REPORT OF THE SPACE LAW COMMITTEE, 2009-2010

The law of outer space is based four International Treaties. These treaties were reached by consensus decision-making in the Committee on the Peaceful Uses of Outer Space (COPUOS) and then forwarded on to the General Assembly and thence to individual states. The first treaty, the Magna Carta of space Law, is the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies. This treaty, often referred to simply as the Outer Space Treaty (OST), was opened for signature in 1967; entered into force the same year; and now has 100 ratifications. The second treaty is the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (ARRA), which was opened for signature in 1968; entered into force the same year; and now has 91 ratifications. The third treaty is the Convention on International Liability for Damage Caused by Space Objects (LIAB), which was opened for signature in 1972; entered into force in 1972; and now has 88 ratifications. The fourth treaty is the Convention on Registration of Objects Launched into Outer Space (REG), which was opened for signature in 1975; entered into force in 1976; and now has 53 ratifications.

A fifth treaty, and the most controversial, is the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (MOON), which was opened for signature in 1979; entered into force in 1984; and now has only 13 ratifications.

In terms of soft law, we see the UN General Assembly resolutions on Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982); Principles Relating to Remote Sensing of the Earth from Outer Space (1986); and the Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1992). Furthermore, the United Nations General Assembly (UNGA) has used resolutions to "interpret" space law as evidenced by the non-binding 2004 Resolution on the Launching State and the 2007 Resolution on Registration Procedures. More recently COPUOS has endorsed the space debris mitigation guidelines of the Inter-Agency Space Debris Coordination Committee (IADC).

COPUOS has two subcommittees, the Legal and the Scientific & Technical. There is also a UN Office for Outer Space Affairs (OOSA), which is responsible for promoting international cooperation on the peaceful uses of outer space, and it serves as the secretariat for COPUOS. The Legal Subcommittee meets every year (this year it met between March 22 and April 1) in Vienna (see www.unoosa.org). The agenda items include the status and application of the five UN treaties, the definition and delimitation of outer space, capacity building, space debris mitigation, nuclear power sources, information on the activities of international intergovernmental and non-governmental organizations relating to space law, and the general exchange of information on national legislation. As part of the meetings, the International Institute of Space Law (www.iislweb.org) and the European Center for Space Law (www.esa.int/SPECIALS/ECSL) organized a symposium on "National Space Legislation – Crafting Legal Engines for the Growth of Space Activities."

National Legislation is another source of space law, and national laws approved by states that have ratified the Outer Space Treaty and the other space treaties should be in harmony with international law. To date, approximately twenty countries have enacted national laws, the first being the United States' NASA legislation of 1958. Since then, a

number of U.S. space-related laws have been enacted by Congress, including the Commercial Space Launch Act of 1984, as amended.

Four recent laws are those of France (2008), Germany – Satellite Data Security Act (2007); Japan – Basic Space Law (2008); and the United Kingdom – British Space Agency (2010). It should be said that in Europe there is still the beginning stage of an effort to harmonize national laws across the Continent.

Germany's recent law is crucial because satellite data acquisition raises questions of national security, commercialization and privacy and law enforcement. This new law was made necessary by the need to support commercialization and privatization while also addressing vital national security interests. This law was written with a clear understanding of Germany's obligations under the OST, Art. VI and the 1986 UNGA Resolution on Remote Sensing Principles. (1)

Japan's Basic Space Law comes 28 years after she launched her first satellite in 1970. During the intervening years, the space program was principally an R & D effort because commercial aspects were not prominent and military projects were rudimentary due to the mandate - "exclusively for peaceful purposes," which fits in with the pacifism of Art. 9 of the Constitution. With the advent of privatization and increasing security cooperation with the United States, the new law was seen as necessary. This law specifically references the Outer Space Treaty and its mandate that space be used for peaceful purposes and international cooperation.(2)

Britain established a Space Agency for the first time in 2010, although national legislation has existed since 1986. This agency has a budget of \$346 million. One might compare it to NASA's \$19-20 billion budget.

