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TWO INCOMPATIBLE VISIONS

Attached hereto please find, excerpted from the final text of the 2000 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons, thirteen commitments to fulfill the disarmament pledges contained in the Treaty. The 187 state parties to the treaty are legally bound to work in a multilateral, cooperative framework to obtain a safer, more secure world, under the rule of law.

Attached hereto are Dr. Craig Eisendrath's (Senior Fellow, Center For International Policy) and my personal thoughts regarding the United States Space Command's Vision 2020, a unilateralist approach to U.S. security, which appears to be incompatible, both legally and in spirit, with the U.S.'s commitments to the NPT. Additionally, the actual Vision 2020 and its Long Range Plan could be very hazardous even if they were not at odds with existing treaties. The Plan does not articulate the levels of cooperative security that are needed to maintain an orderly integration of economies under the rule of law and obtain necessary levels of cooperation to address threats to the environment and terrorism. Moreover, it expresses values incompatible with spreading democracy. Is it not ironic that a country founded in response to an over-arching empire should spawn advocates desirous of spreading democracy through full spectrum dominance?

It is clear that military and commercial assets in space will need to be safeguarded and, according to the Long Range Plan of the U.S. Space Command, over \$500 billion will soon be invested in space development. It is clear that economic interests of this magnitude can have a large impact on policies. It is my hope that the impact of satellites, which have done so much to bring the world's cultures and economies together, can help us work together to bring about greater cooperation. This will clearly make our world more secure.

Respectfully,

Jonathan Granoff
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United States—Masters of Space?

The US Space Command’s “Vision for 2020”

*Thoughts by Jonathan Granoff, President, Global Security Institute,
and Craig Eisendrath, Senior Fellow, Center for International Policy*

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The US Space Command's glossy advocacy pamphlet "Vision for 2020" calls for the US to become "stewards for military space." Its premises are consistent with policies set forth by Secretary Rumsfeld as Chair of the Commission to Assess US National Security Space Management and Organization, issued January 11, 2002. "Vision 2020" sets out two principle themes:

- Dominating the space dimension of military operations to protect US interests and investment;
- Integrating space forces into warfighting capabilities across the full spectrum of conflict.

The vision of US "Full Spectrum Dominance" requires:

- Control of space
- Global engagement (world-wide situational awareness; defense against ballistic and cruise missiles, and the capability to hold at risk from space a small number of high value targets)
- Full force integration (the integration of space forces with air, land, and sea forces, enabling warfighters to take full advantage of space capabilities as an integral part of special, joint and combined warfare)

First Steps toward US Space Dominance

The value of outer space in future battle management in wartime for intelligence gathering, targeting, and weapons guidance, was lauded during the 2003 Iraq War. The US military makes no secret of its goal to become "Masters of Space." It is clearly stated in the "Long Range Plan" (LRP) of the US Space Command¹.

The US has recently deployed ground-based missile defense systems in Alaska and California, which are designed to impact missiles in outer space. Meanwhile, it is spending billions of dollars to research and eventually deploy anti-satellite and bombardment weapons in space. In addition to aspirations to explore innovations and extend defense planning horizons, as stated in the Plan, another justification for this expansion – Secretary of Defense Donald Rumsfeld's invocation of a "space Pearl Harbor" – appears a thin argument for such expenditures of treasure and good will. This exceedingly fearful posture ignores the fact that the US has more than sufficient force to dissuade any nation, including China and Russia, from attempting such an attack. It also ignores multilateral efforts, strongly supported by China and Russia and by virtually all US allies and friends, to pass a treaty outlawing space weaponization. U.S. opposition to treaty based approaches to outer space was reiterated in the 2006 National Space Policy². Nor does the threat of terrorism justify the full weaponization of space, as terrorists have access to only the most primitive means of obstructing outer space activities.

Yet US plans for space dominance through weaponization are moving forward and advocates of the US weaponizing outer space appear to be succeeding. Today, the US accounts for over 90 percent of total global military space expenditures and maintains approximately 135 operational military-related satellites – over half of all military satellites in orbit. The Russians have approximately 60 in orbit³, although today between 70 and 80% of these satellites have passed their effective life span. The Chinese are just beginning to use military satellites.⁴ Theresa Hitchens, Vice President of the Center for Defense Information, estimates that total Department of Defense spending in space – both classified and unclassified – is about \$22.5 billion in FY 2006, and is expected to increase by at least \$1 billion a year over the next six years.⁵

