enterprises will be able to invest in establishing settlements or other operations on celestial bodies with the guarantee that those investments will be protected by a set of property rights. Many advocate that we look to terrestrial legal regimes as providing useful analogies that can help resolve the ambiguities in the outer space regime.

Courts 1AC – Solvency (3/3)

And your disad is not unique. NASA has a direct funding program for private investment - proves our aff is predictable

Clark, 10 [Stephen Clark, Spaceflight Now, 2/22/10, “NASA released new details of commercial crew program, spaceflightnow.com/news/n1002/22commercial|AF]

In a fiscal year 2011 budget estimate posted Monday, NASA unveiled several details of the commercial crew initiative, but offered no specific timetable for when the agency will begin selecting providers. NASA officials previously stated they hoped to start operational commercial flights as early as 2014, but those schedules may be optimistic. The fastest companies say they reach initial operating capability around three years after receiving approval, and the first contracts may not be awarded until 2011. The document suggested NASA will procure crew-carrying spacecraft in a way similar to the Commercial Orbital Transportation Services, or COTS, program that is applying government funding to SpaceX and Orbital Sciences to develop capsules to ferry cargo to the International Space Station. Such an acquisition paradigm would provide NASA funding to commercial partners based on milestones achieved in technical development and financing. The partners would also be required to add significant private funding to the program. The NASA budget request for 2011 includes $6 billion over the next five years for commercial crew development. "These funds will be competed through COTS-like, fixed-price, milestone-based Space Act Agreements that support the development, testing, and demonstration of multiple commercial crew systems," the budget estimate said. NASA awarded $50 million in seed money to five companies in early February, part of the Commercial Crew Development program that seeks to aid companies in early design and development work for key space technologies. The CCDev funding was appropriated by Congress in the 2009 stimulus package. The CCDev work will be completed by the end of 2010, and NASA says there will be a "full and open competition for commercial development activities at the conclusion of the CCDev activities." That schedule means the outcome of any competition would likely not occur until 2011.

\*\* Extensions \*\*

Cooperation- Scenario- Japan

Alliance ineffective- lack of tech cooperation

Rapp 4, [William E. Rapp, Lieutenant Colonel in the US Army, formerly a Fellow at the Institute for International Policy Studies, Jan 2004, “Paths Diverging? The Next Decade in the US-Japan Security Alliance”

http://www.strategicstudiesinstitute.army.mil/pdffiles/pub367.pdf|AF]

Surprisingly (given that the United States and Japan are two of the most technologically advanced nations in the world), one of the most difficult challenges the alliance faces is in the intelligence coordination necessary to respond quickly and to fight an attacker effectively. The Japanese face continued challenges in the legal protection of classified information,129 in the internal coordination and analysis of intelligence data, and in the means, especially from space, to collect timely data. The ban on collective self-defense also seriously hinders the sharing of defense intelligence between the United States and Japan. Although the Cabinet Intelligence Research Office (CIRO) is designed to be the hub for intelligence processing for the Prime Minister, the data and analysis links into that body from the intelligence services in the various ministries are guarded and inconsistent. Interagency intelligence cooperation is still in a nascent stage in Japan. Further, the intelligence community in Japan is not practiced at recognizing who needs what intelligence as it comes in to various intelligence branches. The links to higher coordinating bodies such as CIRO, to lateral agencies in other ministries, or down to the operational level on the ground are not well-institutionalized or practiced.130 Compounding these institutional challenges is a shortage of hardware connectivity and restrictive intelligence sharing norms that prevent the kind of intelligence partnership found between the United States and Britain.131 Although improving post- September 11, tight intelligence sharing between the two countries (although most effective between the Defense Intelligence Agency and the JDA) has been the exception rather than the rule.132 In short, the alliance commits the United States to defend Japan, but does not initially allow for tightly coordinated conduct of that defense. Bilateral operations centers exist in each service branch, and are exercised annually, but are not immediately ready to coordinate the defense against a surprise attack. Likewise, the alliance does not commit the Japanese to actively support the United States in conflicts, in which America might find herself in East Asia, that fall outside the “defense of Japan” or the gray region of “situations in the areas surrounding Japan,” even if those actions directly affect Japanese interests. However, most agree that Japan would likely do so unless its interests were diametrically opposed to those of the United States. Finally, as stated above, the limited intelligence cooperation between the two countries and the way in which intelligence is processed within Japan detracts from the alliance’s effectiveness. If the alliance is to remain viable, these shortfalls will need to be addressed in coming years.

Cooperation in space solves relations- eliminates competition

Logsdon 92, [John M. Logsdon, Professor of Political Science and International Affairs at the Elliot School of International Affairs at George Washington University, 1/17/92, “US-Japanese Space Relations at a Crossroads”, Science, Volume 255, Number 5042|AF]

The United States and Japan have cooperated in space at both the governmental and industrial level for the past two decades. But the objectives of such cooperation have been different for the two countries. The U.S. government has seen space cooperation as a means of demonstrating in a highly visible way its claims to global political and technological leadership; Japan has used cooperation (and not only in space) as a way of learning from a more advanced partner as an interim step to independent, often competitive, Japanese capabilities. Japanese industry worked with U.S. firms in the early stages of developing its space capabilities; after acquiring as much U.S. technology as possible through licensing and other forms of technology transfer, a Japanese firm typically reduces the interactions with its U.S. collaborator and tries to improve on the imported technology. To date, the benefits to U.S. firms have come from the revenues generated by technology transfer, not from access to Japanese or world markets through alliances with Japanese collaborators. Both the United States and Japan recognize that the "leader-follower" relationship that has characterized their space relationship so far requires revision, particularly because Japan is developing world-class capabilities in critical areas of space technology and could emerge both as a significant competitor to the United States for economic payoffs from space and as a major partner in collaborative space undertakings. From the U.S. perspective, a strategy is needed for Japanese-U.S. space relations that balances national security, political, economic, and scientific interests. Key to such a strategy is the balance sought between cooperation and competition. It is in the U.S. interest to stress cooperative interactions (1). As one high-level group recently commented, an "increasingly cooperative U.S.-Japan relationship" would have "a strongly constructive" effect, strengthening the general trend that existed from the late 1940s through the 1970s toward a more open, multilateral trading regime, alignment of security policies, and cooperation in minimizing the instabilities produced by massive capital flows and the loosening of fixed exchange rates... Partnership and competition need not be mutually exclusive (2, p.1). To develop such a productive strategy, one needs a clear understanding of the current state and likely future character of the Japanese space program. Unfortunately, there is substantial confusion on these two topics. For example, last year an aerospace trade publication reported on Japan's "commitment to an aggressive development program that will position it as a major space power in the 21st century" (3, p. 37). In contrast, the Tokyo correspondent of the New York Times observed that Japan is entering its third decade in space more confused than ever about where to proceed next, and deeply uncertain whether it wants to commit the money or scarce talent needed to turn the world's second largest economy into a spacefaring nation" (4, p. C1). The reality is that Japan is still in the process of reaching a national consensus on its long-term purposes in space and on the appropriate level of public and private investment justified by the potential benefits of space activities. The United States can exert some influence on that consensus, but more importantly, the United States needs to understand its emerging outlines so that it is well prepared for future interactions. This article is intended as a contribution to such an understanding. AN OVERVIEW OF JAPAN IN SPACE Compared to the United States, the Japanese space program is modest in size, if not in scope (5) (Table 1). Japan's current government space budget (Table 2) is approximately $1.3 billion [168.2 billion yen (6)], less than 10% of the $13.9-billion budget of the National Aeronautics and Space Administration (NASA); while the United States allocates almost 0.6% of its gross domestic product to space, the Japanese allocate 0.04% (7). Japan's space budget in 1991 was the fifth largest in the world, trailing the budgets of the United States, the former Soviet Union, China, and France (8). Japan, unlike those other countries, does not have a military space program to bear a share of the costs of its space development; the U.S. national security space program has a budget some 50% or more larger than that of NASA, and the technology developed under military auspices finds its way into both NASA and private sector space efforts. There are just under 9,700 people working on space in Japan, including both government and corporate employees; the NASA civil service roster alone totals almost 24,000 (9). A number of Japanese government agencies are involved in space (Fig. 1). (Figure 1 omitted) They operate under a policy framework developed by the Space Activities Commission, a group of senior individuals chaired by the Minister of Science and Technology that was established in 1968 to advise the Prime Minister on space policy and to coordinate government space activities. The most recent Space Activities Commission statement of Japanese space policy, issued in 1989, stresses both autonomy and international cooperation, noting that "Japan has now a promising future in establishing its own technology equal to that at an international level" (10, p. ii) and calling for increased private sector investment in space development while also stating that "Japan, as a member of the international society, is expected to make an appropriate contribution consistent with its international status. Japan will promote international cooperation in this field...." (10, p. 4). This dual emphasis is perhaps the most significant feature of Japanese space policy from a U.S. perspective; there appears to be an opportunity to influence Japan toward cooperative rather than competitive interactions.

Effective alliance deters threats and keeps East Asia stable

Rapp 4, [William E. Rapp, Lieutenant Colonel in the US Army, formerly a Fellow at the Institute for International Policy Studies, Jan 2004, “Paths Diverging? The Next Decade in the US-Japan Security Alliance” http://www.strategicstudiesinstitute.army.mil/pdffiles/pub367.pdf]

Finally, as the partnership deepens, Tokyo’s influence in Asia could further the common interests of the alliance. Japan is in a better position to mitigate the fears of its neighbors―through its leadership in multilateral institutions, continued transparency about its increased military role, and thoughtful recognition of historical emotions. By not intentionally inflaming passions in Korea and China, through acts of nationalist pride aimed at domestic audiences, and by leading East Asia in a number of multilateral forums, Japan could gain influence where the United States might not be so welcomed. Former UN diplomat Yasushi Akashi recently stated that Japan can be an important bridge for the United States into Asia. “There is a gap spreading between the United States and other countries. Japan, as a U.S. ally, can fill that gap. If Japan takes action in areas out of reach for the United States, Washington will count highly on Japan.”204 Having built a reputation for nuance, flexibility, and pragmatism through its ODA program and postwar interaction with Asian countries, Japan may be in a position to soften the more ideological tone of American foreign policy toward the region for the benefit of the two partners.205 For example, Japan could help extend the joint shaping capabilities of the alliance into ASEAN. A potential example is future negotiations over nonproliferation with Iran, with which Japan still maintains diplomatic relations and Washington does not.206 In that manner, Japan and the United States could act as a coordinated team and be successful in molding the future security environment of Asia. Using the Alliance to Shape the Future of East Asia. This monograph began by making the assertion that the alliance can and must become more than simply a narrow defense pact if both the United States and Japan want to be successful in shaping the security future of East Asia in ways that support peace, prosperity, and the growth of democratic and human values. In the next several decades, East Asia in particular will need the stability and positive character of Japan and the United States working in close concert. There is a distinct need for positive complementarities in the relationship. This power sharing could result in an alliance wellsuited to handle, in a positive manner, the most important challenge of the first half of the 21st century―the character of the rise of China to superpower status. Tight coordination of policy and increased military capability will vastly increase the deterrence credibility of the alliance. As Diet Representative Eisei Ito noted, “The best way to deal with China is for Japan and the U.S. to be partners in the truest sense and consult closely and frankly over policy toward that country.”207 Working together with one voice may be the best means of engaging China in the coming decades, preventing the opening of an exploitable rift, precluding the forceful reunification of Taiwan and the mainland, and creating a path that both facilitates Chinese national interests and the peace and prosperity of the entire region.208 North Korea and its quest for nuclear weapons represent a salient opportunity for the alliance to act in concert for the stability of Northeast Asia. No resolution of the current crisis on the Peninsula will be possible without both Japan and the United States working together within an agreed strategic framework. In addition, the powerful American and Japanese navies can help to guarantee the maintenance of the vital sea lines of communication (SLOC) running through Southeast and East Asia.209 About 52 percent of all commercial sea cargo (59 percent of supertankers) transit this region amid thorny and unresolved issues of territorial boundaries, intrastate governance problems, and piracy.210 For Japan, the routes are even more important―over 85 percent of the oil Japan imports sails through these sea lanes.211 Piracy in South and Southeast Asian shipping lanes remains a major hazard, especially in Indonesian waters and the Straits of Malacca.212 At present, Japan is committed to protect only SLOCs out to 1,000 miles from Osaka and Tokyo.213 This arc of committed sea lane protection does not even extend all the way through the vital Bashi Channel to the southern end of Taiwan and the northern entrance to the South China Sea. Increasing this Japanese maritime reach through port calls, freedom of navigation cruises into the Indian Ocean, and combined exercises should be encouraged.214 Aiding in the provision of unfettered SLOCs, which benefit most of Southeast and East Asia, also may reassure Asia about the future role of the Japanese military, thus increasing Japan’s ability to comprehensively engage ASEAN. Working in concert, the two alliance partners could expand their tight cooperation into associated security realms within the region. WMD and ballistic missile nonproliferation, cyber-terrorism, and counternarcotics are just three examples of potentially fruitful venues for increased cooperation. Ideally, the alliance would continue to deepen into a multidimensional force for peace and prosperity in East Asia. The Proliferation Security Initiative hopefully is a harbinger of further expansion beyond the original scope of the alliance. Finally, the alliance can provide the continuity of peace and trust necessary for the growth of liberalism throughout the region. Success for the United States and Japan will increasingly be measured in terms of an increased community of vibrant, pacific, free-market democracies in Asia. Making the two publics aware of the idealistic benefits of the alliance will make more headway toward acceptance of a deepening partnership than simply focusing on the alliance’s role in power politics in the region. Creating the conditions for that liberal development and tamping down the anticipated frictions that will arise along the way can best be accomplished in tandem. In the long run, this liberalism backed by the concerted power of the United States and Japan will bring lasting stability to the region.

Cooperation- Scenario- China

China set to surpass US especially in private sector

Space News 08 [Becky Iannotta, Reporter, 08/16/08, http://www.space.com/5981-china-space-capability-surpass-united-states-panel-warns.html|AF]

WASHINGTON — The Shenzhou 7 mission and spacewalk should serve as a reminder that China is building space capabilities that could surpass U.S. technological advances and boost China's diplomatic and economic ties with its allies, a panel of experts said here Oct. 8. China's success this decade with three human spaceflight missions, including Shenzhou 7 in September, as well as the development of remote-sensing and satellite navigation systems, two satellite export deals and the January 2007 use of an antisatellite weapon to shoot down one of its own satellites punctuate China's broader national interest to become a "comprehensive power," the panelists said. They warned that China's space program is dominated by young aerospace engineers who could help propel the nation's advancements past the United States, which faces difficulty replacing its aging aerospace work force. China's wide reach into manned space missions, satellite navigation and communications, and Earth monitoring could help the nation gain a foothold in an already competitive commercial space market, the panelists said. "A newcomer like China [is] going to take a slice of a very stable pie, which means there are going to be other losers. Will it be the U.S., Europe, Russia? It's going to be something difficult that we'll have to contend with," said Kevin Pollpeter, China program manager for the Defense Group Inc.'s Center for Intelligence, Research and Analysis in Washington. "China's rise in space power is a negative sum consequence for the United States." China has closely guarded its space budget, in large part because it is dominated by the military, panelists said. Chinese leaders reported that the Chang'e lunar program cost "no less than building a mile of subway in Beijing," Pollpeter said. While concerns linger about China's January 2007 shootdown of one of its own weather satellites with an antisatellite missile, or A-Sat, China primarily sees space as a diplomatic tool. China prefers jamming and dazzling satellites rather than more aggressive action, said Dean Cheng, senior Asia analyst with CNA Corp. in Alexandria, Va. Jamming is intentional interference with satellite signals; dazzling is illuminating a satellite with a laser in order to blind it. Themes that can be found throughout the writings concerning China's People's Liberation Army (PLA) indicate China is focused on space deterrence, Cheng said, describing how a country's military capabilities, economy and communications could be affected by space warfare. "We do not at this time have a very good sense of how the PLA would necessarily operate in space in order to secure space dominance," Cheng said. "What we do find in PLA writings are certain key themes: the ability to provide information support, the ability to take on both offensive and defensive positions in space and ? space deterrence." United States policy documents, however, appear more focused than China on national security applications, prompting a "bad-guy image" globally, Pollpeter said. "There's a perception of overemphasizing national security applications," he said. "Even though we are not the ones developing space weapons, China is the one developing space weapons, we are the ones who bear the brunt of that criticism." One way to mitigate the perception would be to emphasize the peaceful uses of space and cooperation with other nations, Pollpeter said. Panelists also said the U.S. space industry should relate its relevance to people the way China's space officials routinely discuss the economic, diplomatic and political benefits of a strong space program. "Space ultimately isn't about space," Cheng said. "But too often here our conversations are stovepiped within the space community focusing on the space budget and [don't] really connect the space program to people's everyday lives even though it touches every aspect of people's everyday lives."

Specifically, cooperation with India is necessary to balance China- on brink

Zongyi 2008 [Liu Zongyi, research fellow at the Center for South Asian Studies, Shanghai Institute for International Studies, 2008, “China-India-US Relationship: Where will it go? http://www.siis.org.cn/en/zhuanti\_view\_en.aspx?id=10055|AF]

It is undeniable that the US enjoys some advantages in China-India-US relations. As the only superpower in the world, both China and India want to maintain a good relationship with the US, because both of them try to avoid becoming the containing object of Washington. At the same time, both China and India want to obtain some support from the US. This might be where Seema Sirohi’s “romantic triangle” comes from. But In the current trilateral relations among China, India, and the US as mentioned above, China’s rise has provoked the US’ concern and even xenophobic sentiments. However, India’s rise has not worried Americans so much, although India has always been regarded by western countries as another key emerging power along with China. It is evident that the US wants to use India to balance China’s rise and cause conflicts between these two countries. This policy came into being during the Bush Administration, when US Secretary of State Condoleezza Rice announced Washington’s decision to “make India a global power.” President Obama did not take India as important as President Bush did at first, which caused dissatisfaction and concern in India, but this has not stopped the US from creating divisions between China and India. When President Obama paid his first state visit to China, the two countries issued a joint statement which declared that the US and China “welcomed all efforts conducive to peace, stability and development in South Asia……and support the improvement and growth of relations between India and Pakistan. The two sides are ready to strengthen communication, dialogue and cooperation on issues related to South Asia and work together to promote peace, stability and development in that region.” This declaration made Indian people, including Prime Minister Manmohan Singh, angry and heightened India’s jealousy of China. Prime Minister Singh finally calmed down after being given a red carpet treatment when he visited the US, and the US held the first strategic dialogue with India in Washington to show its respect to India this June, immediately following the China-US Strategic and Economic dialogue in Beijing. The US successfully provoked contradictions between China and India. India: The swing state in the global balance of power. Will India become an ally of the US and balance China as the Americans hope? Maybe not. Today China’s GDP is about four times to India’s. As a neighboring country, India is naturally jealous of China. Such an emotion was even indicated by Prime Minister Singh in his statement that “democracies have a far better chance of sustaining economic reform than one-party states” made before the G20 London Summit. The growth of China’s military power is a big headache for India’s military authorities although the main aim of China’s military construction is not India. It is obvious that the 1962 border conflict was a nightmare for India. Also, by emphasizing an immediate threat from China India’s army, navy, and air force can get enough money from parliament. India’s jealousy and fear of China is exaggerated by India’s mass media. To catch the public’s eye, India’s mass media reports on “military invasion” by the Chinese army and mentions China-India economic or political competition frequently. The Indian government sometimes needs to show to the US its usefulness to counter China, which makes ordinary people think that the relationship between China and India is very strained. In fact, India understands well that as opposed to taking sides, it is better to be a swing state in the global balance of power, particularly in China-India-US relations. Several factors help India make such a choice: first, India can take a free position in the grand game between China and the US if this game would take place someday, and India can get benefits from both sides; second, India has a nonalignment tradition; third, India has a bad memory of Americans in history from its own experiences of cooperation with the US, and it is afraid of being fooled; and last, and maybe the most important, India and China have a very large interest in common, that is, both countries need a peaceful and stable environment to develop themselves. A peaceful and stable region is a necessity for both India and China to peacefully emerge as world powers. Besides, China and India have a lot of common interests in the multi-polarization of the international structure, the reform of the international financial system, climate change, etc. Their cooperation in these fields is not welcomed by the US.

Chinese space dominance cripples US military- makes Taiwan conflict inevitable

Smith 2006 [Steven A. Smith, Lt Colonel, 02/16/06, “CHINESE SPACE SUPERIORITY? CHINA’S MILITARY SPACE CAPABILITIES AND THE IMPACT OF THEIR USE IN A TAIWAN CONFLICT” http://www.au.af.mil/au/awc/awcgate/awc/smith.pdf|AF]

Given the Chinese space systems in the previous chapter, how might the Chinese use their space capabilities in a scenario involving a conflict with the U.S. over Taiwan? Would the contributions from these systems be sufficient enough to give China space superiority and if so, what would be the impact of that space superiority on the U.S. military? A crucial element of U.S. strategy during a Taiwan conflict will be projecting power into the region with the intent of opposing Chinese military actions. Unless we can apply military power at the point of engagement, Taiwan and the surrounding theater, our military forces will have little ability to impact the situation. Thus, when looking at the impact of the Chinese space capabilities, the paper will pay particular attention to the impact on U.S. power projection capabilities with particular attention to naval and air power. Michael O’Hanlon, a Brookings Institute senior analyst, stated, “Given trends in military reconnaissance, information processing and precision strike technologies, large assets such as aircraft carriers and land bases, on which the United States depends, are likely to be increasingly vulnerable to attack in the years ahead.”107 These attacks could be enabled by Chinese space capabilities. The U.S. intelligence community believes China will use a sea-denial strategy aimed at U.S. aircraft carriers and other naval forces approaching Taiwan.108 Thus, a key component of a Chinese campaign against Taiwan would be to keep the U.S. aircraft carriers out of striking range of Taiwan with a critical task of finding and sinking carriers. ELINT systems, like those demonstrated on the Shenzhou, could track U.S. carriers operating in the western Pacific or Indian Oceans.109 In addition, some of their anti-naval weapons could use space-based information. Specifically, one of China’s primary weapons to strike U.S. naval assets will be the supersonic, sea-skimming SS-N-26 missile. In recent years, China has purchased the Russian SS-N-26 anti-ship cruise missiles; however, without space-based ELINT data which can locate and track naval assets, the Chinese ability to effectively use the SS-N-26 is undermined.110 Michael O’Hanlon, a Brookings Institute senior analyst, states, “To attack a U.S. carrier, one needs not only periodic localization of the carrier, but real-time tracking and dissemination of that information to a missile that is capable of reaching the carrier and defeating its defenses.”111 Space systems are only one of the means to locate and track U.S. carriers, and it is unclear if China’s current reconnaissance satellites have the capability to locate and target U.S. aircraft carriers.112 However, as shown in the previous chapter, China has launched and operated ELINT systems in the past. If they did acquire a space-based ELINT system, how would they use it and the rest of their suite of space capability against U.S. naval forces? Chinese ballistic and cruise missile attacks on airfields would not look to destroy the U.S. facilities, but suppress their ability to provide air and missile defense. Rear Admiral Eric A. McVadon (USN, Ret.), former Defense Attaché at the American Embassy in Beijing and expert on China’s military, stated that once the Chinese suppressed U.S. air and missile defenses, it would conceptually “permit follow-on attacks, in relative safety, by the several new types of Chinese aircraft using very modern cruise missiles.”125 This scenario is a great concern for the Asia-Pacific region. As one wing commander at Guam said, “[Chinese planes and missiles] would keep coming … I fear them numbers-wise,” and one analyst predicts, “We can’t expect that we can completely protect a carrier battle group when it got into theater.”126 Not only would these forces be looking to target carriers, they would look to target items which enable U.S. air power, and this targeting would be assisted by imagery derived from space systems. A former high-ranking Chinese official once said to be victorious in future combat, “We will have to gain air and sea superiority, but win information superiority first.”127 Gaining this information superiority, on the way to winning air and sea superiority, would be enabled by Chinese space systems.

Most probable site for nuclear war- nuclear capabilities, territorial, ideological and regional disputes

Dibb 01, [Paul Dibb, professor of strategy defense studies at the Australian National University, Winter 2001, “Strategic Trends- military and politic in Asia”, Naval College Review|AF]

The areas of maximum danger and instability in the world today are in Asia, followed by the Middle East and parts of the former Soviet Union. The strategic situation in Asia is more uncertain and potentially threatening than anywhere in Europe. Unlike in Europe, it is possible to envisage war in Asia involving the major powers: remnants of Cold War ideological confrontation still exist across the Taiwan Straits and on the Korean Peninsula; India and Pakistan have nuclear weapons and ballistic missiles, and these two countries are more confrontational than at any time since the early 1970s; in Southeast Asia, Indonesia--which is the world's fourth-largest country--faces a highly uncertain future that could lead to its breakup. The Asia-Pacific region spends more on defense (about $150 billion a year) than any other part of the world except the United States and Nato Europe. China and Japan are amongst the top four or five global military spenders. Asia also has more nuclear powers than any other region of the world. Asia's security is at a crossroads: the region could go in the direction of peace and cooperation, or it could slide into confrontation and military conflict. There are positive tendencies, including the resurgence of economic growth and the spread of democracy, which would encourage an optimistic view. But there are a number of negative tendencies that must be of serious concern. There are deep-seated historical, territorial, ideological, and religious differences in Asia. Also, the region has no history of successful multilateral security cooperation or arms control. Such multilateral institutions as the Association of Southeast Asian Nations and the ASEAN Regional Forum have shown themselves to be ineffective when confronted with major crises.

Cooperation- Scenario- Russia

Space key to all other aspects of cooperation

Logsdon and Millar 01, [John Logsdon, Director of the Space Policy Institute at George Washington, and James Millar, emeritus professor of economics and international affairs at George Washington University, February 2001, “U.S. -Russian Cooperation in Human Space Flight Assessing the Impacts”, Space Policy Institute and Institute for European, Russian and Eurasian Studies Elliott School of International Affairs The George Washington University, http://www.gwu.edu/~spi/assets/docs/usrussia.pdf|AF]

Yet, to one participant, "If nothing else, good relations in the area of space policy help provide us with a cushion when they are failing in other areas. . . . Moscow’s military as well as its space program are in very dire straits. Both would seem to be close to cardiac arrest. Having said that, I think our interactions with the Russians in both of these areas are critical to our future bilateral relationship. It would be easy to dismiss the Russians as serious players given their internal situation- an attitude often heard around Washington. To a large degree, we have to carry the ball for them. . . . So why should we continue to pick up the tab? Why should the American taxpayer continue to subsidize the Russian space program - or our military to military contacts? It seems to me that there are two answers to this question. First, when it comes to the space program we are dealing with a very high visibility program. If we ignore the Russian space program, we run the risk of wounding their pride in a very serious way. They don?t need to be told that they are down and out. They know it better than we do. My experience with Russians tells me that they are experts when it comes to knowing the extent of their technological inferiority vis-a-vis the West - or put differently, just how far they are behind us. But by keeping them involved in the space program we are at least giving them a psychological fig leaf."

Relations key to energy security and global warming

**Graham 09** [Thomas Graham, senior director at Kissinger Associates, special assistant to the president and senior director for Russia on the National Security Council, 2009, “Resurgent Russia and US Purposes”, Century Foundation, a foreign policy and economic think tank, http://tcf.org/events/pdfs/ev257/Graham.pdf|AF]

Providing sufficient energy for powering the global economy at affordable prices and in an environmentally friendly way is critical to long-term American prosperity. Fossil fuels, barring a major technological breakthrough, will remain the chief source of energy for decades to come. Much needs to be done in locating and bringing online new fields, ensuring reliable means of delivery to consumers, protecting infrastructure from attack or sabotage, and reducing the temptation to manipulate energy supplies for political purposes. Nuclear energy is enjoying a renaissance, but that raises proliferation concerns. Intensive scientific work will be necessary to develop new sources of energy for commercial use and to deal with climate change. As the world’s largest producer of hydrocarbons, a leader in providing • civil nuclear energy, and a major energy consumer itself, Russia is indispensable to guaranteeing energy security and dealing with climate change. As one of the world’s leading scientific powers, Russia has an important role to play in developing new sources of energy, using traditional fuels more efficiently, and managing climate change.

Warming is anthropogenic and fast- feedback loops would cause extinction

Russell 07, [Peter Russell, MS DCS FSP Fellow at the Institute of Noetic Sciences and the World Business Academy, Findhom Foundation, 04/25/07, “Runaway Climate Change: The most Dangerous Aspect of Global Warming”,

<http://www.peterrussell.com/Earth/RunawayCC.php>|AF]

Most climate models look at the direct effect of carbon emissions on global temperatures. What they do not include is the effect any warming might have on promoting further warming—what are called positive feedback loops. One such loop arises when warmer temperatures lead to an increased evaporation of water from the oceans. Water vapour is itself a powerful greenhouse gas, and this adds to the warming. A second feedback loop concerns the dwindling sea ice and snow cover. Exposed sea and land are darker than snow and ice, and absorb more sunlight, leading to a further rise in temperature. The most dangerous feedback loop involves methane release**.** Methane is also a greenhouse gas, and one that is 21-times more potent than CO2. Billions of tons of methane lie frozen in the permafrost of the Arctic tundra. To make matters worse, the Arctic regions are warming three times faster than the rest of the planet, and are already 2 degrees warmer than they were in the 1980s. Consequently, large areas of the Siberian tundra are now beginning to thaw. In 2005 it was discovered that a million square kilometers—the size of France and Germany combined—in western Siberia had turned from permanently frozen peat bog into a mass of shallow lakes. Moreover, as the tundra thaws, it too changes color from white to brown, absorbing more of the sun's heat, and thus thawing even faster. If this continues—and there is no reason to suppose it will not—billions of tons of methane will be released into the atmosphere leading to further rises in global temperatures—and even faster rises in the Arctic**.** The tundra will then thaw even faster, releasing even more methane. Within a short time—probably just a decade or two—a global tipping point will be reached at which global warming becomes unstoppable. It will then only be a matter of time before the temperature rises the six or so degrees that would bring planetary catastrophe.

And privatization solves- creates certainty for legal cooperation

Ty S. Twibell, J.D. Candidate, 1998, University of Missouri- Kansas City School of Law, B.S., Public Admin istration, Southwest Missouri State University, Spring 1997 [“ NOTE: SPACE LAW: LEGAL RESTRAINTS ON COMMERCIALIZATION AND DEVELOPMENT OF OUTER SPACE”, Lexis Nexis, https://litigation-essentials.lexisnexis.com/webcd/app?action=DocumentDisplay&crawlid=1&srctype=smi&srcid=3B15&doctype=cite&docid=65+UMKC+L.+Rev.+589&key=720b82092d6e4ca5b6ba0705fd769d8b]

Space activities are astronomically expensive, risky and potentially dangerous to human life. Powerful and volatile fuels are used to transport payloads into space. Accidents and mechanical malfunctions are common in such highly technical and complex endeavors, and the malfunction of one seemingly minute insignificant system can destroy an entire mission. n187 Risk is also high because space activities are a relatively recent human endeavor. The Challenger disaster and the near tragedy of Apollo 13 most commonly come to mind when thinking of the risks in space. However, it is also the closely averted mini-crisis' that can forever lurk in the minds of space venturers. For example, when the space shuttle crew was space walking just above the shuttle's open cargo doors repairing the Hubble Telescope, a small screw could have caused disaster. As astronaut Story Musgrave was unscrewing a screw from the panel of the Hubble Telescope with a basic screwdriver, the screw spun away down towards the open cargo hold. Fortunately, one of the astronauts found and caught the screw. If the screw had not been found, it could have become lodged in the cargo doors and lost. The doors then may not have shut properly, leaving room for disaster in reentry for the cargo, and possibly risking the lives of the shuttle crew. This is the environment in which space ventures must operate. Currently, most ventures are performed in the vacuum of space with little or no question regarding celestial property rights, at least so long as the principles of maritime jurisdiction remain in tact. n188 Celestial property issues will not arise or be answered after the advent of colonization on the Moon or Mars and the mining of asteroids and comets. Rather, they must be answered before the beginning of such ventures. While space ventures are already expensive, high risk also exists for investors uncertain as to whether the mined material, mining operations, or colonies will remain the investor's property, or if it must be equally shared with the international community standing idly by. As a result, the motivation to invest is significantly reduced. Heidi Keefe articulates her universal understanding of human motivation and the weakness of international space law as follows: [Space law does not] really take into account the human need to be fairly certain of the task required, and to be rewarded for what is accomplished, which may be the downfall of the current corpus juris spatialis. Without incentive, most individuals will not grow beyond what is absolutely necessary to their lives. The capitalist (or pseudo-capitalist) notions that dominate the economics of the developed world attempt to provide reward based on individual effort. Through this system of rewards for successes, we are ingrained with the notion that there is always an underlying reason for everything that we do. The underlying reason always ends up being money. n189 The rewards for commercial space activities, accordingly, should be certain and predictable. Investors must be guaranteed that the material they mine is their own to profit and use, the colonies built will remain under a particular nation's sovereignty, and the ship or colony built of mined material from unclaimed celestial bodies will not fall under the control of other nations through some abstract claim- of-right to the final product.

Cooperation- Internals into other Advantages

Space cooperation prevents escalation

Rendleman and Faulconer, 10 [James Rendleman, Col, and J. Walter Faulconer, Col, 2010, “Improving international space cooperation: Considerations for the USA”, Space Policy 26|AF]

4. Global engagement For thousands of years, tribes, then cities, states, and nations, have formed cooperative agreements, partnerships and relationships with others to promote matters of mutual interest, such as security and self defense, commerce, and humanitarian assistance. Cooperation presents an opportunity to develop dependencies among nations that may obviate conflict. Such sharing also gives a nation an opportunity to gain what may be a rare insight into what a competitor or adversary knows about space technologies and how they can be employed. This understanding can help reduce the need to prepare for doomsday scenarios where one imagines or projects the technologies that an adversary could develop, regardless of the technical merit or reality. Today, international cooperation extends to a whole host of scientific endeavors, reflecting the best spirit and intentions of the Outer Space Treaty, whose preamble calls for space to be used for “peaceful purposes.”19 This has been the hope since the beginnings of the space era. In 1955, before the very first successful space launches, cooperation was declared a centerpiece of US foreign policy strategy when the White House announced: The President has approved plans by this country for going ahead with launching of small unmanned earth-circling satellites as part of the United States participation in the International Geophysical .This program will for the first time in history enable scientists throughout the world to make sustained observations in the regions beyond the earth’s atmosphere.20 The full realization of cooperation’s promise occurred nearly four decades later with the end of the ColdWar. Space and Earth science research and space exploration were no longer constrained by an overarching competition between two superpowers. Capitalizing on opportunities and leveraging the expertise of other nations, those seeking to jumpstart or advance their scientific initiatives rushed into the new multi-polar world creating a surplus of international space alliances and partnerships.21 The USA is continuing this trend by reaching out more constructively to large nuclear global powers like India and China, in the hope that such engagement shapes their future space and engineering activities in positive directions. Of course, a nation’s decision to engage in space cooperation is very much a political decision. Nations pick and choose if, when, where, and how they expend their national treasure. They choose the manner and extent of their foreign investments for reasons both known and unknownto other nations. The only constant is that a decision to “join in” cooperation is, in every case, a calculated political decision by each potential member of a commercial partnership or alliance, or inter- or quasi-governmental structure. Private commercial investments are nearly always controlled at a national level, usually by the force of domestic (municipal) law, regulation, or licensing.22 National decision-making influences commercial and government entity governing structures. Accordingly, some space capabilities will be funded, developed, and offered if and only if they are strictly operated and controlled under specific national direction and within strategic national guidelines. Thus, military space cooperation tends to occur only when overarching national security military and intelligence community interests are satisfied. In contrast, international civil cooperation generally wins internal national political support for a different set of reasons: that is, if the cooperation generates national diplomatic prestige, provides for political sustainability, or enables workforce stability.23 Cooperation provides opportunities for a nation to demonstrate its international leadership and technical prowess. For example, India has used its recent launches to host payloads from a number of international partners. South Korea is leveraging Russian launch technology to attempt space launches of satellites in support of its dream to become a “top ten” space fairing nation. Russia and China launch satellites for much of the global space faring community. Ultimately, support for cooperation and collaboration increases when the perceived utility and diplomatic prestige derived from cooperation increases. A demonstration of the utility of diplomatic prestige gained from space cooperative endeavors can be seen in the Apolloe Soyuz space link-up (1975) and Space Shuttlee Mir docking (1995) missions, though not for reasons contained in the public pronouncements by the participants Their true and complex diplomatic utility was not made apparent for many years. As described by James Oberg: Only with the Soviet program at a standstill did Moscow agree to fly a joint orbital mission. Its fallback position was that if it couldn’t be Number One in space, it could at least pose as the equal partner of the new Number One, the United States. It was better than letting on how far behind its space program had fallen.24 4.2. Political sustainability International cooperation has the wonderful, if sometimes wasteful, capacity to increase the political will to sustain and fund space programs and associated budgets. As noted, cooperation provides a spacefaring state the basis to draw on additional resources. It also enables a program to weather attempts to rein it in even when faced with contentious and devastating cost-growth or budget realities (which most space programs invariably face). Thus, within the USA, a program often wins some sanctuary from cancellation threats or significant budget reductions to the extent that Congress and the administration feel compelled not to break, stretch, or withdraw from international agreements. Political good will is generated by funding these programs. As an example of the power of this good will, one only need look at the politics surrounding NASA’s manned program. Money has been allocated to the program even when the perceived justification has collapsed. Now the new internationalist US president doesn’t care much for the NASA manned mission, and has even less understanding of its science mission. But critics concede that the president sees value in the votes its engineering and contractor community represents, key especially in vote rich states such as Florida which serve as a nexus for manned US launches. Similarly, some reason the political and diplomatic integration of Russia into the ISS program may well have saved it and Space Shuttle programs from cancellation.25 Once cooperation has commenced, canceling a program becomes inconsistent with political sustainability as long as the utility cost associated with the loss of diplomatic benefits and the negative effects on reputation of terminating an international agreement is larger in magnitude than the utility cost that must be paid to maintain the system. In general, any unilateral action sends a signal that the actor is an unpredictable and therefore an unreliable and possibly disrespectful partner. This tends to sabotage the possibility of future cooperation.26 If significant cooperation has never previously occurred, its commencement is thought to be a defining event, delivering specific political rewards and diplomatic utility. This is why the recent pronouncements on space cooperation made by President Obama and Chinese officials during his November 2009 visits are being watched with special interest. The same attention is being paid to the discussions held with the Indian government and its space community. During the height of the Cold War the USA and the USS Rwere able to find common ground to press on with the Apolloe Soyuz mission despite longstanding security concerns. Perhaps similar common ground can be found with the Chinese. Lamentably, space cooperation between the two countries has thus far been only marginal given the strict security controls that needed to be imposed. The Chinese, like many others, are exploiting space technologies to improve missile systems that can deliver weapons of mass destruction and they are stealing every technology they can get their hands on. China has now tested a kinetic-kill anti-satellite weapon system.

