

STATEMENT OF

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BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

STRATEGIC FORCES SUBCOMMITTEE

UNITED STATES HOUSE OF REPRESENTATIVES

ON

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Introduction. Chairman Everett, Congressman Reyes, and distinguished members of the Committee; it is my honor to present you with an overview of Navy's space cadre efforts and the manner in which this cadre supports our warfighting mission. I am Vice Admiral James McArthur, Commander of Naval Network Warfare Command, located in Norfolk, Virginia. Naval Network Warfare Command is the Navy Functional Component Commander to the Commander, U.S. Strategic Command, for space, information operations and network operations. I support and advise my Navy chain of command, Admiral Bill Fallon at Fleet Forces Command, on space operations, training, and requirements, in support of the Fleet.

My primary responsibility is to ensure that the Navy's daily operational requirements for networks, space, and information operations are met, and that the Navy networks, which support all warfighters and decision makers, are secure. Space is vital to that network, second only to the professional Sailors, Marines, Civilians and Contractors that make up our operational force. For this reason, I have assumed personal responsibility for leadership of the Navy Space Cadre.

To understand the role of our Navy Space Cadre, one must understand the importance of space to the Navy and our need to integrate space into every facet of maritime operations.

Navy and Space. Space assets provide access, perspective and persistence for joint communications, intelligence, surveillance and reconnaissance, precision navigation and timing, meteorology and oceanography, and missile warning. Space capabilities make possible the fundamental qualities – decisiveness, sustainability, responsiveness and agility – required in a winning Naval force. Without space, our ships would face great difficulty in operating beyond the horizon. Our Navy command and control capability is dependent on space – communications (voice, data) and imagery. Over ninety percent of our weather and

oceanographic information comes from space. Our electronic intelligence (ELINT) comes in large part from space. Much of our targeting comes from space. As you can see, Navy is critically and irrevocably tied to space. Space is an integral piece of Naval Power 21 that requires a highly integrated force, capable of working in a joint and coalition environment, and going it alone when necessary. Space must be fully integrated into all our operations to optimize the space assets today and in the future.

Integration is not a single-threaded process. It requires full participation in all facets of space – concepts and requirements development, research, development, acquisition, and operations. It means engaging and participating in those forums that influence policy; planning our next generation space systems; and exploiting our current systems. It means the teams that develop the next generation aircraft carrier must have space expertise so that intelligent use of space is built in from the start. It means that our Sailors must be space savvy, so that they can make the most of space capabilities, and help guide new means of exploiting space. In other words, successful application of space in the Navy translates to a healthy and robust Navy Space Cadre.

Much has been accomplished in building a space cadre across all the Services within the past few years. Working within Navy, coordinating with General Thomas and Lieutenant General Huly in the Marine Corps, General Lord, General Dodgen, and of course Mr. Teets, we have made great strides on all fronts. I am particularly proud of the direction we have established for the Navy Space Cadre, and our ability to leverage the larger Navy Human Capital

Strategy and the National Security Space Human Capital Resources Strategy orchestrated by Mr. Teets.

Navy Space Objectives. In accordance with its updated Department of Navy Space Policy, the Navy's objectives are to: *“(1) integrate the essential capabilities provided by space systems at every appropriate level throughout the Naval force; and (2) shape the outcome of joint deliberations on future space system capabilities to ensure the combat effectiveness of Naval forces.”* To accomplish this, the Navy needs a space cadre with the right mix of operational and space expertise, which is why we have chosen to take an inclusive approach to our space cadre definition. This inclusive approach is critical in our ability to develop and manage the space cadre.

First and foremost, our objective is to ensure that our space cadre is an integral part of Navy's overall manpower strategy. We need to ensure we have the right skills and we identify the training and experience required to hone those skills. We need to put our cadre in the right places, where they provide the maximum benefit for Navy and the entire National Security Space community.

Navy Space Cadre today is a distinct body of expertise that is horizontally and vertically integrated within existing active duty and reserve Unrestricted and Restricted Line communities, and Department of Navy civilian employees organized to operationalize space. Navy does not have a separate career path for its space cadre, and as such, cadre members must remain competitive within their primary communities. To encourage upward mobility for our cadre

members, all officer promotion boards since Fiscal Year 2004 have included language about the importance of space to the Navy. This language has helped to improve our promotion and retention of space cadre members. There are 252 officer billets coded for space systems operations or space systems engineering, subspecialty codes 6206 and 5500 respectively. Today we have 670 active duty officers identified as space cadre members, and we are working to further define the reserves, enlisted and civilian members of our space cadre.

