Developing 'New Space': The Economic Policy of Orbital Space

Market

Over the past 20 years, commercial developments characterizing orbital space have been coined an innovative title: 'New Space'. New space is a common term encompassing the role of recent private telecommunications, remote sensing, and GPS systems. In a sense, it is an orbital space with a declining public role, a profitable private market – especially within the U.S. - and no clear state control. As large corporations overtake the limited space capital available (satellites' electromagnetic spectrum) public entities are falling short. Once dominated by governments, orbital space now provides "for the widest possible participation by private enterprise" (47 USC 701 Sec. 102. 1962. Print.) Consequently, the question arises: How do states react to such a rich, profitable market even as it degrades their already limited control?

Present Day

Since the end of the Cold War, the spread of capitalism has become the cornerstone of international relations. In all their actions, states, such as China, are driven by a need for economic efficiency. Due to this phenomenon, I proposed the U.S. actions would be no different. They would establish "as expeditiously as practicable a commercial communications satellite system, as part of an improved global communications network" (47 USC 701 Sec. 102. 1962. Print). The U.S. would self inflict its public role while loosening regulations on private satellites, making implementing and operating a satellite cheap and efficient. In this sense, enhancing private entities' abilities to operate profitably in space.

Method

Utilizing the Thomas Library of Congress, legislation from 1990 to 2010 was collected if it responded to the keywords: satellite, commercial space, or orbital space. In this way, the apex of U.S. governmental policy could be tracked in its most true form, through a bill's introduction, alterations, and its subsequent passage, or failure. After careful review, these bills were divided into three major categories:

- 1. Regulation (government administration over satellite industries)
- 2. Reliance (bills that create a need for private satellite industries)
- 3. Foreign Policy (U.S. attitude towards foreign space industries)

Within these categories, each bill was further organized into its corresponding Congress chronologically. In this manner, changes in a bill's structure and the types of legislation could be tracked over time. More abstractly, the changes in the Congressional attitude toward a commercial space can be assessed over the past 20 years. As this is conducted, the major legislation that took place over

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References:

- 47 USC 701 Sec. 102. 1962. Print. (Communications Satellite Act of 1962)
- International Conference on the Establishment of an International Maritime Satellite System, signed at London, England, 1976. Final Act of the Conference including the Convention and Operating Agreement on the International Maritime Satellite Organization, (1976)
- International Telecommunications Satellite Organization Agreement Between the United States of America and Other Governments, signed at Washington, D.C., 20 Aug 1971. *Treaties and Other International Acts Series* 7532, (1971).
- The United Nations Agreement on The Outer Space Treaty of 1967, signed at London, Moscow, and Washington, 27 Jan 1967. *The United Nations Treaties on Outer Space*, p.37 (1984).

multiple years, Congresses, and bills that drastically changed the commercial space market, are examined more closely. These bills are categorized separately from the above categories in order to compile them in their entirety. Each bill receives its own category and own chronological order. The multiple drafts, congressional committee hearings, reports, presidential directives, and departmental organization orders which entail them, are then compiled in conjunction with their corresponding bill. These supplementary pieces can even expand beyond the specified time span, for example, the Communications Satellite Act of 1962. In this manner, each piece of major legislation can be assessed precisely over time.

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- <u>Landsat Remote Sensing Policy Act of 1992</u>: Facilitates value-added services for remote sensing. Allows the licensing of private remote sensing systems. (10/28/1992)
- <u>Commercial Space Act:</u> Government agencies must use private satellite data (especially remote sensing) as much as possible. NASA contracts operations to a single-contractor. (10/28/1998)
- Open-Market Reorganization for the Betterment of International Telecommunications Act: Mandates the privatization of major intergovernmental telecommunications companies INTELSAT and INMARSAT by 2001. Both must privatize under President's specifications or they are barred from U.S. market. (3/17/2000)
- <u>Commercial Space Launch Amendments Act of 2004</u>: *Authorizes licensing private human space flights.* (12/23/2004)

Analysis

As the satellite industry consistently evolves, the United States policy relentlessly keeps the fullest commercialization of space in mind. From the Commercial Space Act, the United States minimized the direct role of the government by only requiring the use of private space data. However, the government became the biggest recipient of said data. In effect, Congress limits its role, while fueling a relatively young, yet profitable market. The government directly uses its political power to create space markets "on a commercial basis", especially "a single global commercial telecommunications satellite system" ("International Telecommunications").

Even though the policy of the United States remains largely commercial, a primary, and more rooted interest, lies in control. Through satellite export controls, and resulting from unilateral decisions like the O.R.B.I.T. Act, the United States attempts to control space. Intergovernmental organizations are forced to abide by U.S. standards, forcing states into the 'American' way. For example, the U.S. is the primary shareholder in INMARSAT ("International Conference"), which gives them the greatest voting participation in the organization. Consequently, states rely on an organization largely with U.S. influence. Furthermore, by creating an efficient commercial market quickly, states rely on U.S. satellite systems quicker. In this manner, the United States can dictate the outlook of the international commercial market it creates, bypassing the Outer Space Treaty of 1962: "Outer space is not subject to national appropriation by claim of sovereignty" ("The United Nations..."). *In essence, space becomes a U.S. territory*

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