Space is highly crucial to protect U.S assets and allies; solves for foreign funding and high intelligence communication

Bryan T. **Johnson**; is a former Policy Analyst in the Kathryn and Shelby Cullom Davis International Studies Center at The Heritage Foundation. http://www.heritage.org/research/reports/1999/08/the-new-space-race “The new space race: challenges for U.S National Security and Enterprise” August 25th 19**99**

U.S. military assets in space are vulnerable to jamming or attack. This vulnerability could compromise the military's surveillance and reconnaissance efforts as well as its ability to help forces navigate, communicate, and determine weather conditions. Congress should take steps to ensure that the U.S. military is capable of controlling space and defending military and civilian assets. The military must be able to operate freely in space to protect U.S. assets and lanes of communication, and to monitor all space vessels. It needs adequate command-control-communications-computers and intelligence (C4I) capabilities and systems for tactical warning, anti-satellite efforts, space-to-ground attack, and missile defense. Subsidies for Russian activities on the ISS that could be used to fund Russia's development of advanced anti-satellite systems should be diverted to the U.S. military. Alternatively, Congress should consider diverting funds from the U.S. foreign aid program, specifically development assistance. If the Administration can suggest offsetting an emergency supplemental foreign aid increase with funds that Congress considered appropriating for intelligence activities, as President Clinton did last winter, Congress can use the same approach to divert foreign aid funds to intelligence activities.

Cooperation- Internal- Heg

Cooperation key to international leadership

Newton 11 [Elizabeth K. Newton, Professor of Physics at the University of Alabama, and Michael D. Griffin, Former Administrator at NASA and professor at the University of Alabama, Feb 2011, “United States Space Policy and International Partnership”, Space Policy, 27|AF]

1. Will the USA be more secure? As stated in the White House’s space policy and Lynn’s preview of the National Security Space Strategy, US security hinges on fostering a cooperative, predictable space environment where countries can operate in a stable, sustainable way. Planned debris tracking standards, considerations of international ‘rules of the road’, and shared data sets for collision avoidance and debris mitigation are measures that undoubtedly will contribute to the security of space as a shared venue for national activities. The stated desire to develop a Combined Space Operations Center for coalition operations could expand access to information, awareness, and services. Leveraging partner capabilities, integrating them into system architectures, and increasing the interoperability of systems are important planned steps as well. These new strategies do not diminish the USA’s current strengths in the national security space realm and quite likely stand to capitalize on international interest in multilateral solutions. Further information will doubtless be forthcoming in the Space Posture Review. One might also mention, under the theme of security, the USA’s ability to access its strategic assets in space. On the civil space side, the ‘gap’ in the government’s ability to access the International Space Station (ISS), a >$70 billion asset, after the Shuttle’s retirement is certainly detrimental from a strategic point of view. The USA will be dependent on the goodwill of international partners until an as-yet-unrealized commercial capability becomes available. However even then, the policy’s lack of support for having an independent federal capability is worrying, for it is tantamount to relying on FedEx without the back-up of a US postal service; or on commercial airlines without alternative military air transport; or on commercial weather forecasting without a National Oceanographic and Atmospheric Agency (NOAA).

Cooperation- Internal- Competitiveness

Cooperation is key to competitiveness

Newton 11 [Elizabeth K. Newton, Professor of Physics at the University of Alabama, and Michael D. Griffin, Former Administrator at NASA and professor at the University of Alabama, Feb 2011, “United States Space Policy and International Partnership”, Space Policy, 27|AF]

Scientific research, engineering, and innovation are at the heart of the success of the US economy and world leadership. Some argue that the Apollo Moon landing program laid the technical foundations and infrastructure underpinning advances by the USA for the next 40 years. It inspired hundreds of thousands to become engineers and live on the innovation frontlines. Its communications, weather, precision navigation and timing, surveillance and warning satellites systems became part of a revolution that connected the USA and the rest of the world. Even when interest in manned space programs waned, the engineers it generated drove a technological innovation engine that sparked many years of advances a cross many other arenas. These successes rightly led to the 20th century being called the American Century. Over the past 50 years, 50-85% of the growth in America’s gross national product (GNP) can be attributed to its science and engineering strengths. As noted in a recent report published by the National Academy of Sciences, “scientists and engineers tend, through innovation, to create new jobs not only for themselves but also for workers throughout the economy.”27 They generate economic growth for others unlike many other elements of society, and this success is highly leveraged; only 4% of the US workforce is involved in engineering and science.28 Many other nations are eager to duplicate this success. They are working diligently to grow indigenous capabilities to exploit orbital space for their own commercial or military gain, or for national pride. This has all had the effect of generating considerable interest from other nations and commercial entities to seek space cooperation with USA and other potential partners. Initially such space cooperation might be perceived as inimical to the US aerospace industrial base: cooperation could cause decreased domestic employment because foreign nations could then build space systems and components that might otherwise have been constructed in the USA. India and China are producing huge numbers of science, technology, engineering, and math (STEM) qualified manpower in their rush to become first-tier superpowers. This is problematic for the USA, as cooperation with such states could allow them eventually to better engineer and then undercut US markets. While international space programs often survive the US Congress’ budget knife for the prestige and political reasons described above, spending on cooperative programs also generates large numbers of jobs. In turn, these can serve as key sources of revenue in local communities or among leading edge and educated engineering constituencies. Those who are employed in such programs benefit from the government largess that arises out of the cooperative space effort’s prestige and political support. On the other hand, the prospective loss of aerospace community jobs and revenue can easily pose a serious political problem for both the administration and Congress. Given this, political appointee and elected official perceptions of ongoing international cooperation programs is a matter of great importance.

Cooperation- Solvency- Modeling

US action on property rights in space will be modeled globally

Sam Dinkin, Ph.D. economist who specializes in auctions for privatization, 5/10/04, The Space Review, <http://www.thespacereview.com/article/141/1>

This might not be enough to assure entrepreneurs that their investments will be their property, but don’t let the perfect be the enemy of the good. The US is the center of a good fraction of the global economy and the space economy and if the US leads, other like-minded nations will follow. On Earth, countries that honor property rights are in ascendance. One surmises they will ascend in space as well. If bilateral agreements and the Outer Space Treaty do not provide an adequate regulatory environment for commercialization and colonization, then perhaps the treaty should be amended or the US should withdraw.

Cooperation- No Support for Current Treaties

The international community wants a new legal regime – there’s no support for the old system

Yun Zhao, Lecturer at City University of Hong Kong, PhD from University of Rotterdam, 2004, Journal of Space Law, Pg. 283, <http://heinonline.org/HOL/Page?handle=hein.journals/jrlsl30&div=22&collection=journals&set_as_cursor=5&men_tab=srchresults&terms=26%20W.%20St.%20U.%20L.%20Rev.%2047&type=matchall#295>

Based on the example or the deep seabed, it appears that CHM has lost much of its attraction for developing countries. The political and economic conditions that led to the UNCLOS have changed significantly. The treaties containing the concept of the CHM were argued vehemently in the politically tense atmosphere of the Cold war. The primary goal was to prevent the former Soviet Union and the United States from gaining a military advantage, rather than developing a regime that would support private development.” The end of the Cold war and the adoption of a market-economy approach by most developing countries has pushed the idea of capitalism and the free market approach into the limelight. Through years or discussion, most scholars believe that the CHM, while maintaining some policy significance, lacks the force of accepted international law. A great number of persons even consider the concept as meaningless and lacking no practical value.’

CHM = Common Heritage of Mankind

Extensions- Treaty

Treaty- Advocate- Property Treaty

National property legislation should be coordinated internationally

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

Participating states should additionally provide for reciprocity and/or negotiate some form of limited "mini-treaty" to coordinate national property legislation. Such a treaty would elaborate on the elements in Article VIII -- it would define the property rights conferred under Article VIII, and provide for their recordation; it would define the term "space object," with particular emphasis on the distinction between space vehicles and permanently situated space facilities; it would define the term"personnel"; and it would delineate the extent of jurisdiction and control, with particular emphasis on the physical extent of safety zones, and upon the temporal duration of jurisdiction, i.e. upon the period of abandonment necessary to extinguish jurisdiction.

New property treaty would be best approach to rights

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22|AF]

Many solutions to the problem of private property rights on celestial bodies have been provided by scholars. Unfortunately because technology and funding have not made the issue one that needs immediate resolution, proposed solutions wait until the theories are tested by practice and need in the future. There are plenty of solutions to the problems posed by the uncertainty of property rights in celestial territory that do not require an overhaul of the legal space regime. Slight additions and amendments to the current regime are far more favorable to address property concerns than are drastic upheaval of settled legal norms.121 The International Institute of Space Law advocates for the creation of a specific regime for the exploitation of such resources through the United Nations.122 The Institute states that the purposes of such a creation are clarity and legal certainty.123 As was wisely stated, “[T]he utility of law can be measured in large part by its certainty [. . .].”124 More clarification is needed because the existing treaty system was based on cold war norms, which no longer apply, and because of the growing importance of private enterprises in the space industry as a result of the Obama administration’s new approach to NASA’s funding in favor of private ventures. Creating a new treaty is in line with the practice in this area, i.e. there are a number of treaties that make up the main body of space law. Those advocating for the withdraw of the U.S. from the Outer Space Treaty fail to understand the legal scope of the main principles of the treaty.125 Article II of the treaty has likely passed into international customary law, as discussed earlier. Therefore, even non-parties to the Outer Space Treaty are bound by the principles that have passed into customary international law, one of which being Article II.126 A more practical and appropriate solution would be to create a multilateral treaty, similar to the other space law treaties, dealing particularly with the property rights of private actors. This “Property Treaty” should guarantee property rights to private actors, and craft that content of the property right using the social-obligation norm. Using the social-obligation norm as a more robust, positive theory of property over a “thin” and negative theory of property found in most liberal legal systems would appeal to a wider array of nations prompting more acceptance of the Property Treaty.

Treaties- OST done

OST is dead - Russia’s Phobos Mission will tear up the OST by the end of 2011

DiGregorio 11 [Barry E DiGregorio., director of the International Committee Against Mars Sample Return and author of Mars: The Living Planet (North Atlantic Books), “Don’t send bugs to Mars,” January 2011, http://io9.com/5721723/dont-send-bugs-to-mars|AF]

Early spacecraft had to be thoroughly and expensively sterilised before they could be sent to the moon or planets. However, over the years this requirement has been watered down. The Committee on Space Research (COSPAR) in Paris, France, has been charged with making adjustments based on new data. COSPAR now allows spacecraft to bypass any sterilisation as long as they are not carrying life-detection instruments or landing on areas of Mars designated as "special regions" - areas where liquid water could exist for short periods that might support terrestrial microbial growth. The problem with these policy changes is that they are premature: our knowledge about the survivability of life on Mars is constantly changing with each spacecraft mission. Numerous reports have debated whether terrestrial spores might be able to replicate and spread on Mars. We still don't know the answer, so why risk contaminating the most Earth-like planet in our solar system? Now a mission slated to launch in the second half of 2011 will effectively tear up the treaty. The Russian Federal Space Agency's Phobos Sample Return Mission (formerly known as Phobos-Grunt) will send not just microbial spores but live bacteria into the solar system for the first time. If this isn't a direct violation of the Outer Space Treaty then what is?

OST unenforceable - China violated OST by failing to consult other countries about its ASAT test, yet few objected

Marder 8 [Eugene Marder, Center for defense information, CDI Research Assistant, “CPR for the OST: How China’s Anti-Satellite Weapon Test Can Breathe New Life into Article IX of the Outer Space Treaty,” June 2008, http://www.cdi.org/pdfs/ChineseASATtest.pdf|AF]

As news of a Chinese anti-satellite (ASAT) weapon test spread throughout the world during the second and third weeks of January 2007, most spacefaring nations condemned the action as irresponsible and troubling. 1 Some complaining states cited China’s potential spurring of an arms race in space, and all noted the staggering amount of hazardous orbital debris generated by the test without any prior warning by the Chinese. While these statements were uniformly unequivocal in their disapproval, they seldom implied that China had somehow breached the terms of international law—China’s actions were deemed reproachable, but not illegal. But the Outer Space Treaty of 1967 (OST), by its Article IX provisions, calls for a state to engage in international consultations when predicting that its space activities will harm the interests of others. 2 China failed to do so, and thereby violated the terms of the OST. Yet few states noted this illicit behavior.

Treaties- OST bad

Outer Space Treaty fails- lack of specificity and inability to regulate

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

C.The Outer Space Treaty Fails to Accommodate the Post-Modernist World in Using the Medium of Outer Space The Outer Space Treaty should not be applied to the medium of outer space. n77 The biggest stumbling block of the Outer Space Treaty is Article II's non-appropriations clause and the designation of the use and benefit of space as belonging to the "province of all mankind." n78 These terms of art have been interpreted in various ways by developed and developing states. n79 Independent of either interpretation, such uncertainty in the law will not encourage the costly investments required. n80 With the privatization of outer space, investors will not seek ventures where there is inadequate or no return on investment. n81 The Outer Space Treaty's non-appropriations clause will discourage the private sector from traveling and performing appropriation activities in outer space. Although the Outer Space Treaty addresses some potential novelties in outer space exploration, its premise, as reflected in Article I, is antithetical to the realities of this market-driven world. The treaty does not encourage active commercial exploitation of space travel, but limits its influential impact to the realm of scientific exploration by governmental agencies for the common good of humankind. The Outer Space Treaty's biggest and most [\*593] profound failure is its lack of prospective thought on the impact of privatization of outer space ventures. This theme has been propounded upon by academics that view outer space's potential as truly the final frontier of humanity and wish to be there. n82 Therefore, the treaty will serve as a bar to extraterrestrial appropriations by juridical persons, and will impede outer space travel by tentatively barring space tourists, cargo ships, colonists, for-profit science, etc., from outer space. The other major problem with the Outer Space Treaty is its failure to address a wide range of issues. As the title indicates, the treaty addresses "Principles Governing the Activities of States in the Exploration and Use of Outer Space." n83 Principles serve as a guide to rule-making, but do little to provide practical solutions for space-faring nations. The Outer Space Treaty cannot serve as a proper basis for the corpus juris spatialis. The treaty fails to deal with many anticipated issues for outer space exploration. For example, the Outer Space Treaty fails to propose laws for environmental standards, immigration, distribution of appropriated materials for the benefit of mankind, role of juridical persons and/or governmental contractors in outer space, space pirates, colonization, penalties for actsagainst the Outer Space Treaty, and various jurisdictional issues. Many of the rules propounded by the Outer Space Treaty are vague and problematic. For example, Article VII states that the launch state, or state that procured the launch, retains jurisdiction and control over the launched object; n84 however, Article VII fails to anticipate launches by global corporations into outer space. n85 Likewise, astronauts are considered envoys of mankind, n86 but it is unclear if space tourists, [\*594] contractors, or juridical persons are also considered "envoys." Therefore, the Outer Space Treaty's "principles" do not adequately deal with a wide-range of potential issues, especially as they pertain to non-governmental entities.

Exploration- Extensions- Get off the Rock

Plan leads to wave of private space development

Brandon C. Gruner, J.D. Candidate at Seton Hall University of Law, 2004, Seton Hall Law Review, Pg. 335, <http://law.shu.edu/Students/academics/journals/law-review/Issues/archives/upload/Gruner.pdf>

There is no doubt that this legal uncertainty has inhibited investment and development of outer space for the past three and a half decades. 286 States refuse to risk substantial investments in the development of extraterrestrial settlements, mining colonies, and transportation because attitudes towards that State’s property rights in resources may change as soon as it begins to reap rewards. 287 No State wants the foundation it builds yanked out from underneath it in favor of another set of nations’ ideas of how extraterrestrial land should be governed. 288 Yet the world is at a critical point in its history of space exploration. Nations that previously had little or no space-faring potential now have the financial and technological capabilities to develop space industries, and these nations are challenging the prominence of the United States and Russia in space activities. 289 Consequently, as more and more of these nations develop outer space technologies, States have begun to concede that some measure of property rights should exist in outer space, and therefore are adopting a view that appropriation of resources is permissible. 290 Thus, the deceleration of space exploration that has existed due to the concept of res communis 291 may soon give way to some nation challenging the boundaries of this principle by appropriating a significant tract of extraterrestrial territory. 292 With all of this legal wrangling and flip-flopping, it is no wonder that States have refused to invest money into the development of outer space. Yet, it also demonstrates how an opportunistic nation could easily exploit this legal uncertainty.

Exploration solves every scenario of extinction

Ruth **Suehle**, freelance writer, Citing Stephen Hawking, Professor of Theoretical Physics at Cambridge, Master of Time and Space, 4/27/**11**, Open Source,. “The future of space exploration is in the public's hands. What can collaboration do?”

If 2011 becomes known as the year that our governments lost interest in space, could 2012 be the year that collaboration picks up the pieces? As of this week, the Allen Telescope Array used by the [SETI Institute](http://www.seti.org/) has gone into "hibernation mode" after losing a significant portion of its funding. "Hibernation means that, starting this week, the equipment is unavailable for normal observations and is being maintained in a safe state by a significantly reduced staff," said SETI Institute CEO Tom Pierson. Although the array itself is hibernating, SETI research will continue. Most notably on that list of projects to keep working on, Pierson mentioned "new tools that will enable citizen scientists to help us identify the sources of radio frequency interference, and new avenues for application developers to add new visualizations and detection algorithms." That sounds like a lot of words for "open collaboration," which SETI is already well-known for as one of the pioneers of distributed computing through [SETI@home](http://setiathome.berkeley.edu). For many people, that project was their first interaction with the concept later named "crowdsourcing." It's also one of the largest--how many projects can claim well over a million users and 157,000 active users in more than 200 countries? Even if searching for E.T. doesn't interest you, the ATA wasn't used solely for that. It also had quite a few astronomical observation purposes that now are also unavailable. And of course, SETI's not the only one taking a hit this year. Discovery returned from its final mission last month. June 28 is the scheduled date for the final shuttle launch. What does all this mean for our knowledge and exploration beyond Earth? The privatization and growth of a "space industry" and "space tourism" have had quite a bit of success already. Commercial space launches have been a billion-dollar business for a decade. And now everything sent into space will be sent there by a private company. Projects like SETI@home, [Galaxy Zoo](http://www.galaxyzoo.org/), and the new mobile [SetiQuest Explorer](http://live.seti.hg94.com/) prove that collaboration and crowdsourcing can help with space exploration and scientific discovery. But that's once the data has made it down here to the ground. There are a lot of really expensive things that have to happen first. What about those? We've posted more than a few times about fundraising via Kickstarter. Those are usually projects that need a few hundred dollars here or a couple thousand there. Space projects involve way more zeroes on their budget numbers. Can Kickstarter raise that kind of money? In December, a project for an [iPod Nano watch raised more than $941,000](http://www.kickstarter.com/projects/1104350651/tiktok-lunatik-multi-touch-watch-kits). That's a lot closer. But even with a noble mission--global Internet access--[Buy This Satellite](http://buythissatellite.org/), begun in January when Egypt blocked Internet access, has managed to raise less than $62,000 towards a $150,000 first goal. A year ago, Steven Hawking called for a manned return to the Moon to build a base for travel through the solar system and a manned Mars mission by 2025, not just for the sake of science, but for the survival of humanity. "Life on Earth is at the ever-increasing risk of being wiped out by a disaster such as sudden global warming, nuclear war, a genetically engineered virus or other dangers," he said. "I don't think the human race will survive the next 1,000 years unless we spread into space." Maybe if we're lucky, the answer to further space discoveries--and if Hawking's right, the continuation of the human race--is at the intersection of collaboration, crowdsourced ideas, and a private space industry. The [first private lunar mission](http://www.spaceadventures.com/index.cfm?fuseaction=lunar.welcome) has a seat available--what could a really great idea and a little collaboration do with that opportunity?

We are at a critical stage in human development for exploration to end systemic suffering on Earth

Sylvia Engdahl, teaches online graduate class at Connected Education, award-winning science fiction writer, 1994, “Space and Human Survival, Part I”, http://www.sylviaengdahl.com/space/survival.htm

I have called this stage in our evolution the “Critical Stage.” Paul Levinson [the Director of Connected Education] uses different terminology for the same concept. He says that we have only a narrow window to get into space, a relatively short time during which we have the capability, but have not yet run out of the resources to do it. I agree with him completely about this. Expansion into space demands high technology and full utilization of our world’s material resources (although not destructive utilization). It also demands financial resources that we will not have if we deplete the material resources of Earth. And it demands human resources, which we will lose if we are reduced to global war or widespread starvation. Finally, it demands spiritual resources, which we are not likely to retain under the sort of dictatorship that would be necessary to maintain a “sustainable” global civilization. Because the window is narrow, then, we not only have to worry about immediate perils. The ultimate, unavoidable danger for our planet, the transformation of our sun, is distant—but if we don’t expand into space now, we can never do it. Even if I’m wrong and we survive stagnation, it will be too late to escape from this solar system, much less to explore for the sake of exploring. I realize that what I’ve been saying here doesn’t sound like my usual optimism. But the reason it doesn’t, I think, is that most people don’t understand what’s meant by “space humanization.” Some of you are probably thinking that space travel isn’t going to be a big help with these problems, as indeed, the form of it shown in today’s mythology would not. Almost certainly, you’re thinking that it won’t solve the other problems of Earth, and I fear you may be thinking that the other problems should be solved first. One big reason why they should not is the “narrow window” concept. The other is that they could not. I have explained why I believe the problem of war can’t be solved without expansion. The problem of hunger is, or ultimately will be, the direct result of our planet’s limited resources; though it could be solved for the near-term by political reforms, we are not likely to see such reforms while nations are playing a “ zero-sum game” with what resources Earth still has. Widespread poverty, when not politically based, is caused by insufficient access to high technology and by the fact that there aren’t enough resources to go around (if you doubt this, compare the amount of poverty here with the amount in the Third World, and the amount on the Western frontier with the amount in our modern cities). Non-contagious disease, such as cancer, is at least partially the result of stress; and while expansion won’t eliminate stress, overcrowding certainly increases it. The problem of atmospheric pollution is the result of trying to contain the industry necessary to maintain our technology within the biosphere instead of moving it into orbit where it belongs. In short, all the worldwide problems we want to solve, and feel we should have solved, are related to the fact that we’ve outgrown the ecological niche we presently occupy. I view them not as pathologies, but as natural indicators of our evolutionary stage. I would like to believe that they’ll prove spurs to expansion. If they don’t, we’ll be one of evolution’s failures. If I have frightened any readers here, I’m not sorry! But cheer up; in Part II I’ll explain how humanizing space can not only save our species, but give all cultures equal access to resources that are virtually unlimited.

Ownership of land is a sufficient incentive to spark private development

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

The simple, vital point these authors overlook is that net profit comes from sales price less expenses; revenues less expenditures. 170 Because of the astronomical expense of transporting rocks back to Earth for sale, it is impossible to make a profit selling rocks. But people on Earth would pay approximately the same price for a Lunar land deed as they do for Lunar rocks sold en masse once the settlement is established, 171 and the cost of printing millions of those deeds and delivering them to the customers is pennies apiece. Thus, even though picking up rocks is nowhere near profitable enough for an established settlement, the ability to sell legitimate, recognized ownership of the land the rocks are on would produce revenues in the scores of billions of dollars and earn billions of dollars worth profit. Those billions of dollars of potential profit could be a powerful incentive to develop space settlements.

US action on property rights in space will be modeled globally

Sam Dinkin, Ph.D. economist who specializes in auctions for privatization, 5/10/04, The Space Review, <http://www.thespacereview.com/article/141/1>

This might not be enough to assure entrepreneurs that their investments will be their property, but don’t let the perfect be the enemy of the good. The US is the center of a good fraction of the global economy and the space economy and if the US leads, other like-minded nations will follow. On Earth, countries that honor property rights are in ascendance. One surmises they will ascend in space as well. If bilateral agreements and the Outer Space Treaty do not provide an adequate regulatory environment for commercialization and colonization, then perhaps the treaty should be amended or the US should withdraw.

Exploration- Extensions- Leads to Exploration

Current Law cripples the US patent system and private development of space

Ro et al 11 Theodore U. Ro, intellectual property attorney for NASA, Matthew J. Kleiman, Corporate Counsel at the Draper Laboratory in Cambridge, MA, Kurt G. Hammerle, intellectual property attorney for NASA, 3/15/11, Boston University School of Law Journal of Science and Technology Law, <http://bujostl.org/content/WORKING_PATENT_INFRINGEMENT_IN_OUTER_SPACE.pdf>

The foregoing discussion has shown how the §105(a) Exceptions have created a loophole in U.S. patent law that could permit private entities to insulate themselves from patent infringement liability in the United States for their outer space operations under circumstances wherein they might otherwise be liable under current U.S. extraterritorial principles.  This loophole poses at least two problems.  First, allowing companies to avoid liability for infringing U.S. patents could hamper the effectiveness of the U.S. patent system.   Patents traditionally play an important role in promoting high technology research and innovation. An ineffective patent system could reduce incentives for private space companies to innovate and cause space companies to protect their inventions as trade secrets instead of disclosing them to the public in patent filings. 78    Second, while a purpose of Exception 2 is to recognize and defer to the United States’ obligations under the Outer Space Treaty and the Registration Convention, it is unclear whether completely deferring to the Registration Convention was actually required in order to accomplish this goal.  In fact, entirely ceding responsibility for patent infringement by space objects that are operated by U.S. persons or companies may be inconsistent with the United States’ obligations under the Outer Space Treaty.

Establishing property rights is key to private development of space

W. N. White, Attorney at Law, 2004, Space Resources Roundtable, <http://www.lpi.usra.edu/meetings/roundtable2004/pdf/6009.pdf>

During the past year, real property rights has become the most important issue in the field of space law. Gregory Nemitz pursued his claim to Asteroid 433 Eros in Federal District Court, where his case was dismissed. That precedent-setting case, Nemitz vs. the United States, is now before the Ninth Circuit Court of Appeals. Also in the past year, the International Institute of Space Law, a member organization of the International Astronautical Federation, issued its first ever position paper, “Statement of the Board of Directors Of the International Institute of Space Law (IISL) on Claims to Property Rights Regarding the Moon and Other Celestial Bodies.” Finally, the Report of the President’s Commission on Implementation of United States Space Exploration Policy (the “Aldridge Commission Report”) said that “it is imperative that [property rights] issues be recognized and addressed at an early stage in the implementation of the vision, otherwise there will be little significant private sector activity associated with the development of space resources, one of our key goals.” The author will discuss the implications of these developments, including the prospects for future U.S. legislation regarding property rights and mining law in outer space.

Private exploration of space empirically will not happen without property protection

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

Reinstein says, “A legal system that is unclear as to the rights of developers in the land they develop is almost as prohibitive of positive development as a system forbidding development altogether.” 158 Antitrust and Trade Regulation lawyer David Everett Marko adds, “Free enterprise institutions simply cannot make significant investments in space while they are under the threat of lawsuits over the meaning of treaty terms . . . .” 159 Therefore, it is not at all surprising that, without the incentive that advanced legal certainty would provide, space settlement is not currently happening, and it probably never will. A few space lawyers like Jim Dunstan argue that firm property rights are unnecessary for space development, 160 although this belies the fact that space settlement seems no closer today than it did twenty years ago when David Anderman said the same thing. That is why Lunar land claims recognition legislation is needed now, in order to create an incentive to make space settlement happen at all.

Legal recognition of property rights is a prerequisite to development

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

Reinstein says, “A legal system that is unclear as to the rights of developers in the land they develop is almost as prohibitive of positive development as a system forbidding development altogether.” 158 Antitrust and Trade Regulation lawyer David Everett Marko adds, “Free enterprise institutions simply cannot make significant investments in space while they are under the threat of lawsuits over the meaning of treaty terms . . . .” 159 Therefore, it is not at all surprising that, without the incentive that advanced legal certainty would provide, space settlement is not currently happening, and it probably never will. A few space lawyers like Jim Dunstan argue that firm property rights are unnecessary for space development, 160 although this belies the fact that space settlement seems no closer today than it did twenty years ago when David Anderman said the same thing. That is why Lunar land claims recognition legislation is needed now, in order to create an incentive to make space settlement happen at all.

Exploration- Extensions- Boosts NASA

Exploration gives NASA a competitive edge to increase business

Art, **Dula**; space lawyer, patent attorney CEO of the [private spaceflight](http://en.wikipedia.org/wiki/Private_spaceflight) company, [Excalibur Almaz](http://en.wikipedia.org/wiki/Excalibur_Almaz). “Private Sector Activities in Outer Space” 19**85**; Volume 19

To facilitate development of private industry in space, NASA has de-veloped three basic types of working relationships with private organiza- tions. These three are intended to provide the flexibility needed to meet a wide range of needs from large organizations with strong research depart- ments to small entrepreneurial firms that want to develop a product for the market. They also provide for incremental increases in understanding and commitment by the parties. In all cases, the government does not fund any of the work done by the firm, but rather each party funds its own activities separately. The three types of working relationships are described below. The Joint Endeavor Agreement (JEA) is a cooperative arrangement in which private participants and NASA share common program objectives, program responsibilities, and financial risk. The objective of a JEA is to encourage early space ventures and demonstrate the usefulness of space technology to meet marketplace needs. A JEA is a legal agreement between equal partners, and is not a procurement action; no funds are exchanged between NASA and the industrial partner. A private participant selects an experiment and/or technology demonstration for a joint endeavor which complies with materials processing systems (MPS) program objectives, conducts the necessary ground investigation, and develops flight hardware at company expense. As incentive for this investment, NASA agrees to provide free Space Shuttle flights for projects which meet certain basic criteria, such as technical merit, contribution to innovation, and acceptable business arrangements. As further incentive, the participant is allowed to retain certain proprietary rights to the results, particularly the non- patentable information that yields a competitive edge in marketing products. However, NASA receives sufficient data to evaluate the significance of the results, and requires that any promising technologies be applied com- mercially on a timely basis, or published.

Exploration- Extensions- Leads to Colonies

Exploration will rapidly metastasize colonies in outer space

Art, **Dula**; space lawyer, patent attorney CEO of the [private spaceflight](http://en.wikipedia.org/wiki/Private_spaceflight) company, [Excalibur Almaz](http://en.wikipedia.org/wiki/Excalibur_Almaz). “Private Sector Activities in Outer Space” 19**85**; Volume 19

By 2020, outer space will be a major focus for restless people in a technical society. The existence of a frontier is necessary to provide an adequate challenge to individuals who possess initiative and entrepreneurship. It will also accommodate those individuals, families, or groups who wish to prog- ress faster or achieve more-who like competition and growth. Early in the twenty-first century, space activities will play important, and perhaps cen- tral, psychological, material and cultural roles in making earth a better and more interesting place. As United States society becomes post-industrial and the majority of the human race enters the technological age, the earth will provide a base from which human beings will move outward into the solar system and eventually into interstellar space. It is likely that the openness, opportunities and challenges of outer space will exert a profound and sustained influence on the societies of earth. If we take up the challenge, the following major systems and activities could be in place and operating by 2020 A.D.

Exploration- Extensions- Clean Energy

Fundamental to next gen transportation and clean energy

Art, **Dula**; space lawyer, patent attorney CEO of the [private spaceflight](http://en.wikipedia.org/wiki/Private_spaceflight) company, [Excalibur Almaz](http://en.wikipedia.org/wiki/Excalibur_Almaz). “Private Sector Activities in Outer Space” 19**85**; Volume 19

Space transportation will be routine and inexpensive via common carriers from the Earth's surface to low-earth orbit. Beyond low-earth orbit, ma- ture, second-generation nuclear/electric and solar-sail constant boost spacecraft will provide private and public transportation. These spacecraft will operate routinely on schedules within the inner solar system, i.e., from the orbit of Mercury to the asteroids. The majority of commerce in the inner solar system should be privately owned and will operate for profit. Commer- cial space lines will begin operating no later than 2000 A.D. Beyond the asteroids, publicly owned spacecraft, primarily on missions of exploration, will predominate; but some private spacecraft, owned by "world" corpora- tions (i.e., corporations that do not reside primarily within the jurisdiction of any individual nation-state), will be exploring resources for future harvest.

The technology exists plan gives the green light to resource mapping outer space.

Art, **Dula**; space lawyer, patent attorney CEO of the [private spaceflight](http://en.wikipedia.org/wiki/Private_spaceflight) company, [Excalibur Almaz](http://en.wikipedia.org/wiki/Excalibur_Almaz). “Private Sector Activities in Outer Space” 19**85**; Volume 19

Development of advanced spacecraft and robotics will make possible the automated and manned exploration of the resources of the outer solar sytem to and including the Oort Cloud. These operations will primarily be con- ducted by governments, but some resource mapping and exploration will be done by privately owned space corporations, many of which will have been chartered and developed in space during the expansion of 2010-2020.

Exploration- Extensions- Solves Threats

Space communication tactically responds to enemies before they attack; solves threats

Bryan T. **Johnson**; is a former Policy Analyst in the Kathryn and Shelby Cullom Davis International Studies Center at The Heritage Foundation. http://www.heritage.org/research/reports/1999/08/the-new-space-race “The new space race: challenges for U.S National Security and Enterprise” August 25th 19**99**

During battle, uninterrupted communications are essential to victory. Indeed, preventing the enemy from communicating is a primary objective in warfare. Space-based communication assets enable the military to operate more efficiently. Current systems include the Defense Satellite Communications System (DSCS), used by the armed services and a number of government agencies; the Navy's Fleet Satellite Communications (FLYSATCOM), Leased Satellite (LEASAT), and Ultra-High Frequency Follow-On (UFO) systems;[39](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038593) the Army's Military Strategic/Tactical Relay (MILSTAR) satellites; and the Air Force Satellite (AFSAT) system.[40](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038596)

Intensive Surveillance and communication in space are vital to respond to foreign threats in the space race.

Bryan T. **Johnson**; is a former Policy Analyst in the Kathryn and Shelby Cullom Davis International Studies Center at The Heritage Foundation. http://www.heritage.org/research/reports/1999/08/the-new-space-race “The new space race: challenges for U.S National Security and Enterprise” August 25th 19**99**

America's armed services rely heavily on space-based assets, such as surveillance and communications satellites, to protect national security.[26](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038545) According to Air Force General Howell M. Estes III, former commander in chief of the North American Defense Command, "space is becoming a `vital national interest,' and because it is a source of national power, like oil today, it will be challenged by those who choose to do our country harm."[27](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038548) Indeed, the U.S. military is facing many threats to its continued use of and access to space: Russia has admitted to developing an anti-satellite weapons system capable of destroying U.S. satellites.[28](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038552) There are indications that other countries have acquired or will soon acquire this capability as well.[29](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038555) Many of America's low-orbiting satellites are vulnerable to laser attacks, which could blind certain imagery satellites.[30](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038559) According to the Defense Department, "Given China's current level of interest in laser technology, it is reasonable to assume in the future Beijing will develop a weapon that could destroy U.S. satellites."[31](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038562) Certain types of electronic equipment are capable of jamming signals from U.S. satellites.[32](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038565) According to Air Force General Richard B. Myers, "We have already seen instances of jamming satellites by Indonesia, Turkey, and Iran."[33](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038569) Although Russia's military suffers from lack of pay and resources, it launches about 15 military satellites a year, including reconnaissance and communications satellites.[34](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038573) The United States launches about 10 such satellites each year. Not long after the Kosovo intervention began, European leaders announced that their continued dependence on the United States for space-based intelligence and reconnaissance information would not be tolerated. Defense News noted in May 1999 that Europeans have embarked on an ambitious agenda to challenge the United States' use of space.[35](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038577) China's long-term goals include designing advanced anti-satellite systems that can be deployed either in space or on the ground, establishing permanent bases on the moon and permanently manned stations in orbit.

Exploration- Extensions- Key to Rationality in Modern Era

Provides unmanned intelligence; substantially minimizes human casualties, increases rationality

Bryan T. **Johnson**; is a former Policy Analyst in the Kathryn and Shelby Cullom Davis International Studies Center at The Heritage Foundation. http://www.heritage.org/research/reports/1999/08/the-new-space-race “The new space race: challenges for U.S National Security and Enterprise” August 25th 19**99**

Monitoring the activities of other nations and assessing their capabilities from space are far less risky than they otherwise would be, because human lives are not put at risk, satellites are always on duty, and the cost to deploy them decreases over time. Moreover, satellites cannot defect. An array of U.S. military surveillance satellites (in separate "constellations") provide constantly updated information to force commanders. Imagery intelligence (IMINT) satellites provide the Pentagon and commanders in the field, or at sea, with detailed data on targets, troop and fleet location and movement, armored units, airfields, air defenses, mine fields, beachhead defenses, and other data. As forward-deployed forces are being cut back, the military is becoming increasingly dependent on this form of intelligence.

Exploration- Extensions- Solves Natural Disasters

Exploration combats anti-satellites that block space weather systems; helps predict natural disasters.

