CODE OF CONDUCT FOR MILITARY ACTIVITIES IN OUTER SPACE.

By Paul B. Larsen[1]

Background

There is a considerable body of international law governing military uses of outer space. The existing legal framework includes the UN Charter, space law treaties and agreements and special international laws on military activities in outer space. As of the time of writing all states want to preserve this existing legal framework. The large majority of states would like to prevent an arms race in outer space. [2] The United States wants to keep international legal restrictions on freedom to act in outer space within current limits and is not willing to accept further restrictions. [3]

Unilateral military actions, in the absence of international consensus, move the world towards chaos. Once one state begins to assert unilateral authority to weaponize outer space and to use those weapons, then other states will use that precedent to assert their own unilateral authority. The existing legal framework on peaceful uses of outer space could collapse. Such collapse is in nobody's long term interest. [4]

That some States currently plan to use outer space for military operations is shown by the Chinese ASAT assertion, [5] the U. S. claims for freedom to do what it requires for its national security objectives, [6] and the strong Russian response to U.S. plans to deploy U.S. anti-missile systems in Eastern Europe.[7] These unilateral claims of authority to use military power in outer space, the uncertainties involved in conflicting claims, the possibilities of accidental collision and misunderstandings, all make greater certainty about the nature of military outer space activities very appealing.

Military space activities must coexist with civilian commercial activities in outer space. Commercial activities have increased exponentially since the space law treaties were negotiated in the 1960s and 1970s.

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[2] The recent UN General Assembly Resolution (UNGA Res. 61/58, Dec. 6, 2006) in which the General assembly expressed its disapproval of weaponization of outer space was passed almost unanimously with one vote against (the U.S.) and one abstention.

[3] U.S. National Space Policy Statement, October 6, 2006 states that "the United States opposes negotiation of any new treaties and restrictions that would limit US use of outer space.

[4] Editorial, Jingoism will Get Us Nowhere in Global Space Affairs, Aviation Week and Space Technology, October 30, 2006, at 58.

[5] China's ASAT Test: Irresponsible And Against International Norms, Aviation Week & Space Tech. Jan 29, 2007, at 74. China has later announced measures to control space debris and to survey the amount of debris currently in orbit. The U.S. Air Force Space Command tracks debris over 10 centimeters. Its record indicates 4,189 US-generated debris pieces, 4,281 Russian pieces of debris and 2,296 China generated debris pieces; see de Selding, China Says It Is Implementing Space Debris Mitigation Measures, Space News, Sept. 3, 2007, at 1.

[6] U.S. Policy Statement, supra n. 3.

[7] "The strategic balance in the world is being upset and in order to restore this balance without creating anti-missile defense on our territory we will be creating a system of countering that anti-missile system, which is what we are doing." Russian President Vladimir Putin, Associated Press Report, June 3, 2007.

The developing commercial space activities could be severely affected, possibly terminated, by outbreak of military engagements in outer space. Not only would space business suffer from military activities in outer space, scientific exploration like the Hubble telescope would also suffer and possibly be destroyed. The interests of space commerce and space science exploration constitute a counter balance to greater military space uses. That is recognized in the U.S. national space policy statement which also encourages private commerce and maximum use of U.S. commercial space products in outer space. [8]

Private satellite operators are much concerned with disturbances of private space enterprises by military conflicts in space. The private sector has expressed interest in guidelines for advance communication of military space activities and for reduction of space debris. Both would establish a more secure environment for private business in space. [9]

International coordination and cooperation in outer space is essential. Many civilian activities in outer space have developed into international cooperative projects like the International Space Station (ISS). More international cooperation will be required in the future because space projects like the ISS cost in excess of 100 billion dollars, which is probably more than any one state is willing to invest. International cooperation is necessary for future outer space development such as exploration and economic uses of the Moon and Mars. International cooperation is harmonious with the existing legal regimes for outer space. Alienation of current and future international partners in cooperative space ventures is inimical to future space cooperation.

Short of a treaty, are there any steps that can be taken to create a climate of trust and avoid accidental and unintended military engagements in outer space?

[8] Supra n. 3.
[9] David McGlade, Intelsat CEO, Space News, Feb. 19, 2007.

Rules of the Road for Military Activities in Outer Space.

An entirely different legal approach to random military uses of outer space would be to establish minimal guidelines for whatever military activities do take place in outer space. Such guidelines would be directed less at the legality of weapons in outer space and more at *insuring transparency* so that states can avoid accidental war in outer space. For that approach to work, all space-faring states would observe agreed rules of behavior: a code of conduct. A code of conduct for the prevention of incidents and dangerous military practices in outer space would be similar to other very familiar codes of conduct such as the Missile Technology Control Regime (MTCR) directed against proliferation of guided missiles, [10] the Wassenaar Agreement, [11] and the Hague Code of Conduct on missile proliferation. [12]

These guideline codes have worked well to curb the spread of weaponization in the world. States know how to follow these voluntary guidelines. It is in the self interest of states to observe these codes of conduct. Similarly, a code for prevention of dangerous incidents in outer space would recognizes the dangers of accidental military engagements in outer space. It would establish rules enabling parties to recognize when military space activities may not be hostile, even when they appear to be hostile. It would clarify the intentions of the parties.

