

SUBCOMMITTEE ON STRATEGIC FORCES

SENATE ARMED SERVICES COMMITTEE

STATEMENT OF

MAJOR GENERAL WILLIAM L. SHELTON

COMMANDER

JOINT FUNCTIONAL COMPONENT COMMAND FOR SPACE

BEFORE THE SUBCOMMITTEE ON STRATEGIC FORCES

SENATE ARMED SERVICES COMMITTEE

ON SPACE POSTURE

19 April 2007

SUBCOMMITTEE ON STRATEGIC FORCES

SENATE ARMED SERVICES COMMITTEE

Chairman Nelson, Senator Sessions, and members of the committee:

I am honored to be here today alongside distinguished members of the panel: Undersecretary of the Air Force, The Honorable Ron Segal; General Kevin Chilton, Commander of Air Force Space Command; Vice Admiral James McArthur, Jr., Commander of Naval Network Warfare Command; and Ms. Cristina Chaplain, Director of Acquisition and Sourcing Management, Government Accountability Office. This is my first opportunity to appear before you as United States Strategic Command's (USSTRATCOM) Commander of the Joint Functional Component Command for Space (CDR JFCC SPACE), and it's a pleasure to be able to address you on our space posture.

I know this subcommittee is fully aware of the growing importance of space capabilities to our National security, as well as to our overall economic prosperity. Today, I will provide you an update on our efforts to efficiently and effectively employ our vital space capabilities, highlighting our top priorities, and identifying the challenges we face in fulfilling both National and Combatant Commander objectives.

#### **EMPLOYMENT OF SPACE CAPABILITIES**

In July 2006, General Cartwright, the Commander of United States Strategic Command, in coordination with the Chief of Staff of the Air Force, directed the creation of JFCC SPACE, and assigned the Commander, Fourteenth Air Force, the dual role of CDR JFCC SPACE. While I serve in both roles, it's in the CDR JFCC SPACE position that I am designated as the single point of contact for military space operational matters. Additionally, JFCC SPACE is responsible for providing tailored, responsive, local and global space effects to supported Combatant Commanders. My USSTRATCOM-delegated authorities include Global Space Coordinating Authority, which empowers me to be the primary interface with supported commanders for operational-level planning and execution of space forces in support of Combatant Commander objectives. CDR JFCC SPACE is also assigned Operational Control (OPCON) and

Tactical Control (TACON) authorities for designated, worldwide space operations and missile warning forces. Finally, JFCC SPACE supports the Commander, North American Aerospace Defense Command (NORAD) by providing the missile warning and space surveillance capabilities necessary to fulfill the U.S. commitment to the NORAD Agreement. By establishing the CDR JFCC SPACE, USSTRATCOM provides a single commander, with a global perspective, to enhance functional integration of space capabilities for the joint warfighter and the Nation.

Just in the last year, two significant world events have galvanized our thinking by highlighting both the importance and the potential fragility of our Nation's space capabilities. The first event occurred during our initial month of operation--the July 2006 North Korean launch of a Taepo Dong-2 (TD-2) missile. The second event was the January 2007 Chinese test of a hit-to-kill anti-satellite (ASAT) capability. Interesting enough, this test occurred 6 years to the day after the publication of the 2001 Space Commission Report, which had warned of growing threats to our space capabilities. In both events, JFCC SPACE coordinated pre-launch indications and warning campaigns, then provided space-based tracking of the boosters during flight, which helped shape the National response. We worked closely with our USSTRATCOM global mission partners and various agencies to ensure space capabilities were available to support potential contingencies and courses of action. For the ASAT test, we tracked the resultant debris, and we continue to assess the additional risk posed by the debris to our satellites and the International Space Station. These events foreshadow a future that appears increasingly challenging. Our near-term priorities, which include increasing our Space Situational Awareness (SSA) capabilities and strengthening and formalizing departmental and interagency relationships, are certainly informed by our experience from these two events.

