### Novice – Frontier Mentality AC

#### I affirm the resolution that the appropriation of outer space by private entities is unjust because it embodies the frontier mentality.

#### My value is progress. Human society must continually improve to survive. Reducing pain, misery, and injustice is an essential element of human nature.

#### My criteria is avoiding the mistakes of history. Mistakes are inevitable – the question is whether you learn from them or not. Repeating the same mistakes dooms us to continue the worst aspects of the past.

Miller, 2001 – eco critic for the Electronic Green Journal [Ryder EGJ no. 15 “Astroenvironmentalism: The Case for Space Exploration As An Environmental Issue,” <http://escholarship.org/uc/item/2d37b8cx>]

Astroenvironmentalism, an argument to apply the values of environmentalism and preservationism to developments in space exploration, militarization and commercialism, is not a new idea. But recent developments in space exploration suggest this perspective is not widely acknowledged enough by those who envision taking steps to enter space. Environmentalists did not take a stand on these issues over the last few years, which was unfortunate because this was a topical time to argue that space should be an environmental issue. Astroenvironmentalism is an addition to present efforts, but also an umbrella term to describe a variety of related concerns held by many players in the environmental arena. Since mankind made such a mess of this planet and is now paying the environmental price for the damage, this topic is of extreme importance because we must avoid making the same mistakes in space as we have on earth. At issue are the environmental consequences of the steps we are about to take in entering space. The adaptation of environmental concerns to developments in the exploration and commercialization of space fit surprisingly easily. Astroenvironmentalism is another re-formulation of the associated environmental concerns involving a space wilderness to protect, rather than a "frontier" to exploit. As I have outlined elsewhere (Miller, 1999), some of the concerns of astroenvironmentalism can include: Keeping the space surrounding the Earth clear of pollution, debris, and garbage. Efforts are necessary so we do not add to the reservoir of human waste and machinery left behind by space explorers. Such debris could cause damage to satellites and the space shuttles. Remembering and teaching the lessons learned from terrestrial conservation and preservation struggles of the past and applying them to the new frontier of space, that is, considering space and the celestial bodies pristine wildernesses that need to be protected rather than frontiers to conquer. Tracking and monitoring the environmental damage caused by the fuels used for space expeditions, that is, making space agencies adhere to the restrictions of environmental impact statements. In particular, it would be worthwhile to reduce the amount of plutonium that is being used in case of a mishap that would result in plutonium entering the atmosphere.

#### Contention One – Private appropriation of space is based on the Frontier Mentality

#### The advocacy of private property claims in space is founded on the assumptions of The Frontier Mentality – that space is a frontier for us to exploit and conquer.

Billings, 2006 – National Institute of Aerospace [Linda “ To the Moon, Mars, and Beyond: Culture, Law, and Ethics in Space-Faring Societies” Space Policy November <https://www.researchgate.net/publication/248494321_How_shall_we_live_in_space_Culture_law_>and\_ethics\_in\_spacefaring\_society]

While the social, political, economic and cultural context for the U.S. civil space program has changed radically since the 1960s, the rhetoric, and, arguably, the substance, of space policy making has not. The program and many of its advocates appear to be stuck in the 20th century in some important respects. In the 21st century, politicians and other advocates have been promoting “the Moon- Mars thing” as exploration for the sake of exploring and also as a means of opening up the solar system to private property claims, resource exploitation, and commercial development. In the words of one space advocate, “The solar system is like a giant grocery store. It has everything we could possibly want.” 12 This analogy has its weaknesses: for example, in a grocery store one must, of course, pay for what one wants. And in this “vision,” those with the means to get to the store first get all the goods; those who get there late may get nothing – a system more in the spirit of imperialism than of the 1967 Outer Space Treaty. The rhetoric of space advocacy highlighted herein reflects an assumption that the values of materialism, consumerism, and hyper-consumption prevalent today are values worth extending into the solar system. The conception of outer space advanced by these advocates embodies the idea of a solar system (and beyond) of wide-open spaces and limitless resources – a space frontier. This frontier rhetoric, with its images of pioneering, homesteading, claim-staking, and conquest, has been persistent in American history, and the frontier metaphor has been, and still is, a dominant metaphor in rhetoric about space exploration (see, for example, National Commission, 1986). “Space frontier” means different things to different people, and it is worth thinking about the range of meanings invoked by the metaphor in considering what values are, could be, or should be embodied in the human endeavor of space exploration.

