

Summary of Remarks of Stephen E. Smith,  
Co-Chair, Sherman & Howard Space Law Practice Group  
The 6<sup>th</sup> Eilene M. Galloway Space Symposium on Critical Issues in Space Law,  
Cosmos Club, Washington D.C.,  
December 1, 2011

**Introduction**

The theme of the 2011 Galloway Space Law Conference was “A Comparative Look at National Space Laws and Their International Implications.” Speakers at the conference reviewed recent space law developments in a number of countries, including both traditional “space faring” nations, as well as countries that had just recently enacted legislation relating to treaties to which they are parties such as the Outer Space Treaty of 1967, the Liability Convention of 1972, and the Registration Convention of 1975. Speakers at the conference described such developments in the following countries, among others: Austria, Belgium, China, France, Germany, Japan, Korea, The Netherlands, The United Kingdom and The United States.

The last panel was entitled “Compare and Contrast; International Implications.” In introducing the panelists, including myself, Professor Joanne Irene Gabrynowicz, Director, National Center for Remote Sensing, Air and Space Law, at the University of Mississippi, and the chair of the conference, noted that she had requested the panelists<sup>1</sup> to give the point of view of a “practitioner” of space law. Professor Gabrynowicz noted that prior to my joining Sherman & Howard in 2011, I had been Vice-President and General Counsel of Lockheed Martin Space Systems Company for 15 years. Professor Gabrynowicz asked the other panelists and myself to

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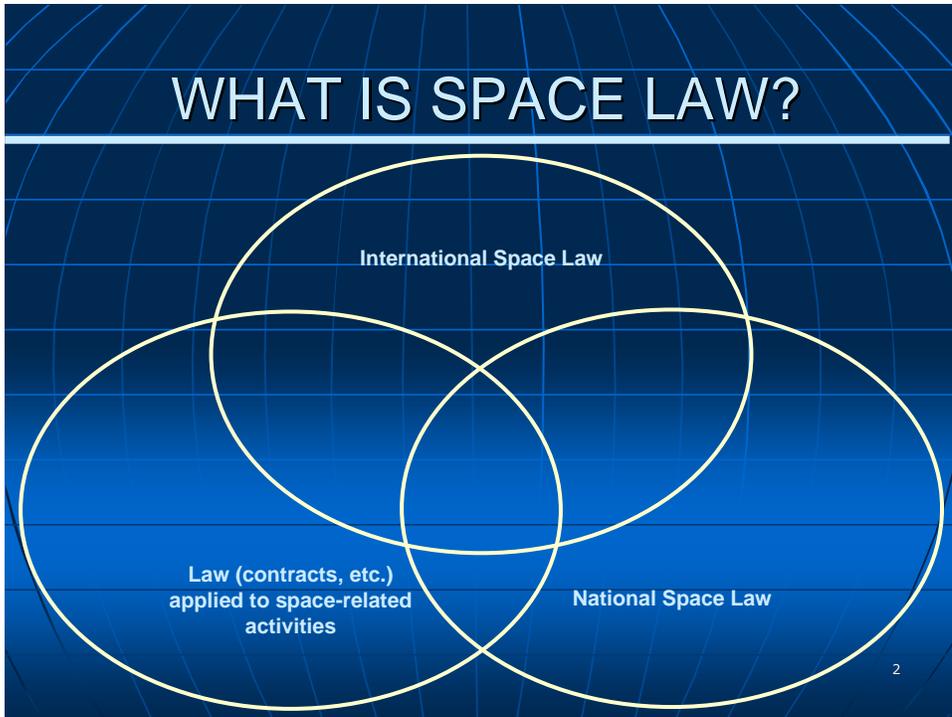
<sup>1</sup> The panelists for this session were Jonathan Galloway, Professor, Lake Forest College, Dennis Burnett, Vice President, Vice President, Trade and Export Controls EADS NA, and the author. This article summarizes the comments made by the author at the Conference who may be contacted at [steve.smith@shermanhoward.com](mailto:steve.smith@shermanhoward.com).

give practitioner's viewpoints on the relevance of national and international space laws to the every day work of lawyers involved with the space activities.