The European Space Agency was established in 1975 (<u>www.esa.int</u>) and presently has thirteen members. One of the greatest examples of international cooperation for peaceful purposes is the International Space Station (ISS). Eleven members of ESA participate in this project – Belgium, Denmark, France, Germany, Italy, Netherlands, Norway, Spain, Sweden , Switzerland and the United Kingdom. The other states are the United States, Russia, Canada, and Japan. One notes the absence of China and India. China is a mature space power and plans to construct its own space station by 2022. India is also an up and coming space power with a well-established remote sensing program and, more recently, a manned program.

U.S. legislation on outer space starts with the NASA Act of 1958, and this legislation precedes and suggests the language in the OST. For instance, Section 102(a) reads, "The Congress declares that it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of mankind." However, in the unending tension between realism and idealism, the 2006 "U.S. National Space Policy" states, while committing the country to existing treaty law, that "The United States will oppose the development of new legal regimes or other restrictions that seek to prohibit or limit U.S. access to or use of space. Note that this is policy, not law, but it does emphasize the importance of space and the overlap between civilian and security uses of space. For further information on this topic see the Space Law Committee's 2007-2008 Report, which was written by our esteemed former chair, Professor Carl Q. Christol.

Since 1958, U.S. national space law has involved many areas of civil, military and commercial law and many agencies and administrations in the government. Two recent developments highlight the complexity of U.S. statute law vis-à-vis international law, which is the supreme law of the land according to Article VI of the Constitution, albeit with the caveat that some treaties are self-executing and some need new domestic legislation in order to be implemented. Last year's International Law Weekend (ILW) space law panel examined "Satellite Collisions, Space Debris and the Liability Convention." This was very topical because of the February 10, 2009 collision of Cosmos 2251 with Iridium 33. In the Liability Convention, there is absolute liability for damage caused by a state's space object on the surface of the earth or to aircraft in flight, whereas there is liability at fault for damages elsewhere than to aircraft and on the surface of the earth. Committee co-chair, Henry Hertzfeld has been very involved in issues surrounding liability in outer space. He presented a paper in Vienna in March 2010 at the IISL/ECSL symposium in which he suggests that we study the possibility of "adopting a new amendment to Art. IV of the Liability Convention to change the provisions of fault liability to absolute liability for damage to other's property in space." This would begin to encourage States to address the presently mostly unregulated in-orbit activities and help to stem the growing problem of space debris.

The October, 2010 space law committee panel for ILW is entitled "Evaluating the 1979 Moon Agreement." This treaty has been controversial since it was opened for signature. Although it passed COPUOS by consensus in 1979 and entered into force in 1984, to date it has been ratified by only 13 states, none of them major space powers. The main ideological reason for this is that there is opposition to the concept of the Common Heritage of Mankind, which connotes to some that the regime for exploiting the moon's resources would be a world socialist enterprise. This topic seems timely in light of the U.S. Constellation program, a project for humans to return to the moon and then go on to Mars. Yet, now that this program is being cancelled or restructured by President Obama and the Congress, the prospects for setting up a human colony seem more remote. Nonetheless, there will be robotic explorations for water, rocket propellants and other resources of the moon under the Obama plan and, also, there will be trips to asteroids which, under international law, are covered in the OST and the Moon Agreement under the term "other celestial bodies." Committee member Rafael Moro Aguilar has been a long-time student of the CHM concept so his participation in our panel will be most welcome.

In the future, the space law committee will be returning to this topic. We are concerned with how Article II of the OST, which denies claims of sovereignty in outer space, relates to the future of private property rights on the moon and other celestial bodies. This also concerns Art. VI of the OST which requires that states authorize and continually supervise the activities of non-governmental entities.(3) We will use as our starting point the March 22, 2009 Statement of the Board of Directors of the International Institute of Space Law (www.iislweb.org/docs/Statement%20BoD.pdf).