#### Relying on flawed assumptions like the frontier myth will cause us to continue the mistakes of the past.

Billings, 2006 – National Institute of Aerospace [Linda “ To the Moon, Mars, and Beyond: Culture, Law, and Ethics in Space-Faring Societies” Space Policy November <https://www.researchgate.net/publication/248494321_How_shall_we_live_in_space_Culture_law_>and\_ethics\_in\_spacefaring\_society]

American historian Frederick Jackson Turner’s (1994, 1947, 1920) turn-of-the-century essay, “The significance of the frontier in American history,” is perhaps the best-known articulation of the metaphor. Later historians of the American West have deemed the idea of the frontier a “myth,” embodying a worldview in which the United States is “a wide-open land of unlimited opportunity for the strong, ambitious self-reliant individual to thrust his way to the top” (Slotkin, 1973, p. 5; also see Slotkin, 1990, 1985). Historian Patricia Nelson Limerick (1994) has observed that space advocates have tended to cling to the frontier metaphor, continuing to conceive of “American history [as] a straight line, a vector of inevitability and manifest destiny linking the westward expansion of Anglo-Americans directly to the exploration and colonization of space.” Critiquing this vision of a space frontier, Limerick has observed: “In using this analogy, space advocates have built their plans for the future on the foundation of a deeply flawed understanding of the past, [and] the blinders worn to screen the past have proven to be just as effective at distorting the view of the future” (p. xxx; also see Limerick, 1999). Historian Stephen Pyne (1988) has examined space exploration as a “cultural invention” (p. 18) that “reinforces and reinterprets…myths, beliefs, and archetypes basic to its originating civilization” (p. 37). Modern Western (European-American) exploration functioned as “a means of knowing, of creating commercial empires, of outmaneuvering political economic, religious, and military competitors – it was war, diplomacy, proselytizing, scholarship, and trade by other means” (Pyne, 2003, n.p.). The postmodern exploration of space is different, Pyne argues. Rationales advanced for space settlement, he says, are ultimately “historical, culturally bound, and selectively anecdotal: that we need to pioneer to be what we are, that new colonies are a means of renewing civilization…. With neither a rambunctious imperialism nor an eager Enlightenment,” he concludes, “the case for space colonization is not compelling” (n.p.).

#### Contention Two – The Mistakes of the Frontier

#### 1. Inequality - The Frontier Mentality repeats the structural violence of poverty from Earth into space.

Launius, 2012 - former chief historian at NASA [Roger D, July 30 “The Declining Significance of the Frontier in Space History?” <https://launiusr.wordpress.com/2012/07/30/the-declining-significance-of-the-frontier-in-space-history/>]

The image of the frontier, however, has been a less and less acceptable and effective metaphor as the twentieth century became the twenty-first century. Progressives have come to view the space program from a quite different perspective. To the extent that space represents a new frontier, it conjures up images of commercial exploitation and the subjugation of oppressed peoples. Implemented through a large aerospace industry, in their view, it appears to create the sort of governmental-corporate complexes of which liberals are increasingly wary. Despite the promise that the Space Shuttle, like jet aircraft, would make space flight accessible to the “common man,” space travel remains the province of a favored few, perpetuating inequalities rather than leveling differences. They also assert that space exploration has also remained largely a male frontier, with room for few minorities. In the eyes of progressives, space perpetuates the inequities that they have increasingly sought to abolish on Earth. As a consequence, it is not viewed favorably by those caught up in what political scientist Aaron Wildavsky has characterized as “the rise of radical egalitarianism.” The advent of this liberal philosophy coincides with the shift in ideological positions on the U.S. space program in the late 1960s and early 1970s.