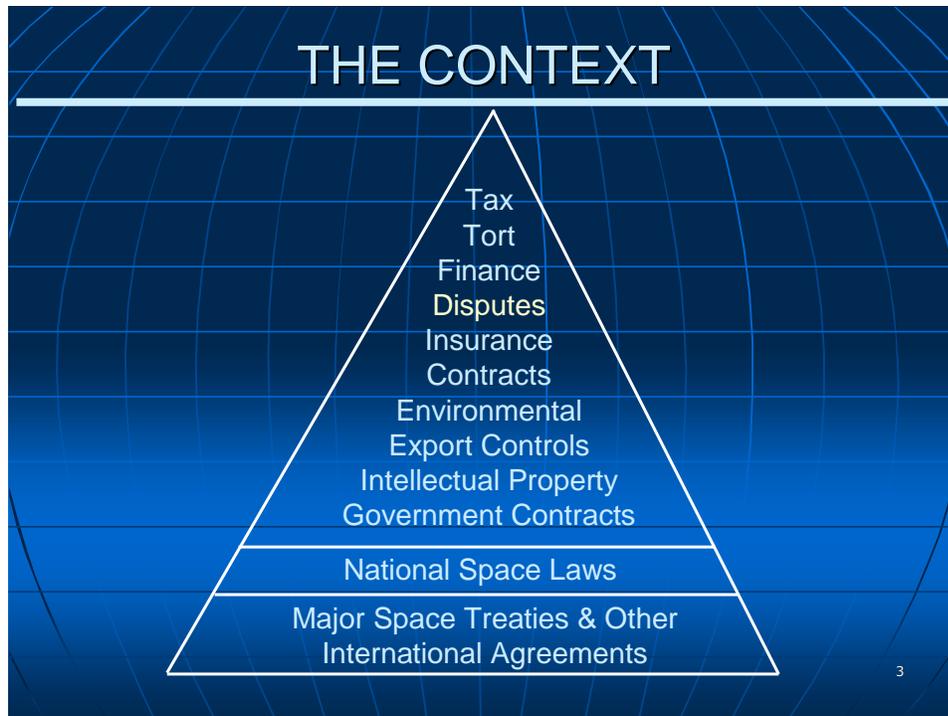
### **Discussion**

For a number of years, Lockheed Martin Space Systems Company ("Lockheed Martin) has been one of the largest and one of the most diversified "space companies" in the world. In-house lawyers at Lockheed Martin frequently dealt with issues involving launch services and U.S. Government and commercial satellites. In December of 2006, Lockheed Martin spun off its launch vehicle manufacturing business to a joint venture with the Boeing Company, called the United Launch Alliance. Although well over 90% of Lockheed Martin's business was and is with the U.S. Government, the Legal Department spent a disproportional amount of time dealing with issues that arose from Lockheed Martin's commercial launch services and satellite businesses.

Dealing with issues involving "space law" was a significant part of my practice at Lockheed Martin, but as a practitioner and lead lawyer of a space company, my view of space law was different from that which had been discussed at the Conference. I asked the audience to envision, as depicted below, three connected and intersecting circles depicting international space law in the middle, national space laws on the right, and a third circle on the left consisting of the variety of laws which are regularly applied in drafting contracts for space activities, including launch services and the purchase of satellites.



Next, I asked the audience to envision a triangle with major space treaties and other international agreements at the bottom, national space laws just above that, and then a variety of different types of laws which were relevant to contracts. These might include tax, tort, finance, disputes, insurance, contracts, environmental, export controls, intellectual property, and the law impacting government contracts.



I noted that in my day-to-day practice, issues of international space law, and space law of countries other than the U.S., came up infrequently. With respect to several U.S. laws, counsel in U.S. space companies need a detailed understanding of those laws. Such laws include the Arms Export Control Act of 1968 (AECA)<sup>2</sup> and the Commercial Space Launch Act of 1984 with 1988 and 2004 amendments (CSLA).<sup>3</sup> Under the AECA, the U.S. State Department and Defense Departments control exports of U.S. satellites and satellite technologies. That is a subject that I dealt with quite frequently, both in dealing with international customers, and in my role as heading up the export/import functions at Lockheed Martin. With respect to CSLA, this law was originally enacted, in large measure, to address concerns of a fledgling U.S.-based commercial launch business in the 1980s. At the time, my company, Martin Marietta, was developing a capability of launching commercial satellites on its Titan launch vehicle, and General Dynamics

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<sup>2</sup> 22 U.S.C. § 2778

<sup>3</sup> 51 U.S.C. §§ 50901 *et seq.*

was developing a business launching commercial satellites on its Atlas launch vehicle. Both companies made clear to U.S. Government officials that the level of third-party liability insurance which both companies felt was necessary to conduct such businesses simply was not available on the commercial marketplace. As a result, to foster such businesses, Congress enacted the CSLA under which the U.S. Federal Aviation Administration licenses and regulates commercial launches from U.S. territory and determines the maximum probable loss (MPL) in connection with such activities. Above that MPL, the U.S. Government indemnifies the commercial operators for third-party liability up to about \$1.5 billion. The CSLA also provides that commercial operators, subject to certain conditions, may utilize U.S. Government launch facilities. I noted that it was interesting that while this law was being developed, I was working in-house on behalf of a provider of commercial launch services, while my partner and co-chair of the Sherman & Howard Space Launch Practice Group, Skip Smith, was working as counsel to the Air Force dealing with issues relating to private access to government launch facilities.

