

**STATEMENT OF**

**THE HONORABLE PETER B. TEETS,**

**UNDERSECRETARY OF THE AIR FORCE, SPACE**

**BEFORE THE**

**HOUSE ARMED SERVICES COMMITTEE**

**STRATEGIC FORCES SUBCOMMITTEE**

**UNITED STATES HOUSE OF REPRESENTATIVES**

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for the  
Under Secretary of the Air Force  
The Honorable Peter Teets**

**INTRODUCTION**

Mr. Chairman and members of the Committee, I am honored to appear before you today to address our current and planned efforts to develop our professional space cadre. I am also pleased to be joined today by General Lance Lord, Commander, Air Force Space Command (AFSPC); Vice Admiral James D. McArthur, Commander, Naval Network Warfare Command; Lieutenant General Larry J. Dodgen, Commanding General, Army Space and Missile Defense Command and Army Forces Strategic Command; and Brigadier General John R. Thomas, Director for Command, Control, Communications, and Computers, and Chief Information Officer for the Marine Corps.

In my testimony to the House Armed services Committee on February 25, 2004, I concentrated my remarks on the five National Security Space priorities I set for 2004. The priority of “developing and maintaining a team of space professionals” is and will remain a key element in accomplishing all the other priorities: achieving mission success in operations and acquisition; integrating space capabilities for national intelligence and warfighting; producing innovative solutions for the most challenging national security problems; and ensuring freedom of action in space. Today I will focus on our progress in developing the most crucial element of space power—our space professionals.

In my role of overseeing National Security Space activities as Under Secretary of the Air Force, Director of the National Reconnaissance Office (NRO), and the DoD Executive Agent for Space, I am committed to preserving our advantage as the world’s leading spacefaring nation. I

am pleased that this Committee shares that commitment, and that we all recognize the need to develop well-educated, motivated, and competent people who are skilled in the demands of the space medium.

## **THE DOD STRATEGY**

The DoD has implemented many of the recommendations concerning the space cadre from the congressionally-directed Commission to Assess National Security Space Management and Organization, and we are working hard to develop the space cadre the nation needs.

Along with the Congress, the Department of Defense recognized the need to develop a professional space cadre across the entire National Security Space community. To meet that need, we prepared and are now implementing a Space Human Capital Resources Strategy for the DoD. With this strategy, we set the over-arching direction for the comprehensive professional development of officers, enlisted personnel, and government civilians into a total National Security Space team. We crafted the strategy carefully to acknowledge service and agency-unique structures and processes, and to use them as a foundation to build the broader cadre. We are working diligently to ensure the department has people with the necessary education, skills and experience, at all levels, both to develop space power and, more importantly, to bring space power to bear to meet warfighting, intelligence, and other National Security needs.

The Space Human Capital Resources Strategy has four main goals. The first is to ensure the services develop the basic building blocks—the space professionals they need to fulfill their service unique requirements. Much like our approach to developing aviators, our strategy for developing space professionals recognizes that the services have a wide variety of needs; one size truly does not fit all.

Under the second goal of the strategy, we are working to synchronize and integrate the space professional development efforts of the National Security Space community, with the aim of increased efficiency and reduced redundancies. With the establishment of a DoD Executive Agent for Space it became clear that some level of overarching management of our space professionals is necessary to provide unity of effort and strategic focus, and to guide the community in common endeavors. To this end we are establishing a DoD-level education and training framework, and will ensure that the services provide their requirements concerning the space cadre and the data needed to manage our space professionals.

We are continuing our diligent pursuit of the third goal of the strategy: to improve the integration of space capabilities into joint warfighting and intelligence operations. We are not developing space professionals to work in isolation. Our space professionals must understand the needs of the many and varied end-users of space capabilities, and be able to formulate and articulate new space doctrine to fully control and exploit the medium of space in support of our nation's security objectives. The depth and breadth of our space professionals' education, training, and experience must include an understanding of joint warfare and how space capabilities are best integrated into our concepts, war plans, and operations. Additionally, we must continue to educate our non-space professionals on what space brings to the fight. In order to do this the strategy requires increasing space education in our service and joint professional military education.

