

FOREWORD

GENERAL JAMES H. DICKINSON

On August 20, 2019, US Space Command was established as the 11th unified combatant command to place a singular focus on preparing US, Allied, and partner military forces to fight and win in the space domain. The command has reached an inflection point in the Third Space Age. On the occasion of the command's fourth birthday, and as we approach full operational capability, our focus must transition from establishing the command to building it for the future. To ground this effort, it is important to establish three foundational facts we have learned over the last four years of planning and conducting space operations: the space domain is unique but not special, space is now viewed as an operational domain, and space superiority will be a precondition for space operations in crisis and conflict.

Space is unique but not special. US Space Command was established with an assigned area of responsibility (AOR), from 100 kilometers above sea level to the edge of the universe, about 46 billion light years away and ever expanding. The AOR is unique in several ways. It is supraglobal, simultaneously bordering all terrestrial nations and other geographic combatant command AORs. It is astrographic, defined by its altitude above Earth's surface, rather than by the natural or human-made geographic features upon it. It is orders-of-magnitude larger than Earth, but also the least populated—currently ten humans on two space stations.

Despite these unique features, we can and must view space as not special, but like any other domain. In fact, many aspects of military operations into and within space are becoming normalized. For example, the concept of key terrain is readily applicable to space, though it will continue to evolve as technology and capabilities advance into areas like the Earth-Moon Lagrange points, exgeosynchronous space, and cislunar space.

Space is now viewed as an operational domain. The expansion of human endeavor into any new domain was historically followed by its exploitation as an operational domain. After the Soviet Union collapsed in 1991, the ensuing age of space activity was characterized by a lack of credible threats. China and Russia both now view space as a warfighting domain and have recently demonstrated their capability and intent to undertake aggressive military activities against US, Allied, and commercial space systems.

Both nations have irresponsibly tested destructive antisatellite missiles, creating unprecedented debris fields that endanger commercial satellites and that necessitated maneuvering the International Space Station. Since the beginning of its war with Ukraine, Russia has even signaled its willingness to attack “quasi-civilian infrastructure”

General James Dickinson, United States Army, is the Commander, United States Space Command.

if it is indirectly involved in military conflict. While we always seek peace and stability in space and will continue to promote norms of responsible behavior there, we must be prepared to fight for freedom of access to and action within our AOR to accomplish our mission.

Space superiority is a precondition for space operations in crisis and conflict.

While space will undoubtedly remain critical to enabling Joint terrestrial operations for the foreseeable future, we can no longer assume assured access to space and freedom to operate within it. Gaining and maintaining space superiority will be a precondition for space operations in crisis and conflict. With space's critical role in enabling Joint terrestrial operations, achieving space superiority through the conduct of coordinated supraglobal space operations to overcome threats to our space architectures and assure access to space will likely see US Space Command designated the "supported" combatant command in the early phases of a terrestrial crisis or conflict.

Conversely, denying space superiority to an adversary in the early phases could influence their decision-making and limit their ability to project combat power. The absolute necessity of gaining and maintaining space superiority, and denying it to our adversaries, requires a deliberate shift in mindset and comprehensive doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P) review. This must be our focus as we build the Command in the Third Space Age.

This special, all-space issue of *Æther: A Journal of Strategic Airpower & Spacepower* covers vast intellectual territory and demonstrates the significant talent of professional military education across our Joint force, Allies, and partners. The authors explore space from the aspects of deterrence, acquisition, history, doctrine, policy, and technology. They hail from the Army War College, Air Command and Staff College, Air Force School of Advanced Air and Space Studies, Army School of Advanced Military Studies, the National Labs, National Intelligence University, and from within Space Command.

This issue showcases creative thinking about space from the ranks of major to lieutenant general, and the topics cover the technological, diplomatic, operational, tactical, and social contexts on space warfighting. These pioneers in thought represent a team of space warfighters prepared to outthink and outmaneuver our pacing challenge, and if necessary, dominate through the application of superior military spacepower to ensure there is never a day without space. **Æ**

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