Book Review

Future Security in Space: Charting a Cooperative Course

Future Security in Space: Charting a Cooperative Course. By Theresa Hitchens. Washington, D.C.: Center for Defense Information, 2004. Notes. Glossary. Index. Pp. 107. $25.00 Paperback.

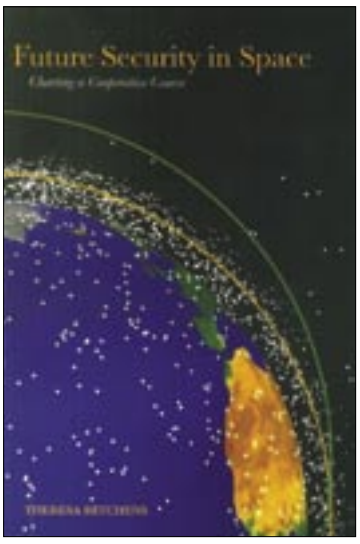
Whoever said, "It's not the size of the hammer, it's the nail you're throwing it at" was right. This diminutive paperback hits you over the head with its thesis from the get-go and continues to hammer away throughout its brief 107 pages. Using a very well-written and well-researched argument, including references to many notable civilian and military space power theorists, authors, and historians, Hitchens prescribes a liberal – with a small "l" – solution to the problems of space, that is, through the application and enforcement of international control regimes. Particularly readable is the 13 page Executive Summary that leads off the book. The Center for Defense Information is dedicated to strengthening security through: international cooperation; reduced reliance on unilateral military power to resolve conflict; reduced reliance on nuclear weapons; a transformed and reformed military establishment.

This monograph covers three major issues and offers possible solutions. The issues are space environment, space tracking and surveillance, and space traffic management. The goal of the book is to "address these interlinked issues and develop the outlines of what could be thought of as a framework for international cooperation in space…in order to ensure future space security and dampen prospects for conflict in space" (p. 22). Hitchen's book prescriptive approach is certainly one way to do it.

The first chapter deals with the space environment by looking at debris, spectrum interference, and crowding problems in the geo belt and efforts to mitigate them. According to the author, the two key environmental issues are the threat of "space pollution" from orbital debris and the growing saturation of the RF spectrum. This chapter begins, as do they all, with very interesting background material on the history of the problem. While claiming this is an important issue, Hitchens also points out "Scientists widely agree that the current hazards to space operations from debris are low" (p. 29). In a sense, then, this discussion is a "sky is falling" argument, which she admits: "preventive measures are best taken well in advance of a 'crisis,' but without the [threat] of an immediate 'crisis,' most stakeholders are loathe to take actions…" (p. 25). Core to Hitchens argument, though, is her basically negative belief that "It is unlikely that voluntary application of mitigation measures will solve the space debris problem" (p. 36), although she never makes it clear why. Therefore, she recommends lots of "could's" and "should's" for solving the problem, centered on the United Nations and other international organizations. This regulatory theme runs throughout.

In chapter two, Hitchens offers what she feels is a solution to the environmental problem, and by extension with the international space situation more generally. In the author's view, mitigating the space debris problem will come through "increased transparency in space." In her opinion, "the ability to 'see' what is going on in space is a precursor to international cooperation and future security in space" (p. 53). She is particularly concerned about her belief that "the trend-line in the United States toward more secrecy" (p. 62) may only make her solution more difficult to achieve but she admits that the problem "is compounded by China's routine secrecy [in] its space program" (p. 70). Hitchens offers an interesting description of the space surveillance capabilities of other nations, including the Europeans, China, Japan, and Canada. This discussion provides both background (e.g., the Chinese spend only $3.63 million on their space tracking budget, including sites in Pakistan and Namibia [p. 59]) and a key to her solution to this problem: wider sharing of the space tracking, surveillance, and situation awareness data, centered on international institutions, a solution that is most likely unachievable. Space power is likely where air power was around 1908 and Hitchens is trying to bring order to chaos. But in one respect, the chaos currently serves a purpose.

The third chapter, "Rules of the Road," is the most prescriptive. This chapter is highly critical of on-going efforts to develop a space traffic regime to prevent collisions in space and, more generally, conflict in space. Hitchens is convinced that it will remain "impossible for space operations to remain safe and relatively conflict-free" without the adoption of her proposals (p. 81). Clearly coming out against weapons in space, while acknowledging that current treaties do not prevent weapons in space other than weapons of mass destruction, Hitchens believes that leaders would imbue on-orbit weapon systems, by virtue of their location and constant presence, with a "use 'em or lose 'em" nature, creating "dangerous new instabilities in international relations" (p. 83). However, US ICBMs have stood alert for decades in essentially the same posture, actually adding stability to the international political environment, not subtracting from it. And given that space weapons do not have to actually be in space (e.g., ground-based lasers or Global Positioning System jammers), Hitchens' argument is somewhat incomplete.



What is the value of this book for the space professional? First, the book provides some interesting background, in one place, on topics like space environmental issues and space control issues. Second, it is useful and in fact important for members of any profession to be aware of arguments and proposals from all sides, whether or not these positions are similar to their own. The Center for Defense Information, for whom Hitchens writes, is dedicated to strengthening security through international cooperation and reduced reliance on military power, among other goals. This book certainly offers some proposals that are outside the typical military approach to these problems. Whether or not you agree with Hitchens' proposals, space professionals should certainly be aware of them.

Reviewed by Maj David C. Arnold, PhD, Director of Strategic Planning, HQUSAF