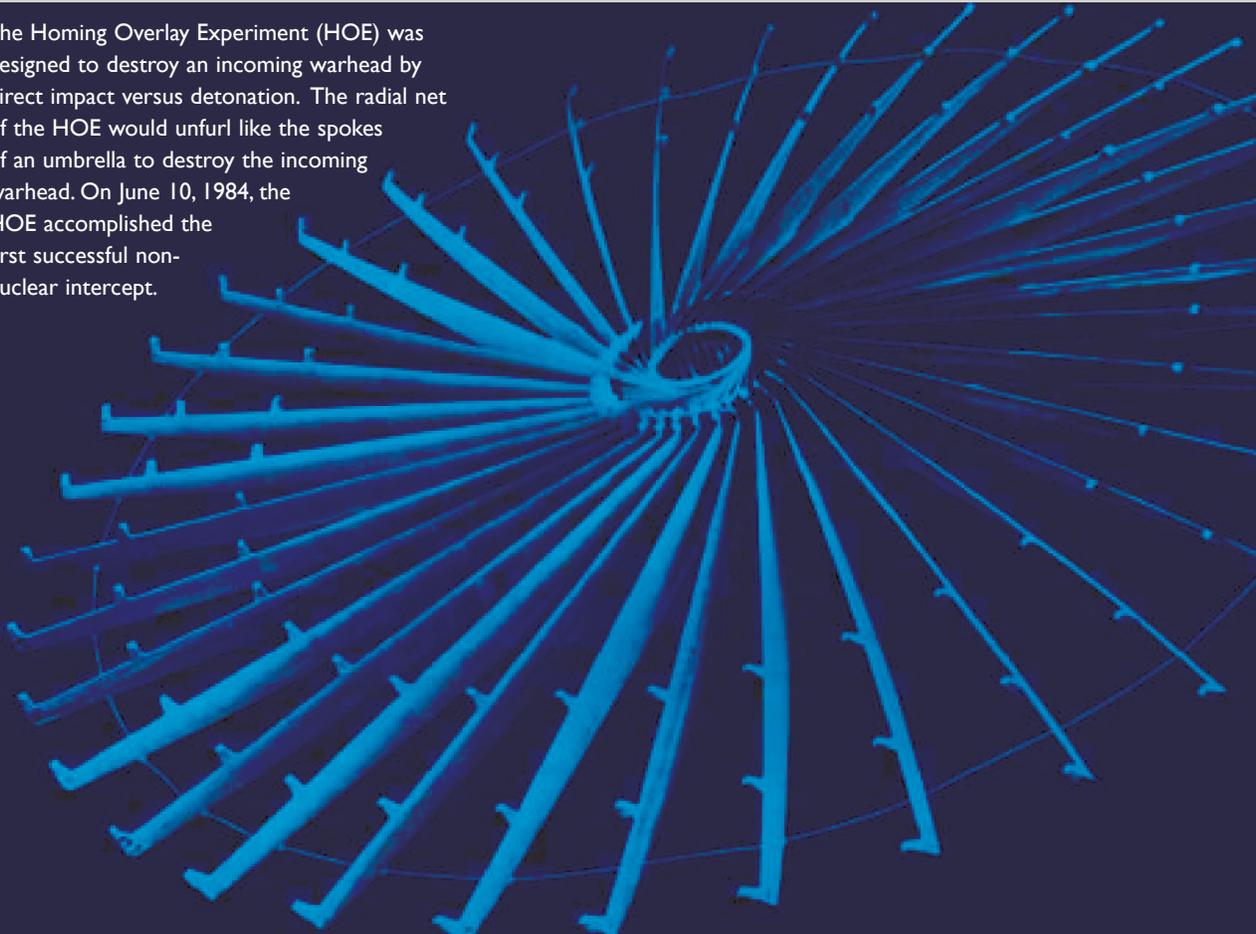




1985

The Homing Overlay Experiment (HOE) was designed to destroy an incoming warhead by direct impact versus detonation. The radial net of the HOE would unfurl like the spokes of an umbrella to destroy the incoming warhead. On June 10, 1984, the HOE accomplished the first successful non-nuclear intercept.



GEN Maxwell Thurman
directed the study of
Army Space Initiatives



RETROSPECTIVE:

ARMY SPACE INITIATIVES STUDY – 1985 (The View from 2008)

It can be reasonably asserted that the current structure of the Army's operations with respect to Space systems was defined and laid out in the Army's first Space Master Plan – developed by the Army Space Initiatives Study. During the last half of 1985 a group of more than 30 officers and civilians led by BG William J. Fiorentino conducted the study. This group was created at the direction of the Army Vice Chief of Staff, GEN Maxwell Thurman, in response to discussions and recommendations made in the Army Space Council meetings in 1984. The study group's charge was "to develop a Master Plan for the Army's exploitation of Space through the first quarter century of the 21st century." The ASIS document focused on three principle areas "materiel investment; personnel education, training, career management and organizational structure."