Professional education is not enough, however; we want to build a team of space cadre members who clearly understand the tactical and operational needs of the other media, as well as the unique tactics, techniques, and procedures involved in space operations. Cadre members must also be knowledgeable about space systems acquisition, the requirements of vehicles that

operate in space, and space-related research and development. We recognize that we need to send more acquisitions experts to the field where they can actually use the systems they produce, and bring more space and missile operators to program offices to apply their operational experience to the acquisition process. Working together across the services and agencies, we can identify and apply best practices within the entire National Security Space community.

The last goal of the strategy is to consistently assign the best space professionals to critical jobs across the DoD. We are examining many models as we decide how best to manage people at the DoD-level. We may emulate the three-tiered certification process under which acquisition professionals operate, or we may adapt the methodology we use to select personnel for joint-critical billets. Taken as a whole, these managerial tools will allow us to shape our team of space professionals and deliver the right person to the right place at the right time. This requires effort and forethought; our goal will be to create a system that serves the community without becoming onerous or self-defeating.

We believe that an integrated, strategic approach will help us develop the cadre we need. We are working within the framework of our strategy to improve coordination among the services, and I think we have struck the right balance by recognizing the services' unique missions and making allowance for service-unique solutions. We are committed to defining, training, and certifying space professionals in a consistent manner across the services, to build a total DoD space cadre that will meet the needs of our national decision makers and our Joint and Coalition fighting forces.

At this point, I would like to discuss how the NRO fits into this concept. The NRO is a remarkable team that benefits not only from its military elements but also from the marvelous technical and operational expertise of its Central Intelligence Agency members. I believe the

nation is best served by retaining the NRO's multi-service, multi-agency identity and its unique personnel prerogatives so that the NRO can continue to focus primarily on national intelligence needs. Within that construct, we are committed to treating the NRO as part of the larger space community. To that end, AFSPC and the NRO are crafting a Memorandum of Agreement that enables them to share personnel information with each other; establishes common administrative processes for such things as assignments and command selection; and ensures healthy crossflow of personnel. We are also reviewing the number of controlled Air Force assignments at the NRO, and expect to extend that review to the smaller number of Navy, Army, and Marine billets as well. Our goal is to capitalize on the broad experiences and opportunities available across the entire National Security Space team, to expand the space talent pool and serve the needs of the NRO and all of its mission partners.

## **PROGRESS TO DATE**

We have made a great deal of progress toward the goals of the Space Human Capital Resources Strategy.

The Secretary of the Air Force approved the Air Force's Space Professional Strategy in July 2003. The strategy is being implemented and has resulted in many positive steps under the outstanding leadership of General Lance Lord, from whom you will hear in a few minutes.

The Navy has also created a sound Navy space policy document, which clearly defines their focal point for space cadre development. Vice Admiral Jim McArthur has assumed responsibility for the Navy space cadre, and will give you his insights as well.

The Army has initiated a space cadre force management analysis, which will define the Army Space Cadre and identify all space related roles, missions, organizational elements,

functions, and skills. This analysis will also include a review of Army doctrine, organizations, training, materiel, leadership and education, personnel, and facilities. Lieutenant General Larry Dodgen has been instrumental in the Army's space cadre development.

The Marine Corps has also established a focal point for space cadre management, and has in place a very mature process for developing space professionals. You will be pleased with what Brigadier General John Thomas has to say in this respect.

In collaboration with the DoD effort, the NRO is developing a workforce management strategy that will be aligned with the NRO Strategic Plan, the technical "Way Ahead," and the DoD space cadre development programs. The NRO is working hard to improve communication with its parent agencies regarding personnel requirements, and to create training and development programs tailored to the NRO's unique situation.

With respect to developing space cadre members, I continue to oversee development of the complementary space-related graduate degrees at the Naval Postgraduate School and the Air Force Institute of Technology (AFIT). I am very pleased with the work the Joint Space Oversight Board did in creating this program, and believe it marks substantial progress toward establishing the space cadre as well as an underlying culture for supremacy in space.

We are also pursuing initiatives to involve industry in our space cadre development. We expect great things from a new effort under AFIT's highly successful Education With Industry (EWI) program: the Lieutenant General Forrest S. McCartney Spacelift Education and Crossover Program, which is scheduled to begin with the 2004-05 EWI class. Also known as "Spacelift EWI," this program will select four officers a year (two space operators and two acquisition or engineering officers) and immerse them in today's space launch business. They will receive military developmental education through the AFIT-sponsored program and upon

completion receive a follow-on assignment targeted at spacelift operations. The program will provide experienced Air Force leaders for current launch systems such as the Evolved Expendable Launch Vehicle and next generation launch systems such as Operationally Responsive Spacelift.

