

Foreword

Early in my tour as the Commander in Chief of the United States Space Command, I was directed by the Secretary of Defense to draft military space policy for space warfare. During our attempts to craft this policy, we often discussed the need for a national philosophy or strategic theory about space to guide our efforts. There was an obvious vacuum of written theory concerning space that had long since been filled for land, sea and airpower. Even though the United States had been involved in space for 50 years, space theory and, therefore, policy and doctrine remain underdeveloped and somewhat disjointed. I believe the lack of theory and policy is having a negative effect on the maturing of space power and the perception of its importance by people in the world's spacefaring nations.

As an aviator, I was aware of the role played by airpower advocates during the inter war period of the 1920s and 1930s. Much of the thinking about the role and functions of an air force came from the Air Combat Training School at Maxwell Field, in Alabama. Fueling their work were the books by Giulio Douhet in Italy, the published speeches and interviews with Sir William Trenchard in Great Britain, and the debate fostered by General Billy Mitchell in the United States. The intellectual debate revolving around the use of airpower and its proper role in warfare provided a basis for discussions and decisions that shaped air forces for their critical role in World War II.

There has been no similar debate about the role and function of space power. The debate seems to be entirely between those who believe space is critical to national power today and those who don't; those who think space should be used only for peaceful purposes and those who say conflict will move to space as interests and investment move there; those who believe space is only useful as it improves life here on earth and those who believe the prospects are much greater. These are but a few of the important but narrow point-counter points that form the limited debate today. There is no framework, no theoretical basis within which the issues can be intelligently addressed.

This book was commissioned as the opening statement in what I hope will be a meaningful debate about space power theory. What is the importance of space power to nations, governments, scientific exploration, economic development, warfare, growth in knowledge, and most importantly what does it mean to the advancement of life here on earth. I was not alone in believing there was a need for a discussion. Many others in the space community, both military and civilian, believe that we need to develop space power theory to help us better understand the critical role that space will play in the future of mankind.

We are presently the world's greatest spacefaring nation. We may understand space better than any other nation. Our only rival in depth of understanding at present with enough space experience to possess our level of knowledge are the Russians. Our use of space already pervades our daily lives to an extent not understood by most Americans. Certainly space systems provide the infrastructure for our military operations. Space systems also are rapidly replacing broadcast towers, aerial surveying, navigation systems and a myriad of other features of daily life. Because we are rapidly doing away with terrestrial systems and replacing them with on orbit capability, the US military is dangerously dependent on space support for expeditionary operations. This dependence is also a strength—it gives us a greater degree of mobility with unmatched information support. Many believe that this information advantage is so great as to herald a change in warfare. Alvin and Heidi Toffler have argued in favor of such a view; others have spoken up to the contrary. Information has always been an important advantage in military operations. However, it is my belief that the importance of space goes well beyond its use as a tool for expansion of information systems. Space operations in the future will change not only warfare, but life in general will be changed in ways that we can not even imagine.

I think it is normal that, while space power already has reached well beyond ties just to national security, much of this book addresses space power theory as it relates to the well-being of nations. This shouldn't come as any surprise. Precisely the same path was taken in the past with the development of land, sea and air

power. While this book does a credible job of starting the debate about space power theory, it is only the beginning. This book will serve its intended purpose if it sparks a debate and serves as a catalyst for others, to advance their thoughts on space power theory. So take up the challenge. Be a part of the debate. Help shape the space power theory that, in my estimation, will have a profound affect on mankind into the next millennium and beyond.

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