Missile Defense and Space Weaponization

The ground-based system of missile defense in Alaska and California has yet to pass realistic battlefield tests, and has not overcome the problem of distinguishing between decoys and warheads. No expansion of this system is being planned. Rather, the US is moving ahead with its plans to use outer space as the venue for missile defense. One system – the Space-Based Laser – if deployed, would operate in low-earth orbit and would seek to destroy hostile ballistic missiles during their boost phase.⁶ The US Missile Defense Agency is also developing an experimental constellation of space-based missile interceptors that it plans to launch in 2012, which would seek to destroy their targets through kinetic contact.⁷ Another system, under consideration, would create a constellation of orbiting, kinetic kill microvehicles designed to destroy enemy intercontinental ballistic missiles in their boost phase. The Space-Based Infrared System, which is to be used to guide all ballistic missile defense projects including all types of interception – boost-phase, mid-course, and terminal-phase – will begin to be launched in 2006, and the full constellation of about thirty satellites is expected to be in orbit by 2011.⁸

All of these systems, including the deployment of ground-based missile defenses in Alaska and California, have been made possible by the US withdrawing from the Anti-Ballistic Missile (ABM) Treaty of 1972, first announced by President Bush in December of 2001, and effective six months later. This was the first arms treaty which had been canceled through presidential action.

Anti-Satellite Weapons

The US is developing the Near-Field Infra Red Experiment, or NFIRE satellite, which seeks to track and kill missiles and satellites.⁹ Longer-term US plans include deployment of a test-bed of three to six space-based interceptors by 2011-2012.¹⁰

Bombardment Satellites

Although no direct strike weapons have been tested or deployed, one system being researched is the long-rod penetrator, or “Rods from God.” This system would dispatch orbital tungsten or uranium rods that would enter the earth’s atmosphere at a speed of 7,200 miles per hour to penetrate bunkers and heavily reinforced facilities.¹¹ Still another system, the Evolutionary Air and Space Global Laser Engagement, or EAGLE, is being designed to put mirrors underneath a huge airship. Lasers, fired from the ground, the air, or from space, would bounce off these blimp-borne mirrors to track or destroy enemy missiles.¹² The US is also considering bombardment satellites using a range of explosive systems which could hit targets on earth from low earth orbit.

Use of Commercial Satellites for Military Purposes

Most commercial satellites can be used for both military and civilian purposes. These include satellites in the Global Positioning System, which is designed and controlled by the US Department of Defense. This system in wartime is used to identify targets and provide the basis for guiding weapons to hit their targets with pinpoint accuracy, as it was in Iraq with devastating effect. Given US military control of this system, both the European Union and Russia have developed positioning systems of their own. In addition, civilian satellites are used to map the world, chart and predict weather, and effect communications from telephoning to virtual conferences to international broadcasting. These satellites are also subject to military uses, and were used extensively during the Iraq wars. Given the growing use of outer space for military uses, international tension has developed over the appropriation of scarce orbital slots and radio frequency bands for military satellites.

The Militarization of Space

Since the beginning of the space age, positioning, communication and weather satellites have worked effectively to knit the planet together. Information is immediately exchanged; areas hitherto out of communication with the rest of the world are now in the global communication system. Weather prediction and world mapping have increased factorially in accuracy. Scientific exploration of the solar system, our galaxy and the universe can now proceed with space-based equipment and sometimes space-based scientists. In addition, there is close cooperation between the eleven space launching nations and over fifty other states which use their launching facilities. World income from outer space is today in the hundreds of billions of dollars. All this is at risk should space be weaponized, and should it become the venue for battle. Not only would all satellites be vulnerable because of their dual-use, but also the orbital debris caused by military actions would jeopardize the operation of all satellites, particularly in low-earth orbit.

Toward an Open Debate on Cooperation as a Course

Weaponization could encourage a costly and dangerous arms race in outer space. Responses will be assured since others will not want to be dominated. Nearly every country in the world but the US supports the preservation of space from weaponization. This is consistent with the aspirations contained in the Outer Space Treaty. Is it not time to codify these aspirations in a formal legal regime? How can we call for effective cooperation in addressing protection of the environment, fighting terrorism, eliminating gross disparities of wealth, controlling the spread of weapons of mass destruction, while pursuing unilateral "full spectrum dominance?" Can we truly expect cooperation in non-proliferation efforts while flaunting cooperative security as a principle so brazenly? What message does America want to send as we promote the rule of law?

It is obviously time to take this issue out of stealth and into the sunshine of public discourse and analysis. A cooperative approach to space security is preferred. Should we not seek to create an enforcement system which could provide adequate assurances and security for all parties, and avoid an expensive and highly dangerous arms race in outer space?