Bryan T. **Johnson**; is a former Policy Analyst in the Kathryn and Shelby Cullom Davis International Studies Center at The Heritage Foundation. http://www.heritage.org/research/reports/1999/08/the-new-space-race “The new space race: challenges for U.S National Security and Enterprise” August 25th 19**99**

The Global Positioning System is a radio signal system of 24 satellites in six different orbits around the Earth that can quickly locate any object on Earth equipped with a GPS receiver.[41](http://www.heritage.org/research/reports/1999/08/the-new-space-race#pgfId=1038601) It provides precise coordinates, speed, and time-related data to any number of military and civilian users. The Defense Department also fields a fleet of weather satellites to assess or predict weather conditions, vital information when planning military operations. However, these space-based military assets are at risk, given Russia's claims that it possesses anti-satellite systems, as well as the Defense Department's confirmation that U.S. satellites have been subjected to jamming by foreign countries. There are also concerns that the International Space Station may be used to spy on the United States. The current agreement stipulates that only "peaceful" projects can be conducted on the Station; however, members do not agree on what qualifies as "peaceful." The United States and Russia believe that experiments vital to national security have "peaceful purposes," but Japan does not. And while agreements between the members prevent them from conducting certain experiments or activities in a particular country's space, no such agreement exists to restrict members from using their own space for reconnaissance and espionage activities. This loophole leaves wide open the door for spying on America. Another major issue facing the Air Force and U.S. intelligence agencies is the exorbitant cost of building and launching ultra-sophisticated electronic imaging satellites. The Air Force is now investigating two stage systems to lower launch costs.

Exploration- Extensions- Solves Heg

Military space focus kills soft power—Space exploration is key

Trevor Brown, BA, Indiana University; MSc, S. Rajaratnam School of International Studies, Nanyang Technological University, 1 March 2009, Air & Space Power Journal - Spring 2009, “Soft Power and Space Weaponization,” http://www.airpower.au.af.mil/airchronicles/apj/apj09/spr09/brown.html

Analysts believe that the United States’ determination to maintain dominance in military space has caused it to lose ground in commercial space and space exploration. They maintain that the United States is giving up its civilian space leadership—an action that will have huge strategic implications.31 Although the US public may be indifferent to space commerce or scientific activities, technological feats in space remain something of a marvel to the broader world. In 1969 the world was captivated by man’s first walk on the moon. The Apollo program paid huge dividends in soft power at a time when the United States found itself dueling with the Soviets to attract other nations into its ideological camp. Unless the United States has a strong presence on the moon at the time of China’s manned lunar landing, scheduled for 2017, much of the world will have the impression that China has approached the United States in terms of technological sophistication and comprehensive national power.32 If recent trends hold, this is likely to come at a time when the new and emerging ideological confrontation between Beijing and Washington will have intensified considerably.33

Extensions- Economy

Economy- Extensions- Uniqueness

Economy on downturn now- laundry list of indicators

Blumer 11, [Tom Blumer, 7/23/11, “The Fear-Based Economy”, Benzinga, http://www.benzinga.com/11/07/1795091/the-fear-based-economy#ixzz1T4Pr4O58|AF]

In July 2008, yours truly christened the economic conditions America began facing roughly a month earlier as the POR (Pelosi-Obama-Reid) Economy, named after its primary creators: House Speaker Nancy Pelosi, Democratic presidential nominee Barack Obama, and Senate Majority Leader Harry Reid. In a comment at that original post, I noted that the economy's job and wealth creators were “genuinely frightened by the lack of seriousness and presence of abject irresponsibility in Congress and in Obama.” This fright went viral long ago but remained whispered in carefully chosen company until Wynn broke the silence. When an earnings call participant asked why his firm hasn't expanded its meeting space in Las Vegas, Wynn responded: I'm afraid to do anything in the current political environment in the United States. … my customers and the companies that provide the vitality for the hospitality and restaurant industry, in the United States of America, they are frightened of this administration. And it makes you slow down and not invest your money. … this is Obama's deal, and it's Obama that's responsible for this fear in America. Why shouldn't the economy's key players be afraid? In 2-1/2 years, Barack Obama and his administration have shown that they will do anything in their power — even if not in their constitutional power — to further their far-left redistributionist and science-free environmental goals. If it means subverting the rule of law to favor bankrupt union-dominated car companies, so be it. If it means shutting down oil drilling and exploration in the Gulf of Mexico and restoring it in slow motion at a cost of tens of thousands of jobs, well, that's unfortunate collateral damage. If it means revoking an already-issued permit for coal mining, too bad, so sad. In Wynn's case, if it means demonizing convention and tourist spots when the timing fits, well, as far as Team Obama is concerned, his company will just have to deal with it. Why should Wynn even think about adding meeting rooms when at any politically convenient moment, Obama can and has shown at least twice that he will demonize a key travel destination? More broadly, Wynn was speaking for the entire economy's most productive participants: the businesspeople, entrepreneurs, and investors who drive commerce, create wealth and create jobs. As long as Barack Obama is president and his apparatchiks remain in control of their expanding bureaucracies and unaccountable czardoms, fear and intimidating uncertainty will rein. Wynn's stated indisputable truth must be at the core of the current debt ceiling, tax, and spending negotiations taking place in Washington. It has long been known and accepted, with proof going all the way back to Herbert Hoover's ill-conceived actions in the early 1930s, that tax increases will at a minimum prevent an economy attempting a recovery from reaching its full potential. At worst, they will send it back into recession. Additional tax increases in the current economy will create an overwhelming danger of another recession and a subsequent malaise which could rival the Great Depression. Did I say, “additional tax increases”? Well, yes. The Wall Street Journal helpfully reminded us on July 11 that tax hikes associated with Obamacare amounting to $438 billion over the next 10 years will begin taking effect in 2013. Of course, these impending levies, the legislation's stifling bureaucracy and disastrous work disincentives have been hanging over employers' growth and hiring plans since Pelosi, Reid, and Obama made it law 16 months ago. As if we needed more problems, make no mistake: The economy, which has failed to grow at the brisk pace required for a genuine recovery in employment since the end of the recession, has shown signs of serious deterioration in the past few months. Here are just a few of the indicators: •In May and June combined, seasonally adjusted employment grew by only 43,000, while the unemployment rate rose in both months. •The new-home market has barely budged from its historic lows. •Consumer confidence is at its lowest level since March 2009, one of the worst months of the recession. •The director of the widely read Consumer Reports Index stated his belief last week in a radio interview that that seeing the unemployment rate hit 9.6% in the next few months “is not out of the question.” •In mid-July, announced U.S. layoffs and terminations at Cisco and Borders alone were within striking distance of the number of seasonally adjusted jobs the whole economy gained in June. •On Friday evening, July 15, the better to avoid attracting much attention, Goldman Sachs dropped its annualized second- and third-quarter growth forecasts to 1.5% and 2.5%, respectively, and indicated that another recession is “clearly a possibility given the recent numbers.” Putting its employment practices where its predictions are, Goldman announced on Tuesday that “it might lay off as many as 1,000 employees globally.” •Most germane to the Washington discussions is the fact that federal collections, after rising steadily if not spectacularly for about a year, suddenly fell on a year-over-year basis in June.

Econ down- bizcon

Lowrey 7/21, [Annie Lowrey, Slate, 7/21/11, “Default Position: How Congress’ dithering on the debt ceiling is already dragging down the economy”, http://www.slate.com/id/2299722/]

Yes, the stock market is up, and bond yields are low. And the government's borrowing costs remain cheap: Interest on a 10-year Treasury bond is less than 3 percent. But a closer look shows that Congress is starting to spook investors, business owners, and individuals. It has introduced a modicum of much-dreaded uncertainty into their lives. And when investors are uncertain and businesses are afraid, they hunker down in ways that are very bad for the economy. So Congress may not have succeeded in blowing up the markets just yet. But fear not. There are signs it is weakening the anemic recovery. To be fair, Congress doesn't have to do much (literally and figuratively) to make economic conditions worse. If, upon hearing the news from Washington, consumers feel more pessimistic and decide to save rather than spend, that hurts the recovery. If bond investors decide to hang on to cash rather than buying corporate debt until this all blows over, that hurts the recovery. If contractors hold off on hiring workers until they are certain they are going to get their check from Washington, it hurts the recovery. And there is evidence that all of those things are starting to happen.

Economic slump has no end in the sight- unemployment

AP news, 7/24, [AP news, 7/24/11, “Economy’s slump may last through summer: rising unemployment signals more worries”, http://gulfnews.com/business/economy/economy-s-slump-may-last-through-summer-1.842003|AF]

Washington: The US economy's spring slump appears to be extending into the summer, according to a slew of mixed data released on Thursday. Layoffs are rising. Manufacturing activity in the Northeast expanded only slightly in July after contracting in June. Economic growth is projected to pick up this fall, but not enough to give businesses confidence to hire and speed the recovery. The economy could lapse even further if Congress and the Obama administration fail to reach an agreement on raising the nation's borrowing limit in the coming week. But for the moment, traders on Wall Street don't seem worried. Stocks soared on Thursday on news that European governments were moving toward agreement on an aid package for Greece. The Dow Jones industrial average closed 152 points up for the day. Article continues below Economists are less optimistic. They are forecasting a third straight month of feeble hiring in July, based on the latest round of data. Expectations are the economy added somewhere in the range of 50,000 to 100,000 net new jobs this month. That's not enough to keep up with population growth and far below what is needed to lower the unemployment rate, which was 9.2 per cent last month. Nothing improved "We're going to see improvement, but right now nothing's improved yet," said Joshua Dennerlein, an economist at Bank of America Merrill Lynch. Applications for unemployment benefits rose last week to a seasonally adjusted 418,000, the Labour Department said. They have now topped 400,000 for 15 straight weeks. Applications had fallen in February to 375,000, a level that signals healthy job growth. The Philadelphia Federal Reserve Bank said its manufacturing index rose to 3.2 in July, a sign that the sector is growing again. It had contracted in June for the first time in nine months, when the index dropped to negative 7.7, the lowest level in two years. Any figure below zero indicates contraction. The index had topped 40 in March. The lower reading illustrates the impact of a parts shortage caused by the Japanese earthquake, which has affected many US automakers and electronics producers. Still, manufacturers expressed some hope in the latest survey, saying they expect orders and shipments to pick up significantly six months from now. The Conference Board projected modest growth for the broader economy in the coming months based on its latest reading of leading economic indicators. The index rose in June for the second straight month. It had declined in April, the first time that had happened in nearly a year. The private research group offered a caveat: US lawmakers must agree to raise the government's borrowing limit and avoid a catastrophic default on the debt. The federal government has reached its borrowing limit of $14.3 trillion, and the Obama administration says the government won't be able to pay all its bills if the cap isn't raised by August 2. Congressional Republicans have demanded steep spending cuts in return for raising the limit. The White House wants to raise some taxes as well, which House Republicans adamantly oppose. The impasse has lasted for weeks.

Econ improving- exports

Business Week 7/21, [Business Week, 7/21/11, “Can the US export its way out of the slump?”, http://www.businessweek.com/magazine/can-the-us-export-its-way-out-of-the-slump-07212011.html|AF]

Federal Reserve officials, including Chairman Ben S. Bernanke and Federal Reserve Bank of New York President William C. Dudley, are touting a bright spot in the economic data: rising global demand for U.S. products. Both cited the increase in exports as one reason they are forecasting a rebound in the second half of the year. While U.S. job growth flags, the housing market struggles, and consumer confidence declines, exports have climbed in the past two years and accounted for a record 13.4 percent of gross domestic product in the first quarter. That compares with a decade low of 9.2 percent in the second quarter of 2003, according to Bureau of Economic Analysis data. “I don’t think the export piece is enough to be a cure-all, but it could certainly be a help at the margin,” says Stephen Stanley, chief economist at Pierpont Securities in Stamford, Conn. U.S. shipments overseas reached a record $175.8 billion in April and were just a tad lower in May, benefiting companies from Dow Chemical (DOW) to Deere (DE), according to the Commerce Dept. Deere, the world’s largest maker of farm equipment, said on June 30 that sales of tractors and machinery to farmers in Brazil are rising, buoyed by high commodity prices. Second-quarter earnings at Deere rose 65 percent, thanks in part to strong Brazilian orders. The Fed’s easy monetary policy has helped spur foreign demand for U.S. products by weakening the dollar. Since Bernanke hinted last August that the Fed might embark on another round of bond purchases, the greenback has declined 9.4 percent against a basket of currencies for six major U.S. trading partners, according to IntercontinentalExchange (ICE)’s Dollar Index. UBS (UBS) now predicts net exports will boost economic growth in the second quarter by 1.5 percentage points, up from an earlier assumption of 0.4 percentage points. Not all economists are impressed. The U.S. trade deficit widened 15 percent in May, to $50.2 billion, the highest in almost three years, because of a surge in the cost of imported oil. “Trade is still going to be a wild card,” says Drew Matus, a senior U.S. economist at UBS in Stamford. Fed officials should focus on “the inflation outlook, which has gotten quite bad,” and on domestic purchases, he says. “I don’t think trade is the be-all, end-all.” These objections are not deterring the Fed from spreading the good news. The New York Fed’s Dudley cited “robust” demand abroad for U.S. exports, particularly to Asia, in a June 10 Brooklyn speech as one “reason to expect the economy to recover from this soft patch.” Manufacturers in the American South are a “major beneficiary of globalization,” with auto, aerospace, pharmaceutical, and commodity companies exporting around the world, Federal Reserve Bank of Richmond President Jeffrey M. Lacker said on June 13 at a conference in Roanoke, Va. “Our ports are now jammed with these goods.”

Recession not improving

Crawford 7/23 [Dan Crawfod, Reporter, 7/23/11, “The US economy: July’s not looking any better”, http://www.benzinga.com/11/07/1795485/the-us-economy-julys-not-looking-any-better#ixzz1T4JD7Yhe]

Next week the Bureau of Economic Analysis will release its estimate of Q2 US GDP growth. Of 69 economists polled, the bloomberg consensus is that the US economy grew at a 1.8% annualized rate spanning the months of April to June over January to March. In all, this quarterly growth rate implies just 1.9% annualized growth during the first half of 2011. Not much of an expansion. Economists have put their 'hope' into the second half of 2011. But high frequency data show that the third quarter is setting up to be a doozy as well. This is too bad because we're talking about jobs and the welfare of American families here. I like to follow two weekly indicators to get a feel for the labor market and the corporate trucking business. The message is clear: the economy is not improving. First, the bellwether of the state of the US labor market - weekly initial unemployment claims - continues to disappoint. In the week ending July 16, seasonally adjusted initial claims increased 10,000 to 408,000. The 4-week moving average was 421,250, which is just 19,000 below its May peak of 440,250. This week's report fell on the BLS' survey week, so the July employment report is likely to be another weak one (weak is of course a euphemism for the June report). The chart below illustrates the annual growth rate of the non-seasonally adjusted 4-week moving average of initial unemployment claims. I use this for comparison to the second series, diesel consumption, which is not seasonally adjusted. I include the recession bars for association with the business cycle. Claims really are more of a coincident indicator - but the frequency is helpful for gauging the state of the real economy. The weekly claims are not indicating a recession - they are contracting on an annual basis. However, the contraction in claims is slowing, -8.4% Y/Y, which is much slower than the average -13% annual drop in claims during the first quarter of 2011. Unless claims start to fall more precipitously, the labor market will continue to be stuck in neutral - not good. Second, the US Energy Information Administration releases weekly estimates of distillate fuel oil supplied to the end user in thousands of barrels per day (real). This is important because roughly 90% of this number is comprised of diesel fuel. Given that diesel fuel is a primary input to construction and commercial and industrial trucking, the weekly series serves as a high-frequency indicator of domestic demand for goods that are transported across the country. There are seasonalities to this data , but the message is clear: demand for diesel fuel suggests that wholesale demand is inherently weakening. Unlike diesel prices, which can be impacted by number of factors including taxes, refining capacity, and most recently by IEA's petroleum release, consumption measures absolute demand. The chart below illustrates the same representation of demand for distillate fuel (primarily diesel) as the annual growth rate of the 4-week moving average. The latest data point is July 15. The annual decline was a bit less severe in the week of July 15 - but this series is quite a bit more volatile, and the downward trend in fuel consumption has been established.

Economic slump is worsening- no recovery in sight

ap news 11, [AP News, 7/24/11, “Economy’s slump may last through summer- Rising unemployment signals more worries”, http://gulfnews.com/business/economy/economy-s-slump-may-last-through-summer-1.842003]

Washington: The US economy's spring slump appears to be extending into the summer, according to a slew of mixed data released on Thursday. Layoffs are rising. Manufacturing activity in the Northeast expanded only slightly in July after contracting in June. Economic growth is projected to pick up this fall, but not enough to give businesses confidence to hire and speed the recovery. The economy could lapse even further if Congress and the Obama administration fail to reach an agreement on raising the nation's borrowing limit in the coming week. But for the moment, traders on Wall Street don't seem worried. Stocks soared on Thursday on news that European governments were moving toward agreement on an aid package for Greece. The Dow Jones industrial average closed 152 points up for the day. Article continues below Economists are less optimistic. They are forecasting a third straight month of feeble hiring in July, based on the latest round of data. Expectations are the economy added somewhere in the range of 50,000 to 100,000 net new jobs this month. That's not enough to keep up with population growth and far below what is needed to lower the unemployment rate, which was 9.2 per cent last month. Nothing improved "We're going to see improvement, but right now nothing's improved yet," said Joshua Dennerlein, an economist at Bank of America Merrill Lynch. Applications for unemployment benefits rose last week to a seasonally adjusted 418,000, the Labour Department said. They have now topped 400,000 for 15 straight weeks. Applications had fallen in February to 375,000, a level that signals healthy job growth. The Philadelphia Federal Reserve Bank said its manufacturing index rose to 3.2 in July, a sign that the sector is growing again. It had contracted in June for the first time in nine months, when the index dropped to negative 7.7, the lowest level in two years. Any figure below zero indicates contraction. The index had topped 40 in March. The lower reading illustrates the impact of a parts shortage caused by the Japanese earthquake, which has affected many US automakers and electronics producers. Still, manufacturers expressed some hope in the latest survey, saying they expect orders and shipments to pick up significantly six months from now. The Conference Board projected modest growth for the broader economy in the coming months based on its latest reading of leading economic indicators. The index rose in June for the second straight month. It had declined in April, the first time that had happened in nearly a year. The private research group offered a caveat: US lawmakers must agree to raise the government's borrowing limit and avoid a catastrophic default on the debt. The federal government has reached its borrowing limit of $14.3 trillion, and the Obama administration says the government won't be able to pay all its bills if the cap isn't raised by August 2. Congressional Republicans have demanded steep spending cuts in return for raising the limit. The White House wants to raise some taxes as well, which House Republicans adamantly oppose. The impasse has lasted for weeks. 418,000: applications for joblessbenefits last week 3.2: manufacturing index at Philadelphia Fed -7.7: manufacturing index at Philadelphia Fed in June

Economy- Extension- Bizcon Key

Business confidence key to economic growth

Lawrence Whitman, formerly the director of the Thomas A. Roe Institute for Economic Policy Studies at Heritage, 8/15/2002, Heritage Foundation, <http://www.heritage.org/Research/Regulation/wm135.cfm>

WHITMAN: Confidence on the part of consumers, investors and business owners is an integral part to the economy. And the greater the confidence people have across the spectrum, the greater the chance for economic growth going forward. That's why it's important for the President to hear the views of people, ordinary people as well as CEO's and academics, and for the President to get out in front and lead on this issue, and inspire confidence in people. NACHMAN: So this "feel good" stuff, no matter how ephemeral it is, can be meaningful in the economic reality, correct? WHITMAN: It's not just that it's ephemeral, it's what some economists have called "animal spirit." It's what people perceive about the future as well as the present that effects their behavior now.

Economy- Extensions- Key to Heg

Economic power outweighs all other internal links to heg

Gelb 10

Leslie Gelb (President Emeritus of the Council on Foreign Relations. He was a senior official in the U.S. Defense Department from 1967 to 1969 and in the State Department from 1977 to 1979, and he was a Columnist and Editor at The New York Times from 1981 to 1993), Foreign Affairs, November/December 2010, “GDP Now Matters More Than Force”, accessed November 21, 2010, http://www.foreignaffairs.com/print/66767

To be sure, U.S. presidents need to preserve the United States' core role as the world's military and diplomatic balancer -- for its own sake and because it strengthens U.S. interests in economic transactions. But economics has to be the main driver for current policy, as nations calculate power more in terms of GDP than military might. U.S. GDP will be the lure and the whip in the international affairs of the twenty-first century. U.S. interests abroad cannot be adequately protected or advanced without an economic reawakening at home.

Economy- Extensions- Property Rights Key

Space property rights are key business confidence and space development

Cherian & Abraham ‘7 Jijo George Cherian & Job Abraham [National University of Advanced Legal Studies, Kerala, India]

In January 2004, the US President George W. Bush announced his vision for the future of space exploration and the development of space resources and infrastructure and created the Commission on Implementation of United States Exploration Policy which recommends that Congress increase the potential for commercial opportunities related to the national space exploration vision by: 1) providing incentives for entrepreneurial investment in space; 2) creating significant monetary prizes for the accomplishment of space missions and/or technology developments; and 3) assuring appropriate property rights for those who seek to develop space resources and infrastructure. The report also recommends protecting and securing the property rights of private industry in space and recognizes that the issue of private property rights in space is a complex one involving national and international issues (Presidents Comm., 2004). A general view in this regard is that the implementation of this vision requires an overhaul of the current treaties and laws that govern property rights in space in order to develop better and more workable models that will stimulate commercial enterprise on the moon, asteroids, and Mars. The expansion of a commercial space sector to include activities on celestial bodies requires the establishment of a regulatory regime designed to enable, not inhibit, new space activity. The development of specific laws, which are consistently applied, will create a reliable legal system for entrepreneurs, companies, and investors. The establishment of a reliable property rights regime will remove impediments to business activities on these bodies and inspire the commercial confidence necessary to attract the enormous investments needed for tourism, settlement, construction, and business development, and for the extraction and utilization of resources (Rosanna S., 2005). The working of the International Space Station (“ISS”) and the International Telecommunications Union (“ITU”) is showcased as the steps to be emulated in order to achieve a workable framework, so as to recognize some form of property rights in space. The Antarctica Treaty model (Antarctica Treaty System, 1959) is also another approach that is said to be adaptable with regard to space laws. All these developments showcase a growing need to address the concept of property rights in space law. In addition, space exploration is no more limited to nations alone, and neither confined to realm of science fantasy only. Commercial activities in space are gaining momentum, (Micheal C., 2004) and more and more participation of private individuals is the need of the hour, for which an explicit recognition of property rights is a necessity.

‘

Business confidence key to economic growth

Lawrence Whitman, formerly the director of the Thomas A. Roe Institute for Economic Policy Studies at Heritage, 8/15/2002, Heritage Foundation, <http://www.heritage.org/Research/Regulation/wm135.cfm>

WHITMAN: Confidence on the part of consumers, investors and business owners is an integral part to the economy. And the greater the confidence people have across the spectrum, the greater the chance for economic growth going forward. That's why it's important for the President to hear the views of people, ordinary people as well as CEO's and academics, and for the President to get out in front and lead on this issue, and inspire confidence in people. NACHMAN: So this "feel good" stuff, no matter how ephemeral it is, can be meaningful in the economic reality, correct? WHITMAN: It's not just that it's ephemeral, it's what some economists have called "animal spirit." It's what people perceive about the future as well as the present that effects their behavior now.

Extensions- Mining

Even if not commercially feasible now, opening resources to the public will prevent resource wars

Collins & Autino ‘8 2008 “What the Growth of a Space Tourism Industry Could Contribute to Employment, Economic Growth, Environmental Protection, Education, Culture and World Peace”

As an alternative to the "resource wars" already devastating many countries today, opening access to the unlimited resources of near-Earth space could clearly facilitate world peace and security. The US National Security Space Office, at the start of its report on the potential of space-based solar power ( SSP) published in early 2007, stated: "Expanding human populations and declining natural resources are potential sources of local and strategic conﬂict in the 21st Century, and many see energy as the foremost threat to national security" [38]. The report ended by encouraging urgent research on the feasibility of SSP: "Considering the timescales that are involved, and the exponential growth of population and resource pressures within that same strategic period, it is imperative that this work for "drilling up" vs. drilling down for energy security begins immediately" [38]. Although the use of extra-terrestrial resources on a substantial scale may still be some decades away, it is important to recognise that simply acknowledging its feasibility using known technology is the surest way of ending the threat of resource wars. That is, if it is assumed that the resources available for human use are limited to those on Earth, then it can be argued that resource wars are inescapable [22,37]. If, by contrast, it is assumed that the resources of space are economically accessible, this not only eliminates the need for resource wars, it can also preserve the benefits of civilisation which are being eroded today by "resource war-mongers", most notably the governments of the "Anglo-Saxon" countries and their "neo-con" advisers. It is also worth noting that the $1 trillion that these have already committed to wars in the Middle-East in the 21st century is orders of magnitude more than the public investment needed to aid companies sufficiently to start the commercial use of space resources.

**Lack of patent rights prevents private investment in extraction**

Mike Wall, Senior staff writer, 1/13/11, Space.com, <http://www.space.com/10621-moon-mining-legal-issues.html>

The Outer Space Treaty of 1967 seems to permit extractive activities on the moon and other celestial bodies, according to space-law experts. But it's not entirely clear that mining companies would own the stuff that they extract. That fuzziness could be a problem for outfits contemplating a moon mining endeavor, which could have initial costs running into the tens of billions of dollars. As far as title goes, it's a gray area," international lawyer and space-law expert Timothy Nelson, who works for the firm Skadden in New York City, told SPACE.com. "And from a risk perspective, lack of clarity means it doesn't exist." [Q & A: One Company's Moon Mining Plan] Water on the moon: An abundant resource The moon has a lot of water ice, as recent discoveries have made clear. Frigid craters at both lunar poles have likely been trapping and accumulating water for billions of years — water that is relatively pure and easy to get at. Scientists and entrepreneurs alike have begun talking seriously about mining this ice, and not just to keep future moon dwellers hydrated. Water ice can also be separated into its constituent hydrogen and oxygen — the chief components of rocket fuel. Propellant could be produced from moon water and sold at refueling stations in low-Earth orbit, allowing spaceships and satellites to top off their tanks in space. This arrangement could help spur a wave of trade, travel and exploration throughout the solar system, researchers and businessmen have argued. It would make more economic sense to supply the filling stations from the moon, they've added. The moon's gravity is just one-sixth that of Earth’s, so launching from there is far cheaper. Some companies are already drawing up plans to mine moon water for this very purpose. Shackleton Energy Co. (SEC), for example, hopes to be selling rocket fuel in orbit by 2020, according to its founder Bill Stone. The good news: It's legal The good news for outfits such as SEC is that moon-mining operations appear to be legal, experts say. The Outer Space Treaty of 1967 — which forms the basis of international space law and has been signed by the United States and other major spacefaring nations — prohibits countries from exercising territorial sovereignty over the moon or other celestial bodies. But it doesn't prohibit resource extraction. "Experienced space lawyers interpret the treaty to allow mining," space-law expert Wayne White, who works in the aerospace industry, told SPACE.com. "I have never seen anybody argue that you couldn't use mineral resources." White and Nelson both referenced the Moon Treaty of 1979, which sought to set up a regime governing how the moon's resources would be used. The Moon Treaty remains more or less irrelevant today; it has been ratified by just a handful of nations, none of them big players in spaceflight and space exploration. "If the Moon Treaty wants to regulate how we use natural resources in outer space, then that presumes that it's legal to do so under the Outer Space Treaty," White said. Nelson compared the legal status of moon mining to that of fishing in the high seas, beyond national borders and claims. "The idea that you can't claim sovereignty is not necessarily incompatible with the right to go conduct mining operations," Nelson said. "The high seas are not subject to any sovereignty, but people can go and fish there." The bad news: Title may be ambiguous While the Outer Space Treaty likely allows mining, it does not set up a system granting explicit title to the extracted resources, according to Nelson. That ambiguity may not cause problems during mining operations, but it could be an issue when companies try to sell the resources. "If you're pouring billions of dollars into extracting something of value, you don't want the risk that a bunch of people are going to sue you, or boycott you, or sanction you if you take it to market," Nelson said. White thinks that companies probably can claim ownership, under the Outer Space Treaty, of the ice they mine from a lunar crater. But he agrees that there is a bit of fuzziness — and fuzziness is daunting to big-dollar operations. "If you really are talking about a multibillion-dollar endeavor, if I were the lawyer for that company, I would say, 'Don't make that investment until we have legislation in place,'" White said. Comprehensive new legislation should aim to take the ambiguity out, White added. "Ideally, you'd really need to do property rights, mining law and salvage law all in one package, because some of the elements are common to all three," he said. Some space entrepreneurs agree that resources on the moon and other celestial bodies won't be used to their full extent unless companies have explicit property rights and title.

Extensions- Hegemony

Hegemony- Extensions- Plan Solves

Plan solves Heg  
Robert **Walker et al**, Chair of the Commission on the Future of the United States Aerospace Industry Commissioners, 11-20**02**[“Final Report of the Commission on the Future of the United States Aerospace Industry Commissioners”, <http://www.trade.gov/td/aerospace/aerospacecommission/AeroCommissionFinalReport.pdf>]

Defending our nation against its enemies is the first and fundamental commitment of the federal govern-ment.2 This translates into two broad missions—Defend America and Project Power—when and where needed.  
In order to defend America and project power, the nation needs the ability to move manpower, materiel, intelligence information and precision weaponry swiftly to any point around the globe, when needed. This has been, and will continue to be, a mainstay of our national security strategy.The events of September 11, 2001 dramatically demonstrated the extent of our national reliance on aerospace capabilities and related military contributions to homeland security. Combat air patrols swept the skies; satellites supported real-time communications for emergency responders, imagery for recovery, and intelligence on terrorist activities; and the security and protection of key government officials was enabled by timely air transport.As recent events in Afghanistan and Kosovo show, the power generated by our nation’s aerospace capabilities is an—and perhaps the—essential ingredient in force projection and expeditionary operations. In both places, at the outset of the crisis, satellites and reconnaissance aircraft, some unmanned, provided critical strategic and tactical intelligence to our national leadership. Space-borne intelligence, command, control and communications assets permitted the rapid targeting of key enemy positions and facilities. Airlifters and tankers brought personnel, materiel, and aircraft to critical locations. And aerial bombardment, with precision weapons and cruise missiles, often aided by the Global Positioning System (GPS) and the Predator unmanned vehicle, destroyed enemy forces. Aircraft carriers and their aircraft also played key roles in both conflicts.Today’s military aerospace capabilities are indeed robust, but at significant risk. They rely on platforms and an industrial base—measured in both human capital and physical facilities—that are aging and increasingly inadequate. Consider just a few of the issues:• Much of our capability to defend America and project power depends on satellites. Assured reliable access to space is a critical enabler of this capability. As recently as 1998, the key to near- and mid-term space access was the Evolved Expendable Launch Vehicle (EELV), a development project of Boeing, Lockheed Martin and the U. S. Air Force. EELV drew primarily on commercial demand to close the business case for two new launchers, with the U.S. government essentially buying launches at the margin. In this model, each company partner made significant investments of corporate funds in vehicle development and infrastructure, reducing the overall need for government investment.Today, however, worldwide demand for commercial satellite launch has dropped essentially to nothing—and is not expected to rise for a decade or more—while the number of available launch platforms worldwide has proliferated. Today, therefore, the business case for € for 20 years or more?• More than half of the aerospace workforce is over the age of 404, and the average age of aerospace defense workers is over 50.5Inside the Department of Defense (DoD), a large percent of all scientists and engineers will be retirement eligible by 2005. Given these demographics, there will be an exodus of “corporate knowledge” in the next decade that will be difficult and costly to rebuild once it is lost. There will be a critical need for new engineers, but little new work to mature their practical skill over the next several decades. Further, enrollment in aerospace engineering programs has dropped by 47 percent in the past nine years6, and the interest and national skills in mathematics and science are down. Defense spending on cutting-edge work is at best stable, and commercial aircraft programs are struggling and laying workers off. As the DoD’s recent Space Research and Development (R&D) Industrial Base Study7 concluded, “[s]ustaining a talented workforce of sufficient size and experience remains a long-term issue and is likely to get worse.” In short, the nation needs a plan to attract, train and maintain a skilled, world-class aerospace workforce, but none currently exists.• The current U.S. research, development, test and evaluation (RDT&E) infrastructure has a legacy dating back to either World War II or the expansion during the Space Age in the 1960s. It is now suffering significantly from a lack of resources required for modernization. In some cases, our nation’s capabilities have atrophied and we have lost the lead, as with our outdated wind tunnels, where European facilities are now more modern and efficient. In the current climate, there is inadequate funding to modernize aging government infrastructure or build facilities that would support the development of new transformational capabilities, such as wind tunnels needed to design and test new hypersonic vehicles. The aerospace industry must have access to appropriate, modern facilities to develop, test and evaluate new systems. Throughout this dynamic and challenging environment, one message remains clear: a healthy U.S. aerospace industry is more than a hedge against an uncertain future. It is one of the primary national instruments through which DoD will develop and obtain the superior technologies and capabilities essential to the on-going transformation of the armed forces, thus maintaining our position as the world’s preeminent military power.

Hegemony- Extensions- Plan Key

Experts agree – privatization is key to space power

Nelson ’11 Steven Nelson writes for the Daily Caller ews website based in Washington, D.C., United States with a focus on politics, original reporting, breaking news “Fiscal conservatives call for increased privatization of space” The Daily Caller

Members of the task force issued several recommendations to Congress, including finding an American replacement to the Space Shuttle (so to minimize the costly expenditures on use of Russian spacecraft) and encouraging more private investment in the development of manned spacecraft. Former Republican Rep. Robert S. Walker of Pennsylvania said, “If we really want to ‘win the future’, we cannot abandon our commitment to space exploration and human spaceflight. The fastest path to space is not through Moscow, but through the American entrepreneur.” Task Force chairman Rand Simberg, of the Competitive Enterprise Institute, said, “By opening space up to the American people and their enterprises, NASA can ignite an economic, technological, and innovation renaissance, and the United States will regain its rightful place as the world leader in space.”

Hegemony- Extensions- Econ Internal

Privatization solves – creates tech leadership that promotes economic growth

**NASA ’11** National Aeronautic and Space Administration “Fiscal Year 2012” NASA

Technologies conceived by the world’s greatest innovators will be tested in the space environment, proving their potential value in advancing exploration, and sparking ideas for products and services that benefit society here on Earth. These technologies will spur economic growth as new markets are developed, creating new jobs, and expanding international trade. Advances in scientific research, successful solutions to engineering challenges, and new technologies will help ignite student interest in science, technology, engineering, and mathematics (STEM) academic disciplines and careers. Industry and government employers will increase demand for skilled workers as the U.S. repositions itself for technological leadership on a global scale. NASA actively seeks the engagement of industry in this achievable strategy for exploration. NASA plans to stimulate a competitive commercial market in which academia, non-profit research organizations, and corporations develop and mature aerospace-related technologies, processes, and services. Economic principles of supply, demand, and competition will drive this commercial market and ultimately result in reliable, low cost options for access to, and operations in, space. Public and private partnerships, collaborations with Federal agencies and other nations, and Federal grant awards to innovators at U.S. universities and research centers will initially help to strengthen competition and drive innovation in the aerospace industry. As part of this strategy, NASA will continue architecture planning for a Multi-Purpose Crew Vehicle (MPCV) capable of taking human explorers to distant locations throughout the inner solar system. The Space Launch System (SLS) Program will develop the heavy lift vehicle that will launch the MPCV, other modules, and cargo for these missions.

Hegemony- Extensions- Research Internal

Space is the key stage for research – it will revolutionize our tech

Robert Zubrin, Chairman of the National Space Society, President of the Mars Society, Aerospace Engineer, August 1996, National Space Society, <http://www.nss.org/settlement/mars/zubrin-colonize.html>

Ideas may be another possible export for Martian colonists. Just as the labor shortage prevalent in colonial and nineteenth century America drove the creation of "Yankee ingenuity's" flood of inventions, so the conditions of extreme labor shortage combined with a technological culture that shuns impractical legislative constraints against innovation will tend to drive Martian ingenuity to produce wave after wave of invention in energy production, automation and robotics, biotechnology, and other areas. These inventions, licensed on Earth, could finance Mars even as they revolutionize and advance terrestrial living standards as forcefully as nineteenth century American invention changed Europe and ultimately the rest of the world as well.

Property rights key to R&D and innovation in space technology

Reinstein 99, [Ezra J. Reinstein, Northwestern, International Law and Business, “Owning Outer Space”, Hein Online|AF]

C. Problem: Would ownership rights create inappropriate incentives, leading to inefﬁcient development? Any property system based on the right of the ﬁrst comer creates artiﬁcial value unrelated to the property’s inherent worth. This skews the economic efficiencies of the market. We might cal] this the “get it while you can” problem.” A concrete example might help explain. Suppose a site is worth $1 million. CorpA, operating alone, would not commence on a mission to exploit the site until it felt that there was enough demand, and cheap enough exploitation technology, to carry the mission out. However, operating in competition with CorpB and C0rpC, CorpA will recognize that it might not be able to harness the site’s value at all if CorpB or CorpC get to the site ﬁrst. Thus CorpA will feel compelled to zoom up to the site, using today’s less efﬁcient technology, simply because of the artiﬁcial value of being the ﬁrst-in-time. Does the possibility that an ownership-based property regime that could lead to less efﬁcient development mean that we should reject such a system? I believe the answer is no, for two reasons. First, the most effieient and effective way to spur the development of better space technology is to encourage private commercial space ﬂights. Government funding was no doubt needed at the inception of the space program, because there was no understanding of space’s commercial value. Now, however, tremendous amounts of private money are being invested in space-oriented projects,” and that's without ownership rights. Ownership rights would speed up space development, which would pump even more money into space technology R&D. Furthermore, money would go to R&D in needed areas, not pork-barrel projects. The industry could become self-sufﬁcient, free of the need for govemment funding. Pioneering space ﬂights may have many positive externalities, but this would be perhaps the most important one of all. So even though the prospect of ownership might stimulate some early space projects into a premature, and less efﬁcient, start-date than would otherwise be the case, these early endeavors bring the ﬁxture of space technology a great deal closer to the present. Second, it is impossible to know, ex ante, how much space ﬂight technology will improve. Surely hindsight will show that development could have achieved greater efﬁciency, in some cases, by waiting ﬁve years. On the other hand, should property law let a governmental authority force a company to wait ﬁve, ten, or ﬁfty years on a project on the belief that fusion engines are just around the corner? If fusion engines never materialize, humanity will have been deprived for no reason. Do we wish to put the de 5C00nd, 1 suggest that the right to use be unlimited, except by environmental regulations and the developer’s domestic law. This rule is a recognition that humanity's fortune is best enhanced not by a centralized command-and-control system, but by private development making marketdriven decisions. Like the right to perpetual possession, the third right -- the right no exclude -- creates the certainty vital to an optimal investment environment. As noted, the current system precludes such a right, for it would certainly run afoul of the prohibition on appropriation and the requirement that there be “free access to all areas of celestial bodies.”“° Without the right to exclude, however, pioneer investors would be at the mercy of free riders. After investing countless hours in (or paying someone else for) a survey of the real estate, setting up a mining colony at great expense, the pioneer would have no recomse if another pany took advantage of the pioneer’s research and began a copycat mine on the very same site. So the right to exelude must form a part of the new legal system. Finally, the right to transfer must accompany the rights of exclusion and perpetual possession. The Coase Theorem of economics tells us that, in a legal environment supportive of bargaining, property rights will be allocated to the party who values them most, i.e. the most efﬁcient user of the property." When transaction costs are high enough to prevent bargaining, property rights only end up in the most productively efﬁcient hands if the law happens to initially assign them that way.” Without any right to transfer, transaction costs are inﬁnite, and no bargaining can occur. In order to avoid the inevitably inefficient solutions of a command-and-control regime of property usage, the right to transfer -- alienability -- must be a part of our system.“ All these rights together -- possession, use, exclusion, and transfer -make up ownership. And it is ownership that the modem law of space real property needs. uranium). With these numbers, the system has lost a net of $1 billion. And this loss, it seems, has been caused by the right of ownership. Without ownership rights, C01-pA would never have undertaken the project, as it would have lost money. But with ownership ﬁghts, the project, seemingly inefﬁcient to the Earth as a whole, becomes proﬁtable to CorpA. To put it more generally, the incentives created by rights of ownership seem to make projects proﬁtable to individuals, even though the project delivers a net loss £0 the world's wealth. But this inefﬁciency is an economic illusion. A false assumption has been made: that ownership has "artiﬁcial" value inherent. The fact is, rights of ownership can have no value outside of what it's worth to mankind, socalled “real” value. That is, SpaccCorp’s ownership rights will not be worth $1.1 billion, or anything at all for that matter, unless someone else L9 willing to purchase the site for that amount. And, of course, no one will purchase the land unless it contains something of value to humanity, e.g. another type of mineral.