Other topics that the committee will be looking at in the future are 1) export controls and ITAR (International Traffic in Arms Regulations), 2) space tourism and 3) NEOs (Near Earth Objects). These issues are very much in the news. In the first instance, the Secretary of Defense has issued a call for simplifying ITAR as they are becoming inefficient not only from an industry perspective but also from the point of view of national defense. Space tourism captures the imagination and is in the initial stages of private commercial development at least for sub-orbital flights. Asteroids as NEOs that

may hit the earth and cause extensive devastation have been on the agenda of the Scientific and Technical Subcommittee of COPUOS and now attention is being drawn to developing an international legal response in order to cope with potential calamities.

The continuing mission for the committee concerns the current status and development of space law. One perspective is that of Professor Dr. Stephan Hobe who has argued that international space law has gone through three phases.(4) The first from 1957 to 1979 saw the development of hard law through the UN negotiated treaties. The second phase lasted from 1980 to 1995 and saw the adoption of the various UNGA Resolutions, which, while quite significant, lack legal binding force. From 1995 to the present the tendency has been to have UNGA resolutions which interpret ambiguous concepts in the treaties, e.g., launching state and registering space objects. Hobe considers this path to be a deviation from hard international law and a challenge to the rule of law and thus to the maintenance of peaceful international relations. Another commentator, co-chair Jonathan Galloway, has taken a different tact.(5) Thus, he writes, "The Law of Outer Space has been written in bold strokes and then interpreted and decided upon in numerous forums and locals. Initially, it developed in a time of revolutionary technological changes; then as these innovations became more evolutionary, the laws became more discrete and focused. The reason for new treaty law was at first critical – the fear of war and the crucial need for international cooperation and détente during the Cold War... Now we live in quieter times...and consequently, much law evolves incrementally through less formal arrangements." Perhaps law does not need to be hard law if states can cooperate in their own best interests on various soft law measures.

To assist ABILA members in further analyzing developments and perspectives, the space law committee finds that general viewpoints on space law and policy and more discrete topics can be followed on a daily basis by accessing these web sites:

The UN Office of Outer Space Affairs www.unoosa.org
The International Institute of Space Law www.iislweb.org
The Cologne Commentary on Space Law www.cocosl.com
The European Space Policy Institute www.espi.org
National Center for Remote Sensing, Air and Space Law http://rescommunis.wordpress.com
space policy on line www.spacepolicyonline.com
International Law Association, Space Law Committee www.ila-hq.org
London Institute of Space Policy and Law www.space-institute.org
McGill Institute of Air and Space Law www.mcgill.ca/iasl/
European Space Policy Institute www.espi.or.at/
George Washington University's Space Policy Institute www.gwu.edu/~spi/

12. Secure World Foundation www.secureworldfoundation.org

References:

 For a full examination of the Act, see Dr. Bernhard Schmidt-Tedd and Max Kroymann,"Current Status and Recent Developments in German Remote Sensing Law," 34 Journal of Space Law 1 (2008), 97-140. 2. For a thorough review of Japanese space legislation, see Setsuko Aoki, "Current Status and Recent Developments in Japan's National Space Law and its Relevance to Pacific Rim Space Law and Activities," 35 Journal of Space Law 2 (Winter, 2009), 363-438.

3. Article VI of the Outer Space Treaty was the subject of the 3rd Eilene Marie Galloway Symposium on Critical Issues in Space Law held at the Cosmos Club in Washington, D.C. on December 11, 2008. This annual symposium is sponsored by the International Institute of Space Law and the National Center for Remote Sensing ,Air and Space Law at the University of Mississippi. Professor Joanne Gabrynowicz is the Director of this Center, the editor of the Journal of Space Law and a member of the Space Law Committee.

4. Stephan Hobe, Bernhard Schmidt-Tedd, Kai-Uwe Schrogl, eds., Gerardine Meishan Goh, assistant ed., Cologne Commentary on Space Law, vol. 1 Outer Space Treaty. Carl Heymanns Verlag. 2009. 16-17.

5. "Revolution and Evolution in the Law of Outer Space," Nebraska Law Review, vol. 87, no. 2. 2008, 516-520, 516.

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