One of our most important lessons learned was that our current systems processing such events are not sufficiently dynamic. Outstanding people overcame these limitations by arranging manual data and voice workarounds, but clearly, this should not be how we conduct space command and control operations in the future.

Strengthening unity of command and unity of effort is critical in executing timely actions to preserve space effects for the Nation. Organizationally, we are taking steps to gain better access to limited resources. Among these include dual-hatting the Deputy Commander of JFCC SPACE (DCDR JFCC SPACE) with the National Reconnaissance Office's Deputy Director for Mission Support (NRO/DDMS). This designation will help strengthen the bonds between NRO space operations and DoD space operations. We are constantly searching for opportunities to synergize efforts and leverage existing resources in the employment of space capabilities. Unity of effort in tactics, techniques, and procedures, underpinned by a net-centric system designed to provide both enhanced SSA and operational-level command and control, will strengthen JFCC SPACE operations.

To ensure USSTRATCOM, through JFCC SPACE, can deliver persistent space effects in support of both National and Combatant Commander objectives, we rely on the Services, under the able coordination and direction of the DOD Executive Agent for Space, Dr. Segal, to acquire the space systems we need to maintain our tremendous advantage in space. I thank Dr. Segal for his leadership in our Nation's space capability development. Through his efforts, and those of our talented Sailors, Soldiers, Airmen, and Marines, we are able to enhance the quality of current space effects and ensure continuity of services in our position, navigation, and timing (PNT), missile warning, satellite communications, and environmental monitoring capabilities.

## CHALLENGES

Our Nation's growing dependence on space-based capabilities creates a corresponding potential vulnerability. Therefore, preserving our space-based capabilities against intentional and unintentional events will be a growing challenge as more entities gain access to the space domain.

We currently track over 16,000 artificial objects in space, to include everything from active satellites to launch-related debris. Although this is certainly a large number of objects, there are many more that are too small for our space surveillance sensors to track. As the number of objects increases, so does the potential for a catastrophic collision in space. And, the addition of over 1,600 pieces of trackable debris from the Chinese ASAT test further complicates the problem.

Along with the growing debris population, there are many other current and developing threats to our space capabilities. To fully understand the potential threat to National assets, DOD payloads, commercial space satellites, and manned space systems, we depend on both ground- and space-based space surveillance sensors.

Every commander strives for the best situational awareness possible before he/she engages in operational activity. For space operations, this imperative is especially true, given our investment in space, our dependence on space capability, and the difficulty of replacing assets following an unexpected loss. As the threats to our space assets grow, our ability to provide robust SSA must grow commensurately. We will become increasingly dependent on the availability of a persistent, predictive, dynamic SSA capability. The success of our space operations will hinge on a decision-maker's ability to quickly answer the "who, what, when, where, how, and why" questions, as he/she determines a course of action to support our National security objectives. We must have thorough, decision-quality, knowledge of all constituent parts of SSA: the space environment conditions, the space

debris situation, the status of blue forces, and the intelligence picture, which includes enhanced information on potential adversary space capabilities and intent.

An increasingly threatened, dynamic environment will drive us to highly automated, net-centric capabilities. Machine-to-machine interfaces will enhance decision-makers' ability to quickly and accurately assess emerging space capabilities and threats. And the net-centric data sharing that will occur will allow much easier integration of disparate data, enhancing the overall situational awareness of the warfighter. I thank General Chilton for his strong leadership and commitment to making SSA a top priority within Air Force Space Command. He is driving hard toward vastly improved SSA to provide that crucial underpinning for JFCC SPACE operations.

#### CONCLUSION

Space operations are changing rapidly. Dynamically taskable satellites, increasing threats to the space environment, and the dependence on space, are all key factors that drive our decisions on the future of operational command and control in JFCC SPACE. It's an exciting time to be in the space business, and I am privileged to command the men and women who employ these great space capabilities for our Nation. I thank you for your time and attention, and for your assistance in preserving the vital space capabilities for our National security.