Court Clog- Extensions

Court Clog- Extensions- Terror Impact

**Judicial legitimacy is key to prevent terrorism.**

**Shapiro '03** (Jeremy Shapiro, Associate Director and Research Associate, Brookings Institute, March 2003, "French Lessons: The Importance of the Judicial System in Fighting Terrorism <http://www.brookings.edu/fp/cusf/analysis/shapiro20030325.htm>)   
The unique nature of terrorism means that maintaining the appearance of justice and democratic legitimacy will be much more important than in past wars. The terrorist threat is in a perpetual state of mutation and adaptation in response to government efforts to oppose it. The war on terrorism more closely resembles the war on drugs than World War II; it is unlikely to have any discernable endpoint, only irregular periods of calm. The French experience shows that ad-hoc anti-terrorist measures that have little basis in societal values and shallow support in public opinion may wither away during the periods of calm**.** **In the U.S., there is an enormous reservoir of legitimacy**, established by over 200 years of history and tradition, **in the judiciary**. That reservoir represents an **important asset** that the U.S. government can profit from to maintain long-term vigilance in this type of war. Despite the unusual opportunity for innovation afforded by the crisis of September 11, the U.S. government has not tried to reform American judicial institutions to enable them to meet the threat of terrorism. **To prevent the next wave of attacks**, however far off they might be, and to avoid re-inventing a slightly different wheel each time **will require giving life to institutions that can persist and evolve, even in times of low terrorist activity.** Given the numerous differences between the two countries, the U.S. cannot and should not simply import the French system, but it can learn from their mistakes. Their experience suggests a few possible reforms: A specialized U.S. Attorney tasked solely with terrorism cases and entirely responsible for prosecuting such cases in the U.S. Direct and formal links between that U.S. Attorney's office and the various intelligence agencies, allowing prosecutors to task the intelligences agencies during judicial investigations Special procedures for selecting and protecting juries in terrorism cases and special rules of evidence that allow for increased protection of classified information in terrorist cases Creating a normal, civilian judicial process that can prosecute terrorists and yet retain legitimacy is not merely morally satisfying. It may also help to **prevent terrorist attacks** in the long run. Not incidentally, it would demonstrate to the world a continuing faith in the ability of democratic societies to manage the threat of terrorism without sacrificing the very values they so desperately desire to protect.

**3. Unchecked terrorism will expand and cause extinction**

**Alexander '03** (Yonah Alexander, professor and director of the Inter-University for Terrorism Studies in Israel and the United States, August 28, 2003, The Washington Times l/n)  
Last week's brutal suicide bombings in Baghdad and Jerusalem have once again illustrated dramatically that the international community failed, thus far at least, to understand the magnitude and implications of the terrorist threats to the very survival of civilization itself. Even the United States and Israel have for decades tended to regard terrorism as a mere tactical nuisance or irritant rather than a critical strategic challenge to their national security concerns. It is not surprising, therefore, that on September 11, 2001, Americans were stunned by the unprecedented tragedy of 19 al Qaeda terrorists striking a devastating blow at the center of the nation's commercial and military powers. Likewise, Israel and its citizens, despite the collapse of the Oslo Agreements of 1993 and numerous acts of terrorism triggered by the second intifada that began almost three years ago, are still "shocked" by each suicide attack at a time of intensive diplomatic efforts to revive the moribund peace process through the now revoked cease-fire arrangements [hudna]. Why are the United States and Israel, as well as scores of other countries affected by the universal nightmare of modern terrorism surprised by new terrorist "surprises"? There are many reasons, including misunderstanding of the manifold specific factors that contribute to terrorism's expansion, such as lack of a universal definition of terrorism, the religionization of politics, double standards of morality, weak punishment of terrorists, and the exploitation of the media by terrorist propaganda and psychological warfare. Unlike their historical counterparts, contemporary terrorists have introduced a new scale of violence in terms of conventional and unconventional threats and impact. The internationalization and brutalization of current and future terrorism make it clear we have entered an Age of Super Terrorism [e.g. biological, chemical, radiological, nuclear and cyber] with its serious implications concerning national, regional and global security concerns. Two myths in particular must be debunked immediately if an effective counterterrorism "best practices" strategy can be developed [e.g., strengthening international cooperation]. The first illusion is that terrorism can be greatly reduced, if not eliminated completely, provided the root causes of conflicts - political, social and economic - are addressed. The conventional illusion is that terrorism must be justified by oppressed people seeking to achieve their goals and consequently the argument advanced by "freedom fighters" anywhere, "give me liberty and I will give you death," should be tolerated if not glorified. This traditional rationalization of "sacred" violence often conceals that the real purpose of terrorist groups is to gain political power through the barrel of the gun, in violation of fundamental human rights of the noncombatant segment of societies. For instance, Palestinians religious movements [e.g., Hamas, Islamic Jihad] and secular entities [such as Fatah's Tanzim and Aqsa Martyr Brigades]] wish not only to resolve national grievances [such as Jewish settlements, right of return, Jerusalem] but primarily to destroy the Jewish state. Similarly, Osama bin Laden's international network not only opposes the presence of American military in the Arabian Peninsula and Iraq, but its stated objective is to "unite all Muslims and establish a government that follows the rule of the Caliphs." The second myth is that strong action against terrorist infrastructure [leaders, recruitment, funding, propaganda, training, weapons, operational command and control] will only increase terrorism. The argument here is that law-enforcement efforts and military retaliation inevitably will fuel more brutal acts of violent revenge. Clearly, if this perception continues to prevail, particularly in democratic societies, there is the danger it will paralyze governments and thereby encourage further terrorist attacks. In sum, past experience provides useful lessons for a realistic future strategy. The prudent application of force has been demonstrated to be an effective tool for short- and long-term deterrence of terrorism**.** For example, Israel's targeted killing of Mohammed Sider, the Hebron commander of the Islamic Jihad, defused a "ticking bomb." The assassination of Ismail Abu Shanab - a top Hamas leader in the Gaza Strip who was directly responsible for several suicide bombings including the latest bus attack in Jerusalem - disrupted potential terrorist operations. Similarly, the U.S. military operation in Iraq eliminated Saddam Hussein's regime as a state sponsor of terror**.** Thus, it behooves those countries victimized by terrorism to understand a cardinal message communicated by Winston Churchill to the House of Commons on May 13, 1940: "Victory at all costs, victory in spite of terror, victory however long and hard the road may be: For **without victory, there is no survival**."

Court Clog- Extensions- CRR

This turns your case – court clog prevents CRR use – not enough judges and long trials

Christopher Regan, J.D. Candidate, Notre Dame Law School, Notre Dame Law Review, December, 19**99** (75 Notre Dame L. Rev. 797)

I. The Failure of the Civil Rights Remedy to Make aDifference In 1993, Congress found that four million women were battered every year. [11](http://www.lexis.com/research/retrieve?_m=37c6511400b43ce2f67e3e2c92dd2760&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAb&_md5=1db598281207dc2e1ec5ac08beef0f96" \l "n11#n11" \t "_self) In the five years the law has been in force, fewer than forty reported decisions refer to a suit under the CRR's provisions. [12](http://www.lexis.com/research/retrieve?_m=37c6511400b43ce2f67e3e2c92dd2760&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAb&_md5=1db598281207dc2e1ec5ac08beef0f96" \l "n12#n12" \t "_self) That contrast is the CRR's legacy. [13](http://www.lexis.com/research/retrieve?_m=37c6511400b43ce2f67e3e2c92dd2760&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAb&_md5=1db598281207dc2e1ec5ac08beef0f96#n13#n13) Proceeding in federal court is a [\*801] costly process. The CRR assumes ample resources on the part of either the plaintiff or the defendant to support the cost of litigating. These resources **do not exist**. The CRR further assumes ample judicial resources in the form of federal judges to hear CRR claims. Those resources do not exist either. The CRR does indeed create a right, but it falls well short of a remedy. ... CARD CONTINUES... It would seem that the CRR is a powerful weapon for abused women, but it just seems that way. Inability to pay an attorney, delay in obtaining a judgment (likely to be several years, if the suit is successful), and the unlikelihood of enforcing the judgment have been enough to deter nearly all abused women from availing themselves of the CRR's provisions. [29](http://www.lexis.com/research/retrieve?_m=37c6511400b43ce2f67e3e2c92dd2760&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAb&_md5=1db598281207dc2e1ec5ac08beef0f96" \l "n29#n29" \t "_self) The numbers cannot lie - after five years, there have been at most perhaps a few hundred filings. [30](http://www.lexis.com/research/retrieve?_m=37c6511400b43ce2f67e3e2c92dd2760&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAb&_md5=1db598281207dc2e1ec5ac08beef0f96" \l "n30#n30" \t "_self) Moreover, even if all of these difficulties could be made to disappear, and even if all four million abused women could sue without further delay in federal courts, nothing more would be accomplished than a shut-down of those courts. The impossibility of having 646 district judges [31](http://www.lexis.com/research/retrieve?_m=37c6511400b43ce2f67e3e2c92dd2760&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAb&_md5=1db598281207dc2e1ec5ac08beef0f96" \l "n31#n31" \t "_self) hearing [\*803] 4,000,000 additional cases each year (over 6000 per judge) is just ignored by the CRR. [32](http://www.lexis.com/research/retrieve?_m=37c6511400b43ce2f67e3e2c92dd2760&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAb&_md5=1db598281207dc2e1ec5ac08beef0f96" \l "n32#n32" \t "_self)

Extensions- Judicial Independence

Judicial Independence- Extensions- Independence Shaky

Attacks on judicial independence now – and rising

Chin ’10. Justice Ming W. Chin [The Honorable Ming W. Chin was appointed to the California Supreme Court in March 1996. He chairs the Judicial Council of California’s Court Technology Advisory Committee, as well as the California Commission for Impartial Courts Implementation Committee.] 2010 Hastings Law Journal “Judicial Independence: Under Attack Again?”

Now, it is true that attacks on judicial independence are almost as old as the American Republic itself; they date back at least to 1805, when President Jefferson tried, but failed, to use the impeachment procedure to remove United States Supreme Court Justice Samuel Chase, in part because of the content of his decisions.5 But most people agree that attacks are now on the rise. As retired United States Supreme Court Justice Sandra Day O’Connor wrote not long ago, judges “have become central villains on today’s domestic political landscape,” and “the breadth and intensity of rage currently being leveled at the judiciary may be unmatched in American history.”6 Sadly, the increasing effort to politicize the judiciary is partly a self- inflicted wound. For example, in 2006, an Alabama Supreme Court justice publicly attacked his colleagues for overturning a death sentence.7 Their crime? Following the United States Supreme Court’s holding that the Eighth Amendment prohibits imposing the death penalty for offenses committed by minors.8 The Alabama justice charged that the high court’s decision was an “unconstitutional” act of “blatant judicial tyranny” by five “liberal activist” justices, and he argued that his colleagues, as judges sworn to support the Constitution, had a duty not to follow it.9 Later in 2006, he made his criticism the centerpiece of his campaign to unseat Alabama’s chief justice. He was joined on the ballot by three others who targeted other incumbent justices for following allegedly “unconstitutional” high court decisions and federal court orders.10 He lost, as did the other judicial candidates who took up his cause.11 Unfortunately, this is not an isolated incident, as advertising in judicial elections around the country has taken an increasingly negative tone. For example, the 2008 race for the top seat on the Michigan Supreme Court produced what one nonpartisan judicial watchdog group called an “orgy of negativity.”12 Backers of the incumbent accused the challenger of granting “[p]robation to a terrorist sympathizer.”13 Backers of the challenger struck back with an advertisement urging voters to call the incumbent and “thank him for protecting wealthy corporations from suits by women who are sexually harassed and raped at work.”14 In a 2004 election for a seat on the Illinois Supreme Court, backers of the Democratic candidate ran advertisements accusing the Republican candidate of “giving probation to kidnappers who [had] tortured and nearly beat[en to death] a 92-year-old grandmother . . . and . . . to a man who [had] molested a young girl and her brothers.”15 Backers of the Republican candidate hit back with an advertisement claiming that the Democratic candidate had voted to free “a man convicted of sexually molesting a 6-year-old girl.”16 An Illinois State Bar Association Committee determined that the advertisements were “inflammatory and misleading,” and asked the candidates to renounce them.17 “Both declined, saying they believed what the ad[vertisements] said.”18 And the 2004 race for a seat on the West Virginia Supreme Court saw what some have called “the nastiest mudslinging in the history of modern American court campaigns.”19 “Of the nearly 10,000 attack ad[vertisements] that ran nationwide in 2004 state Supreme Court races, nearly 43 percent appeared in West Virginia, including an ad[vertisement] that accused [the incumbent] of assigning a child rapist to work in a high school.”20 “[c]ampaign contributions to candidates for state supreme courts increased more than 750 percent between 1990 and 2004.”21 More generally, in 2000 and 2004, candidates for judicial elections broke fundraising records in nineteen states; in 2006, at least four more states saw similar records broken.22 It has even been said that “[s]uccessful [state] supreme court candidates now sometimes raise more money than many gubernatorial or [United States] Senate candidates.”23 All told, from 2000 to 2009, state supreme court candidates raised over two hundred million dollars nationally, more than double the amount spent in the previous decade.24 And that figure does not even include the tens of millions more spent on “independent” television advertisements.25 As some have said, “Cash has become king in judicial elections.”26 These numbers should be of grave concern to anyone who cares about an independent and impartial judiciary. When judges have to rely on campaign donors to get or keep their jobs, there is an inevitable public perception of judicial bias and favoritism. This perception threatens to diminish the courts’ effectiveness because, as the United States Supreme Court has noted, “[t]he legitimacy of the Judicial Branch ultimately depends on its reputation for impartiality and nonpartisanship.”27 United States Supreme Court Justice Anthony Kennedy put it this way: “[T]he law commands allegiance only if it commands respect. It commands respect only if the public thinks the judges are neutral.”28

Independent judiciary is being threatened

DRI ’11 The Voice of the Defense Bar [International organization of attorneys defending the interests of business and individuals in civil litigation.] “DRI Warns of Threat to Judicial Independence” DRI

DRI-The Voice of the Defense Bar released a report today confirming that large scale contributions to judicial campaigns have reached unprecedented levels in the aftermath of the Supreme Court’s decision in Citizens United v. Federal Elections Commission, posing critical threats to the notion of judicial independence and the integrity of the American civil justice system. The report, Without Fear or Favor in 2011, examines a vast array of issues affecting judicial independence and accountability, explaining how judicial campaign contributions and attack ads are polarizing the judiciary and compromising the appearance of fairness in our court systems. The report – with “A New Decade of Challenges” as its underlying theme – proposes a number of solutions. DRI recommends the automatic disqualification of judges who accept campaign contributions above a specific threshold, the establishment of procedures for handling disqualification motions by a judge different than the one who is subject of the recusal motion and expanding the use of non-partisan judicial performance evaluations to help educate voters and promote a less politicized electoral process. DRI also recommends increased diversity in the judicial ranks to better ensure that decisions are perceived to be fair. Not just concerned with the appearance of fairness of the judicial process, the DRI report also shows with unlimited campaign contributions to judges running for election or retention, how the conduct of judicial elections has significantly degraded. “With increased special interest funding, attack ads have become common, altering both the substance and tone of judicial elections,” said Matt Cairns, president of DRI. “As demonstrated by what occurred in the 2010 Iowa Supreme Court retention election, special interest groups want to treat judicial decisions like they treat the decisions of other branches of government. And, they want treat judicial elections like they are just another partisan political election. However, judicial decision making and judicial elections are different. Our courts act as a check on the excesses of the other branches of government. Judges are supposed to be neutral and fairly evaluate cases based on their interpretation of the facts and the law. Judges shouldn’t be worried about the latest opinion poll on a hot button issue” added Cairns.

Judicial Independence- Extensions- Bad suits clog courts

Dealing with unimportant suits clog courts

Time 85, [Time Magazine, 3/24/85, “Law: Court Overload: A crisis that is not?”, http://www.time.com/time/magazine/article/0,9171,964107,00.html|AF]

For more than a decade the Justices of the U.S. Supreme Court have been complaining that they are overworked, and Chief Justice Warren Burger has recently renewed his call for a national appeals court to help relieve the burden. But is the work load really so heavy? Well, yes, answer a bevy of new scholarly articles, but the fault lies with the Justices. Perhaps the most experienced critic is former Justice Arthur Goldberg, who writes in the Hastings Constitutional Law Quarterly that the high court could save considerable time if the Justices were less verbose in their opinions, concurrences and dissents, and if they screened more efficiently the 4,000 petitions for review they receive every year. The most voluminous censure will fill at least two future issues of the New York University Law Review. The study, by N.Y.U. Law Professors Samuel Estreicher and John Sexton, applies a microscope to the cases considered by the court in its 1982-83 term. Its most striking conclusion: nearly one-fourth of the cases decided (39 out of 165) were not worth the Justices' time. The high court should deal only with the most important and vexing issues, the scholars say, rather than merely correct the errors of lower courts.

Extensions- Solvency

Plan --> Development  
Floating island theory --> development

Application of floating island theory to patent protection would incentivize private development of space

(current ambiguity in patent law is preventing development)

Burk 93, [Dan L. Burk, Visiting Assistant Professor of Law at George Mason University, BS Brigham Young University, MS Northwestern University, JD Arizona State University, JSM Stanford, 1993, “Patents in Cyberspace: Territoriality and Infringement on Global Computer Networks”, Tulane Law Review, Tulane University, 68 Tul. L. Rev. 1AF]

b. Patents In Space A more specialized gap in U.S. patent protection was closed in 1990 with the enactment of legislation dealing with patents in [\*37] space. n279 Commercial research in outer space holds the promise of developing valuable industrial property; however, it was unclear whether U.S. patent protection would extend to such activity. n280 Outer space is considered to be an area outside the territory of any nation, n281 and the U.S. patent statutes contain language limiting their scope to U.S. territory. n282 Given the international character of outer space, and in light of the Deepsouth Packing ruling, these statutory provisions made extension of U.S. patent laws to outer space a doubtful legal proposition. n283 One proposed analysis concerning outer space patents implies that no problem exists at all, because U.S. spacecraft are in some sense equivalent to U.S. territory. n284 This view is based primarily on the holdings of certain older patent cases that considered American ships on the high seas as floating islands of U.S. territory for purposes of patent law analysis. n285 According to these cases, U.S. patent law jurisdiction extends to the decks of American vessels on the high seas, as much as it does to all the territory of the country ... n286 The same principle, it was argued, could be extended to American spacecraft. n287 [\*38] More recent patent cases have indicated that the courts are uncomfortable with the notion of floating island jurisdiction. n288 As one court stated, a decision founded on the fiction that for purposes of the Patent Laws, U.S. ships and planes wherever found, are United States territory, would be founded on water. n289 In addition, this legal theory had been explicitly rejected in areas outside patent law. The U.S. Supreme Court has stressed that the jurisdictional character of ships derives more from registry than from territoriality. n290 Consequently, although the application of the floating island theory to U.S. spacecraft might lead to the correct result, there was little surety that courts would in fact employ such a problematic doctrine. n291 As an alternative to floating island theories, Congress was urged to clarify the patent law by stating explicitly that it extends to activities aboard U.S. spacecraft. n292 Legislation to this effect was introduced as early as 1985 under the title of the Patents in Space Act n293 and was eventually enacted in 1990. The legislation added a new section, 35 U.S.C. 105, to the patent statutes, explicitly extending U.S. patent law to activity aboard U.S. registry spacecraft and to foreign registry craft if provided for in an international treaty. n294

Property rights are a prereq to commercialization and colonization of space

Dinkin, 04. [Sam Dinkin, PhD economist specializing in privatization and industry, 5/10/04, “Property rights and Space Commercialization”, http://www.thespacereview.com/article/141/1|AF]

“Pseudo” property rights In order to facilitate commercialization and colonization, there needs to be a property rights regime established. There are some impediments to private property in space, but they may not be insurmountable. The Outer Space Treaty says some things that the US and other signatories cannot do. The US cannot stake a sovereign claim in outer space. This effectively limits the property rights that the US can grant to its citizens. The Treaty does, however, ask that the US and other signatories closely monitor non-governmental activities, “The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty.” The Outer Space Treaty demands that we do this. Depending on how we regulate activities of US entities, we can bootstrap a private property regime by only granting a single US entity the right to exploit a certain tract on Mars. We will be expanding an American way of doing business into space. In the United States, we have always monitored and supervised activities using a capitalist system. Here on Earth, we have property rights regimes for real estate, intellectual property, mineral rights, water rights, spectrum rights and airport takeoff and landing slots among myriad property rights that are bought and sold. I propose that we extend that regime into the heavens. A property right is a right to exclude someone from doing something. By excluding US citizens and corporations from doing certain things, the US can create pseudo property rights in outer space for other US citizens and corporations that are not excluded from doing so. These pseudo property rights in outer space would be just like the rights afforded by patents in the US patent system. By filing a patent, a company can exclude all other rocket companies from using a certain novel process or technique. But an outer space pseudo property right is also just like the title deed to a house—the deed gives me the right to exclude others from using my house. Excluding others from using something is creating a right that is tangible and valuable even if it is not technically a property right. By excluding US citizens and corporations from doing certain things, the US can create pseudo property rights in outer space for other US citizens and corporations that are not excluded from doing so. While it is not really a property right—since those are forbidden—these pseudo property rights would have the same effect as one if only US entities were in space. If there are two US non-governmental entities that both want to use a particular plot of land or a particular slice of radio spectrum in space, they need to obtain authorization from the United States. If the US only authorizes one of the entities to do so, that authorization could create a transferable property right that could be bought and sold like a US spectrum license or a piece of real estate. That authorization would have the force of law. Specifically, the US should recognize individual and corporate pseudo property rights. There are a couple of ways the property rights can work. One way is like title deeds that entitle the property holder to non-interference from the United States and all of its citizens in perpetuity. Another way is more like water rights, mineral rights or spectrum licenses that entitle the holder to lease for a specific use for a specific amount of time and require the licensee to undertake development of the lease within a set amount of time or lose the lease. The US should begin to regulate these pseudo property rights. We should register them. We should hold hearings on them. We should auction them off in some cases where there is contention just like for spectrum licenses or government land. We should hold the money in trust until the international community decides who should get it. The President should establish a property rights regime by executive order that is later written into law by Congress. The property rights might not be sufficient to spark investment. Having a piece of paper from the United States saying that no US entities may interfere with what you are doing does not necessarily give a US person or business the right to do something. There may be prior claims on the resources and there may be international actors that do not recognize US property rights. However, since there is no proven enforcement mechanism for prior claims, they are unlikely to deter investment if a new strong property rights regime were established. Regarding international contention, the Outer Space Treaty gives the US the right to ask for a consultation before someone interferes with a US space activity. “A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the moon and other celestial bodies, may request consultation concerning the activity or experiment.” While this is not as ominous as a complaint through the WTO or NAFTA, it is something. We would hope that the US would undertake to sign reciprocal bilateral agreements with countries willing to coordinate their space activities with us. That is, if we adopt a policy that allows a US business to have an exclusive and defined territory to scout for ice at the lunar South Pole and Australia is willing to do the same, then we can jointly manage the registry of who is authorized to do so. The US should take steps to expand property rights in space with a little of the vigor we use to extend copyright agreements, open skies policies and international telecommunications spectrum standards that we pursue on Earth.

Property rights key to development of space

Property rights in space key to development, use of resources, and investment

Dinkin, 04. [Sam Dinkin, PhD economist specializing in privatization and industry, 5/10/04, “Property rights and Space Commercialization”,

http://www.thespacereview.com/article/141/1|AF]

One could interpret Article VII of the Outer Space Treaty to mean that damages might be due if another country’s spacecraft infringed the property of US “natural or jurisdictional persons”. “Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the moon and other celestial bodies, and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air or in outer space, including the moon and other celestial bodies.” While this is not the main meaning of this Article which primarily protects people on the ground from debris, it could become the main meaning as in situ resource utilization gets going to support exploration. If we do nothing, space will look a lot more like Antarctica than Alaska. This might not be enough to assure entrepreneurs that their investments will be their property, but don’t let the perfect be the enemy of the good. The US is the center of a good fraction of the global economy and the space economy and if the US leads, other like-minded nations will follow. On Earth, countries that honor property rights are in ascendance. One surmises they will ascend in space as well. If bilateral agreements and the Outer Space Treaty do not provide an adequate regulatory environment for commercialization and colonization, then perhaps the treaty should be amended or the US should withdraw. Space property rights will probably not spark a space transportation boom that will rival the railroad boom, the airplane boom, or the automobile boom. But there will be no boom if there are no property rights. Leaving the regulatory regime the same is a recipe for continued sclerosis. If we do nothing, space will look a lot more like Antarctica than Alaska. Without property rights there will not be adequate investment and space resources will be underutilized. Establishing property rights in space will cost millions, not billions, and can be done decades ahead of any commercialization or colonization. It’s time to set the stage to break out of the exploration mode of Columbus and get on with establishing the regulatory regime to lay the foundation for the next Plymouth Rock.

Current Law cripples the US patent system and private development of space

Ro et al 11 Theodore U. Ro, intellectual property attorney for NASA, Matthew J. Kleiman, Corporate Counsel at the Draper Laboratory in Cambridge, MA, Kurt G. Hammerle, intellectual property attorney for NASA, 3/15/11, Boston University School of Law Journal of Science and Technology Law, <http://bujostl.org/content/WORKING_PATENT_INFRINGEMENT_IN_OUTER_SPACE.pdf>

The foregoing discussion has shown how the §105(a) Exceptions have created a loophole in U.S. patent law that could permit private entities to insulate themselves from patent infringement liability in the United States for their outer space operations under circumstances wherein they might otherwise be liable under current U.S. extraterritorial principles.  This loophole poses at least two problems.  First, allowing companies to avoid liability for infringing U.S. patents could hamper the effectiveness of the U.S. patent system.   Patents traditionally play an important role in promoting high technology research and innovation. An ineffective patent system could reduce incentives for private space companies to innovate and cause space companies to protect their inventions as trade secrets instead of disclosing them to the public in patent filings. 78    Second, while a purpose of Exception 2 is to recognize and defer to the United States’ obligations under the Outer Space Treaty and the Registration Convention, it is unclear whether completely deferring to the Registration Convention was actually required in order to accomplish this goal.  In fact, entirely ceding responsibility for patent infringement by space objects that are operated by U.S. persons or companies may be inconsistent with the United States’ obligations under the Outer Space Treaty.

Establishing property rights is key to private development of space

W. N. White, Attorney at Law, 2004, Space Resources Roundtable, <http://www.lpi.usra.edu/meetings/roundtable2004/pdf/6009.pdf>

During the past year, real property rights has become the most important issue in the field of space law. Gregory Nemitz pursued his claim to Asteroid 433 Eros in Federal District Court, where his case was dismissed. That precedent-setting case, Nemitz vs. the United States, is now before the Ninth Circuit Court of Appeals. Also in the past year, the International Institute of Space Law, a member organization of the International Astronautical Federation, issued its first ever position paper, “Statement of the Board of Directors Of the International Institute of Space Law (IISL) on Claims to Property Rights Regarding the Moon and Other Celestial Bodies.” Finally, the Report of the President’s Commission on Implementation of United States Space Exploration Policy (the “Aldridge Commission Report”) said that “it is imperative that [property rights] issues be recognized and addressed at an early stage in the implementation of the vision, otherwise there will be little significant private sector activity associated with the development of space resources, one of our key goals.” The author will discuss the implications of these developments, including the prospects for future U.S. legislation regarding property rights and mining law in outer space.

Private exploration of space empirically will not happen without property protection

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

Reinstein says, “A legal system that is unclear as to the rights of developers in the land they develop is almost as prohibitive of positive development as a system forbidding development altogether.” 158 Antitrust and Trade Regulation lawyer David Everett Marko adds, “Free enterprise institutions simply cannot make significant investments in space while they are under the threat of lawsuits over the meaning of treaty terms . . . .” 159 Therefore, it is not at all surprising that, without the incentive that advanced legal certainty would provide, space settlement is not currently happening, and it probably never will. A few space lawyers like Jim Dunstan argue that firm property rights are unnecessary for space development, 160 although this belies the fact that space settlement seems no closer today than it did twenty years ago when David Anderman said the same thing. That is why Lunar land claims recognition legislation is needed now, in order to create an incentive to make space settlement happen at all.

Ownership of land is a sufficient incentive to spark private development

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

The simple, vital point these authors overlook is that net profit comes from sales price less expenses; revenues less expenditures. 170 Because of the astronomical expense of transporting rocks back to Earth for sale, it is impossible to make a profit selling rocks. But people on Earth would pay approximately the same price for a Lunar land deed as they do for Lunar rocks sold en masse once the settlement is established, 171 and the cost of printing millions of those deeds and delivering them to the customers is pennies apiece. Thus, even though picking up rocks is nowhere near profitable enough for an established settlement, the ability to sell legitimate, recognized ownership of the land the rocks are on would produce revenues in the scores of billions of dollars and earn billions of dollars worth profit. Those billions of dollars of potential profit could be a powerful incentive to develop space settlements.

Plan is key to full development and exploration of space – now is key

Brandon C. Gruner, J.D. Candidate at Seton Hall University of Law, 2004, Seton Hall Law Review, Pg. 335, <http://law.shu.edu/Students/academics/journals/law-review/Issues/archives/upload/Gruner.pdf>

There is no doubt that this legal uncertainty has inhibited investment and development of outer space for the past three and a half decades. 286 States refuse to risk substantial investments in the development of extraterrestrial settlements, mining colonies, and transportation because attitudes towards that State’s property rights in resources may change as soon as it begins to reap rewards. 287 No State wants the foundation it builds yanked out from underneath it in favor of another set of nations’ ideas of how extraterrestrial land should be governed. 288 Yet the world is at a critical point in its history of space exploration. Nations that previously had little or no space-faring potential now have the financial and technological capabilities to develop space industries, and these nations are challenging the prominence of the United States and Russia in space activities. 289 Consequently, as more and more of these nations develop outer space technologies, States have begun to concede that some measure of property rights should exist in outer space, and therefore are adopting a view that appropriation of resources is permissible. 290 Thus, the deceleration of space exploration that has existed due to the concept of res communis 291 may soon give way to some nation challenging the boundaries of this principle by appropriating a significant tract of extraterrestrial territory. 292 With all of this legal wrangling and flip-flopping, it is no wonder that States have refused to invest money into the development of outer space. Yet, it also demonstrates how an opportunistic nation could easily exploit this legal uncertainty.

Legal recognition of property rights is a prerequisite to development

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

Reinstein says, “A legal system that is unclear as to the rights of developers in the land they develop is almost as prohibitive of positive development as a system forbidding development altogether.” 158 Antitrust and Trade Regulation lawyer David Everett Marko adds, “Free enterprise institutions simply cannot make significant investments in space while they are under the threat of lawsuits over the meaning of treaty terms . . . .” 159 Therefore, it is not at all surprising that, without the incentive that advanced legal certainty would provide, space settlement is not currently happening, and it probably never will. A few space lawyers like Jim Dunstan argue that firm property rights are unnecessary for space development, 160 although this belies the fact that space settlement seems no closer today than it did twenty years ago when David Anderman said the same thing. That is why Lunar land claims recognition legislation is needed now, in order to create an incentive to make space settlement happen at all.

Legal reforms are key to space real estate

**Pop ‘1**. Virigliu Pop Foremost Romanian Space Lawyer 2001 Space Future “Lunar Real Estate: Buyer, Beware!”

The first reason for invalidating the claims presented above is the lack of corpus possidendi. In the acquisition of possession, two concurrent elements - "the mind" and "the body" are required. One is insufficient without another; there must be "both an intention to take the thing and some act of a physical nature giving effect to that intention25". The first element required is the animus possidendi, the intention to possess. However, Dennis Hope can not own the Moon just because he wants to. He lacks the second element required in the acquisition of possession, namely the corpus possidendi; without an act of physical nature giving effect to the intention to take the thing, animus is insufficient. The Scottish jurist Stair has explained this in very illustrative terms: "if any act of the mind were enough, possession would be very large and but imaginary.26" As large as the Solar System, in the case of Hope, that has a very valid animus, but no corpus at all. The application of the intertemporal law in the case of Juergens would produce no legal effects favourable to him. Thus, while the Moon may have been claimable in the past - being free from the retroactive application of the contemporary non-appropriation principle -, even then a corpus was necessary besides animus. No traces of Prussian boots have been found in the lunar dust to serve as proof of corpus. Regarding the existence of animus possidendi from the Prussian emperor, the situation must have been different, at least judging by what other leaders thought on the subject. Thus, it is reported that Alexander the Great was furious when learning that the planets were other worlds he was incapable of reaching; millennia later, in 1902, Cecil Rhodes wrote: "The world is nearly all parcelled out, and what there is left of it is being divided up, conquered, and colonised ... I would annex the planets if I could. I often think of that. It makes me sad to see them so clear and yet so far.27" Hope's claim is, in the words of the Lunar Embassy, "modelled on old American law28", allegedly on the US Homestead Act of 186229. As the US astronauts "were the first to walk on the Moon and plant their flag on it ..., it could be argued that if the Moon ever belonged to anyone, it certainly belongs more to the USA than any other nation30". In reality, the Moon may not belong to any nation, given the non-appropriation principle embodied in Article II of the Outer Space Treaty, and extraterrestrial landed property cannot be regulated by a domestic law such as the US Homestead Act. Even if it were, its provisions would by no means legitimate Hope's claim. The land claimed under the said act was limited to 160 acres; furthermore, the land was not to be alienated - while the Lunar Embassy's raison d'etre is precisely alienation of lunar land; last but not least, application was to be made for the purpose of actual settlement and cultivation, the land claimed having to be resided upon or cultivated for five years31 - no further comments being needed concerning Hope's settlement and cultivation of the Moon. Another reason for invalidating Hope's claim is that - as it is detailed in another paper of mine published in Space Policy32 - landed property rights cannot survive without protection from a sovereign entity, such as it is the case with the extraterrestrial realms. In sustaining his claims, Hope also invokes the silence of the authorities, both US and foreign. The Lunar Embassy felt "obliged to inform the General Assembly of the United Nations, and the Russian Government in writing of the claim and the legal intent of selling extraterrestrial properties33"; however, "[t]he US Government has several years to contest such a claim. They never did. Neither did the United Nations nor the Russian Government".34 Still, as Yehuda Z. Blum notes, - "the absence of protest is relevant in the formation of an historic title only in those cases in which protest would have been expected to be forthcoming, had the affected State really wished its objection to be made known. There are situations ... in which an inference of acquiescence cannot be justifiably drawn from the simple fact of absence of protest35". Indeed, protest was not to be expected from the UN and USSR, when confronted with such trivial claim; actually, the Soviet reaction to earlier lunar real estate affairs was that of a good laugh: "[a]s for appropriating celestial bodies, only American speculators trade in lots on the Moon..." - Soviet jurists commented36. The heart of the matter, as well as the reason for the silence of the authorities lays, nevertheless, elsewhere. According to Saint-Germain, what Hope is doing is "not a joke, and it's perfectly legal37". A choice has to be made, though: it is either a joke, and thus legal, or it is not a joke, and thus illegal. As the Lunar Embassy itself points out, the Lunar Deeds are "novelty gifts"38. Their legal classification as novelty items means that these are to be used animus jocandi, i.e for fun only. It is not illegal to sell or to possess novelty items; it is illegal though to misuse them outwith the "novelty use only" scope. Other companies sell items such as one-million-dollar bills, or camouflage passports from inexisting countries, or "Area 51" license plates that, as long as they are commercialised and used as "novelty gifts", do not upset the authorities. Even in the case of Juergens, if, by any chance - however remote may be - Frederick the Great gave the Moon to his ancestor, this must have been made animus jocandi. While avoiding lawsuits, being a novelty gift does in fact affect the value of the property, unlike claimed above. In 1997, NASA's news chief Brian Welch declared that he knows of no plans to take legal action in the extraterrestrial real estate affair, as the deeds to lunar property are as worthless as the Yemeni's claims: "That's why they invented the phrase Caveat Emptor" - let the buyer beware40. The astronaut Buzz Aldrin is also aware of their real value: "Well, if somebody wants to have a certificate that says they own a certain portion of the moon, and they're willing to pay whatever it is, probably the only thing they'll ever get is a certificate41". Say, it's only a paper moon...42 The whole extraterrestrial real estate affair is in fact a legal non-issue. As nemo dat quod non habet, the lunar wills and deeds have no legal effect - or at least not the legal effect of endowing people with extraterrestrial properties. They need not to be formally declared void; they are already so. Should a contract be made in fraud of third persons, it is void ab initio; "[n]o person's rights can be affected by it, whether he be a party or a stranger43". Local councils do not sue "Monopoly" players for "buying" and "owning" High Street - as long as the "gameboard owners" do not squat the real-world High Street. As shown above, Hope's "lunar deeds" are to be seen as what they really are: jocandi causa "gameboard certificates". As such, they cannot serve as evidence in real world trials modeled on the three Yemeni men claim against NASA, where the alleged owners of lunar estate and minerals would try defend their "properties" against "trespass" from prospectors and developers. 3. Conclusion: The Need for Landed Property Regulations in Outer Space While the "extraterrestrial real estate" claims described above are nothing more than media curiosities, it needs to be agreed that behind their triviality they hid significant legal implications. The advancement of such claims has been only possible because of the lack of a property rights regime in the extraterrestrial realms. There is no debate on the need for such a regime; the issues that need to be regulated are related to the extent on which property rights are allowed in the extraterrestrial realms, whether these property rights may be exclusive or inclusive, and what are the means of securing property rights in extraterrestrial resources.