One example of the kind of guideline that might be applied to military uses of outer space has been proposed by the Stimson Center. [13] It is described here for the

[10] www.mtcr.info
[11] www.wassenaar.org
[12] Hague Code of Conduct against Missile Proliferation, at www.armscontrol.org
[13] The Stimson Center in Washington DC is nonprofit institution devoted to enhancing international peace and security. It seeks to reduce the threats to the peace by recommending solutions to complex problems such as military threats to peaceful uses of outer space. The draft code of conduct is an executive level agreement

purpose of beginning discussion of a possible outer space code of conduct. The Stimson code includes these elements:

1. States shall not simulate attacks on satellites of other states, and shall avoid maneuvers that increase the risk of collision.
2. States shall not use directed energy devices, such as lasers, to impair a satellite in space. States shall not use anti-satellite weapons or space weapons to impair a satellite.
3. States shall not engage in activities intended to generate space debris. States shall observe the IADC debris rules.
4. States shall keep each other informed about launches into outer space and about legitimate approaches to each other's satellites.
5. States shall adopt ITU's international traffic management regulations and recommendations, including uses of radiofrequencies and orbital slots.
6. States shall permit verification in accordance with internationally recognized principles.
7. States may, by agreement, establish special caution zones for the purpose of avoiding collisions.
8. States shall establish a mandatory communication system and a system of consultation to resolve problems.

The 21st Century is a time of renewed interest in outer space exploration and uses. States are making plans to go to the Moon and Mars. The Hubble telescope is being repaired and new technology telescopes are being deployed. The private sector is involved in an array of commercial activities ranging from communication satellites to space hotels. Chaos in outer space would defeat all these plans. For these plans to come to fruition, we need, at a minimum, some rules of the road to avoid accidents and mistakes. We need to maintain order to ensure future planning for outer space exploration and uses.

The environmental hazards of uncoordinated space activities are great as evidenced by the massive debris cloud of the Chinese ASAT test. The Outer Space Treaty, Art. IX, requires states to "conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to corresponding interests of all other States Parties to the Treaty." [14] States are required to act responsibly and respect the outer space activities of other States. Space debris from military and non-military activities now constitute hazards that cannot be accommodated or tolerated. [15] Avoidance of the kind of space debris caused by the Chinese ASAT test would be a basic element in a code of conduct for outer space. It would improve the likelihood that such an event would not happen again.

The Chinese ASAT test also shows how much damage can be caused by a fairly simple direct kinetic energy weapon. It did not require an extremely sophisticated weapons system. The test showed that the one state can no longer control and maintain order in outer space. Some kind of internationally agreed code among the states with space capabilities is necessary to curb unacceptable outer space activities.

There currently exists a feeling that

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creating "rules of the road" for space operations. Its objective is for states to refrain from irresponsible behavior in outer space. See: www.stimson.org

[14] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, 610 UNTS, Art IX. The meaning of 'due regard' was defined by the International Court of Justice in U.K. v. Iceland, 1974 I.C.J. 3, in which the I.C.J. stated that states have "the obligation to pay due regard to the interests of other States in the conservation and equitable exploration of these resources." The principle was adopted in the Law of the Seas Convention, 1833 UNTS 3, at Arts 53-59.

[15] Note that all the States have expressed support for the IADC debris rules. See discussion of space debris in Steven A. Mirmina, Reducing the Proliferation of Orbital Debris: Alternatives to a Legally Binding Instruments, 99 Amer. J. Int'l L. 649 (2005)

satellites in outer space are vulnerable. They can be disintegrated by an ASAT. The natural reaction to feelings of vulnerability and instability is to build weaponry to protect space assets. That leads to an arms race in outer space. An agreed code of conduct would lead to increased trust and sense of stability thus reducing the prospect of an arms race in outer space.

Guidelines for military activities in outer space would actually provide spacefaring states greater certainty and thus greater freedom to use outer space. Commonly agreed guidelines for military activities are well known.[16] Guidelines for military space activities can range from the general code of conduct proposed by the Stimson Center to simple rules of the road that would provide advance notice to identify space activities so that collisions would be avoided. The basic idea is to create certainty, predictability and safety of space flights.

Who would negotiate a Code of Conduct on military practices in outer space? A code might not be negotiated within the United Nations. It would most likely be negotiated by the major space powers because they are most directly affected. Other agreements on outer space are created outside the United Nations framework as for instance the International Space Station Agreement. But the issue of a code could also be placed on the agenda of the COPUOS and of the Geneva Disarmament Conference.

In the final analysis, the code of conduct should be seen as an implementation of the Outer Space Treaty and not as a new legal regime. Order and stability in outer space is the basic purpose of the Outer Space Treaty. That is why the Outer Space Treaty is often referred to as the constitution of outer space.

[16] Supra notes 10-12