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- ¹ See: <http://www.fas.org/spp/military/docops/usspac/lrp/toc.htm>
- ² See: <http://www.ostp.gov/html/US%20National%20Space%20Policy.pdf>
- ³ See: <http://cns.miis.edu/research/space/russia/mil.htm>
- ⁴ Simon Collard-Wexler, Jessy Cowan-Sharp, Sarah Estabrooks, Ambassador Thomas Graham Jr., Dr. Robert Lawson, Dr. William Marshall, *Space Security 2004*, Northview Press, Ltd., p. xv.
- ⁵ Report on e-Parliament Conference on Space Security, September 14, 2005, 2105 Rayburn House Office Building, Washington, D.C., p. 16.
- ⁶ Theresa Hitchens, "Weapons in Space: Silver Bullet or Russian Roulette?", Center for Defense Information, April 18, 2002.
- ⁷ Jeremy Singer, *Space News*, April 18, 2005.
- ⁸ See "Space-Based Laser Put on Hold," *Arms Control Today News Briefs*, December 2002, cited in *Space Security 2004*, p. 129.
- ⁹ David Barton et al., "Report of the APS Study Group on Boost-Phase Intercept Systems for National Missile Defense," American Physical Society, July 15, 2003, cited in *Space Security 2004*, p. 144.
- ¹⁰ *Space Security 2004*, p. 140.
- ¹¹ Theresa Hitchens, "Weapons in Space: Silver Bullet or Russian Roulette," Center for Defense Information," p. 7
- ¹² Noah Schachtman, "Pentagon Preps for War in Space," February 20, 2004, <http://www.wired.com/news/technology/0,1282,62358,00/html>.

13 PRACTICAL STEPS

EXCERPTED FROM THE FINAL DOCUMENT OF THE NPT 2000 REVIEW CONFERENCE

The Conference agrees on the following practical steps for the systematic and progressive efforts to implement Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and paragraphs 3 and 4 (c) of the 1995 Decision on “Principles and Objectives for Nuclear Non-Proliferation and Disarmament”:

1. The importance and urgency of signatures and ratifications, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty.
2. A moratorium on nuclear-weapon-test explosions or any other nuclear explosions pending entry into force of that Treaty.
3. The necessity of negotiations in the Conference on Disarmament on a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices in accordance with the statement of the Special Coordinator in 1995 and the mandate contained therein, taking into consideration both nuclear disarmament and nuclear non-proliferation objectives. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate commencement of negotiations on such a treaty with a view to their conclusion within five years.
4. The necessity of establishing in the Conference on Disarmament an appropriate subsidiary body with a mandate to deal with nuclear disarmament. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate establishment of such a body.
5. The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.
6. An unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all States parties are committed under Article VI.
7. The early entry into force and full implementation of START II and the conclusion of START III as soon as possible while preserving and strengthening the ABM Treaty as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions.
8. The completion and implementation of the Trilateral Initiative between the United States of America, the Russian Federation and the International Atomic Energy Agency.
9. Steps by all the nuclear-weapon States leading to nuclear disarmament in a way that promotes international stability, and based on the principle of undiminished security for all:
 - * Further efforts by the nuclear-weapon States to reduce their nuclear arsenals unilaterally.
 - * Increased transparency by the nuclear-weapon States with regard to the nuclear weapons capabilities and the implementation of agreements pursuant to Article VI and as a voluntary confidence-building measure to support further progress on nuclear disarmament.
 - * The further reduction of non-strategic nuclear weapons, based on unilateral initiatives and as an integral part of the nuclear arms reduction and disarmament process.
 - * Concrete agreed measures to further reduce the operational status of nuclear weapons systems.
 - * A diminishing role for nuclear weapons in security policies to minimize the risk that these weapons ever be used and to facilitate the process of their total elimination.
 - * The engagement as soon as appropriate of all the nuclear-weapon States in the process leading to the total elimination of their nuclear weapons.
10. Arrangements by all nuclear-weapon States to place, as soon as practicable, fissile material designated by each of them as no longer required for military purposes under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside of military programmes.
11. Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.
12. Regular reports, within the framework of the NPT strengthened review process, by all States parties on the implementation of Article VI and paragraph 4 (c) of the 1995 Decision on “Principles and Objectives for Nuclear Non-Proliferation and Disarmament”, and recalling the Advisory Opinion of the International Court of Justice of 8 July 1996.
13. The further development of the verification capabilities that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear-weapon-free world.