Extensions- Solvency- Reverse Causal

Lack of rights stops development- OST

Ost ambiguous- prevents development now

Reinstein 99, [Ezra J. Reinstein, Northwestern, International Law and Business, “Owning Outer Space”, Hein Online|AF]

The Outer Space Treaty is riddled with ambiguities. It is silent, outside of afﬁnning of “exploration and use," as to what sort of rights parties can claim in celestial bodies. It is silent as to the circumstances under which these unspeciﬁed property rights might vest, that is, what a person must do to ‘gain whatever property rights are available. For example, even as to the right of short-term usufruct (which a consensus of scholars agree is granted by the OST), Glenn Reynolds has said, Suppose you land yam spacecraﬁ on Mars and your little robot dn'ves around and picks up stuff. Does that mean you ovm Mus? Nah, that seems unreasonable, to claim a whole planet But could you claim, say, that you own the [resources within a] quarter of a square mile in which your robot rolled around? The exact size of it is uncertain. 7. This A legal system that is unclear as to the rights of developers in the laud they develop is almost as prohibitive of positive development as a system forbidding development altogether. A SpaceCorp-type company will not spend the millions, perhaps billions, of dollars it would take to travel to the ends of the solar system and develop a mine, a factory, and a colony, if the governing law is unclear as to whether they may keep their plutonium and their proﬁts. Furthermore, the colony itself would be yanked out under them should a majority of the international community deem it not to be in the best interests of mankindwas not a pressing concem in 1967, when the Outer Space Treaty was ratiﬁed. It was perfectly acceptable at the time to consign a deeper digg cussion of property rights to future negotiation, as the United Nations did.” The prospect of space development seemed distant. Now it is upon us. And the problem is even worse. Beyond the ambiguous and oddly contadictory language already noted, the OST has nothing more to say about property law. No other binding treaty elaborates the OST’s befogged law of real property. We are thus left with a legal void, a wasteland of indeterminacy and instability. Right now, reservoirs of great wealth sit untapped in space. Unless people and nations are encouraged to exploit the riches of space, humanity will never know their beneﬁt. And the more we are able to exploit, the more humanity stands to beneﬁt. If commercialization is to be successful, space law must encourage investment in outer space development. But to do so, space law must work as a comprehensive regulatory scheme, with maximum predictability and minimum regulatory interference, that both rewards space development and accounts for the rights of all nations and individual participants.” What is needed is an amendment to the Outer Space Treaty, one that both clariﬁes and expands property rights in space.

Lack of rights stops development

Lack of rights in space prevent development

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22|AF]

Unfortunately, the legal regime concerning the use of the Moon and other celestial bodies is largely unsettled. First off, what counts as a celestial body is not defined in under law.14 The things that likely fall into the category of celestial bodies include planets, planetary satellites—like the Moon, astronomical objects, asteroids, comets, and stars. It seems that celestial bodies encompasses all extraterritorial, physical objects hurdling through outer space. Given the ensuing rise in private ventures into outer space and onto other celestial bodies in our solar system, the set of rights that will protect those private ventures should be clearly defined. However, these ambiguities that exist in the status of property rights in international space law, primarily under the widely accepted Outer Space Treaty,15 both in the ownership of minerals removed from the land, and ownership of the land it self. The land and the resources found within that land are what carries the value and incentive for future exploration, settlement, and ultimately exploitation. Private enterprises often claim that the ambiguity regarding the status of property rights on celestial bodies is a major barrier to commercial development. Commercial development requires large amounts of financing, and the ambiguities prevent effective financing and deprives them of assurance that their investments will be protected. There is also a risk that private actors bring resources back to Earth from the Moon or other celestial bodies will be faced with confiscation of the material.16 Resolving the status of property rights on other celestial bodies is a complicated one. This Paper focuses on the issues related to territorial property rights on celestial bodies. There are many types of property rights that are involved with commercial development in outer space. For instance, orbital rights, intellectual property rights and commercial transactions are other areas in which the law regarding property rights in space need to be developed.17 Most current activities in space occur in Earth orbit. Ventures like Richard Branson’s Virgin Galactic that are currently concerned with suborbital human flights for space tourism, are not concerned with territorial property rights on let say the moon. Industries that would be interested in territorial property rights are those that plan to land on celestial bodies and establish a permanent presence on that body. These companies would include lunar hotels, mining ventures, manufacturers and energy producers—similar to the fictitious company in the movie Moon. These types of companies face far more hurdles to viability than private property rights in celestial territory; nonetheless, once these companies do become viable, these issues will need to have been sorted out. Outer space and all the resource contained within it, besides those on Earth, have been proclaimed as having value to all of humanity. All the international agreements and proclamations have this theme. This desire thus underlies the basis for all space law and serves the overarching principle. Some claim that this principle precludes the private property rights in space, because they are inconsistent with the good of community, but this is not so. Private property rights incentivize innovation and productive use, that will in turn benefit society as a whole. Private rights allow for individual efforts to flourish.

Status quo commercialization now is impossible – legal restraints

Hertzfeld ‘7 Henry Hertzfeld Space Policy Institute, George Washington University, Washington November 2007 [“Globalization, commercial space and spacepower in the USA” SciVerse]

Spacepower can be viewed from a commercial perspective in two ways. One is economic: encouragement of US commercial space ventures to be dominant in the world marketplace, either through creation of a monopoly or by sheer market dominance. The latter often makes competitors follow the leader's standards and practices, which in turn, virtually assures that others will adopt systems compatible with those of the market leader.1 The second is by a show of strength, aggressively denying others access or interfering with the operations of foreign space assets. This paper will focus on policies of commercial market dominance. Spacepower will therefore be discussed without the notion of military control or aggressive action to protect space assets or deny others the ability to operate in space. A truly competitive commercial world assumes that companies can operate on a level playing field and the deciding factor is the ability to make a profit, not that a potential competitor can be taken out by military action.2 Looking to the future growth of commercial space companies and the multinational aspects of commercial space raises an interesting question regarding spacepower. Specifically, will it be possible for commercial interests to supersede other national interests in space? The short answer is no. Besides the clear dual-use aspect of all space products, space law, as defined by current UN treaties on outer space, makes nations responsible for the actions of their citizens in outer space. To get to space and to do anything in space, a company will need the formal approval of a parent nation. And since each nation may be both jointly and severally liable for certain types of damage from space objects, it will be difficult, if not impossible, for a company to operate in space without supervision. Therefore, unless the major legal tenets of space activity change, commercial interests will be subservient to national interests in space and will face major regulatory controls.3

**Current patent structure prevents tech development**

Matthew J. Kleiman, Corporate Counsel at the Draper Laboratory in Cambridge, Mass., 2-7-11[“Patent rights and flags of convenience in outer space”, The Space Review, <http://www.thespacereview.com/article/1772/1>]

The development of a thriving commercial space industry will require significant private investment in space technologies. As a matter of public policy, an effective patent system can play a critical role in encouraging innovation and investment in budding high technology industries. Patents give inventors a period of market exclusivity for their inventions in exchange for disclosing their new inventions to the public. This limited monopoly provides an incentive for companies to invest in new technologies, while the public disclosure requirement allows inventors to design around and improve upon earlier inventions. A loophole in international space law, however, threatens to limit the patent system’s ability to properly incentivize private investment in new space technologies.Under current space law, each spacecraft is subject to the laws of its country of registration, including that country’s patent laws. This system of national jurisdiction could enable companies to circumvent patents on space technologies by registering their spacecraft in countries where these patents are not on file, just as the owners of merchant ships often register their vessels under “flags of convenience,” such as Panama and Liberia, to avoid burdensome taxes and regulations in their home countries.Permitting space companies to evade patents using flags of convenience will lessen the value of these patents. Space companies may find it more difficult to secure private financing for research and development activities and be more likely to keep the inventions they do create as trade secrets. This article describes the origins of this loophole in international space and patent law and explains how flags of convenience could undermine the value of patents on space technologies. The article then discusses measures that spacefaring nations can undertake to address this problem.

Patent law limits development- reduces incentives for companies to innovate

Kurt G. Hammerle is an intellectual property attorney for the National Aeronautics and Space Administration et al. i 3-18-2011 [Matthew Kleiman is Corporate Counsel at the Draper Laboratory, Theodore (Ted) Ro is an intellectual property attorney at Johnson Space Center ,“PATENT INFRINGEMENT IN OUTER SPACE IN LIGHT OF 35 U.S.C. § 105: FOLLOWING THE WHITE RABBIT DOWN THE RABBIT LOOPHOLE”, http://bujostl.org/content/WORKING\_PATENT\_INFRINGEMENT\_IN\_OUTER\_SPACE.pdf]

The foregoing discussion has shown how the §105(a) Exceptions have created a loophole in U.S. patent law that could permit private entities to insulate themselves from patent infringement liability in the United States for their outer space operations under circumstances wherein they might otherwise be liable under current U.S. extraterritorial principles. This loophole poses at least two problems. First, allowing companies to avoid liability for infringing U.S. patents could hamper the effectiveness of the U.S. patent system. Patents traditionally play an important role in promoting high technology research and innovation. An ineffective patent system could reduce incentives for private space companies to innovate and cause space companies to protect their inventions as trade secrets instead of disclosing them to the public in patent filings. 78 Second, while a purpose of Exception 2 is to recognize and defer to the United States’ obligations under the Outer Space Treaty and the Registration Convention, it is unclear whether completely deferring to the Registration Convention was actually required in order to accomplish this goal. In fact, entirely ceding responsibility for patent infringement by space objects that . are operated by U.S. persons or companies may be inconsistent with the United States’ obligations under the Outer Space Treaty. To examine this view further, consider, as stated supra, that the Outer Space Treaty provides that “a State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space.” 79 Although the language “shall” suggests a mandatory edict is being placed on the launching State, with respect to “retain jurisdiction,” neither the Outer Space Treaty nor the Registration Convention requires that the designated launching State exercise exclusive jurisdiction over its registered space objects. The failure of the Outer Space Treaty to vest a single state with exclusive jurisdiction over space objects seems intentional when compared with language in the 1959 Convention on the High Seas, which provides that “Ships shall sail under the flag of one State only and, save in exceptional cases expressly provided for in international treaties or in these articles, shall be subject to its exclusive jurisdiction on the high seas.” 80 By contrast, the language in article VIII of the Outer Space Treaty is much less restrictive. Further support in the view that the State of Registry does not necessarily have exclusive jurisdiction over its registered space objects can be found by the fact that the Registration Convention seems to encourage creative jurisdictional arrangements when there are multiple potential launching States. Specifically, the Registration Convention states that the determination of the launching State shall be made “without prejudice to appropriate agreements concluded or to be concluded among the launching States on jurisdiction and control over the space object and over any personnel thereof.” 81 A 1986 report by the U.S. Congressional Office of Technology Assessment even speculated that this provision of the Registration Convention could be a basis upon which to establish joint jurisdiction under the Registration Convention for the then‐proposed international space station. 82

Solvency- Extensions- Mixing Bad

Mixed strategy of NASA and private industry is bad – private industry and will take it over

Moss 2k Randolph Moss, former Assistant Attorney General, Regulatory and Government Affairs and Litigation/Controversy Departments, 9/18/00 http://www.justice.gov/olc/nasaopinionfinal.htm

One of the primary concerns of the domestic launch industry is the future role of NASA in the provision of space transportation. A return to the days of competition between NASA and private industry would be disastrous to the nascent space launch industry. NASA's role has already been defined by statute to be developmental and not operational, [FN241] and its future operations should be limited by this crucial distinction. Responsibility for the provision of routine access to space should rest with private sector launch services. NASA should focus its efforts on research areas, keeping America in the forefront of advancedtechnology development [FN242] with a pass- through of applicable technology to the private sector. A similar approach was successfully adopted by the National Advisory Committee for Aeronautics (NACA), NASA's predecessor, during the developmental years of the aerospace industry. Established in 1915 to "supervise and direct the scientific study of the problems of flight, with a view to their practical solution," [FN243] NACA was active in research and development for the purpose of fueling the commercial aircraft industry. Particularly in the late '20s and early '30s, NACA had a solid record of achievement in technology research and development, including a leading role in developing critical technology for commercial and defense aviation. NACA limited itself to basic research in aeronautics and development of new technology; it did not attempt to enter the airline business itself. [FN244] NACA's goal, which was largely achieved, envisioned private firms utilizing NACA research to build more effective and competitive aircraft. [FN245] A similar relationship should be developed between NASA and the commercial space launch industry. The Reagan Administration moved towards restructuring NASA more along the lines of NACA. President Reagan stated: NASA and our shuttles can't be committing their scarce resources to things which can be done better and cheaper by the private sector. Instead, NASA and the four shuttles should be dedicated to payloads important to national security and foreign policy, and, even more, on exploration, pioneering, and developing new technologies and uses of space. NASA will keep America on the leading edge of change; the private sector will take over from there. Together, they will ensure that our country has a robust, balanced, and safe space program. [FN246] This redirection of NASA will facilitate the overall advancement of U.S. space technology by providing funds for the development of "areas that promise broad, national benefits that are too diverse and as yet too far from marketability to attract private capital" [FN247] and "areas that provide a sound infrastructure upon which private-sector development can flourish." [FN248] In addition, the removal of NASA from the role of a provider of commercial launch services assists the development of the private launch industry by opening up an economic opportunity for private industry. Part of this shift in NASA's role includes the transformation of the Government from the purchaser of hardware to the purchaser of services. [FN249] This step is a corollary to the curtailing of NASA's role in the provision of commercial transportation since NASA would no longer maintain low- end launch capabilities. The new national space policy adopts this position by requiring that all Government agencies purchase launch services from the private sector "to the fullest extent feasible." [FN250] NASA has also expressed its intentions to procure launch services from the private sector. [FN251] This, in conjunction with the limited role of the shuttle and NASA in the provision of commercial space transportation, [FN252] is one of the most effective steps the Government could undertake to foster the commercial launch industry. [FN253] Furthermore, by contracting directly with private companies for launch services rather than for vehicle hardware, the Government and private industry receive a number of secondary benefits. First, by taking this process out of the current "cost plus" contracting mode, private industry (not the Government) is responsible for the business risks associated with a commercial venture. With company profits on the line, private industry will have an increased incentive for the development of more innovative and less expensive ways to implement the technology. Second, private industry will be able to reduce the per unit cost of space transportation vehicles by utilizing a production-line manufacturing process. [FN254] Third, allowing private companies to manufacture and launch ELV's could alleviate much of the red tape currently associated with producing hardware under contract for the Government. [FN255] Therefore, one can anticipate a lowering of costs and a reduction in governmental risk and obligation associated with space travel. In order to accommodate this shift in responsibility, the Government will need to alter current procurement methods. To illustrate, General Dynamics recently responded to a U.S. Government request for launch services with a submission that included about 9,000 pages of documentation. The entire agreement for provision of the same type of service to Intelsat [FN256] for $250 million in launch services totaled only 165 pages. [FN257] While Government interests may be well served by requiring extensive documentation, evaluations, and briefings for the development of major new Government-sponsored systems, such as the space station, such a process should not be required when purchasing a service, especially one the Government has used numerous times in the past. Thus the procurement process should be restructured to allow for more reasonable, business-like transactions. One potential weakness in this general proposal is that the Government's utilization of private launch services other than NASA could raise a legal question as to the authority of NASA to contract with outside service providers who replace civil servants. However, NASA's ability to replace federal civil service personnel with outside contractors has already been tested in the courts. In Lodge 1858, American Federation of Government Employees v. Webb, [FN258] the court held that NASA may go outside of the ranks of the civil service and enter into "contracts . . . or other transactions as may be necessary in the conduct of NASA's work and on such terms as it may deem appropriate." [FN259] Therefore, NASA's use of private launch services should not present any legal problems in this respect, especially in light of the provisions of the Space Policy.

Solvency- Extensions- OST not cool

Legal questions remain in OST

Sadeh ‘5 Eligar Sadeh Department of Space Studies, University of North Dakota, Grand Forks, ND November 2005 [Space Policy Vol. 21 Issue 4 “Public–private models for lunar development and commerce”]

When the Outer Space Treaty (OST) regime1 was codified, the focus was on government, not commercial, space activities. As a result, a number of legal questions exist about conducting commercial operations on the Moon. These questions include the rights to sell for profit samples recovered from the lunar surface, intellectual property rights to knowledge about lunar resources, and real property rights and the appropriation of lunar resources by establishing a mining facility [5]. The impact of these questions varies based on the business model of the commercial ventures. To date only a single firm, Transorbital, has succeeded in getting the necessary clearances and licenses for a commercial lunar flight [6]. Since Transorbital's planned lunar mission will only map the lunar surface from space, followed by a controlled crash to the surface to eliminate navigation risks, the legal issues it raised were minimal and could be accommodated within the existing space law framework. The licenses Transorbital needed involved getting clearance from two US government agencies. The State Department, under International Traffic in Arms Reduction (ITAR) regulations granted Transorbital a license to launch aboard a Russian booster. A second license was from the National Oceanic and Atmospheric Administration's (NOAA's) Licensing for Commercial Remote Sensing Systems legislated with the US Congress Land Remote Sensing Policy Act of 19922 to cover any images of Earth the spacecraft might take from lunar orbit [7]. In contrast to this case, more ambitious commercial lunar ventures, such as exploring Apollo landing sites and returning samples for sale to collectors, are not likely to be accommodated within the existing legal regimes. These ventures raise legal concerns about property rights issues under the existing OST regime. Such legal uncertainty not only raises the issue of costly legal delays, but also affects the viability of business models. A business model built around selling lunar samples to the general public, for example, hinges on legal ownership of the samples. Other commercial ventures focusing on mining lunar water or other lunar materials are even more sensitive to resolution of the legal issues of ownership and intellectual property rights about lunar surface conditions and resources. One means to address the legal issue of commercial lunar ventures proactively is through government legislation based on the model of the US Deep Seabed Hard Mineral Resources Act of 1980.3 This Act established a national regime to regulate the activities of US nationals and firms who wish to engage in deep seabed mining activities in international waters. It provides legal protection to US firms pending the creation of an international agreement on deep-sea mining acceptable to the US. The Act spelled out the legal rights US firms had to resources recovered from the ocean floor and ensured federal protection of these rights. Although it did not lead to any major deep-sea mining boom, as market economics did not justify recovery of sea floor minerals at the time, it did eliminate the legal uncertainty associated with deep-sea ventures. Creating a legal regime of this nature to protect commercial firms seeking to conduct lunar operations would similarly eliminate legal risk. The model of the Deep Seabed Hard Mineral Resources Act is especially applicable to lunar development given the problems encountered with the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement), and its call for an international regime to govern the resources of the Moon [8]. To date, no spacefaring powers have ratified the Moon Agreement.4 The view of the US government on this is that commercial firms need to be certain that their investments are protected and not governed through an international regime or organization that is more concerned with equity and benefit sharing than ROI. The idea of a ‘Lunar Resources Act’ akin to the Deep Seabed Hard Mineral Resources Act provides one possible way to provide legal protection, and thus to reduce the legal risks that will hinder the development of a commercial lunar industry. The counter argument to the USA, in terms of the property rights issue, lies with the example of the International Seabed Authority (ISA), which was established as part of the United Nations Convention on the Law of the Sea (UNCLOS). While the USA has not ratified UNCLOS because of objections to the ISA,5 the Seabed Authority has created a global common property resource regime embodying concepts of equity and international community interests into the arrangements for exploitation of the deep seabed as a commons resource [9]. The ISA is regulatory body that allocates companies permits to recover minerals from the seabed within a specified time period, requires all mining operators to contribute a portion of their revenues to the ISA, and obligates those companies receiving permits to sell to ISA mining technologies that cannot be obtained on the open market. With this approach there is no actual ownership or ‘real’ property rights to the seabed, but a right of use. Such a right of use approach is another way to reduce legal risks for lunar development, while ensuring that no one state can unilaterally impose its version of international law and equity on the rest of the world.

Companies won’t invest in space now - OST

**Davidson ‘5** Keay Davidson Chronicle Science Writer 9/16/2005 “Final frontier for lawyers -- property rights in space / Land claims, commercial schemes and dreams have legal eagles hovering”

Space buffs are dreaming about vast land developments on the moon, planets and asteroids -- and wherever people start making land claims, the lawyers can't be far behind. Consider this: This year, in a virtually unnoticed decision, the U.S. Court of Appeals for the Ninth Circuit in San Francisco dismissed a lawsuit by a Nevada man who claims he owns asteroid 433, a mountainous celestial rock also known as Eros. After NASA landed a robotic spaceship on Eros in 2001, online entrepreneur and space enthusiast Gregory W. Nemitz of Carson City, hoping to set a legal precedent for future cosmic exploration, informed the space agency that he owned Eros. He had previously filed his claim to ownership of the asteroid at an online registry for celestial land claims, which a Seton Hall University School of Law professor started in the 1990s to stir discussion of space- related legal issues. After NASA landed its probe on Eros, Nemitz asked NASA to pay a "parking/storage fee" of $20 for one century, plus late-payment fees. The agency refused. NASA general counsel Edward Frankle informed Nemitz that his property claim "of a celestial body ... appears to have no foundation in law." In response, Nemitz sued NASA and the U.S. State Department. In April 2004, the U.S. District Court in Reno tossed out Nemitz's suit "for lack of a recognizable legal theory" behind his claims. On Feb. 10, the San Francisco-based Ninth Circuit issued a terse ruling, without explanation, that upheld the district court decision. Disillusioned by the decision, Nemitz -- a nonlawyer who argued the case himself without the aid of an attorney -- plans no further legal action. But he's pretty mad about what he regards as a federal transgression of his rights. "I have a right as a human being to make a claim for anything that is not owned," Nemitz told The Chronicle on Thursday. "I think claiming a single asteroid is a reasonable claim -- (Eros) is about the size of Lake Tahoe in dimension. It's not like you're claiming a planet, and you're not claiming you're ruler of the universe." Bizarre though it sounds, the case of Nemitz vs. United States is just one of the odder sideshows in an emerging circus known as "space law." Space is new legal terrain, just as the air was in the early days of aviation and as the seas were in the dawn of ocean voyaging. For space buffs, the stickiest legal issue is property rights in space, the question of whether a private person can lay claim to property where there is no constituted government. And it involves not only land, but also the airless void of space. Entrepreneurship is the driving force. Space enthusiasts look forward to an age of space commercialization on a grand scale, ranging from orbital hotels with zero-gravity swimming pools that float in the middle of a room to lunar factories that mine nuclear fuel for terrestrial fusion reactors. They fear such dreams might be stillborn if the legal niceties -- especially property rights -- aren't worked out in advance. The legal status of property claims in space remains uncertain partly because of the ambivalent wording of the U.N. Outer Space Treaty of 1967, which called space "the province of all mankind." A subsequent U.N. document, the so-called Moon Treaty of 1979, was less ambiguous, as it implied that space resources should be commonly owned by all nations. The United States signed the first treaty but not the second one. Most space fans vehemently opposed the Moon Treaty, believing that its assertion that the moon could not become "property of any state, international intergovernmental or nongovernmental organization" was socialistic and would force space entrepreneurs to share their profits with all nations. In a potentially groundbreaking article on space property rights, space law expert Rosanna Sattler recently argued that an overhaul of current treaties and laws is needed to "stimulate commercial enterprise on the moon, asteroids and Mars." A major corporation "is not going to invest millions and millions of dollars for a communications system on the moon if there's no law up there to protect their assets," said Sattler, whose article, titled "Transporting a Legal System for Property Rights: From the Earth to the Stars," appeared in the summer issue of the University of Chicago Law School's Chicago Journal of International Law. Another lawyer trying to rewrite space law, UC Davis-educated Wayne White of Boulder, Colo., advocates revising space law via a legal theory that he calls "property rights without territorial sovereignty." White, who served on the U.S. State Department's legal subcommittee at a United Nations conference on space exploration in 2003, proposes that the United States pass a domestic law that recognizes the right of individuals to own and operate space industries, as long as they obey a "use it or lose it" provision: If they abandon the industry, they give up rights to it. In this way, he says, the United States could awaken other countries to the necessity for revised space laws and encourage them to negotiate a new international treaty that, he hopes, would clarify the legal status of property rights in space. "Space development and settlement will not happen if it's internationally taxed and controlled," White said. "I think space settlement is a social 'release valve' that we desperately need. ... It's only going to get more crowded here on Earth." Whether legally protected or not, space commerce is becoming a reality. Last week, wealthy entrepreneur-scientist Gregory Olsen returned to Earth after a trip aboard a Russian rocket to the international space station. The journey cost him $20 million, making him the third private citizen who paid for a space voyage. In 2004, Burt Rutan, designer of the private SpaceShipOne rocket launched from the Southern California desert, won a $10 million award from a private foundation for the achievement. The trip could presage tourist flights to orbit. Meanwhile, President Bush is pushing for renewed human missions to the moon. There, space entrepreneurs speculate, future astronauts could drink water that private firms have extracted from the Hetch Hetchys of the solar system: fallen icy comets entombed in the eternally dark deep-freeze of the lunar south pole.

Solvency- Extensions- Current patent law isn’t cool at all

US patent law is flawed

Kurt G. Hammerle is an intellectual property attorney for the National Aeronautics and Space Administration et al. i 3-18-2011 [Matthew Kleiman is Corporate Counsel at the Draper Laboratory, Theodore (Ted) Ro is an intellectual property attorney at Johnson Space Center ,“PATENT INFRINGEMENT IN OUTER SPACE IN LIGHT OF 35 U.S.C. § 105: FOLLOWING THE WHITE RABBIT DOWN THE RABBIT LOOPHOLE”, http://bujostl.org/content/WORKING\_PATENT\_INFRINGEMENT\_IN\_OUTER\_SPACE.pdf]

To explore how U.S. patent law would be applied to patent disputes on activities in outer space, this article will first describe the context in which such disputes will likely be litigated and then examine how an exception in 35 U.S.C. § 105, Inventions in outer space, 12 has seemingly created a jurisdictional loophole that could allow private entities to insulate themselves from patent infringement liability in the United States. This article will conclude that this loophole could hinder the U.S. patent system’s ability to incentivize research on space‐based technologies and that the loophole is arguably inconsistent with the United States’ obligations under the United Nations treaties pertaining to outer space operations. As possible remedies or mitigating tactics, this article proposes potential solutions to render this loophole irrelevant or close this loophole, including amending 35 U.S.C. § 105 to enable the courts to follow or expand principles of extraterritorial patent jurisdiction.

Solvency- Extensions-

Current patents--->flags of convenience

Lack of structured patent laws create “flags of convenience”

Matthew J. Kleiman, Corporate Counsel at the Draper Laboratory in Cambridge, Mass., 2-7-11[“Patent rights and flags of convenience in outer space”, The Space Review, <http://www.thespacereview.com/article/1772/1>]

Nonetheless, the 1967 Outer Space Treaty states that a space object’s country of registration “shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body.” Thus, the treaty permits countries to extend their laws, including their patent laws, to their registered space objects. Accordingly, in 1990, the United States extended the reach of its patent laws to US-flagged spacecraft through the Patents in Space Act, which provides that “any invention made, used, or sold in outer space on a space object or component thereof under the jurisdiction or control of the United States shall be considered to be made, used or sold within the United States for the purposes of [US patent laws].” Therefore, an invention created on a US-registered spacecraft would be deemed to have been invented in the United States and a patent infringement lawsuit based on an activity on a US-registered spacecraft must be brought in a US court and would only succeed if the activity is covered by a US patent.1 In 1998, the major space powers incorporated this concept of national patent jurisdiction into the intergovernmental agreement concerning cooperation on the International Space Station. Under this agreement, patent jurisdiction over an activity on the space station resides in the country of registration of the space station module where that activity occurs. Consequently, Japan, Russia, and the United States each has exclusive patent jurisdiction over activities conducted in its respective space station modules, and any European partner state may claim patent jurisdiction over activities conducted in the space station modules registered to the European Space Agency.Basing the outer space patent system on the application of national patent laws to registered space objects could limit the effectiveness of patent protection for space technologies. On Earth, a company generally would file patents only in countries where there is a significant market for the patented technology. Once an object is in space, however, it transcends the boundaries and protections of any single terrestrial market or patent jurisdiction. Therefore, companies must apply for patent protection in every country where a competing space object might be registered, potentially a very expensive and time-consuming process. If a company is unable to obtain patent protection in every such country or if a country becomes a potential country of registration after the invention has already been disclosed to the public (e.g., in earlier patent filings), competitors may be able to circumvent the company’s patents by using flags of convenience. Similar to the Outer Space Treaty, under maritime law, a ship operates under the law of its country, or “flag,” of registration. The term “flag of convenience” refers to the practice of registering a ship in a country different from that of the ship’s owners for the purpose of reducing operating costs and avoiding burdensome regulations. In 2009, when measured in terms of total tonnage, more than half of the world’s merchant ships were registered under flags of convenience, with the Panamanian, Liberian, and Marshall Islands flags accounting for nearly 40% of the global fleet.2 Due to lax regulations, minimal oversight, and poor record keeping in these countries, flags of convenience are often criticized for creating a permissive environment for criminal activities, poor working conditions, and environmental damageThe Outer Space Treaty laid the groundwork for a similar flag of convenience problem in outer space by making the country of registration the basis for applying national laws to space objects. Under the 1975 Convention on the Registration of Objects Launched into Outer Space, which implements the Outer Space Treaty’s registration requirements, a space object is registered by the “launching state,” which is either the country that launches or procures the launching of the space object, or the country from which the space object is launched. Because the term “launching state” is broadly defined, a company could conceivably select an outer space flag of convenience by either incorporating its business in or launching its spacecraft from the desired country.4

Flags of convenience bad

Flags of convenience disincentives tech development

Matthew J. Kleiman, Corporate Counsel at the Draper Laboratory in Cambridge, Mass., 2-7-11[“Patent rights and flags of convenience in outer space”, The Space Review, <http://www.thespacereview.com/article/1772/1>]

Flags of convenience are likely to raise many of the same legal issues in space as they do at sea, but the unique environment of outer space creates additional problems, particularly with respect to intellectual property protection. Merchant ships on Earth simply transport cargo from one location to another. Once the cargo reaches port, it becomes subject to the laws of the destination country. For instance, if a US company believes that products brought to the United States on a Panamanian-flagged ship infringe on its US patents, the company can rely on US patent laws to prevent the sale of the products in the United States. In space, where there is no “destination country” with its own patent laws, a patent holder who wants to prevent a competitor from using a patented invention on the competitor’s spacecraft would need to rely on the laws of the country where the spacecraft is registered. If the patent is not on file or is difficult to enforce in that country, the patent holder would be virtually powerless to protect its invention.In this early phase of the commercial space industry, commercial space operations are probably too high profile and the barriers to entry too great for flags of convenience to be an immediate problem. Commercial space operations, however, may soon become routine and not subject to as much scrutiny as they are today. Space companies may be able to establish themselves in almost any country they wish, and advances in launch technology may eventually enable companies to launch a spacecraft from almost any country on Earth. Once that happens, flags of convenience could render the patent system largely ineffective at protecting inventions designed for use in outer space.An ineffective outer space patent system would harm the space economy in at least two respects. First, a lack of meaningful patent protection in outer space would reduce the incentive to innovate and develop new space technologies. Second, space companies that are able to ignore patents would obtain a competitive advantage over competitors that are not able to do so. This could put considerable economic pressure on all space companies to register their spacecraft under flags of convenience, resulting in a race-to-the-bottom that would exacerbate the patent protection problem, along with safety, environmental, and other regulatory problems traditionally associated with flags of convenience.

Solvency- Extensions- Plan Action Spills over

US action on property rights in space will be modeled globally

Sam Dinkin, Ph.D. economist who specializes in auctions for privatization, 5/10/04, The Space Review, <http://www.thespacereview.com/article/141/1>

This might not be enough to assure entrepreneurs that their investments will be their property, but don’t let the perfect be the enemy of the good. The US is the center of a good fraction of the global economy and the space economy and if the US leads, other like-minded nations will follow. On Earth, countries that honor property rights are in ascendance. One surmises they will ascend in space as well. If bilateral agreements and the Outer Space Treaty do not provide an adequate regulatory environment for commercialization and colonization, then perhaps the treaty should be amended or the US should withdraw.

Solvency- Extensions- Floating Island Good

Floating island good- can apply to outer space

Menthe 98, [Darrel C. Menthe, Federal District Judge, 1998, “Jurisdiction in Cyberspace: A Theory of International Spaces”, 4 Mich Telecomm, Tech L Rev 69|AF]

V. The Theory of International Spaces A. Overview The theory of international spaces begins with one proposition: nationality, not territoriality, is the basis for the jurisdiction to prescribe in outer space, Antarctica, and the high seas. This general proposition must be assembled through observations. In outer space, the nationality of the registry of the vessel, manned or unmanned, is the relevant category. In Antarctica, the nationality of the base governs.41 Other informal arrangements (for instance, the United States providing all air traffic control in Antarctica)42 weigh heavily in decisions about jurisdiction. On the high seas, the nationality of the vessel—the “law of the flag”—is the primary rule A competing view is emerging positing that jurisdiction at sea is really “floating island” jurisdiction, a subspecies of territorial jurisdiction.43 This theory posits that vessels at sea are really “floating islands,” and that the jurisdiction predicated upon them is territorial in nature.44 The Supreme Court has weighed in against this interpretation, pointing out that stepping onto a U.S.-flagged vessel is not legally the same as entering the United States.45 The “floating island” theory appears to derive from the obsolete notion that vessels must somehow possess territoriality because “the right of protection and jurisdiction . . . can be exercised only upon the territory.”46 One approach is to treat these three areas as sui generis treaty regimes. Some scholars see international law as no more than the sum of various international agreements—a purely positivist approach.47 This has the veneer of theoretical consistency, but only if we fail to recognize an evolving organic international legal system. The sui generis conception of international law is out of touch with the treatment of the respective international regimes in American courts. It is usual for American courts to treat these regimes as analogs to one another. Smith v. United States is typical in this regard: Antarctica is just one of three vast sovereignless places where the negligence of federal agents may cause death or physical injury. The negligence that is alleged in this case will surely have its parallels in outer space. . . . Moreover, our jurisprudence relating to negligence of federal agents on the sovereignless high seas points unerringly to the correct disposition in this case.”48 In Hughes Aircraft,49 the U.S. Court of Federal Claims held that U.S. patent law did not apply to foreign spacecraft in outer space and relied on the decision in Smith v. United States that barred the application of the Federal Tort Claims Act to claims arising in Antarctica.50 The governing treaties are also similar in their conception and design The next theoretical and conceptual hurdle is physicality. These three physical spaces are nothing at all like cyberspace which is a nonphysical space. The physical/nonphysical distinction, however, is only one of so many distinctions which could be made between these spaces. After all, one could hardly posit three more dissimilar physicalities—the ocean, a continent, and the sky. What makes them analogous is not any physical similarity, but their international, sovereignless quality. These three, like cyberspace, are international spaces. As a fourth international space, cyberspace should be governed by default rules that resemble the rules governing the other three international spaces, even in the absence of a regime-specific organizing treaty, which the other three international spaces have.