Navy has informally managed its space expertise since the early 1980's, when the first space graduates from Naval Postgraduate School returned to the Fleet. The acquisition corps of the space cadre has been actively mentored since the early 1990's, under the careful guidance of Rear Admiral Rand Fisher at the National Reconnaissance Office. In the past five years, the Navy's strategic placement of its space acquisition cadre has gone up significantly throughout the National Reconnaissance Office. This has substantially increased the Navy's insight into all National Security Space programs, providing our voice into the development and acquisition of these programs. The Navy has Flag representation on the National Reconnaissance Office Board of Directors, Directorship of the Communications and Acquisition Engineering Directorate, and Director of the Transformational Communications Office, as well as O-6's in Program Manager positions throughout each of the Directorates. Outside the National Reconnaissance Office, the Navy has been very successful in placing its space cadre in key positions at the National Security Space Office. To implement such focused management of the space cadre Navy-wide, a new position was established to report to key staffs within Navy headquarters, N13, Personnel Policy and Plans, and N61, Command, Control Communications. In September 2002, Captain Cheryl Spohnholtz, took the helm of our space cadre as the first Navy Space Cadre Advisor. The Space

Cadre Advisor Office will be funded in Fiscal Year 2005 and will initially be staffed with two Navy Commanders. One will be assigned to N13 in Washington DC to coordinate with the National Security Space Community. The other will be assigned in Millington, TN to work directly with the detailers. This approach will help ensure we assign our space qualified officers to the right places to best influence the outcome of critical National Security Space plans and policies. Navy Space Cadre members are also assigned to several Joint Program Offices, including Military Satellite Communications (MILSATCOM), Global Positioning Service (GPS), Global Broadcast System (GBS), and Space-Based RADAR (SBR), and U.S. Strategic Command, as well as in all Navy organizations that deal with space. On the waterfront, an initiative is underway to “space code” additional fleet billets, better reflecting the expertise required to maximize operational use of space capabilities.

Cadre Training and Development. Navy space education is conducted at the U.S. Naval Academy, Naval Postgraduate School, and Naval War College. The Naval Academy has a very strong astronautics track, graduating approximately 30 students per year. Recent graduates have been heavily involved in building, launching and operating small satellites. The Naval Postgraduate School’s space systems program has mirrored the evolution of space in support of military operations, and has provided graduate education to those officers and government civilians who represent the core professionals that manage the design, development, acquisition, operation and exploitation of our national space program. For over 20 years, Naval Postgraduate School has provided the highest levels of space systems technical education to military officers from each service, Navy, Air Force, Army, Marines, as well as Department of Defense civilians, providing masters and doctorate level education to an all-service student

population in support of National Security Space objectives. Additionally, to improve space education availability to our deployed forces, Naval Postgraduate School offers a Space Systems Certificate program, consisting of four distance learning courses. For more senior officers, Naval War College includes some basic space information in its core curriculum and offers a space elective course. As a result of a memorandum of agreement between the Secretaries of the Navy and Air Force in 2002, the Naval Postgraduate School and the Air Force Institute of Technology have developed an educational alliance. Mr. Teets established a Joint Space Oversight Board to oversee the space curricula at the two institutions and has encouraged multi-service participation at each of these schools.

Beyond our space education efforts, Navy has long taken advantage of training courses developed and taught by the Air Force, such as Joint Space Fundamentals. Today, we are coordinating with the Air Force on the Space Operations School National Security Space Institute curriculum development and have sent Navy students to several of the prototype courses to provide maritime perspective. The Navy Space Cadre Advisor is working closely with the other Service cadre managers to ensure these courses meet National Security Space objectives. Requirements for Fleet space training are being gathered, and for those requirements not met by the Space Operations School, Navy will develop specific maritime courses.

Our overall education and training strategy is multi-dimensional. This is necessary, as no single curriculum or format can meet the needs of the full cadre. By introducing the astronautics curriculum at the Naval Academy, we have an initial opportunity to entice new cadre members, and put some “space smarts” into the Fleet. The graduate level education allows us to increase and refine the skills base and further our expertise. Distance learning supports maintenance and

currency of expertise, as well as the ability to reach an audience that may not otherwise have an opportunity to attend Naval Postgraduate School. By coordinating with the other Services, leveraging one another's training programs, we are getting the most return on investment.

Conclusion. Integrating space so that our warfighters can truly have the information advantage is the objective of our space cadre. The future of the Navy is tied to space, and that is why we must succeed in shaping and maintaining our space cadre. We provide a key component to the National Security Space community with our continuous influx of operational experience. We will be robust, we will be well trained, and we will offer the necessary incentives to attract and retain the best and the brightest the Navy has to offer.