#### 2. Environment – without reconsidering the frontier mentality, we will repeat environmental damage in space.

Miller, 2001 – eco critic for the Electronic Green Journal [Ryder EGJ no. 15 “Astroenvironmentalism: The Case for Space Exploration As An Environmental Issue,” <http://escholarship.org/uc/item/2d37b8cx>]

Over the years there have been many people who have been concerned with this issue, but they would not necessarily call themselves astroenvironmentalists. I put forth astronenvironmentalism as an argument that space should be considered an environmental issue and the term can function as an umbrella term for the related concerns. Astroenvironmentalism seems to fill a void, because there are no widely known organizations that focus on this issue. There is no widely known Mars First or Venus First organization arguing against terraforming. There is no Greenspace or Spacepeace. Most environmental groups are focused on more immediate issues and are more concerned with immediate and down-toEarth issues. Leopold's Land Ethic, which focused on protecting life, is not easily applicable to the barren territories of space. But the argument of protecting space from exploitation is not solely about protecting rocks; it is also about making a statement about human behavior. If one succeeds in making the argument about protecting celestial bodies, we are also making the argument about protecting habitats here on earth. In Beyond Space Ship Earth: Environmental Ethics and the Solar System, probably the most thorough coverage of the subject, Hargrove (1986) writes that the only reason there are no people on the Moon or Mars is due to reduced NASA spending levels. "The attempts to apply environmental concepts to the Solar System represent a significant challenge for environmental ethics, since so far as we know at present the Solar System, except for Earth, is a collection of nonliving natural objects, the kind of entity that offers the greatest conceptual difficulties for environmental ethics." Hargrove warns, "If serious planning begins without adequate ethical and environmental input, then future NASA and associated industrial/commercial projects in the Solar System may simply produce a new environmental crisis that dwarfs our current one" (pp. x-xi). Hargrove argues that if we do nothing, the dark visions of science fiction could become true.

#### 3. Militarism – Space will repeat the military violence of the frontier in space.

Billings, 2017 – consultant NASA’s Planetary Defense Coordination Office [Linda, “Should Humans Colonize Other Planets? No” Theology and Science · June <https://www.researchgate.net/publication/317888512_Should_Humans_Colonize_Other_Planets_No>]

Examining the history of the U.S. space program reveals an underlying ideology of space exploration that has at its core a rationale for conquest and exploitation. This ideology is deeply rooted in a durable American cultural narrative of frontier pioneering, free enterprise, rugged individualism, and a right to life without limits.8 It is a pastiche of many ideologies, drawing on American exceptionalism, neoliberalism (and its more extremist cousin, libertarianism), the doctrine of manifest destiny, the belief in the necessity of “progress,” and even Russian cosmism.9 A fundamental goal of U.S. space policy since the establishment of NASA in 1958 has been to establish, maintain, and strengthen U.S. leadership in space exploration and the global space community, and the influence of the narrative of American exceptionalism has remained strong in official space rhetoric into the 21st century, promoting the message that USA must be Number 1. The rhetoric of U.S. space policy and advocacy advances a conception of outer space as a place of wide-open spaces and limitless resources – a space frontier. Though the contemporary cultural environment is vastly different from that of the Cold-War era in which human space flight began, the 21st century narrative of U.S. human space exploration to date is still intimately intertwined with what feminist critic Susan Faludi has called “security myth” and “nationalist fantasy,” a story of cowboys on the space frontier.10 In the early 21st century, the trend in the U.S. space community, energized during Ronald Reagan’s administration and reinvigorated during the George W. Bush administration, has been to view the solar system as an environment to exploit, as we have done with our own planetary environment.

#### 4. Nationalism – The frontier mentality will reinforce American exceptionalism in space.

Messeri, 2017 - prof of Anthropology at Yale [Lisa March 15, “We Need to Stop Talking About Space as a “Frontier” The language we use matters, especially when it’s deployed in the service of envisioning possible futures” <https://slate.com/technology/2017/03/why-we-need-to-stop-talking-about-space-as-a-frontier.html>]

But mobilizations of the frontier metaphor from Turner to today don’t just ignore the historical reality of war, disease, and environmental destruction. The Americanness of the frontier metaphor is also at odds with the need for international cooperation in the new era of space exploration. While the frontier might inspire Tumlinson and his fellow American baby boomers, does it have salience more broadly? As we try and move from a model of space competition to space cooperation, does the frontier, which necessarily pits “us” against “them,” undermine the peaceful expansion many imagine?