Floating island good

Menthe 98, [Darrel C. Menthe, Federal District Judge, 1998, “Jurisdiction in Cyberspace: A Theory of International Spaces”, 4 Mich Telecomm, Tech L Rev 69|AF]

3. Jurisdiction in Outer Space The fundamental document in outer space law is the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space.82 The treaty was adopted pursuant to a United Nations General Resolution which contains verbatim much of the text of the treaty.83 The resolution and the treaty explicitly state that States have jurisdiction over objects bearing their registry. Remarkably, this resolution of the General Assembly was unanimous.84 There is also no doubt that the Outer Space Treaty was based on the Antarctic Treaty. Hearings held before the Senate Committee on Foreign Relations in 1967 actually include a copy of the Antarctic Treaty.85 In the hearings, the committee noted that the Outer Space Treaty was specifically based on the Antarctic Treaty.86 The treaty states that outer space, including the moon, is not subject to claims of sovereignty.87 Therefore, no territorial jurisdiction is possible. Article III provides that all activities shall be in accordance with international law.88 This article assures us that international law is not merely a terrestrial phenomenon, but includes all non-sovereign spaces, whether on this earth or beyond it. The treaty skirts many jurisdictional problems through Article VI, which declares that all activities are to be authorized by a State. States are to assure “national activities” are carried out in conformity with the treaty. Article VII makes a state responsible for damage caused by objects that it launches or causes to be launched, thus embracing the state of registry and the state of the launcher. Jurisdiction as set forth in Article VIII is then an easy matter: the national registry of an object gives the state of registry jurisdiction over that object and over any personnel thereof. This national status functions like the “temporary presence” doctrine announced in The Schooner Exchange89 and Brown v. Duchesne.90 When the objects return to earth, their special national status for jurisdictional purposes is not affected.91 Thus, jurisdiction in outer space, as in Antarctica, is predicated on the nationality principle. 4. Jurisdiction in Cyberspace: The Vessel of Nationality Making nationality work as a principle in cyberspace requires an analysis appropriate to cyberspace. It is too easy to fall into the trap of analogy by asking how nationality would play out on the open sea, in outer space, or in Antarctica, and then trying to make direct applications to cyberspace. As we have seen, the nationality principle is firmly entrenched in these areas, but its implications are different for each. For example, if we are applying the “law of the flag” from maritime law, we can get bogged down in the analysis of how the nationality of a ship is determined. There is, of course, an international regime in place which determines the registry of a ship, and there are such things as “flags of convenience,” under which U.S. nationals may fly a Panamanian flag and then be subject to Panamanian law at sea. The obvious question might be, “What is the nationality of a vessel in cyberspace?” But we are at a loss to find a ship or plane in cyberspace. Thus, we must ask first, what is the vessel of nationality in cyberspace, i.e. what carries nationality into cyberspace? Registry will not suffice as it does not currently exist. International treaties may at a later date specify that all files and messages be “registered” with a nationality. Until such time, however, we must discover the default rules. Before there was registry at sea, there was still nationality. Justice Stevens recently referred to the principle as the personal sovereignty of the nation over its citizens.92 In cyberspace, persons bring nationality into the international space of cyberspace through their actions. An uploader marks a file or a webpage with his nationality. We may not know “where” a webpage is, but we know who is responsible for it. The nationality of items in cyberspace could be determined by the nationality of the person or entity who put them there, or perhaps by the one who controls them. This analysis is relatively easy to undertake with regard to webpages.93 Generally, determining the nationality of a webpage is not a problem. The creator of a webpage is usually listed on the webpage, and is typically an individual or an organization. However, webpages are now also created by individuals and companies for others. This makes us ask who “owns” the page for jurisdictional purposes—the creator or the person on whose behalf it is maintained? International law is not displeased with either answer. If a nation wishes, it can ascribe nationality to all webpages maintained “on behalf of” its citizens, as well as any webpages actually created (i.e. uploaded) by its citizens. Either solution essentially solves the conflict of laws problem by reducing the conflict to two states at the most. Courts will have to make their own judgments about what level of connection between a cyberspace item and an individual is reasonable for the nationality of that person to dictate the jurisdiction to prescribe law. The theory of international spaces turns cyberspace from a place of infinitely competing jurisdictions into a place where normal jurisdictional analysis can continue.

No plan --> Bad things

Limits R&D

Lack of patent protection in outer space limits R&D

Harvard Law Journal 90, [Harvard Law Journal, 1990, “Forum on Space Law”, Volume 3, Spring Issue, http://jolt.law.harvard.edu/articles/pdf/v03/03HarvJLTech001.pdf|AF]

U.S. patent law currently does not provide protection for inventions made, used, or sold in outer space because the existing law is territorial in application. The relevant U.S. Code section provides that for the purposes of the patent laws: The terms "United States" and "this country" mean the United States of America, its territories and possessions. 5 The Supreme Court recently held that our patent system has no extraterritorial effect and was not intended to apply to activities taking place beyond the territorial limits of the United States. 6 Prior to this decision, there had been some case authority that seemed to suggest otherwise. 7 Based on this earlier authority, one can make an argument that U.S. patent law continues to apply to U.S. flag ships and, by analogy, to U.S. flag spacecraft. 8 However, such an argument would be undercut by the intervening changes in the law, which I will discuss further in the next section. 9 For the moment, I will assume that in the absence of this bill U.S patent law will not apply to space inventions, so that the bill is required to ensure "U.S. treatment" of inventions made, used, or sold in space. To understand why this is important, one must understand three key points about how U.S. patent law currently works. The first key point is that under U.S. law, foreign inventive activity is treated differently than U.S. activity. Unlike the patent laws of most other countries, U.S. patent law generally provides that a patent will issue to the first person to invent the product or process she claims in her patent. 1° As a result, in the United States the first inventor is said to have "priority" over others claiming the invention. The existence of priority is determined by looking at certain key events: conception, reduction to practice, and diligence. Crucial to the issue of space patents is that a person may not establish any of these events by reference to activity outside the United States. An inventor will suffer a substantial disadvantage if, because of the territorial nature of U.S. patent law, an invention reduced to practice on board a satellite or space station is viewed as being reduced to practice outside the United States. 12 This problem is exacerbated by the nature of much space research. Many of the most promising devices and processes being investigated can only be reduced to practice in outer space, since they rely on microgravity or other unique characteristics of the space environment. Thus, a lack of patent protection would likely forestall research in these fields. 13 A second key point has to do with "prior art." An invention, in order to qualify for a patent, must be a true invention worthy of some sort of encouragement. Under patent law, this translates into a requirement that 8. an invention be both "novel ''14 and "nonobvious. ''15 For reasons now somewhat dubious, U.S. patent taw draws a sharp distinction between domestic and foreign activities in calculating what is to be counted as prior art. Patents and printed publications, no matter where they originate, are considered prior art; but non-written items that are previously known, used, or invented by another are counted within the relevant prior art only if they occur within the United States. 16 This means that if space is considered "outside the United States" for patent purposes, a U.S. company's work in space would, for example, not be "prior art" barfing a patent by another foreign or domestic company unless it were either published or the subject of a patent. The third issue is protection from infringement. In many cases, this would not be a practical problem. Since U.S. patent law forbids anyone from making, using, or selling a patented device within the United States without a license from the patent owner, 17 the mere fact that a satellite manufactured in the United States is to be launched into space would not protect its manufacturer from a suit for infringement. It would still be "made" and presumably "sold ''18 in the United States, and thus subject to U.S. patent law. However, there are other circumstances where only the "use" aspect is called into play, and where that "use" is likely to take place on~,y in space. 19

Lack of patent protection limits innovation

Harvard Law Journal 90, [Harvard Law Journal, 1990, “Forum on Space Law”, Volume 3, Spring Issue, http://jolt.law.harvard.edu/articles/pdf/v03/03HarvJLTech001.pdf|AF]

Given these three important restrictions of existing U.S. patent law, the denial of patent protection for space inventions would have undesirable effects. First, there is no sound policy reason for denial of such protection; it is simply a gap in the law. Second, while denial of protection would not discourage innovation in the affected areas entirely, it would tend to skew the character of research. Large, integrated firms that could make use of knowledge gained internally would still have an incentive to do research (though a smaller one than if the results of their research were to be protected), but smaller firms and universities that could realistically be expected to recoup their costs only through patent licensing fees would not. Unlike many of our economic competitors such as Japan, these small entities account for a disproportionate share of our cutting-edge, research. By failing to extend patent protection to space innovations made by smaller firms and research centers, we would systematically be depriving ourselves of our most valuable research resources. 2° Finally, the bill will have an impact with regard to protection of national security secrets. U.S. patent law provides that an invention offginating in the United States may not be patented abroad unless the inventor has either filed an application in the United States and waited six months, or obtained permission to file abroad from the Commissioner of Patents and Trademarks. 21 The purpose of these provisions is to permit national security review of U.S. inventions. H.R. 2946 will ensure that these national security provisions apply to inventions made on board U.S. registry space objects.

US patent law is flawed-creates loopholes disincentivizing research

Kurt G. Hammerle is an intellectual property attorney for the National Aeronautics and Space Administration et al. i 3-18-2011 [Matthew Kleiman is Corporate Counsel at the Draper Laboratory, Theodore (Ted) Ro is an intellectual property attorney at Johnson Space Center ,“PATENT INFRINGEMENT IN OUTER SPACE IN LIGHT OF 35 U.S.C. § 105: FOLLOWING THE WHITE RABBIT DOWN THE RABBIT LOOPHOLE”, http://bujostl.org/content/WORKING\_PATENT\_INFRINGEMENT\_IN\_OUTER\_SPACE.pdf]

To explore how U.S. patent law would be applied to patent disputes on activities in outer space, this article will first describe the context in which such disputes will likely be litigated and then examine how an exception in 35 U.S.C. § 105, Inventions in outer space, 12 has seemingly created a jurisdictional loophole that could allow private entities to insulate themselves from patent infringement liability in the United States. This article will conclude that this loophole could hinder the U.S. patent system’s ability to incentivize research on space‐based technologies and that the loophole is arguably inconsistent with the United States’ obligations under the United Nations treaties pertaining to outer space operations. As possible remedies or mitigating tactics, this article proposes potential solutions to render this loophole irrelevant or close this loophole, including amending 35 U.S.C. § 105 to enable the courts to follow or expand principles of extraterritorial patent jurisdiction.

Solvency- Extensions- Plan good

Settles Conflicts/Leads to Certainty and Development

Real Property Rights good- settles conflicts over discovered resources, provides legal and political certainty, and encourages development

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

Why Real Property Rights are Necessary The 1967 Outer Space Treaty[1] does not provide a positive regime for the governance of space development. The 1979 MoonTreaty[2] provides a regime for development, but that regime prohibits real property rights. For that and other reasons, most nations have not signed or ratified the Moon Treaty. A development regime which provides some form of property rights will become increasingly necessary as space develops. Professionals foresee an integrated system of solar power generation, lunar and asteroidal mining, orbital industrialization, and habitation in outer space. In the midst of this complexity, the right to maintain a facility in a given location relative to another space object may create conflict. Such conflicts may arise sooner than we expect, if private companies begin building subsidiary facilities around space stations. Eventually large public facilities will become the hub of private space development, and owners will want to protect the proximity value of their facility location. It also seems likely that at some point national governments and/or private companies will clash over the right to exploit a given mineral deposit. Finally, the geosynchronous orbit is already crowded with satellites, and other orbits with unique characteristics may become scarce in the future. The institution of real property is the most efficient method of allocating the scarce resource of location value. Space habitats, for example, will be very expensive and will probably require financing from private as well as public sources. Selling property rights for living or business space on the habitat would be one way of obtaining private financing. Private law condominiums would seem to be a particularly apt financing model -- inhabitants could hold title to their living space and pay a monthly fee for life-support services and maintenance of common areas. Even those countries which do not have launch capability would benefit from a property regime. Private entities from the developing nations could obtain property rights by purchasing obsolete facilities from foreign entities that are more technologically advanced. A regime of real property rights would provide legal and political certainty. Investors and settlers could predict the outcome of a conflict with greater certainty by analogizing to terrestrial property law. Settlers and developers would also be reassured, knowing that other nations would respect their right to remain at a given location.

Reduces Collision/Debris/Enters Field

Plan good- reduces collision and debris, also easy to implement and encourages people to enter the field

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

In outer space, requiring facility owners to maintain a fixed orbit offers several advantages. First, it will reduce the probability of collision. It seems likely that some sort of "space traffic control" will evolve to track and direct space objects; plotting titled orbital locations as constants would permit controllers to concentrate on space vehicles and satellites in less stable orbits. Facility owners would benefit from this arrangement if non-titled space objects (or space objects exceeding their parameters) were held presumptively liable in a collision. Secondly, fixed orbits discourage indiscriminate dumping of debris, because debris can be more easily tracked to plotted, fixed pointsof origin. Hence, courts would sometimes be able to assess liability for debris-caused damage. Functional property rights permit free access to all areas ofouter space and celestial bodies because they do not necessitate territorial sovereignty and its consequent appropriation of larg areas of space. Safety zones may extend to a reasonable distance around a facility, and exist only for the security of the facility and to promote safe navigation in its vicinity. The regime is attractive because it is so easy to implement. Nations can unilaterally enact legislation, and they can tailor that legislation to conform to their existing property laws. The regime will cost states virtually nothing to implement, yet it will encourage citizens to enter what promises to be a very lucrative field.

Plan good- Private ownership would be quality controlled

Private property would still have to pass US testing

Kempf 68, [Robert F. Kempf, Feb 1968, “Reduction to the Practice of Space Inventions”, Journal of the Patent Office Society, Law Journal Library|AF]

The Treaty on Outer Space 5° and the United Nations Resolution 1962 provide that “states on whose registry an object launched into space is carried shall retain jurisdiction and control over such objects and any personnel thereon while in outer space.” A nation that constructs and orbits :1 spacecraft, manned or unmanned, retains ownership and control over it no matter where it is located. A spacecraft may come under American registry in the same sense as the registry of an ocean going vessel.“ The jurisdiction and control of the states under whose registry the spacecraft is carried clearly includes the applicability to the spacecraft and occurences thereon the law of the state of registry in the same manner in which occurrences onboard a ship are governed by law of the ﬂag.” The analogy between space law and the law of the high seas of many purposes is an obvious one.“ The courts have had occasion to discuss occurrences on a ship on the high seas in regards to the patent laws: The patent laws of the United States afford. no protection to inventions beyond or outside the jurisdiction of the United States; but this jurisdiction extends to the decks of American vessels on the high seas, as much as it docs to all the territory of the country, and for many purposes is even more exclusive." It is submitted that whenever the United States constructs and orbits a spacecraft, any legally relevant events, such as the operation and testing of an invention in its intended functional setting, comes within the jurisdiction of the United States and as such the invention may he considered as being reduced to practice in the United States under patent law. CONCLUSION It is concluded that space inventions, many of which represent enormous expenditures on both the part of private industry and the government, are subject to the same basic considerations in regards to the requirements for testing as terrestrial inventions for the purpose of establishing reduction to practice. Intended operation of the invention in a space environment may impose more stringent requirements for testing, but does not prevent the invention from being reduced to practice on earth rather than under actual service conditions in space. The requirements will be greater for inventions intended to act on and control a spacecraft in n space environment than for those merely carried to a more hostile environment by the spacecraft. If the requirements for testing have not been or cannot be complied with such that reduction to practice must necessarily be shown by operation in outer space, the invention can be considered to have been reduced to practice in the United States under one of two theories. l\*‘irst.ly, although an invention is carried on a. spacecraft remote from the United States, it may be operated by and under the control of command signals originating from the United States, and accordingly, may be considered as an integrated instrumentality not being removed from the United States by reason of the spacecraft being necessarily distant. Secondly, for spacecraft operating beyond sovereign airspace, :1 free space doctrine may be applied. Here legally relevant events, such as reduction to practice, come under the jurisdiction of the launching or registry nation analogous to the manner that jurisdiction extends to the decks of vessels on the high seas.

Plan good- Environment

Property rights in space solve the environment- self interest drives protection

Reinstein 99, [Ezra J. Reinstein, Northwestern, International Law and Business, “Owning Outer Space”, Hein Online|AF]

V. THE RIGHT OF OWNERSHIPI PROBLEMS AND RESPONSES A. Problem: Would additional incentive to develop space unleash environmental havoc? The current space law governing environmental responsibilities is well-meaning, but not effective enough. It is composed of OST article VII and the Convention on International Liability for Damage Caused by Space Objects (the “Liability Convention”).\*° Article VII Of the OST asserts that [e]ach State Party to the Treaty that launches or procures the launching of an object into outer space is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object. . . The Liability Convention limits liability to “fault.” Space environmental law, as it stands under these two treaties, is deeply ﬂawed. The Liability Convention supplies no deﬁnition of fault. Both treaties refer only to harms caused by launched objects; while these might be interpreted to include harms caused by unlaunched installations constructed on celestial bodies, such an interpretation is by no means certain.“ A detailed dispute resolution procedure neither has been described nor has arisen." Even if the liability standards fashioned by these two treaties can remedy localized and evidentiarily attributable injuries, they cannot redress those harms which are communal or otherwise unattributable.” One reason for the inadequacy of the current law might be that its formulators did not correctly foresee the course space development would take. The approach taken by the OST and Liability Convention resonates with the expectation that space activity would remain limited to periodic governmental exploratory missions.” I suggest two ways to bring space environmental law into the modem space age of ubiquitous commercial activity. First of all, an approval process, overseen by an international organization, must precede: any actual development. This would be similar in function to the Intemational Telecommunications Union ("ITU”), an organization whose most essential duty is to certify that proposed communications satellites will not interfere with each other?” Any party wishing to engage in the development of space would ﬁrst present a proposal to the overseeing organization. The organization would then only grant project approval an environmental review, ensuring that the project complies with environmental standards agreed to by COPUOS. Making approval dependent on environmental compliance docs not destroy the dual goals of efficient usage and wealth maximization. Far from it. Environmental safeguards embody the recognition that environmental degradation harms humanity in very real ways: it can endanger our health and lives, and can ruin a site’s utility. It doesn't bear belaboring this point; an example should suffice. Without environmental precautions, a mining corporation might dirty a distant planet’s lone water supply, forever deadening a world that might have grow into a great and productive colony. Similar has happened on Earth many times. It can happen in space. Another way to solve the problem of space environmental ruination is by accepting the right of ownership into our system of space law. It would be a simple but effective step in the right direction. As Lawrence Roberts has written, the current law “is rather damaging from an environmental perspective” because “without a means to secure control of a resource in the ground” ie without ownership, “each individual developer will seek to maximize his or own gain by extracting as much value as quickly as possible without regard to the effect on the communal resource. Ownership creates a strong incentive to act with an environmentalist ethos. As owner of a site, SpaceCorp would want to maximize the site’s value. This self-interest protects the environment in two related ways. First, because SpaceCorp is not just a squatter on a plot of celestial territory, because it will have more than an expiring unsufrutary interest, SpaceCrop will avoid wanton despoliation of the land. Despoliation would reduce the value of the property to a purchaser, and thus SpaceCorp’s potential revenue. Poor land management might also harm SpaceCorp’s current interests, if its actions contaminate its own site to the point that its settlement loses viability. Second, SpaceCorp will avoid ripping through the site; instead, it will either preserve materials it does not use to maximize the site’s resale value, or it will itself use the site as fully and efficiently as possible. SpaceCorp will either use the site with preservationist techniques, sparing the site from wasteful destruction, or it will use the site as a conservationist, ie wholly and completely, sparing other sites from exploitation. The incentive to use space non-wastefully, discussed above in the context of economic efficiency, clearly has positive environmental repercussions. An owner has an interest in keeping his own site clean, as well as using it with minimal waste and maximum efficiency, because if he wants to eventually sell the property, any despoliation will devalue it. This carrot, because it is self-executing, is better than any stick. Of course, the right of ownership would not make an envrionmental violation whose harm extends onto another site less likely, but it wouldn’t make it more likely, either. As under the current system, lawsuits should still be available to remedy harms. Hopefully the requirement of environmental review would act as a prior restraint to prevent these harms. And ownership, by creating an incentive to care about one’s own property, protects the interests of others: both those nearby (who instantly feel the effects of tmore care given to eg waste disposal and water management), and those who come later.

Plan good- prevents landrush

Private property rights good but must be controlled- gov action good, prevents landrush

Reinstein 99, [Ezra J. Reinstein, Northwestern, International Law and Business, “Owning Outer Space”, Hein Online|AF]

VI. Centralized COORDINATION OF DEVELOPMENT: THE UNSER SYSTEM On what basis should ownership be awarded? The legal system's answer to this question is crucial, because it determines what commercial actors will do. If the rule of ownership was no more than “ﬁrst come, ﬁrst served," with ownership going to the ﬁrst person to grab a celestial body, an unmitigated land-rush would ensue. Of course, the amount of wealth dependent on being ﬁrst-in-time would doubtless breed the criminality and outright sabotage witnessed in the Ameriacan West of the gold rush era. This, along with efﬁciency concerns, dictates that the legal regime must not operate on a pure principle of ﬁrst come, ﬁrst served. Clearly there must be a measure of centralized organization. I am not suggesting that private industry cede its independent judgrnent to an intergovermnental command-and-control planning board. What l am suggesting is that an international body, carrying the legitimacy of the United Nations, coordinate private industry so that the market forces can operate most efficiently. We might call it the United Nations Space Exploitation Registy, and it might be founded on a document like this (commentary in bracketed italics): The notion that our future in space is reserved to the superpowers, or even to governments, has passed. Private commercial space investment, unforeseen at the inception of the Outer Space Treaty’s dominion, has grown apace, while governmental investment has shrunken Commercial activitics in space now generate more revenues than government contracts.“ The time has come to reject the old space law whose “pro-state, anti-private enterprise hue. . .darkly colors space activities to this day.” I believe that some changes, Whether the ones outlined in this essay or others I have not considered, are necessary, if we are to push our species out to the stars. Thanks to the development of a new generation of “singlestage-to-orbit" ]launchers, launch costs may drop by 30 percent in the just next few years.'” Companies are researching opportunities in new uses of the GSO, in mining, even in tourism: a consortium including Lunacorp and Carnegie Mellon University hopes to send two camera-equipped rovers to the moon, not for geological surveying, but to let virtual tourists experience a lunar drive.'” The recent discovery of large quantities of water on our moon might cut the cost of lunar missions in half again: the water, converted into liquid hydrogen and liquid oxygen, could satisfy fuel needs for retum ﬂights. 3° The moon could even end up as a refueling station for more distant journeys. Space law must take into account private needs and build on private opportunities; to do this, it must embrace the principle of private property. If humanity hands control of the exploitation of space over to an intemational political body in an effort to use space development as a wealth redistribution mechanism, the entire project is likely to fall on its face and there won’t be any wealth to redistribute. Humanity will lose out on knowledge, adventure, living room, and resources. In contrast, the greatest good for the greatest number will occur if property rights are expanded and clariﬁed in the ways suggested throughout this essay. One small legal step perrnitting the private ownership of space territory would be one giant leap for mankind.

Plan god- Resolves IP rights and competition conflicts

Plan good- state authorization of claims resolves IP and competition rights

(+ States unlikely to interfere in the actions of private entities)

Tennen 09, [Leslie I. Tennen, Attorney at Law Offices of Sterns and Tennen, April 2009, “Towards a New Regime for Exploitation of Outer Space Mineral Resources?”, Conference on Near-Earth Objects: Risks, Responses, and Opportunities- Legal Apsects”, University of Nebraska Conference

http://spaceandtelecomlaw.unl.edu/conferences/docs/2009NEO\_Tennen.pdf|AF]

Elements of Commercial Regime  Authorization and Continuing Supervision  Outer Space Treaty does not specify or mandate any particular form of legal regime be adopted for the authorization and continuing supervision of non-governmental entities in space  does not require that states implement any licensing regime whatsoever  the number of states which have done so is relatively few  states permitted to determine the domestic criteria for accepting or rejecting a proposed project or mission  states are free to promulgate any form of administrative oversight they deem appropriate consistent with their national interests and policies, subject to international treaty obligations requirement of state authorization and continuing supervision of the private sector affords a significant measure of protection for commercial space  protection from in situ interference by other entities  state which granted the authority to the private entity  other entities authorized by that state  other states or their nationals  rogue entities  space activities are difficult, costly, and fraught with risk  unlikely that state which granted authorization to a private entity purposely would interfere with the activities of that authorized entity  state has broad array of means and mechanisms to limit or restrict the activities of the private entity  much less costly and considerably more efficient than launching a mission to conduct interference with activities in situ  include revocation of authorizations, restriction of communications, issuance of injunctions, attachment of property, and/or the utilization of provisional or other remedies under domestic law also is unlikely for interference by another entity granted authority by the same state  request for authorization with clear intention to cause physical interference would have little chance of obtaining approval  state itself would object to such a purpose  operator of the licensed facility, or members of the public, may have an opportunity to object pursuant to domestic licensing or judicial procedures  possible for second entity to be granted authority to operate a facility near a previously authorized facility  potential for claims such as infringement of intellectual property rights and unfair competition  these types of claims are raised on a daily basis, and resolved on a daily basis, according to extant law

\*\* taken from a powerpoint slideshow

Plan good- innovation

Privatization is key – capitalist innovation

Garmong ‘5 Robert Garmon Ph.D. in philosophy, was a writer for the Ayn Rand Institute from 2003 to 2004 2005 [Privatize Space Exploration Capitalism Magazine]

There is a contradiction at the heart of the space program: space exploration, as the grandest of man's technological advancements, requires the kind of bold innovation possible only to minds left free to pursue the best of their thinking and judgment. Yet, by placing the space program under governmental funding, we necessarily place it at the mercy of governmental whim. The results are written all over the past twenty years of NASA's history: the space program is a political animal, marked by shifting, inconsistent, and ill-defined goals.

Plan good- NASA

Privatization saves NASA

NASA Academy ‘8. NASA Academy NASA's premiere leadership training program for undergraduate and graduate students “ROADMAP TO A SPACE FARING CIVILIZATION” 2008

Another factor that pushes for the commercialization of the space industry is the current state of NASA‟s budget. NASA‟s annual budget in 2004 at the announcement of President Bush‟s Vision of Space Exploration was 15.559 billion US dollars (all numbers are adjusted for 2007 inflation). Four years later, after this initiative to go back to the Moon and onto Mars, the budget has only increased about 5 billion dollars, as 20.949 billion dollars is being proposed for FY 2009 (78). This budget while increasing is not increasing enough to allow NASA to complete the Vision entirely its own. NASA doesn‟t have enough money to continue with the ISS, complete its current projects and send man back to the Moon with only a 5 billion dollar increase in their budget. Operations at NASA are much different as we head back to the Moon for the second time, than they were when we journeyed to the Moon in the days of the Apollo Program. During the Apollo program (July 1969 to December 1972) NASA‟s budget peaked in 1966 and the total budget was 6% of the annual federal budget (8). Today, NASA‟s budget makes up less 1% of the federal budget. Furthermore, the Apollo Program made up 34% of NASA‟s annual budget (9), while its successor the Constellation Program receives only 17% of NASA‟s annual budget (10). All of these factors point to the result that NASA has significantly less funding with which to perform their journey back to the Moon. Thus, there is no way that NASA will be able to travel to the Moon completely under government funding as it did in the Apollo Program. NASA‟s lack of adequate funding leads to the commercialization of space because there is work that they don‟t have the resources to complete that will need to be done to fulfill the Vision.

Plan good- tourism

Space commercialization will lead to greater space tourism

NASA Academy ‘8. NASA Academy NASA's premiere leadership training program for undergraduate and graduate students “ROADMAP TO A SPACE FARING CIVILIZATION” 2008

A final catalyst for the development of the commercial space industry is the growth of the market for Space Tourism. As NASA and other international government agencies continue to explore space, the public is becoming more interested and intrigued by what lies beyond our planet. Space Tourism provides the public with the opportunity to explore this interest and makes space accessible to a wider range of people, rather than just a select astronaut core. Space Tourism is a major catalyst for commercial development, because NASA is not interested in helping get the public to space. NASA more importantly does not have the resources or the budget to do so. But, still the demand to go to space remains and in order to fill this demand, the private companies must emerge and supply opportunities for Space Tourism. Currently the market for Space Tourism is in an early development phase as many new companies are starting up and presenting new experiences and products to the public. One current opportunity presented by Bigelow Aerospace, the inventors and manufacturers of inflatable orbiting modules, is the “Fly Your Stuff” Program. In this program, Bigelow will fly personal items in their Genesis II module and take pictures of the items floating in space (80). Bigelow‟s end goal is to develop inflatable habitats, which could function as a suborbital space hotel (81). A second major experience that is in development by Virgin Galactic, are suborbital space tourism flights. These flights are going to take the public to space beginning around 2010 and ticket prices will be about $200,000.00 US dollars (81). Many other companies, like Space Adventures, XCOR, and RocketPlane Limited, are looking to compete with Virgin Galactic as space airlines as they begin to develop their own suborbital spaceflight programs. In addition to suborbital flights, Space Adventures is currently conducting orbital flights by flying private citizens on the Russian Soyuz to the International Space Station for $20 million US dollars (82). Many opportunities are being developed for Space Tourism by private companies, but there is room for many more once in a lifetime adventures. The key to Space Tourism being a catalyst to the commercialization of space is that the government is unwilling to participate in the market, but the demand for this market is still thriving. This flourishing new industry of Space Tourism provides a great economic opportunity for the private companies.

Plan good- war

Plan solves resource wars and neo-con war mongering

Collins & Autino ‘8 Patrick Collins PhD, well known and respected authority on space economics, space tourism, reusable launch vehicles Adriano Autino President of the Space Renaissance Initiative. 2008 “What the Growth of a Space Tourism Industry Could Contribute to Employment, Economic Growth, Environmental Protection, Education, Culture and World Peace”

Although the use of extra-terrestrial resources on a substantial scale may still be some decades away, it is important to recognise that simply acknowledging its feasibility using known technology is the surest way of ending the threat of resource wars. That is, if it is assumed that the resources available for human use are limited to those on Earth, then it can be argued that resource wars are inescapable [22,37]. If, by contrast, it is assumed that the resources of space are economically accessible, this not only eliminates the need for resource wars, it can also preserve the benefits of civilisation which are being eroded today by "resource war-mongers", most notably the governments of the "Anglo-Saxon" countries and their "neo-con" advisers. It is also worth noting that the $1 trillion that these have already committed to wars in the Middle-East in the 21st century is orders of magnitude more than the public investment needed to aid companies sufficiently to start the commercial use of space resources.

Plan Good- laundry list

Privatization is key to jobs, innovation and is the future of space exploration

Dyson ’10. Esther Dyson [member of the NASA Advisory Council] “Prepare for Liftoff” 2010 Foreign Policy

The U.S. Defense Department may have created the Internet, but had it kept control of the technology, it's unlikely the Web would have become the vibrant public resource it is today. That credit goes to the investment and activity of private citizens and private companies, starting in the late 1980s and early 1990s. With Barack Obama's new spending proposals, the same sort of thing could happen to space travel and exploration. Critics of the new NASA budget have described the U.S. president as "cutting" manned space exploration and abandoning the hope of a return to the moon. But in fact, Obama's novel approach signals a much more far-sighted view of space travel than Washington has had to date. The U.S. government should be leading the way in rocket science and space exploration, but it should leave exploitation of those advances to the private sector. The new space budget will provide encouragement and funding for the private sector to do what it does best -- move from technology research to technology development. To quote Rick Tumlinson , cofounder of the Space Frontier Foundation, a space advocacy group, there's no need for the government to be "driving the trucks in low-earth orbit." It should focus on opening up the far frontiers while businesspeople deliver the goods. The budget also devotes extra resources to keeping the International Space Station in operation. The station was slated to be shut down, a crazy notion given that the United States has invested almost $100 billion and 30 years to build it and we have just started to make use of it. We have just moved to the six-person crew it was designed for, and it's a fine initial hub for other space activities, including commerce, research, and exploration. However, common sense doesn't always rule in politics. When the Internet opened up to commerce, there were objections from the high priests of the cyberspace, who didn't want anyone to turn their holy calling into a business. In the case of space, there are jobs at stake and, more importantly, politicians' careers at stake. Obama is proposing to cancel some $25 billion in NASA programs -- with most of the cuts affecting jobs in Alabama, Utah, and Texas, whose congressional delegations are now up in arms. But in the long run, the new approach will create more jobs -- and more value -- because the United States will end up with both an innovative, long-term government space program and an energetic, fast-growing private-sector market that will transport people and cargo for the U.S. government, space tourists, and non-U.S. governments. Ultimately, the costs and risks of space transport will come down, flights will increase, and markets will grow. As with the Internet, we can't predict all the uses to which commercial innovation will put this infrastructure. From the public's point of view, it really doesn't make much sense for the government to operate low-earth-orbit space flights when the private sector is willing to take over that part of the job. The private sector will take it on for profits and focus on efficiency over radical innovation, while NASA's scientists and engineers get the opportunity to work on more speculative, long-term research and exploration projects. Right now, a variety of companies are developing and building spacecraft, exploring the production of pharmaceuticals in zero-gravity (which produces purer crystals), and devising space tourism operations. Politically, the fuss is mainly about jobs that can help politicians get elected, and not about space exploration itself. The simple solution is some promise that the jobs will not be lost; they will simply be transformed. If no commercial company is willing to hire these workers, then perhaps they could retrain as teachers, an area where the United States desperately needs more scientists and technical people, or in medicine, which requires the same meticulous attention to detail. But the commercial space market will need at least some of them. President Obama and all of us who want to focus on the future should not forget how good the private sector can be at creating both jobs and opportunities.

New property law in space good- resources, land, clutter

Reinstein 99, [Ezra J. Reinstein, Northwestern, International Law and Business, “Owning Outer Space”, Hein Online|AF]

II. THE NEED FOR A LAW OF PROPERTY Commercialization of space is no longer technologically unimaginable. But it may be illegal. The most fundamentally important document in space law for the last three decades has been the Treaty on Principles Goveming the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Ogter Celestial Bodies (better known as the “Outer Space Treaty" or "OST").” The Outer Space Treaty was hashed out in a politically tense environment. Negotiations began on the heels of the Soviet Union’s earthshaking Sputnik launch in 1957. Each side of the Cold Wmwas concerned that the other might gain irreversible advantage by militarizing outer space.” The DST grew up as much a document of prevention as one of hepe. 'I'he U.N. General Assembly Resolution 1348 (XIII) of October 17, 1963, on which parts of the OST were based, explicitly intended to “avoid the extension of present national rivalries into this new The U.S. Representative to the U.N. General Assembly remarked at a U.N. plenary session during OST negotiations, We of the United States regard this treaty as an important step toward peace... Therefore, as we stand on the threshold of the space age, our ﬁrst responsibility as governments is clear: we must make sure that ma.n’s earthly conﬂicts will not be carried into outer space... [The Outer Space Treaty] rcsponds to that desire and hope.” The lion's share of discussion dealt with arms control provisions, jun'sdiction over spaceships, deciding which military activities are banned by the “peaceful purposes” clause,“ and the like. In fact, the atmosphere was so contentious that the U.S. and U.S.S.R. repre§entatives bickered even as to which side originated the OST’s basic ideals.” Creating a space property law supportive of private development was not a priority. Each side of the Cold War was hoping to prevent the other from advancing as a sovereign into outer space and achieving an insurmountable military and geographic superiority. As a result, the OST is at best ambiguous, and at worst hostile, to the pm/atization and commercialization of space resources. Why is a deﬁnitive property law needed? There are at least three reasons. A. Division of limited resources Space may be vast, but many of the most valuable resources cially those convenient to Earth -- are limited. Our moon is one example. It may be one of the most promising sites for mining," energy-capture projectsf and spaceship refueling,” but a limited amount of usable land exists, with an even more limited quantity of usable water.“ For another example, the Geo-Stationary Orbit (“GSO”) is probably the most valuable of all space resources to date. The GSO is a loop of space above Earth’s equatorial surface.“ Satellites placed in GSO orbit the Earth at the same rate and in the same direction as the Earth’s rotation.” Thus, objects in the GSO can stay ﬁxed abovc a single point on Earth’s surface. The GSO's inherent use~ fulness for observation (e.g. weather, military intclligcnce) and c0mmuni~ cations links has led to big business. The GSO, however, limited to a narrow band 35,800 km above the equator,“ is already cluttered, both with electromagnetic interference from rival satellites” -- of which there are more than 750“ -- and with “space-junk,” del)!-is from past launches that threatens to rip holes in the orbiting equipment." This problem is not limited to the GSO and the moon; in truth, every resource is limited. The question, then, is who, if anyone, should have the rights to the riches of space? A system of space law, if it is to be successful, must provide an answer.

Plan doesn’t violate things

Plan good- Ilaw

Plan doesn’t violate I-Law: acting for commercial purposes

Nikhil D. Cooper, Deputy Attorney General at the California Department of Justice in Los Angeles, Spring 2009 [“Circumventing Non-Appropriation: Law and Development of United States Space Commerce Note”, Heim Online, Hastings Constitutional Law Volume 36 Issue 1]

473-474

In response to the arguments above, one arguing for the legitimacy of the domestic space commerce industry would note that "appropriation," as it appears in the Outer Space Treaty, should be interpreted narrowly. Under this logic, one would contend that the highly interdependent nature between government and industry is one in which the government has no appropriation rights to space. Instead, the structure between government and private space commerce does not exist to assist the United States in "appropriating" space but instead serves to regulate private space commerce. The argument would cite that government heavily regulates private industry (through its monopoly of the STS launch system) and through permitting legislation (such as the CSLA) and does not realize any sovereign interest in outer space in the manner expressly proscribed by the "non-appropriation principle." Moreover, one would argue that STS launch contracts are in fact government contracts. Therefore, given that "the Government acts in its commercial or propriety capacity in entering contracts, rather than its sovereign capacity,"'"13 the government cannot appropriate space in a sovereign capacity merely through its regulation of private commercial space-launch activities. Faced with these conflicting interpretations, a court reviewing the Outer Space Treaty could examine the history at the time of its signing for clues as to what level of national involvement "appropriation" was intended to cover. Recall that the Outer Space Treaty was signed during the Space Race and was intended to alleviate tensions between space-faring nations. 14 Construing the treaty's introductory text with the history of the treaty's signing, the likely interpretation of the treaty is not a ban on the commercial development of space but, rather, is a declaration of outer space as a demilitarized zone that all nations were free to explore peacefully and scientifically."I5 Under this view, the development of space commerce would not be considered inherently contradictory to the expressed treaty intent of peaceful and scientific space use.

Plan good- common heritage principle

Plan consistent with common heritage principle- promotes international coop and prevents unfair competition

Tennen 09, [Leslie I. Tennen, Attorney at Law Offices of Sterns and Tennen, April 2009, “Towards a New Regime for Exploitation of Outer Space Mineral Resources?”, Conference on Near-Earth Objects: Risks, Responses, and Opportunities- Legal Apsects”, University of Nebraska Conference

http://spaceandtelecomlaw.unl.edu/conferences/docs/2009NEO\_Tennen.pdf|AF]

Law of the Sea Convention demonstrates promotion and protection of commercial interests is compatible with the common heritage of mankind principle  1994 revisions:  deleted mandatory technology transfer in favor of a set of general principles  promoted international cooperation  preserved the equality of opportunity  provided for appropriate representation of states commensurate with their interests  created a neutral juridical regimes to arbitrate disputes  restructured the international authority of the LOS to prevent it from engaging in unfair competition with private entities subject to its regulatory jurisdiction

Plan good- OST

**Privatization doesn’t violate OST – benefits all**

**Dalton ’10** Taylor Dalton J.D. and LL.M., Cornell Law School 10/6/2010 [Scholarship@Cornell Law: A Digital Repository “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”

Outer space and all the resource contained within it, besides those on Earth, have been proclaimed as having value to all of humanity. All the international agreements and proclamations have this theme. This desire thus underlies the basis for all space law and serves the overarching principle. Some claim that this principle precludes the private property rights in space, because they are inconsistent with the good of community, but this is not so. Private property rights incentivize innovation and productive use, that will in turn benefit society as a whole. Private rights allow for individual efforts to flourish. Nonetheless, the overarching principle of shared benefit must somehow influence the manner and extent to which private property rights are exercised.