I believe that in the future a number of international and national space laws are likely to become more relevant to practitioners including space company general counsels and their outside counsels than has been the case to date. In particular, the following subjects which had been discussed at the Conference might very well require practitioners to become much more conversant with international and national space laws. Those subjects include, but are probably not limited to the following:

- hosted payloads
- space debris

- satellite servicing missions, and
- issues at the International Telecommunications Union (ITU)

With respect to hosted payloads the U.S. Government is increasingly contracting with commercial operators, both domestic and international, to place and operate small, “bolt-on” payloads on commercial communication satellites. The missions of such hosted payloads include both communications and earth observation. A hosted payload was recently launched on a satellite owned by a non-U.S. company (SES), on a non-US launch vehicle, from a non-US launch base (Ariane Space and French Guyana, respectively). In light of this precedent, it is likely that within the foreseeable future, hosted payloads will be used on satellites launched by ILS Proton launch vehicles from Kazakhstan.

With respect to space debris, which had been the subject of considerable discussion in earlier sessions, significant liability issues under international and national space laws might very well arise in situations where a piece of space debris causes damage to a government or commercial satellite. The customers of launch services and satellite manufacturing companies, including satellite operators, as well as the space insurers who insure those missions, are becoming increasingly concerned about space debris. Given that the costs of launching a commercial communications satellite into orbit can be upwards of \$250 million, space insurance is absolutely critical to the continued viability of space-based businesses. I predicted that at some point a piece of space debris will collide with a commercial communication satellite (insured or not), doing significant if not catastrophic damage to that satellite. When that happens, it is likely that space insurers will either seek to exclude such damage from future policies, or seek a rise in premiums to cover such damage. While space debris is currently a

mostly hypothetical concern, when such damage occurs, it will be a major issue for purchasers of launch services and satellites, and therefore, for the lawyers who practice in that area.

Next, I discussed the issues that were occurring at the International Telecommunications Union (ITU), particularly relating to the claim by Iran that it had been operating its Zohreh-2 communications system on U.S. (Intelsat) and European (Eutelsat) satellites.<sup>4</sup> The issue is important because if the Iranian claims are untrue, as both the U.S. and European authorities have stated, Iran could lose its right to operate that particular system and the orbital position and frequencies could be reallocated to another country/operator. Initially, an ITU Board sided with Iran, noting that the ITU had never before disregarded the word of a nation state member. However, following the statements of the U.S. and European operators that Iranian traffic had not been carried on their satellites, the ITU reopened the matter, which at this writing is not settled. It will be taken up at the World Radio Communications Conference meetings starting in January 2012. This issue is particularly important for the ITU since that organization has always been based upon voluntary cooperation of its members. It is a very significant concern throughout the international space community. SES, the second largest commercial satellite operator in the world, has been quoted in *Space News* as stating that if the ITU is not able to resolve this matter, “the regulatory foundation of the entire satellite telecommunications industry will be shaken.”<sup>5</sup>

Finally, space servicing missions had been discussed throughout the day at the Conference. I told the group that while there are a number of paper systems under consideration,

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<sup>4</sup> See e.g., Peter B. de Selding, *Iran's Claims About Satellite Service Try International Regulatory Regime*, Space News International, April 8, 2011, at 1.

<sup>5</sup> Peter B. de Selding, *ITU Board Fails to Resolve Dispute Over Iranian Service*, Space News International, Nov. 4, 2011, at 4.

no one had yet built a space servicing vehicle, and given current world economic circumstances, it is unclear whether that would happen in the near term. Space servicing will become a reality at some point in the future and when it does, a number of the international and national space laws will certainly be applicable to such missions.

In closing, I stated that throughout my tenure at Lockheed Martin, with few exceptions, only a very high level understanding of international space laws, and relevant national space laws, was necessary for me to do my job on a day-to-day basis. When issues of national or international space laws did come up, I was able to retain outside counsel to provide the discreet answers that I needed. However, for the reasons discussed above, practitioners such as myself, in future years, will need to have a much greater awareness of national and international space laws. For that reason, conferences such as the Galloway Conference, and organizations such as the International Institute of Space Law, will likely play an increasingly important role in the work of practitioners dealing with space-related matters.