These strong space education and training programs will provide the foundation for another key part of the strategy: professional certification for space cadre members. Professional certification will guide personnel from a foundation of technical competency, through demonstrated depth of knowledge, to extensive knowledge in space and warfighting operations. Space professional certifications will eventually form an integral part of the assignment process in that competitive command and staff billets will be identified with the certification levels required to fill them.

One of the goals of our training and certification efforts is to promote greater crossflow from acquisitions to operations and vice versa. Building the complete space cadre will require people who are willing—and able—to move from the system program office (SPO) to the operations squadron, to the laboratory, back to the SPO or to the NRO, to the headquarters, and so forth. Certification will serve as glue to hold the space cadre together as well as a long-term roadmap and mentoring guide to help us steer the right people into the right opportunities.

Lastly, I would like to share with you a few of the many near term activities we are working on. First, we are holding a space professional development conference that we will use to create our education and training framework to guide and manage our efforts. We are creating a detailed implementation plan for the Human Capital Resources Strategy which we will provide to the Armed services committees not later than November 15. This does not mean we are not already implementing it; instead, we want to ensure that specific goals, metrics, and schedule are

captured. Also, we have initiated a department wide data call to ascertain the demographics, trends and requirements of the space cadre.

## **CHALLENGES**

Our DoD space cadre is doing a great job today, but we need to keep pushing forward if we want to sustain the United States as a world leader in space. I would like to take a moment to discuss two of the challenges confronting our space cadre.

First is a shortfall in systems engineering expertise. This shortfall was identified by the Defense Science Board/Air Force Science Advisory Board joint task force (the Young Panel), and is evident to anyone who has observed the state of the U.S. air and space industries. The Young Panel tracked the decline of expertise through the 1990s and noted that it led to decreased ability to lead and manage space acquisitions. To strengthen the systems engineering knowledge of our program managers, we have focused efforts on professional development, including additional training and the identification of best practices, at both the Space and Missile Systems Center and the NRO to rebuild this critical core competency. I list this challenge here because it is one area where our space professional development efforts should provide some relief: by giving acquirers operational or laboratory experience, they can apply deeper insight into sound engineering practices and make appropriate risk management decisions. I believe this will help them meet the extraordinary acquisition challenges posed by military space programs.

Another challenge facing us is to ensure that our space cadre—in each service—is given the optimum opportunities for professional development, career progression, and promotion. We recognize that right now our personnel are divided into the three core disciplines of operations, system acquisition, and space support, by virtue of what functions they perform. But we are

determined to ensure that such administrative divisions do not become “stovepipes” that stifle development and kill careers.

## **CONCLUSION**

Operation IRAQI FREEDOM confirmed how important American dominance of space is to the successful conduct of military operations. A major pillar of this dominance has been the asymmetric advantages provided by our space systems that help our servicemen and women to fight and win. Developing, acquiring, deploying, and operating those space systems is the special purview of our space cadre.

Space programs are uniquely challenging to develop and sustain, because of the highly advanced technologies, severe operating environment, and inability to repair them on-orbit. This requires up-front investment and attention to detail that are greater than many other acquisitions and operations. As long as we need our space systems to provide extremely asymmetric advantages, even after years on-orbit, we will have to build systems on the leading edge of technology. We spend a lot of time working to minimize the risk and avoid surprises, but they are part of working on the thin edge of the future.

Even if we overcome the technical challenges that confront us, every technological capability in the world will prove useless unless we have the leadership, vision, motivation, and skills to employ those capabilities effectively. We cannot produce these qualities overnight. It will take time to nurture and develop this space cadre and allow it to mature. We do not know where the future will take this effort but we can be sure of one thing: in order to preserve our advantage as the leading space faring nation, individuals of exceptional dedication and ability will continue to be the backbone of our joint and interagency space operations.

I appreciate the continued support the Congress and this Committee provide to deliver these vital capabilities to our warfighters and National decision makers. I look forward to working with you as we define and refine the requirements for our space cadre: dedicated professionals with the depth and breadth of training, education, experience and vision to advance the use of space power and to transform military and intelligence operations.