Private property in space is permissible via OST

**Dalton ’10** Taylor Dalton J.D. and LL.M., Cornell Law School 10/6/2010 [Scholarship@Cornell Law: A Digital Repository “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”

Alan Wasser, the Chairman of The Space Settlement Institute, is a vocal proponent of private property rights on the Moon and other celestial bodies. He argues that private property is not explicitly excluded within the Outer Space Treaty; therefore, it is permissible for private actors to claim property rights on celestial bodies.61 He relies on the legal doctrine of expressio unis est exclusio, or the doctrine that when interpreting a statute, one should presume that provisions not mentioned were excluded by deliberate choice, not mistake.62 He interprets Article II of the Outer Space Treaty narrowly as only applying to nations because it does not explicitly prohibit property claims by private actors.63 Wasser primarily relies on a Lockean-type theory of obtaining property rights that is independent of any sovereign.64 The natural law principle of pedis possessio or “use and occupation” is the theoretical basis for his property claims on celestial bodies.65 He finds this precedent in civil law traditions based on Roman law and admits that this theory of property rights does not comport the common law standard.66 Wasser claims that since the Outer Space Treaty does not explicitly prohibit a nation from recognizing a property claim, then such recognition is permissible.67 Therefore, nations can only recognize, not confer, rights under current space law. He rebuts claims that recognition of property claims would be an act of national appropriation prohibited under Article II by clarifying that recognition of extraterritorial claims is not the same as asserting authority over the property.68 He highlights the fact that U.S. courts recognize and defend property rights not subject to U.S. sovereignty.69 Wasser and others like Wayne N. White70 exploit the distinction between property and sovereignty. He also points out that Articles VI, VII, and VIII of the Outer Space Treaty do not turn private actors into branches or parts of the state just by the fact that the state authorizes and oversees their activities.71

OST is ambiguous regarding land ownership

Zullo ‘2 Kelly M. Zullo Lawyer and writer for the Georgetown Law Journal

When the experts discuss the ambiguities of the Outer Space Treaty, they usually mention two: 1) the ownership of minerals removed from the land, and 2) the ownership of the land itself.112 The U.S. and Soviet governments resolved the first ambiguity by simply taking Moon rocks and declaring ownership of them.113 As Thomas Gangale and Marilyn Dudley-Rowley, who oppose Lunar land claims recognition, say in their AIAA paper: Has there ever been a serious challenge to the US or Soviet/ Russian governments over their ownership (or at least their control) of the material they brought back from the Moon? These precedents established a principle of customary law that “if you take it, it’s yours.” Essentially, this derives from the Roman legal principle of uti possidetis: “as you possess,” so you may continue to possess.] The second ambiguity could similarly be resolved by an inter- national private settlement simply landing on and taking posses- sion of a hunk of Lunar land.115 The settlers could then offer to sell pieces of their land to anyone on Earth in order to recoup the cost of setting up the settlement and running a space line open to all paying passengers, regardless of nationality.116 All any nation of the world would have to do is not contest the settlement’s right to sell Lunar land deeds to its citizens.117

Private property not excluded by the ost and are therefore permissible

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22|AF]

A. Yes, Private Property Rights are Permissible Alan Wasser, the Chairman of The Space Settlement Institute, is a vocal proponent of private property rights on the Moon and other celestial bodies. He argues that private property is not explicitly excluded within the Outer Space Treaty; therefore, it is permissible for private actors to claim property rights on celestial bodies.61 He relies on the legal doctrine of expressio unis est exclusio, or the doctrine that when interpreting a statute, one should presume that provisions not mentioned were excluded by deliberate choice, not mistake.62 He interprets Article II of the Outer Space Treaty narrowly as only applying to nations because it does not explicitly prohibit property claims by private actors.63 Wasser primarily relies on a Lockean-type theory of obtaining property rights that is independent of any sovereign.64 The natural law principle of pedis possessio or “use and occupation” is the theoretical basis for his property claims on celestial bodies.65 He finds this precedent in civil law traditions based on Roman law and admits that this theory of property rights does not comport the common law standard.66 Wasser claims that since the Outer Space Treaty does not explicitly prohibit a nation from recognizing a property claim, then such recognition is permissible.67 Therefore, nations can only recognize, not confer, rights under current space law. He rebuts claims that recognition of property claims would be an act of national appropriation prohibited under Article II by clarifying that recognition of extraterritorial claims is not the same as asserting authority over the property.68 He highlights the fact that U.S. courts recognize and defend property rights not subject to U.S. sovereignty.69 Wasser and others like Wayne N. White70 exploit the distinction between property and sovereignty. He also points out that Articles VI, VII, and VIII of the Outer Space Treaty do not turn private actors into branches or parts of the state just by the fact that the state authorizes and oversees their activities.71 What would property rights look like under Wasser’s regime? Rights holders would not have a full set of property rights. For example, the right to exclude would be abrogated by Article XII of the Outer Space Treaty—requiring all stations and installations must be open to representatives of other state—as well as the “benefit of all” language in Article I. How much land can be claimed? Answer: the amount of land that a settlement can, and must, use depends on what the land is being used for and how much land the settlement will need to survive This position suffers from a fatal theoretical flaw. It is theoretically true that property rights can exist independent of a government or sovereign. However, for those rights to have any meaning, a group or community must agree to recognize those rights. A holder of property rights can only “enforce” those rights if the rest of the community agrees to back him up. To have legal status, the property rights must be recognized by the sovereign, which would be the government or community in which the property rights holder chooses to enforce his rights. If the community does not recognize the property rights, then the community will not entertain a claim to enforce those rights. In the space context, it would be necessary for the international community or individual states to recognize the property rights for a rights holder to ever make a claim. And here Wasser has not shown that the community has back up his claim.

Article II of OST only prohibits national and not private property rights

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

Article II of the Outer Space Treaty governs the appropriation of space resources. Article II provides that "Outer Space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use occupation, or by any other means." International lawyers differ in their interpretation of the term "national appropriation." Some interpret Article II narrowly to prohibit only national appropriation.[3] Many others interpret the clause broadly to prohibit all forms of appropriation, including private and international appropriation.[4] When Article II is compared to similar provisions in other documents, however, it becomes clear that the narrow interpretation is correct. Before the Space Treaty was drafted by the U.N. Committee on the Peaceful Uses of Outer Space (COPUOS), four other international legal organizations prepared draft resolutions. All of these documents recommended non-appropriation clauses which are broader than Article II.[5] The terminology in these clauses suggests thatat the time the Space Treaty was drafted, international lawyers did not consider "national appropriation" to be an all-inclusive phrase. For example, a resolution of the International Instituteof Space Law specifically distinguished between national and private appropriation: "Celestial bodies or regions on them shall not be subject to national or private appropriation, by claim of sovereignty, by means of use or occupation or by any other means."[6] On the basis of a similar analysis, Professor Gorove has concluded that Article II only prohibits national and not private appropriation.[7]

Article II allows for functional sovereignty

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

Sovereignty Article II also refers to claims of sovereignty. Sovereignty is a nation's right to exert exclusive authority over people, resources and institutions. It is exercised to its fullest extent within the boundaries of a nation's territory. Countries also express their sovereignty outside national boundaries, but that authority is limited to certain specific functions, such as jurisdiction over ships, aircraft, and citizens abroad. Thus, international lawyers distinguish between the absolute territorial sovereignty which is exercised within national boundaries, and the functional aspects of sovereignty, which are exercised beyond national boundaries. The Outer Space Treaty contains provisions other than ArticleII which actually require parties to exercise functional sovereignty. The most significant example is Article VIII, which requires parties to "retain jurisdiction and control over... space objects on their registry... and over any personnel thereof, while in outer space or on a celestial body." It follows that all aspects of sovereignty cannot be prohibited by Article II.

Article II only applies to states and not private entities

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

Real Property Rights Beyond a Facility The relationship between property and sovereignty differs under common law and civil law systems. The common law theory of title has its roots in feudal law. Under this theory the Crown holds the ultimate title to all lands, and the proprietary rights of the subject are explained in terms of vassalage. Civil law, on the other hand, is derived from Roman law, which distinguishes between property and sovereignty. Under this theory it is possible for property to exist in the absence of sovereignty. Article II of the Outer Space Treaty prohibits territorial sovereignty but does not prohibit private appropriation. Hence, private entities may appropriate area in outer space or on a celestial body, although states may not. Under the common law theory of property rights, however, states (lacking sovereignty), would not have any rights to confer on private entities. Conversely, under the civil law view, property rights would exist independent of sovereignty, and therefore could be recognized. This is why "[i]n the discussions leading to the conclusion of the [Outer Space] treaty, France [a civil law country] indicated more than once that she was not altogether satisfied with the wording of Article II . . . ." France's representative was "thinking in particular of the risks of ambiguity between the principle of non-sovereignty-- which falls under public law -- and that of non-appropriation, flowing from private law."[26]

Plan doesn’t violate OST- it’s temporary appropriation

Nikhil D. Cooper, Deputy Attorney General at the California Department of Justice in Los Angeles, Spring 2009 [“Circumventing Non-Appropriation: Law and Development of United States Space Commerce Note”, Heim Online, Hastings Constitutional Law Volume 36 Issue 1]

473-474

In response to the arguments above, one arguing for the legitimacy of the domestic space commerce industry would note that "appropriation," as it appears in the Outer Space Treaty, should be interpreted narrowly. Under this logic, one would contend that the highly interdependent nature between government and industry is one in which the government has no appropriation rights to space. Instead, the structure between government and private space commerce does not exist to assist the United States in "appropriating" space but instead serves to regulate private space commerce. The argument would cite that government heavily regulates private industry (through its monopoly of the STS launch system) and through permitting legislation (such as the CSLA) and does not realize any sovereign interest in outer space in the manner expressly proscribed by the "non-appropriation principle." Moreover, one would argue that STS launch contracts are in fact government contracts. Therefore, given that "the Government acts in its commercial or propriety capacity in entering contracts, rather than its sovereign capacity,"'"13 the government cannot appropriate space in a sovereign capacity merely through its regulation of private commercial space-launch activities. Faced with these conflicting interpretations, a court reviewing the Outer Space Treaty could examine the history at the time of its signing for clues as to what level of national involvement "appropriation" was intended to cover. Recall that the Outer Space Treaty was signed during the Space Race and was intended to alleviate tensions between space-faring nations. 14 Construing the treaty's introductory text with the history of the treaty's signing, the likely interpretation of the treaty is not a ban on the commercial development of space but, rather, is a declaration of outer space as a demilitarized zone that all nations were free to explore peacefully and scientifically."I5 Under this view, the development of space commerce would not be considered inherently contradictory to the expressed treaty intent of peaceful and scientific space use.

Plan good- Functional property rights don’t violate ilaw

Property rights inside facilities don’t violate ilaw

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

Real Property Rights Within a Facility Jenks stated that property rights within a facility would be permissible under international law. Nevertheless, in light of the maxim that entities cannot transfer a greater right than they have, these property rights would be, in common law jurisdictions, necessarily more limited than traditional property rights. The common law sovereign could only confer title to the extent of its own sovereignty; thus, under the functional sovereignty conferred by Article VIII of the Outer Space Treaty, property rights would be functionally defined and limited in time.

Plan good- COPUOS

COPUOS only limits territorial and not functional sovereignty

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

The degree of control which is necessary to establish a valid claim varies with the circumstances of each claim. International case law provides us with the following guidelines: (l) the smaller, the more inaccessible and uninhabited an area is, the less control a state must display to establish a claim;[13] (2) the area claimed must be a geographical unit-- "a naturally rounded-off region"; and (3) competing claims may either defeat an inchoate title or geographically restrict other claims based on effective occupation.[14] On the basis of these rules, the symbolic acts of the Soviet Union (scattering medallions and naming features on the far side) would not be sufficient to establish a valid claim on the moon. Nevertheless, on the day when Lunik II landed, Premier Kruschev stated that his country had established "priority" over the Moon, and it appeared that the U.S.S.R. might eventually make a claim. But the Soviets subsequently renounced any territorial claims.[15] There are four principal reasons why the U.S.S.R. (and later other countries) chose to reject territorial sovereignty: (1) to prevent conflict; (2) to ensure free access to all areas of outer space; (3) because it would be difficult for states to delineate boundaries in outer space; and (4) to enhance national pride, prestige and influence. The major powers were vying for the allegiance of the many new African and Asian nations. These recently independent former colonies were extremely wary of "superpower imperialism." Consequently, both the Soviet Union and the United States could expect to gain political influence and prestige should they reject territorial sovereignty and its overtones of colonialism. However, treaty representatives could not expect states to accept responsibility for actions which they could not control. Consequently, parties to the treaty had to retain jurisdiction and control if they also wanted to provide for international liability. Thus, COPUOS delegates elected to prohibit only territorial and not functional sovereignty.

Plan good- Functional sovereignty v. territorial

Functional sovereignty follows common heritage principle

Jessop 08, [Brent Jessop, Knowledge Driven Revolution, Reshaping the International Order thinktank, 4/30/08, “Functional Sovereignty and the Common Heritage of Mankind”, http://www.informationliberation.com/?id=25197|AF]

"Given the growing list of problems confronting mankind, every effort must be made to stimulate processes which point in directions which can be deemed desirable. This would certainly apply, for example, to the tendency towards the increasing centralization of decision-making involving issues beyond national frontiers should be viewed as a logical continuation of the process of change and a precondition for the effective assertion of national sovereignty." - 103 The "increasing centralization of [international] decision-making" being a "precondition for the effective assertion of national sovereignty" may seem contradictory. The reason for this misunderstanding is your definition of sovereignty is based on an apparently outdated "territorial sovereignty" instead of the much more modern and politically correct "functional sovereignty". "In other words, the traditional concept of territorial sovereignty should be replaced by the concept of functional sovereignty, which distinguishes jurisdiction over specific uses from sovereignty over geographic space. This would permit the interweaving of national jurisdiction and international competences within the same territorial space and open the possibility of applying the concept of the common heritage of mankind both beyond and within the limits of national jurisdiction."- 172 That is right, "sovereignty" no longer involves governmental control within a geographic space, rather it refers to governmental control of specific functions within a geographic space. Which functions would depend on the dictates of a world authority. "Acceptance of these elements calls for a reinterpretation of the concept of national sovereignty. Participation and social control suggest a functional rather than a territorial interpretation of sovereignty, or jurisdiction over determined uses rather than geographical space. Conceptually, this interpretation will make possible the progressive internationalization and socialization of all world resources - material and non-material - based upon the 'common heritage of mankind' principle. It also permits the secure accommodation of inclusive and exclusive uses of these resources, or, in other words, the interweaving of national and international jurisdiction within the same territorial space... Ultimately, we must air for decentralized sovereignty with the network of strong international institutions which will make it possible." - 82 Common Heritage of Mankind as "Functional Ownership" "... the new concepts of functional sovereignty and functional ownership (common heritage of mankind)." - 314 "The [Communist Yugoslavian] concept of social ownership and its attributes are clearly applicable to the 'common heritage' concept." - 81 "Effective planning and management calls for the fundamental restructuring of the United Nations so as to give it broad economic powers and a more decisive mandate for international economic decision-making... It is also hoped that major changes in the United Nations structure will be made over the next decade so that it is not only able to play a more forceful role in world political affairs but it is also able to become more of a World Development Authority in managing the socio-economic affairs of the international community. ... The most effective way of articulating the planning and management functions of this organization would be through a functional confederation of international organizations, based upon existing, restructured and, in some instances, new United Nations agencies - to be linked through an integrative machinery. This system and its machinery, if it is really to reflect interdependencies between nations and solidarity between peoples, should ultimately aim at the pooling and sharing of all resources, material and non-material, including means of production, with a view to ensuring effective planning and management of the world economy and of global resource use in a way which would meet the essential objectives of equity and efficiency." - 185 "In the long term, and assuming progress towards the creation of an equitable international economic and social order leading to a pooling of material and non-material resources, mineral resources will need to be viewed as a common heritage of mankind.

Functional Sovereignty

Functional property rights only allow jurisdiction over facilities- distinct from territorial

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22|AF]

Functional property rights are a kind of property right distinguishable from real property rights. This is the argument that states that have jurisdiction and control over a facility or vehicle can exercise dominion over the facilities that are attached or constructed onto the celestial land, can be exercised over an area and for a period determined by occupation and use. This control and dominion is described as “functional” property rights.73 Wayne N. White advocates that this limited form of “functional sovereignty” would allow for a form of property rights because it is distinct from territorial sovereignty.74 Problem of interplanetary fixtures: A fixture is a chattel that has been fixed to land and thus has ceased being personal property and has become part of realty. Fixtures pass with the ownership of the land they sit on. The purpose of the attachment generally controls whether it is part of the real property or chattel. The party wishing to make a chattel a fixture to the land must have an objective intention to make the chattel part of the land.

Functional rights best

Functional rights approach best- allows claims to only what is being used

Dalton 10, [Taylor R. Dalton, JD and LLM, Cornell Law, 10/6/10, “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”, http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1041&context=lps\_papers&sei-redir=1#search=%22US%20claim%2C%20functional%20claim%2C%20territorial%20claim%2C%20outer%20space%20territory%2C%20functional%20sovereignty%22|AF]

White’s argument that a certain set of “functional” private property rights are permissible in space is likely most accurate and appropriate for the further development of space and its resources. Wasser’s position, that private actors can obtain rights to a large plot of real property seems untenable and to run contrary to overarching principle of shared benefits in space law. His position advocates from broad private property rights over land that is not actively being used, but is prospective. This seems to be no more valid of a claim than the claims of companies that purport to sell land claims on the moon. There must be more than a simple proclamation of ownership; there must be some active element involved. On the other end of the spectrum, Gangle’s theory reads the prohibitions on national apportionment too broadly. It seems unreasonable that no private rights are permissible even when an individual puts their own investment and labor into the acquisition of the property. This complete prohibition on private property rights in extraterritorial property is not found in any of the other legal regimes, namely the law of the sea and the Antarctic treaty system. The functional approach to private property rights in space best balances the interests of the private entity and the interests of the global community in the resources of the universe. It allows claims to rights only in that which is actually being used, not to property “as far as the eye can see.” Nonetheless, because the legal regime currently stands, there is too much ambiguity and no court or body to clarify the provisions. Therefore some clarification on whether private enterprises will be able to invest in establishing settlements or other operations on celestial bodies with the guarantee that those investments will be protected by a set of property rights. Many advocate that we look to terrestrial legal regimes as providing useful analogies that can help resolve the ambiguities in the outer space regime.

Functional property rights okay- Gangale

Functional property rights possible

Gangale 8, [Thomas Gangale, OPS-Alaska and San Francisco State University, and Marilyn Dudley-Rowley, OPS-Alaska and Sonoma State University, June 6, 2008, “To Build Bifrost: Developing Space Property Rights and Infrastructure”, http://www.astrosociology.com/Library/PDF/Submissions/To%20Build%20Bifrost.pdf|AF]

Nicholas Katzenbach refers to “primary rights... in a localized facility” that exist by virtue of the activity ongoing in the facility, independent of any consideration of real property ownership.16 White applies this idea to outer space activities: ...[S]tates may legislate with respect to a broad range of both public and private activities; and, in most circumstances, they exercise as much authority within the vicinity of their space facilities as they would within their territory on Earth. Under a regime of functional property rights, title would arise on the basis of a principle entirely different from traditional property rights. Conferral of title would not depend upon a government’s control over a specific area, but rather upon its control over the space objects and personnel at that location. In space, first-come, first-served occupation, and the prohibition against harmful interference with other states’ activities provides states with a similar, albeit less clearly defined, right of exclusion.... Functional property rights would be subject to the limitations of [Outer Space Treaty] Article VIII jurisdiction. These rights would terminate if activity were halted, as for example, if a space object was abandoned or returned to Earth. Finally, rights would be limited to the area occupied by the space object, and to a reasonable safety area around the facility.17 Article VIII provides: A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth.18 But how does this jurisdiction translate into “functional property rights... around the facility?” Article IX states: If a State Party to the Treaty has reason to believe that an activity or experiment... would cause potentially harmful interference with activities of other States... it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party... would cause potentially harmful interference... may request consultation concerning the activity or experiment.19 This right to be free of “potentially harmful interference with activities” gives rise to functional rights in the vicinity of the activity. Arguably, this right is implicit in the Outer Space Treaty; however, White proposes that the major launching states conclude a “mini-treaty” to explicitly provide for functional property rights. The idea of a “mini-treaty” is meant to circumvent the forum of the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS), which includes many non-launching states that have sought to limit the rights of launching states to appropriate extraterrestrial resources. In the absence of any new international agreement, however, with the language of the Outer Space Treaty as a springboard, functional property rights might develop as customary law as the national entities of launching states extract such extraterrestrial resources.

Functional Jurisdiction

Jurisdiction applies only to the individual facility

White 1997, [Wayne N. White Jr, American Institute of Aeronautics and Astronautics, 1997, “Real Property Rights in Outer Space”,

http://www.spacefuture.com/archive/real\_property\_rights\_in\_outer\_space.shtml|AF]

Members of the international community sometimes complain about de facto territorial appropriation. When a nation exercises jurisdiction and control over a facility for an extended period of time, they argue, the end result is indistinguishable from territorial sovereignty.[19] Article VIII confers "quasi-territorial" jurisdiction. It applies to the space facility, to a reasonable area around the facility (for safety purposes), and to all personnel in or near the facility, irrespective of nationality. Space objects occupy locations on a first-come, first-served basis, and personnel have the right to conduct their activities without the harmful interference of other states. In addition, although entities may not claim ownership of mineral resources "in place," once they have been removed (i.e. mined) then they are subject to ownership.[20] Former Attorney General Nicholas Katzenbach aptly describes this new hybrid as "primary rights... in a localized facility."[21] This jurisdiction permits the state of registry to subject its space objects and personnel to any national laws which are not in conflict with international law. So states may legislate with respect to a broad range of both public and private activities; and, in most circumstances, they exercise as much authority within the vicinity of their space facilities as they would within their territory on Earth.

Courts Advocate

Courts can do plan

Glenn H. Reynolds, Associate Professor of Law at University of Tennessee and JD from Yale, Spring 1990, Harvard Journal of Law and Technology, “Legislative Comment: The Patents in Space Act", *Harvard Journal of Law & Technology,* Lexis

This is not to say that a court could not, with some effort and craftsmanship, manage to hold otherwise. n50 Cer-tainly I would hope that a court confronted with this question in the absence of legislation would [\*25] go ahead and extend patent protection to innovations aboard U.S. spacecraft, since there are no conceivable policy grounds for not placing U.S. spacecraft within U.S. patent law, and since a judgment in favor of extending patent protection to outer space activities would in fact be more in accord with the intent of Congress in passing the patent laws. But those who feel that legislation is unnecessary because the "floating island" theory or something similar will support such jurisdic-tion are urging a long walk on what will probably turn out to be a very short legal pier. n51

Court action key – Congressional laws are chronically vague

Fred Barbash, staff writer, 1998, Washington Post

There is one common thread connecting many of the important decisions in the Supreme Courts just-completed term: The failure of Congress to say what it means in the laws it writes. Had Congress been explicit in the Americans With Disabilities Act, the court could not have extended that law's protections to the reproductively impaired—carriers or the AIDs virus. Had Congress answered an obvious question, whether or not employers are liable for workplace sexual discrimination they don't know about, the coumt--on its own-- could not have said they are. Had the lawmakers said whether schools are responsible for sexual harassment in similar circumstances, the justices could not have said they were not. Whatever your view on the merits of these judgments, shame on any member of Congress who uses them to flay the court for “judicial activism," or for “making laws." It's Congress's fault. It cannot or will not be specific. And when it isn't, that gives the court the power—denied to it by the constitution’s very first clause--to play in the legislative game. Indeed, it leaves the court with little choice but to legislate. Somebody’s got to fill in all the blanks.

Court action of property rights key to ensure effective and accurate solutions

Ilya Somin, George Mason University School of Law, July 2008, George Mason University Law and Economics Research Paper Series, <http://www.law.gmu.edu/assets/files/publications/working_papers/08-53%20Taking%20Property%20Rights.pdf>

However, the claim that the political power of property owners as a group obviates the need for judicial review is flawed because it assumes that the victims of property rights violations are likely to be the most politically influential owners, or at least ones with average amounts of political influence. In reality, government officials who undermine property rights are likely to target the poor or otherwise politically weak. Thus, the fact that property owners as a group have extensive political influence is unlikely to provide much protection to those owners whose rights are most likely to be violated.

Courts action key to fight economic hierarchies within the political process

Ilya Somin, George Mason University School of Law, July 2008, George Mason University Law and Economics Research Paper Series, <http://www.law.gmu.edu/assets/files/publications/working_papers/08-53%20Taking%20Property%20Rights.pdf>

For a variety of reasons, the poor have far less influence on government policy than the relatively affluent. They are less likely to vote,153 less likely to engage in other forms of political activity, and of course less likely to make financial contributions to political campaigns.154 In addition, the poor also have lower levels of political knowledge than more affluent citizens.155 Low political knowledge makes it more difficult for poor voters to effectively assess government policy and cast informed votes.156 Moreover, due in part to their lower average levels of education, the poor are less likely than the more affluent to be able to make effective use of the information they do possess, and more likely to be misled by faulty reasoning or deception.157 The poor therefore rarely exercise substantial influence over the political process, especially in cases where their perceived interests conflict with those of the wealthy or the middle class.158 Therefore, it is not surprising that judicial deference to the political process on property rights issues benefits the relatively wealthy at the expense of the poor more often than the reverse. Even if increasing redistribution to the poor is desirable, foregoing judicial protection for property rights is unlikely to achieve this goal.

Fed key warrant- controls space commercialization

**Space commercialization needs to be controlled through law**

Reinstein 99, [Ezra J. Reinstein, Northwestern, International Law and Business, “Owning Outer Space”, Hein Online|AF]

IV. PROPOSAL: APPROPRIATIVE OWNERSHIP OF Rs.-u. PROPERTY The ideal legal regime should create maximum incentives for development of space, in recognition of the fact that the potential wealth in space will not drop into out laps. But as much as commercial development of space would beneﬁt all mankind, it is just as important that the development be controlled. We must leam from mistakes of the past, Any legal regime should guard against inefﬁcient exploitation, waste, and environmental dcspoliation. Furthermore, space should not become the next Wild West. Destruction and sabotage must be discouraged. My ptoposal, which will be developed throughout this essay, is to maximize incentives by giving developers comprehensive property rights. Humanity/‘s welfare demands that we alter the current law to allow real estate ownership -- not ‘just usuﬁuctary rights - to those who would best develop land in space.’ The potential wealth of outer space, in the form of minerals, energy, living space, etc, doesn't do us any gocd unless we are able to hamess it. And, as Jeffrey Kargcl, a planetary scientist at the U.S. Geological Survey, has written, “if you want to cross the bridge into the 21st century of space [development], then space must pay its way and give private investors a handsome early return on investment.” S What do we mean by “ownership?” Property is commonly recognized as being a “bundle” of disparate lights regulating relations between people with respect to things. The bundle of rights can be unpacked. It includes: the right \_to possess, the right to use, the right to exclude, and the right to transfer.” These rights are not on/off affaim; they can each be limited or expanded along a continuum. I use the term “ownership” to describe a state of affairs wherein a person has all four of these rights to their maximum extent with respect to a piece of property. Current space law ostensibly respects the right to use real property in space and to collect and own its fruits. Historically, this has been known as the usuﬁuctary right.” But the current law doesn’t even provide this right ii-eely; it seems to be limited by several clauses of the Outer Space Treaty (e.g. use “for the beneﬁt...0f all co1.u1tries").7a Nor does the OST recognize the right to exclude, as is evidenced by article I’s prohibition on appropriating what it recognizes as being “the province of all mankind," the guarantee in the same article of “free access to all areas of celestial bodies," and article requirement that stations [and] installati0ns...shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity.” Likewise, as illuminated in the SpaceCorp hypothetical, the prohibition on appropriation seems to negate a long-tenn right of possession. Without the right to exclude or possess, of course, a legal system need not provide the right to transfer real estate. Anyone else may simply help themselves. In sum, the OST demands that State can obtain such possessions as will entitle it to claim ownership or sovereignty over them... There can be no exclusive appropriation of [celestial bodies] and any part thereof as a result of their Under current law, space cannot be owned. A new law of space real property must enliven and support all four rights that comprise ownership. First, there must be a right to permanent possession: barring some extraordinary circumstance or the enforcement of a judgment, no one should face dispossession of his real estate on Earth or in space. This rule supplies a needed measure of certainty, in two ways: (1) it’s a deﬁnite rule and almost any such rule is better than the fogginess of the current regime, and (2) it moves the presumption away public conversion of private lands, and therefore makes it clear that the OST’s statement, that space development must be “for the benefit...ofal1 countries," is a moral exhortaﬁon and not a loophole through which the United Nations can dispossess a private party of his site. C00nd, 1 suggest that the right to use be unlimited, except by environmental regulations and the developer’s domestic law. This rule is a recognition that humanity's fortune is best enhanced not by a centralized command-and-control system, but by private development making marketdriven decisions. Like the right to perpetual possession, the third right -- the right no exclude -- creates the certainty vital to an optimal investment environment. As noted, the current system precludes such a right, for it would certainly run afoul of the prohibition on appropriation and the requirement that there be “free access to all areas of celestial bodies.”“° Without the right to exclude, however, pioneer investors would be at the mercy of free riders. After investing countless hours in (or paying someone else for) a survey of the real estate, setting up a mining colony at great expense, the pioneer would have no recomse if another pany took advantage of the pioneer’s research and began a copycat mine on the very same site. So the right to exelude must form a part of the new legal system. Finally, the right to transfer must accompany the rights of exclusion and perpetual possession. The Coase Theorem of economics tells us that, in a legal environment supportive of bargaining, property rights will be allocated to the party who values them most, i.e. the most efﬁcient user of the property." When transaction costs are high enough to prevent bargaining, property rights only end up in the most productively efﬁcient hands if the law happens to initially assign them that way.” Without any right to transfer, transaction costs are inﬁnite, and no bargaining can occur. In order to avoid the inevitably inefficient solutions of a command-and-control regime of property usage, the right to transfer -- alicnability -- must be a part of our system.“ All these rights together -- possession, use, exclusion, and transfer -make up ownership. And it is ownership that the modem law of space real property needs.

Fed key warrant- infrastructure

Infrastructure prevents development of space- fed key

Gangale 8, [Thomas Gangale, OPS-Alaska and San Francisco State University, and Marilyn Dudley-Rowley, OPS-Alaska and Sonoma State University, June 6, 2008, “To Build Bifrost: Developing Space Property Rights and Infrastructure”, http://www.astrosociology.com/Library/PDF/Submissions/To%20Build%20Bifrost.pdf|AF]

In recent years, there has been much excitement over individuals arguing for private land claims on the Moon and Mars as a thrust to commercialize space. There is a fundamental flaw in the logic of those who purport that these bodies or portions thereof may be privately owned. It is true that, “The 1967 Outer Space Treaty prohibits any claims of national sovereignty on the Moon or Mars,” and it is also true that “the treaty says nothing against private property.” It does not follow, however, that without claiming sovereignty, the U.S. could recognize land claims made by private companies that establish human settlements there, as would-be extraterrestrial realtors claim. As a practical matter, property rights exist only if they are granted or recognized by a government and subject to the protection of law. Such grant, recognition, or protection is an act of state, and as such is an exercise of state sovereignty. Title cannot come into existence out of thin air (or the vacuum of space). Legal title must arise from a sovereign power possessing legal authority over the territory in question. For Congress to pass “land claim recognition” legislation legalizing private claims of land in space would be an exercise of state sovereignty, and therefore a violation of international law under the provisions of the Outer Space Treaty. There is little need for this in any case. Has there ever been a serious challenge to the US or Soviet/Russian governments over their ownership (or at least their control) of the material they brought back from the Moon? These precedents established a principle of customary law that “if you take it, it’s yours.” Essentially, this derives from the Roman legal principle of uti possidetis: “as you possess,” so you may continue to possess. The real barrier to commercializing space is the huge capital investment that is required to develop a transplanetary infrastructure. Some authors imagine that private enterprise can pull itself up to the Moon and Mars by its own bootstraps. This position ignores the history of opening frontiers. The libertarian mantra that “government is the problem” is nonsensical. Neither is government the entire solution, but it is a necessary partner in the solution--on land and on sea, in the air and in space. Building a transplanetary infrastructure is not something that private enterprise is going to accomplish... ever. First must come the political vision to build rainbow bridges to the heavens, then will come the economic incentive to travel them.

Private enterprise alone cannot explore space due to lack of infrastructure- gov involvement key

Gangale 8, [Thomas Gangale, OPS-Alaska and San Francisco State University, and Marilyn Dudley-Rowley, OPS-Alaska and Sonoma State University, June 6, 2008, “To Build Bifrost: Developing Space Property Rights and Infrastructure”, http://www.astrosociology.com/Library/PDF/Submissions/To%20Build%20Bifrost.pdf|AF]

Again, the central problem is infrastructure. When the Apollo program ended, it left some ground infrastructure (assembly and launch facilities later used by the Space Shuttle program) but no space infrastructure, and in that respect it was a developmental dead end. Political motivation for government to build lasting infrastructure is generated by private sector anticipation of colonizing a new human ecology in which it can produce profit. This is the common thread in all of the aforementioned government infrastructure projects. In contrast, no government has bothered to build a tunnel under the Bering Strait; there are no roads on either side, and so there is little prospect of a sustainable human ecology there. This is not to say that there will never be a Bering Tunnel, just not any time soon. This may sound like a chicken-and-egg problem. Private enterprise is ill-positioned to develop infrastructure that it requires to thrive. Technocracy--government-directed technological development--has its limits, and may be politically motivated to develop capabilities that have little or no economic utility. A case in point is the depopulation of Siberia that has been occurring since the collapse of communism. The Soviet Union built infrastructure and forcibly moved population in a massive effort to colonize Siberia and extract its natural resources. Under a command economy, it was not clear that this was an uneconomical project, but as Russia has transitioned to a market economy, an increasing number of people have found that they cannot make a decent living in Siberia despite its vast natural wealth. There are enormous costs associated with extracting those resources in the extreme environment, and furthermore, there are considerable costs attached to transporting goods out of this remote region of the Earth to market. So, millions of Russians are abandoning the frontier to return to the bosom of Mother Russia’s European heartland. Now, Siberia is paradise next door compared to the distant and forbidding Moon and Mars, yet here private enterprise is retreating from an ecology that government established. Private enterprise only recently duplicated Alan Shepard’s 1961 suborbital flight. How credible is it that private enterprise is going to blaze trails to the planets in our lifetime? It is about as credible as the hype about living on the Moon that baby boomers read in the Weekly Reader 40 years ago, or the grand vision of solar power satellite constellations 30 years ago, or a fleet of commercially owned and operated Space Shuttles 20 years ago, or the Iridium mobile telephone satellite constellation 10 years ago. It seems like every time you turn around, space endeavors are being oversold, whether they are governmental or commercial. However, developing a spacefaring civilization is not an insoluble chicken-and-egg conundrum. It is more subtle than that, and there are solutions--not in all cases, but on the margins. Obviously, progress does occur, and while the pace of progress is not immutable, it does have constraints. The key conceptualization is of government and private enterprise in a push-pull relationship. When private interest becomes curious about what lies over the five-year return-on-investment horizon, it nudges government to stand straight and see further over that horizon. If the vista is promising, private interest encourages government to build the rainbow bridge to the pot of gold. Government then gets its piece of the action by taxing that pot of gold. The challenge is in recognizing that not every horizon hides a pot of gold, or if it does, it can be too costly to bring it home with the means at hand. Space technology is not a magic wand, and the High Frontier is not the Promised Land. Laissez-faire libertarianism is not the answer to space development any more than command economy technocracy was; rather what is required is, as John Kenneth Galbraith prescribed for the United States half a century ago, a social balance between public goods and private goods.49 The concept of and need for sociopolitical balance between various economic power centers in society, including government, corporations, organized labor, international civil society, et cetera, is also described in Raymond Miller’s Multicentric Organizational model of political economy.50 For space development to proceed and to succeed there must be a partnership between government and enterprise as well as among governments and enterprises, a transnational partnership of governmental and nongovernmental entities.51, 52 It is not merely corporations, but all sectors of human society, that must go into space.

Resources after removal can be owned

Removed resources from space can be privately owned

Gangale 8, [Thomas Gangale, OPS-Alaska and San Francisco State University, and Marilyn Dudley-Rowley, OPS-Alaska and Sonoma State University, June 6, 2008, “To Build Bifrost: Developing Space Property Rights and Infrastructure”, http://www.astrosociology.com/Library/PDF/Submissions/To%20Build%20Bifrost.pdf|AF]

In seeking to justify overthrowing the current treaty regime (by arbitrary interpretation or otherwise), Ballegoyen makes the situation seem worse than it really is: The phrase “for the benefit and in the interest of all mankind,” mentioned in the first paragraph of article 1, has traditionally been interpreted as the sharing of either profits or scientific discoveries and advances.20 The actual language in Article I is “for the benefit and in the interest of all countries,” [emphasis added]. It appears in the context of “free access” (Paragraph 2) and “freedom of scientific investigation” (Paragraph 2). There is no communist plot here. On the contrary, Gennady M. Danilenko, a Soviet expert on international law, asserts: ...[T]he Outer Space Treaty proclaims freedom in the use of outer space, which, as generally recognized, includes the freedom to exploit its resources....21 Dinkin agrees: The Outer Space Treaty does not forbid in situ resource utilization. Space is treated like a commons. Astronauts have brought home space rocks and taken title to them. If you want resources on Mars or the Moon, take them.22 White adds: ...[A]lthough entities may not claim ownership of mineral resources “in place,” once they have been removed (i.e. mined) then they are subject to ownership.23 Goldman provides the historical context of Article I: From the beginning, the U.S. position has been that in the Outer Space Treaty, Article I, “use” includes resources. In negotiations on this language, the French and the Hungarian representatives likewise acknowledged that “use” included “exploitation” of resources and other attributions and applications of outer space.24 The customary law that has developed since 1967 accords with this principle. American and Soviet/Russian ownership of lunar samples has never been challenged. Furthermore, some lunar material (sold by the Russian government) is now privately owned. The language of the 1979 Moon Agreement, Article 11, Paragraph 3 should also be considered: Neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or nongovernmental organization, national organization or nongovernmental entity or of any natural person.25 The American delegation’s statement in UNCOPUOS, at the time that the Moon Agreement was negotiated, that the words “in place” allow private property rights to apply to resources upon extraction, went unchallenged.26 Although the Moon Agreement is not binding on the US (nor on most other states), the delegation’s unchallenged statement is additional evidence of customary law on this point. Also to be considered is the United Nations Convention on the Law of the Sea (UNCLOS), Annex III, Article 2: “Title to minerals shall pass upon recovery to the entity which mined them.”27 Since UNCLOS has been widely accepted by the international community, and since much of space law derives from maritime analogies, this principle can be applied to outer space as a point of customary law. Finally, the Russian Federation has set the precedent of incorporating this principle into its municipal law: “The property rights over the physical product created in outer space shall belong to the organizations and citizens possessing property rights in the components of space technics....

Solvency advo: law of the sea analogy

Distinguishing vacuum of space from celestial bodies allows for both freedom and territorial rights

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

The Law of the Sea Convention, as applied to the vacuums of space, is an important source to envisage future issues that offers possible solutions to those issues. n161 Although the Law of the Sea Convention cannot be applied to the vacuums of space perfectly, it does offer some possible solutions. 2. Defining the Territorial Boundaries of Space The Law of the Sea Convention separates four distinct boundaries: the territorial sea, the contiguous zone, exclusive economic zone, and the high seas. n162 Rights, duties, and responsibilities are defined according to the proximity to the coastal state. The structure of the Law of the Sea Convention presumes that states have more interests and risks the closer those interests and risks are to their state. The first territory is called the territorial sea. It starts from the baseline "to a limit not exceeding twelve nautical miles" n163 as measured from the baseline extending out into the ocean "at a distance from the nearest point." n164 The second territory is called the contiguous zone. It cannot exceed twenty-four miles from the baseline. n165 The third territory is called the exclusive economic zone. It is "an area beyond and adjacent to the territorial sea," n166 which "shall not extend beyond two hundred nautical miles from the baselines . . . ." n167 The fourth territory is called the "high seas." It encompasses all parts of the sea that are not included in the zones referred to above, and other zones mentioned by the Law of the Sea Convention wherein states have some classification of rights. n168 Many outer space theorists argue for a corpus juris spatialis that [\*607] applies to outer space in its entirety; however, a more effective system would distinguish the vacuums of space from celestial bodies. This distinction was recognized by Grotius in his designation of Tarrae as res nullius. n169 The celestial bodies of space have vast resources by which humankind will be benefited. Furthermore, those resources will encourage increased technological innovation and outer space travel. The Outer Space Treaty fails to encourage persons from appropriating those resources. Likewise, the vacuums of space need to remain open allowing freedom of space. By allowing unrestricted passage, trade, commerce, scientific exploration, colonization are all encouraged and facilitated. If humankind wants to venture into the final frontier, those activities must be allowed and encouraged. At the same time, however, states must be able to ensure the safety of their citizenry. Celestial bodies and the vacuums of space should have territorial zones where the rights of the state and the rights of space vessels deviate according to the proximity with the state. As celestial bodies are appropriated and states make claims to those extraterrestrial regions, or even entire planets, states will want to protect their own appropriation activities andtheir citizenry from those activities. The problem with a zoning system for celestial bodies is the diversity of celestial bodies. For example, there are asteroids, gas planets, planets and moons with little or no atmosphere, and planets with thick atmospheres (Venus). Planetary diversity would forbid the use of arbitrary designations for different territories as proposed in the 1950s. n170 Therefore, flexibility will be needed in order to accommodate zoning of celestial bodies and the vacuums of outer space. Celestial bodies should be subjected to the following territorial zoning: territorial space, contiguous space, and transitory space. Territorial space would extend from the surface of the celestial body to the exosphere n171 of a planet. For celestial bodies which do not [\*608] have exospheres, an artificial boundary should be calculated using the diameter of the celestial body. By using the Earth's diameter and exosphere to calculate the ratio, territorial space could be defined for planets which do not possess an exosphere. The exosphere is a distance of approximately 960 kilometers from the Earth's surface, n172 and the equatorial diameter of the Earth is 12,756.3 kilometers. n173 By dividing the Earth's diameter into the distance of the exosphere, the diameter to distance ratio is 13.2879125. Using 13.2879125 as the ratio, the territorial zone of any planet can be ascertained. Thus, in order to determine the territorial zone, you must take the diameter of the celestial body and divide it by the ratio in order to determine the boundary of territorial space (x = 13.2878125 diameter). For example, the diameter of the moon is 3,476 kilometers. By taking the ratio, 13.2879125 and dividing it into 3,476, the territorial limit would equal 261.59. Therefore, the moon, which is approximately one third the size of Earth, would have a territorial breadth of 261.59. n174 Instead of establishing a one-size fits all boundaries for territorial space, this simple mathematical formula creates reasonable boundaries based upon the size of the celestial body. The exosphere of the Earth is the most appropriate boundary because it is considered "the true upper limit of the earth's atmosphere." n175 Thus, it is where the earth's atmospheric condition ends, and outer space begins. In the Law of the Sea Convention, an arbitrary boundary was agreed upon which reflected a compromise between sovereign rights and the principle of freedom of passage. n176 At twelve miles from the baseline, there is no natural condition in the seas which indicates that states' rights should change; likewise, none should be required for an indication of where territorial space should begin. That being said, there is a much stronger argument for a boundary which is based on a compromise between sovereign rights and freedom [\*609] of passage, and a natural boundary found in outer space. The territorial space, based on the exosphere, is limited enough to allow free passage of outer space vessels in transitory space, but allows sufficient space for Earth's inhabitants to use orbital appropriation activities (such as satellites, space stations, current modalities of space travel, etc.). Outside of the earth, however, by using the Earth's ratio, an arbitrary boundary is established for celestial bodies. This result is appealing because there would be a uniform, mathematical system for defining territorial regions of outer space based on humankind's experience with the natural boundaries of Earth. This artificial boundary also bears a natural, reasonable correlation to the diameter of the celestial body. Contiguous space would act as a pre-entry buffer zone between transitory space and territorial space. In the Law of the Sea Convention, the territorial sea is as large as the contiguous zone. Likewise, the contiguous space would be as large as territorial space. For those planets which have an exosphere, the distance between the surface of the celestial body and the beginning of the exosphere would be multiplied by a factor of one. For those celestial bodies which have no exosphere, territorial space would also be multiplied by a factor of one. Therefore, the earth's contiguous space would start where the exosphere starts and would extend another 960 kilometers. For example, the moon's contiguous space starts at 261.59 kilometers and would extend another 261.59 kilometers. In the Law of the Sea Convention, the exclusive economic zone was necessitated by the need for control over fishery and oil - both of which are very profitable industries. n177 These limited concerns do not [\*610] apply to outer space, and an exclusive economic zone would only hinder the spatialis liberum. n178 The third space zone is called transitory space. This zone would be tantamount to the high seas and apply to all parts of outer space that are not included in territorial space and contiguous space. For those celestial bodies which do not have ownership claims, no territorial or contiguous space would exist; instead, the space surrounding those celestial bodies would be designated as part of the transitory zone.

Law of sea analogy good- allows for security, commerce, and free navigation

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

3. Passage and Commercial Use through Outer Space Written into the Law of the Sea Convention are restrictions and rights on the use of each zone by the coastal state, as well as rights of those who enter those zones. Overall, the Law of the Sea Convention [\*611] encourages innocent passage through the seas. This policy should also be encouraged in the corpus juris spatialis. a. The Territorial Sea / Territorial Space The territorial zone allows for the broadest restrictions imposed by the state, and the least amount of rights to those who enter its zone. Accordingly, ships of all states "enjoy the right of innocent passage through the territorial sea." n179 Passage means that the vessel must continuously proceed through the zone and only permits stops that are "ordinary to navigation . . . or distress" and proceed to a "port facility." n180 "Innocent" has a very precise definition: 1. Passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal State. Such passage shall take place in conformity with this Convention and with other rules of international law. 2. Passage of a foreign ship shall be considered to be prejudicial to the peace, good order or security of the coastal State if in the territorial sea it engages in any of the following activities: (a) any threat or use of force against the sovereignty, territorial integrity or political independence of the coastal State, or in any other manner in violation of the principles of international law embodied in the Charter of the United Nations; [\*612] (b) any exercise or practice with weapons of any kind; (c) any act aimed at collecting information to the prejudice of the defence or security of the coastal State; (d) any act of propaganda aimed at affecting the defence or security of the coastal State; (e) the launching, landing or taking on board of any aircraft; (f) the launching, landing or taking on board of any military device; (g) the loading or unloading of any commodity, currency or person contrary to the customs, fiscal, immigration or sanitary laws and regulations of the coastal State; (h) any act of wilful and serious pollution contrary to this Convention; (i) any fishing activities; (j) the carrying out of research or survey activities; (k) any act aimed at interfering with any systems of communication or any other facilities or installations of the coastal State; (l) any other activity not having a direct bearing on passage. n181 In other words, almost all activities are prohibited which would have an adverse effect on a state, including pollution, appropriation activities, immigration, research, etc. This broad power recognizes the potential harms a state could encounter if parties were allowed greater rights near its mainland. In addition to the above language, the coastal states may also "adopt laws and regulations" concerning maritime traffic, safety, protection of navigational aids, facilities, cables, pipelines, conservation, infringement of fishery laws, research, sanitation, etc. n182 [\*613] Coastal states may also designate "sea lanes" in their territorial waters. n183 Coastal states are prohibited from hampering the innocent passage of foreign vessels or enacting laws which have the "practical effect of denying or impairing the right of innocent passage; or discriminate in form or in fact . . . ." n184 Even levees are prohibited if they are related to passage, but are allowed for services rendered to the state. n185 States may enforce their rights by taking "necessary steps" to prevent passage, including the use of force. n186 [\*614] The same standards for the territorial sea in the Law of the Sea Convention should apply to outer space. "Innocent passage" would allow vessels to enter into territorial space as long as the conduct is not harmful to the state. This provision encourages movement in outer space while protecting states from vessels which will cause harm. With the exception of (i), which pertains to "fishing activities," n187 the definition of innocent passage in the high seas should be applied to outer space travel. For those celestial bodies which are owned or controlled by multiple parties, foreign vessels would be required to obtain permission from one of the states to enter into the planet. Each state would be entitled to a designated space lane, which would correspond to the trajectory space vessels must undertake to reach the target state. The foreign vessel would be required to use a projected course, or "space lane." n188 This method of zoning territorial outer space would not interfere with the laws governing the geostationary orbits around Earth, nor [\*615] should it interfere with future geostationary orbits around other planets. The geostationary orbit of earth is approximately 35,786 km, n189 located in the ionosphere, which is below the exosphere. n190 Therefore, the geostationary orbit of Earth is located within the general territorial space of the planet. Under this proposed system, states who share a celestial body would enter into agreements to regulate the geopositioning of artificial satellites, as done on Earth. n191 b. The Contiguous Zone / Contiguous Space The contiguous zone acts as a buffer zone n192 for the territorial sea. As such, a state would have a right of "control" necessary to "prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations . . ." and punish for infringement. n193 The contiguous zone allows a state to eliminate risks before they enter its territorial waters. A contiguous zone will also be necessary for outer space because states will have more opportunity to restrict access to violators and potential violators regarding their important state interests, such as immigration, customs, and sanitation. If no buffer zone existed, states would not be able to respond with sufficient time to secure their interests in territorial space. By doubling the area of control, states will have more time and space to deal with those persons not engaged in [\*616] innocent passage. However, the contiguous zone is not so expansive that it limits foreign vessels from traveling in outer space. c. The High Seas / Transitory Zone The high seas are reserved "for peaceful purposes," n194 and prohibit claims of sovereignty. n195 The freedoms of the high seas include: 1. The high seas are open to all States, whether coastal or land-locked. Freedom of the high seas is exercised under the conditions laid down by this Convention and by other rules of international law. It comprises, inter alia, both for coastal and land-locked States: (a) freedom of navigation; (b) freedom of overflight; (c) freedom to lay submarine cables and pipelines, subject to Part VI; (d) freedom to construct artificial islands and other installations permitted under international law, subject to Part VI; (e) freedom of fishing, subject to the conditions laid down in section 2; (f) freedom of scientific research, subject to Parts VI and XIII. 2. These freedoms shall be exercised by all States with due regard for the interests of other States in their exercise of the freedom of the high seas, and also with due regard for the rights under this Convention with respect to activities in the Area. n196 Although these freedoms are very broad, they are tempered by the following language: "[d]ue regard for the interests of other States in the [\*617] exercise of the freedom of the high seas . . . ." n197 In other words, states must assess the rights of other states in relation to their own activities in the high seas. n198 The "Area" referred to by the Law of the Sea Convention refers to the "seabed," "ocean floor," and "subsoil." n199 The "area" is specifically deemed the "common heritage of mankind." n200 As such, all states are not only prohibited from exercising sovereignty over the area, but they are also prohibited from "appropriation." n201 All "area" activities are carried out for the "benefit of mankind as a whole." n202 The "as a whole" provision is misleading because Article 140 takes "into particular consideration the interests and needs of developing states" and people who do not have "self-governing" status as recognized by the United Nations. n203 Even among developing states, participation in the "area" is governed by Article 148, which gives "due regard to [developing states'] special interests and needs . . . ." n204 The development of those resources in the area, distribution, and the establishment of an "authority" are arranged by numerous articles in the Law of the Sea Convention. n205 These provisions have been highly controversial, n206 and some states, like the United States, have refused to [\*618] sign and ratify the Law of the Sea Convention due to the "area" provisions. n207 The "common heritage of mankind" concept has also been introduced as a proposal to the corpus juris spatialis in the Moon Treaty. n208 However, it has not received significant support from many states and no support at all from developed states. n209 [\*619] Like the high seas, transitory space should allow for liberal travel by all vessels. By adapting the Law of the Sea Convention, the following language, or its equivalent, would be beneficial to the corpus juris spatialis: 1. Transitory space is open to all states, Freedom of outer space is exercised under the conditions laid down by this Convention and by other rules of international law. (a) freedom of navigation; (b) freedom to construct artificial habitations and other installations permitted under international law, (c) freedom of scientific research 2. These freedoms shall be exercised by all states with due regard for the interests of other states in their exercise of the freedom of transitory space. This language unequivocally announces that outer space is open for all people, and subjects their actions to the convention itself and evolving standards of international law. States would be allowed liberal use of outer space for travel, artificial space habitations, and freedom of scientific research. In exercising these freedoms, states will give due regard to other states exercising the same freedoms. These freedoms will facilitate and encourage rapid use of the medium of outer space, while ensuring that vessels do not perform activities that will interrupt or bar spatialis liberum.

Law of sea analogy good- solves defense and military problems

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

d. Military Uses of Outer Space Military use of outer space has been highly controversial since President Reagan introduced the Star Wars program in the early eighties. n210 Numerous commentaries and articles have addressed the future of military operations in outer space. n211 Much of this literature [\*620] derives from governmental doctrines, such as the United Stated Air Force document "Counterspace Operations." n212 The Air Force argues that it has the right to attack enemy satellites and satellites of neutral third parties which are being used by the enemy. n213 This aggressive posturing reflects the United States' growing reliance on third party commercial satellites and the commercial reliance in the United States on satellite technology. n214 For example, one could imagine the immense costs associated with the destruction of satellites in orbit. Not only are the satellites themselves costly, but the deleterious affects would be more destructive. GPS, disc television, vast arrays of telecommunications, internet, air traffic control, etc., would cease to function; thereby, costing billions of dollars in incidental costs. In Counterspace Operations, the Air Force seeks to protect those assets and destroy other states' satellite assets. n215 Despite the risk to significant assets in outer space, many commentators argue for a moratorium on arms in outer space. n216 Some commentators have argued that if the United States develops Star Wars technologies, it will lead to an exponential arms race in outer space, thereby escalating risks and costs. n217 These [\*621] commentators fail to grasp that things have changed. n218 The Cold War ended. In order to have an arms race, you need a state with interests inimical to your own. The new threat to the United States' involves rogue nations, and terrorism. Glenn Reynolds suggests satellites may become a desirable target for rogue nations and terrorists due to the large economic losses involved. n219 As outer space becomes more profitable and greater assets are deployed in outer space, even those opposed to militarization of outer space, recognize that it will occur. n220 The Law of the Sea Convention offers some guidance in this area. The Law of the Sea Convention premises use of force within the categorical regions of the territorial sea, contiguous sea, exclusive economic zone, and high seas. n221 For example, within the territorial sea, a state may take whatever steps "necessary" to ensure the interests of the coastal state as outlined therein. n222 In each zone, the state may exercise varying degrees of control. n223 Additionally, uses and threats of force are not prohibited, but are subject to "international law embodied in the Charter of the United Nations." n224 The Law of the Sea Convention is based on the premise that states have an interest in protecting themselves from foreign harms. n225 At the same time, however, the Law of the Sea Convention encourages peace by codification of a rule based regime. n226 Therefore, it allows states to protect their interests, but encourages peace by its elaborate articles and [\*622] accountability by subjecting states to international standards. In the Law of the Sea Convention, warships may not board a foreign vessel except under very limited circumstances such as piracy, slave trade, or when the vessel is without nationality. n227 Similarly, a foreign vessel may be stopped and/or arrested in the high seas and exclusive economic zone if violating the laws and regulations of the state in its territorial or contiguous waters. n228 The militarization of outer space should depend on the categorical regions of space. In territorial space, states should be allowed to use whatever force is reasonably necessary to ensure their interests. Much like the Coast Guard in the United States, armed patrol vessels may be necessary to protect the state from threats of harm ranging from customs violations to people smuggling. However, presence in territorial waters should not be sufficient to detain those engaged in innocent passage to a space port in orbit or on the celestial body. Vessels will require supplies, repairs, food, fuel and other materials for voyages, necessities which should not be restricted. By allowing open uses of territorial space for innocent passage, vessels will be able to effectively obtain supplies and make repairs. This freedom will also provide pecuniary compensation to those states. In transitory space, vessels should not face constant intrusions of being boarded and searched. Like the high seas, transitory space should allow for the quickest passage of vessels and the most freedoms. By disallowing unprovoked arrests of vessels, more powerful states will not be allowed a virtual monopoly based on their military forces. Likewise, military and government vessels are prohibited from being arrested. These restrictions support the sovereignty of each state over its persons.

Law of sea analogy good- solves environmental conservation where ost fails

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

e. Environmental Uses of Space Conservation, like demilitarization, has also received increasing attention from space law theorists. n229 There are already some laws in [\*623] place which deal with the environmental law of space. n230 Unfortunately, these laws were developed during the 1950's through 1970's. n231 The Outer Space Treaty adds little, if anything, to protect the environment including an enforcement mechanism for compliance. n232 The Registration Convention requires identification of launched space objects in a registry. n233 The Liability Convention imposes absolute liability for damages caused on the earth's surface or flying in the air. n234 Damages in space are determined on a fault basis. n235 Claims for damages are presented through "diplomatic negotiations." n236 Compensation is determined under "international law and the principles of justice and equity." n237 Although the Liability Convention may offer some pecuniary disincentive for actions which could adversely impact the environment, it applies after the damage has been done. n238 Due to this lack of environmental standards in outer space, many have called not only for environmental restraints on appropriation activities affecting the Earth and its orbit, but also for standards governing extraterrestrial appropriation. n239 [\*624] The Law of the Sea Convention offers some interesting solutions to these problems. First, it should be noted that the Law of the Sea Convention applies to "living resources" and the environment in which those resources live. n240 Many commentators express token tribute, due to the heightened awareness of environmental damage, to environmental standards for space travel and extraterrestrial appropriation. n241 This heightened awareness is ill- placed in most of outer space. The problem with assuming that all of outer space should be protected is that there is a lot of inanimate material in outer space. Even more importantly is that inanimate materials may provide solutions to increased populations by supporting the living population. On Earth, environmental protections are necessary to safe-guard the long term habitability of this living planet and do as little harm as necessary to other living resources. On celestial bodies that have no life, not even microbial, there are no such incentives for environmental protections because there is nothing to protect. Of course, premature annihilation would defeat the ability to harvest those resources. The Law of Sea Convention attempts to place restrictions on fishery, which allow the maximization of resources over time. n242 For example, over-fishing may lead to a short term increase in food production and profit, but substantial depletions will affect the ability of fish to reproduce, thereby causing shortages in the years to come. This method allows for the maximization of resources without affecting the rights of appropriators. This is a better method for the conservation of outer space. Extraterrestrial appropriation, therefore, may occur, but in a way to maximize those resources by not prematurely destroying a nonliving resource. Likewise, in outer space exploration, waste may not poise the same kind of threats as here on Earth. n243 Outer space is a vacuum of matter. There are no living organisms in the "ethers" of space. Although there are possibilities that [\*625] wastes may contaminate future explorers or haphazardly damage other systems of future generations, these concerns must be addressed in the context of outer space's huge amount of space. Under risk assessment analysis, these risks may be so insignificant that wide scale or even significant environmental protections would be unnecessary.

Law of sea analogy good- solves jurisdictional issues between states

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

f. Jurisdictional Issues The Law of the Sea Convention is a good model for jurisdictional issues pertaining to outer space travel and exploration. Even in territorial waters, states are precluded from exercising civil jurisdiction on foreign vessels. n244 This assures and encourages transitory passage and freedom on the seas. However, states may exercise criminal jurisdiction for ships not engaged in innocent passage. n245 Each vessel is required to sail under the flag of its nationality. n246 Jurisdiction of the vessel is determined by the flag of the state. n247 Vessels are prohibited from flying more than one flag. n248 In cases where there is an incident on a vessel, penal and disciplinary action may only be taken by the flag state. n249 These strict standards for jurisdiction encourage the non-interference with vessels. In many ways, vessels are treated as islands unto themselves within the territory of the flag state. Its persons cannot be disturbed, boarded, or arrested in international waters except under very limited circumstances, such as piracy. n250 Even in territorial waters, coastal states may only assert jurisdictional authority where harm has incurred. n251 These provisions in the Law of the Sea Convention would solve many problems which might arise from outer space exploration. Outer space vessels will require crews who have varying expertise and are [\*626] from various states. By only allowing one state to be sovereign over that vessel, it avoids the problems associated with anarchy or, in the alternative, judging persons by the laws of their nationality. Additionally, no state can enforce its own laws on foreign vessels in any territory in outer space. This policy ensures that states will not abuse laws in order to bar passage to foreign space vessels or to confiscate their cargos. The Law of the Sea Conventions' requirement that "ships shall sail under the flag . . ." n252 would be problematic in outer space for obvious reasons. Flags put other ships on notice of their nationality. This would be important for outer space in cases of malfeasance, wrong doing, negligence, rescue, organization, recognition of pirates, etc. Therefore, states should be required to emit a beacon which announces the sovereignty of the vessel. n253 g. The Treatment of Vessels and Their Inhabitants The Law of the Sea Convention balances the rights of the state with the rights of other states to use the medium of the sea for "innocent passage." Generally, a state may not search, levy or seize a foreign vessel engaged in innocent passage. n254 The "innocence" of the passage depends largely on the zone the vessel finds itself. n255 Thus, a state may take necessary to cure violations of its customs regulations in the contiguous zone, but it would be unable to do so in the exclusive economic zone. n256 This approach balances interests of free passage and the states' interest in protecting themselves. i. Vessel Registration and the Genuine Link Requirement In addition to assigning rights in different zones, the Law of the Sea Convention requires the flag state to meet certain requirements for [\*627] its registrant vessels. n257 Each state is required to "fix the conditions" for a grant of registration and right to fly its flag. n258 In order for the registration to be effective, "a genuine link" is required between the "state and the ship." n259 Vessels may only fly one flag and are subject to the jurisdiction of the flag state. n260 States have certain duties in exercising jurisdiction over their flagged vessels, including maintaining a proper register, "assume jurisdiction under its internal law," and measures for safety at sea. n261 This same model should be used for the exploration of outer space. By requiring states to maintain a registry of all their vessels, damages done by a space vessel will be easily traced to the flag state, which in turn will be able to find the vessel in its registry. States would be required to have a "genuine link" with the registrant vessel. This would ensure that a state has proper jurisdiction, and would avoid charter shopping by juridical persons for states that have inadequate (and therefore less expensive) standards. n262 ii. Rendering Assistance The Law of the Sea Convention mandates that states must also require the "master of the ship" to render assistance to vessels and persons "in danger of being lost," or "to the rescue of persons in distress," "or render assistance in a collision." n263 Mutual assistance to those in need of aide will also encourage increased travel and exploration in outer space because persons will be able to expect assistance should they encounter perilous circumstances. iii. Treatment of Pirate Vessels Pirate ships, however, are not treated with the same rights as [\*628] flagged vessels. n264 "Every state may seize a pirate ship or aircraft . . . and arrest the persons and seize the property on board." n265 The pirates come under the jurisdiction of the seizing state. n266 Outer space, like the Age of Discovery, will have its fair share of persons who want to pillage from the appropriation activities of others. These space pirates are effectively dealt with because all states may arrest such persons and try them under the state's laws. This will discourage space pirates from pursuing their detrimental activities

Law of sea analogy good- solves problems of OST and provides procedures for military security, environmental law, jurisdiction, and allows for the successful growth of commerce

Thomas 06, [John Thomas, JD, magna cum laude, Florida Coastal School of Law, 2006, “Spatialis Liberum”, LexisNexis|AF]

In order to take a small step for man, the corpus juris spatialis must accommodate rapid privatization of outer space exploration. The Outer Space Treaty fails to accommodate privatization in the postmodern world because it was the product of the Cold War era. It relies on the assumption that outer space activities will be carried on by states; however, multinational corporations are dominating the outer space industry while government presence is diminishing. In order to facilitate this rapid private growth, the vacuums of outer space should be declared as res communis. This will prohibit domination by a super power and increase world participation in outer space travel and exploration. The Law of the Sea Convention offers some practical solutions to outer space exploration. For example, the Law of the Sea [\*629] Convention creates different categories of the seas and defines the states' rights in each category. Likewise, the corpus juris spatialis should be divided into territorial space, contiguous space, and transitory space. By making these divisions, states would be adequately protected against rogue space vessels, and space travelers would be encouraged to perform appropriation activities and travel in the great expanse. Accordingly, states would be allowed to exercise necessary military force in outer space. The Law of the Sea Convention offers solutions to other issues presenting the corpus juris spatialis, such as environmental law, jurisdiction, and the treatment of space travelers. These proposals borrowed from the Law of the Sea Convention will be successful in facilitating the rapid growth of the outer space market, while ensuring state interests.

AT: Topicality – Development

Legal recognition of property rights is a prerequisite to development

Wasser and Jobes 08 Alan Wasser, Chairman of The Space Settlement Institute, Douglas Jobes, President of The Space Settlement Institute, 2008, National Space Society, “SPACE SETTLEMENTS, PROPERTY RIGHTS, AND INTERNATIONAL LAW: COULD A LUNAR SETTLEMENT CLAIM THE LUNAR REAL ESTATE IT NEEDS TO SURVIVE?”, <http://www.nss.org/settlement/moon/library/SpaceSettlementLandClaimsRecognition-Wasser2008.pdf>

Reinstein says, “A legal system that is unclear as to the rights of developers in the land they develop is almost as prohibitive of positive development as a system forbidding development altogether.” 158 Antitrust and Trade Regulation lawyer David Everett Marko adds, “Free enterprise institutions simply cannot make significant investments in space while they are under the threat of lawsuits over the meaning of treaty terms . . . .” 159 Therefore, it is not at all surprising that, without the incentive that advanced legal certainty would provide, space settlement is not currently happening, and it probably never will. A few space lawyers like Jim Dunstan argue that firm property rights are unnecessary for space development, 160 although this belies the fact that space settlement seems no closer today than it did twenty years ago when David Anderman said the same thing. That is why Lunar land claims recognition legislation is needed now, in order to create an incentive to make space settlement happen at all.

Establishing property rights is key to private development of space (OK Card, might be best used on T)

W. N. White, Attorney at Law, 2004, Space Resources Roundtable, <http://www.lpi.usra.edu/meetings/roundtable2004/pdf/6009.pdf>

During the past year, real property rights has become the most important issue in the field of space law. Gregory Nemitz pursued his claim to Asteroid 433 Eros in Federal District Court, where his case was dismissed. That precedent-setting case, Nemitz vs. the United States, is now before the Ninth Circuit Court of Appeals. Also in the past year, the International Institute of Space Law, a member organization of the International Astronautical Federation, issued its first ever position paper, “Statement of the Board of Directors Of the International Institute of Space Law (IISL) on Claims to Property Rights Regarding the Moon and Other Celestial Bodies.” Finally, the Report of the President’s Commission on Implementation of United States Space Exploration Policy (the “Aldridge Commission Report”) said that “it is imperative that [property rights] issues be recognized and addressed at an early stage in the implementation of the vision, otherwise there will be little significant private sector activity associated with the development of space resources, one of our key goals.” The author will discuss the implications of these developments, including the prospects for future U.S. legislation regarding property rights and mining law in outer space.

Allowing the private ownership of property in outer space would develop it by increasing its value (this is an OK card for T – specific to Mars)

Jeff Brooks, Public Interest Advocate for the Texas Public Interest Research Group, 12/11/06, The Space Review, <http://www.thespacereview.com/article/763/1>

As the exploration of Mars accelerates and serious moves towards genuine colonization are made, the value of Martian real estate will gradually increase. This, in turn, will lead to further infusions of capital to finance further efforts towards the economic development of the Red Planet. The further Mars moves to genuine exploitability, the further the value of its land will rise. With a bit of luck, we will see a positive feedback loop take form, where efforts to develop Mars result in increases in land value, which in turn leads to further development efforts, and so on. What happened in the American West might be repeated on Mars.

AT: OST DA

Plan doesn’t violate the OST

Ro et al 11 Theodore U. Ro, intellectual property attorney for NASA, Matthew J. Kleiman, Corporate Counsel at the Draper Laboratory in Cambridge, MA, Kurt G. Hammerle, intellectual property attorney for NASA, 3/15/11, Boston University School of Law Journal of Science and Technology Law, <http://bujostl.org/content/WORKING_PATENT_INFRINGEMENT_IN_OUTER_SPACE.pdf>

Nonetheless, the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (hereinafter the “Outer Space Treaty”), which is the formative instrument that established the international legal framework for activities conducted in outer space, provides that a space object’s country of registration “shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body.” 22    This principle is analogous to the “floating island” principle existing in maritime law for ships in international waters. 23   Under the 1975 Convention on the Registration of Objects Launched into Outer Space (hereinafter the “Registration Convention”), which implements the Outer Space Treaty’s registration requirements, a space object is registered by a “launching State.” 24     A launching State is either (i) the country that launches or procures the launching of the space object or (ii) the country from which the space object is launched. 25     Thus, under the Outer Space Treaty and the Registration Convention, launching States are permitted to extend their laws, including their patent laws, to their registered space objects. 2

Current Patent law violate US commitments to the Outer Space Treaty

Ro et al 11 Theodore U. Ro, intellectual property attorney for NASA, Matthew J. Kleiman, Corporate Counsel at the Draper Laboratory in Cambridge, MA, Kurt G. Hammerle, intellectual property attorney for NASA, 3/15/11, Boston University School of Law Journal of Science and Technology Law, <http://bujostl.org/content/WORKING_PATENT_INFRINGEMENT_IN_OUTER_SPACE.pdf>

The foregoing discussion has shown how the §105(a) Exceptions have created a loophole in U.S. patent law that could permit private entities to insulate themselves from patent infringement liability in the United States for their outer space operations under circumstances wherein they might otherwise be liable under current U.S. extraterritorial principles.  This loophole poses at least two problems.  First, allowing companies to avoid liability for infringing U.S. patents could hamper the effectiveness of the U.S. patent system.   Patents traditionally play an important role in promoting high technology research and innovation. An ineffective patent system could reduce incentives for private space companies to innovate and cause space companies to protect their inventions as trade secrets instead of disclosing them to the public in patent filings. 78    Second, while a purpose of Exception 2 is to recognize and defer to the United States’ obligations under the Outer Space Treaty and the Registration Convention, it is unclear whether completely deferring to the Registration Convention was actually required in order to accomplish this goal.  In fact, entirely ceding responsibility for patent infringement by space objects that are operated by U.S. persons or companies may be inconsistent with the United States’ obligations under the Outer Space Treaty. To examine this view further, consider, as stated supra, that the Outer Space Treaty provides that “a State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space.” 79    Although the language “shall” suggests a mandatory edict is being placed on the launching State, with respect to “retain jurisdiction,” neither the Outer Space Treaty nor the Registration Convention requires that the designated launching State exercise exclusive jurisdiction over its registered space objects.  The failure of the Outer Space Treaty to vest a single state with exclusive jurisdiction over space objects seems intentional when compared with language in the 1959 Convention on the High Seas, which provides that “Ships shall sail under the flag of one State only and, save in exceptional cases expressly provided for in international treaties or in these articles, shall be subject to its exclusive jurisdiction on the high seas.” 80     By contrast, the language in article VIII of the Outer Space Treaty is much less restrictive.

No mechanism for international backlash to plan – no treaty or legal statutes

Yun Zhao, Lecturer at City University of Hong Kong, PhD from University of Rotterdam, 2004, Journal of Space Law, Pg. 279, <http://heinonline.org/HOL/Page?handle=hein.journals/jrlsl30&div=22&collection=journals&set_as_cursor=5&men_tab=srchresults&terms=26%20W.%20St.%20U.%20L.%20Rev.%2047&type=matchall#295>

The notion of States sharing a common interest in the exploration and use of outer space led the international community to declare outer space to be the “province of all mankind.”9 Some scholars have interpreted this to be the functional and legal equivalent or “common heritage of mankind" (CHM),’ which was officially introduced to the mineral resources of the Moon.” The use of the two terms above rightly shows the concerns of the international community as a whole. However, the ambiguity and ramifications of those terms have left space law as one of the least stable and clarified areas of international law. No treaties offer guidance on how to implement the CHM concept in outer space.

International opinion has changed – there’s support for privatizing space

Yun Zhao, Lecturer at City University of Hong Kong, PhD from University of Rotterdam, 2004, Journal of Space Law, Pg. 283, <http://heinonline.org/HOL/Page?handle=hein.journals/jrlsl30&div=22&collection=journals&set_as_cursor=5&men_tab=srchresults&terms=26%20W.%20St.%20U.%20L.%20Rev.%2047&type=matchall#295>

Based on the example or the deep seabed, it appears that CHM has lost much of its attraction for developing countries. The political and economic conditions that led to the UNCLOS have changed significantly. The treaties containing the concept of the CHM were argued vehemently in the politically tense atmosphere of the Cold war. The primary goal was to prevent the former Soviet Union and the United States from gaining a military advantage, rather than developing a regime that would support private development.” The end of the Cold war and the adoption of a market-economy approach by most developing countries has pushed the idea of capitalism and the free market approach into the limelight. Through years or discussion, most scholars believe that the CHM, while maintaining some policy significance, lacks the force of accepted international law. A great number of persons even consider the concept as meaningless and lacking no practical value.’

CHM = Common Heritage of Mankind

**Privatization doesn’t violate OST – benefits all**

**Dalton ’10** Taylor Dalton J.D. and LL.M., Cornell Law School 10/6/2010 [Scholarship@Cornell Law: A Digital Repository “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”

Outer space and all the resource contained within it, besides those on Earth, have been proclaimed as having value to all of humanity. All the international agreements and proclamations have this theme. This desire thus underlies the basis for all space law and serves the overarching principle. Some claim that this principle precludes the private property rights in space, because they are inconsistent with the good of community, but this is not so. Private property rights incentivize innovation and productive use, that will in turn benefit society as a whole. Private rights allow for individual efforts to flourish. Nonetheless, the overarching principle of shared benefit must somehow influence the manner and extent to which private property rights are exercised.

Plan’s Precedent = Good

Sea law is applicable to celestial bodies

**Dalton ’10** Taylor Dalton J.D. and LL.M., Cornell Law School 10/6/2010 [Scholarship@Cornell Law: A Digital Repository “Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind”

Part XI of UNCLOS is devoted to the exploitation of the deep seabed and the ocean floor.86 Part XI specifically addresses issues relating to the exploitation of minerals on the seabed outside a nation’s Exclusive Economic Zone (EEZ),87 the region called “the Area.”88 The treaty designates this area “the common heritage of mankind.”89 UNCLOS required that all profit received from the exploitation of the seabed must be shared with the developing countries of the world. UNCLOS generally prohibits any “claim or exercise of sovereignty or sovereign rights nor appropriation” over “the Area or its resources.”90 Part XI also went so far as to create the International Seabed Authority (ISA)91 which had the power to license and regulate the exploitation of the ocean floor,92 as well as collect and distribute seabed mining royalties.93 Exercise of any rights relating to the extraction, acquisition or claim to any resources in the Area must be in accordance with UNCLOS, and the rules, regulations, and procedures of the ISA.94 This provision hindered the U.S. from ratifying the treaty; nonetheless, the U.S. accepted most of UNCLOS as customary law, except for Part XI. Subsequently, the 1994 Agreement95 sought to address some of the concerns of the U.S. over the provisions in Part XI, by suspending the limitation on seabed production96 and mandatory technology transfer.97 Rosanna Sattler advocates for transfer of the concept of the EEZ into the outer space regime.98 She proposes that states be given or declare an EEZ on celestial bodies. Once declared or acquired, they would enjoy the same privileges a costal state enjoys in its EEZ under UNCLOS, namely the exclusive right to exploit, control, and manage resources within its zone. The nation would be able to license rights to private enterprises to exploit the resources within each nation’s EEZ on the celestial body. This argument may fit within the outer space legal regime forbidding national appropriation because under the UNCLOS EEZ regime, costal states do not have full sovereignty over their EEZ, but a set of conferred sovereign rights. The distinction is most clear by comparing the complete sovereignty available to costal sates within their territorial sea,99 which includes criminal jurisdiction and other traditional forms of sovereignty, and the limited rights available to the costal state in the EEZ. The EEZ is essentially the high seas—under no state’s jurisdiction or control—except for the fact that the costal state has more privileges to natural resources within the zone than all other states. Therefore, establishing EEZs on a celestial body would not be an actual conferral of sovereignty, but simply a conferral of rights against other states, possibly avoiding the prohibition on national appropriation.