Note from the Editor

The following articles are excerpts from an in depth paper written by John Marrs titled Army Space Initiatives Study – 1985 (The View from 2008):

- Retrospective: Army Space Initiatives Study – 1985 (The View from 2008)
- In the Beginning ... the Origins of the Army Space Organization
- Then and Now: Space Related Research

ENVIRONMENT AT THE TIME OF THE STUDY

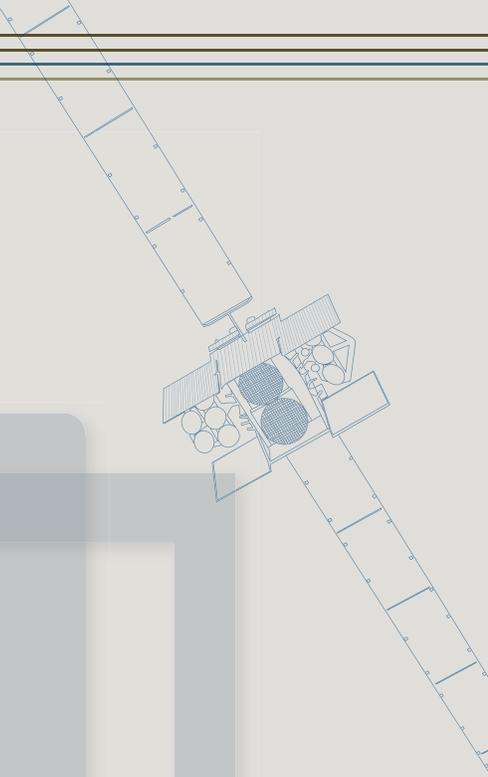
In the early to mid 1980s there was a wave of organizational interest in Space. U.S. Space Command was just being stood up. It had been preceded by the stand-up of Air Force Space Command. The Navy and Marines were initiating their own organization called Naval Space Command located in Dahlgren, Va., in that same time frame. The Army was energized to stake its place in this rapidly developing reorganization of military Space. The Army Space Council was chartered at this time to place focus on this effort. This was necessary because an effort in Space was viewed by most of the Army below the 3-star level as only potentially valuable (at best) with essentially no interest. Army Space Council at the time was chaired by the Vice Chief of Staff of the Army and included commanders of Army Materiel Command, U.S. Army Training and Doctrine Command, other commands and Headquarters Department of Army staff elements. At that level, it was recognized that high-level attention would be needed to “birth” Army organizations whose primary mission would be Space-related.

On the technical side, the Army Science Board in 1984 reviewed the Army’s role in Space and concluded that “the Army was only a minor user of available Space systems, without a great deal of influence in the design and operation of the systems.” This was true even though most of the first satellites (weather and communications) had been designed and built by Army Laboratories at Fort Monmouth, N.J., and launched on Army missiles. However, much of the Army expertise in Space systems was transferred to NASA in 1958 and 1959. The Long-Range Ballistic Missile role was transferred to the U.S. Air Force by the Office of the Secretary of Defense during this same period.

Newport Centre One served as the home of earlier entities of U.S. Army Space and Missile Defense Command/Army Forces Strategic Command. Moving into the building as the Army Space Agency in 1988, the Agency was changed to Army Space Command in 1989 and then to SMDC/ARSTRAT in 2002, the last year the operational headquarters was housed in the building.

SMDC/ARSTRAT photo





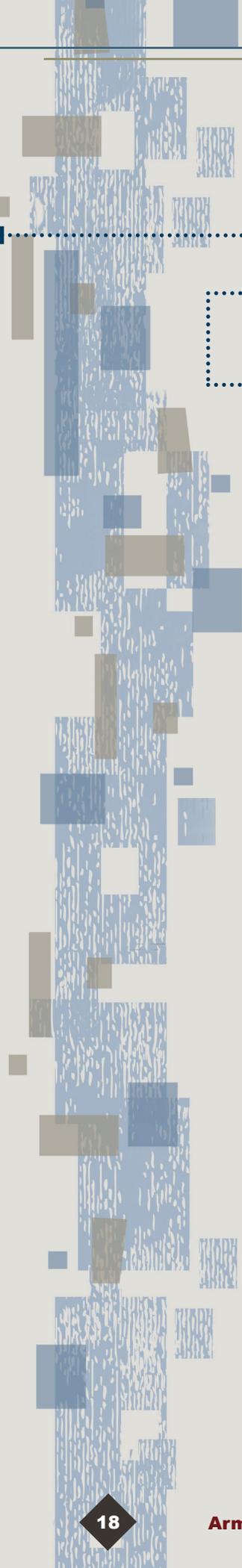
ARMY VISION IN 1985 FOR ITS ROLE IN SPACE:

“If the Army is now to regain an active role in Space, it must be based upon national and defense Space policies and objectives. Accordingly, an Army Space Policy was established by the Army’s Secretary and Chief of Staff in June 1985. It calls for the full exploitation of Space capabilities which will enhance and contribute to the successful accomplishment of strategic, operational, and tactical Army missions. To this end an Army Space Operational Concept was developed, building upon Airland Battle Doctrine and the emerging Army 21 concept. According to that concept, the Army’s activities in Space would expand logically from an early emphasis on force enhancement to the addition of Space operations support and Space control to, ultimately, the inclusion of the application of firepower from Space.”

— Army Space Initiatives Study Report

It is remarkable that this concept has evolved with the Army’s growing maturity in using Space capabilities and is still embedded in the Army vision for Space as articulated in the current Army Space Policy. That Space Policy unabashedly asserts the role of the Army in Space Operations.

Shortly before the Army Space Initiatives Study was chartered, the Army had created an Additional Skill Identifier of “Space Activities,” 3Y, and began the effort to identify which of its Officers and Soldiers were qualified to receive it. Previously there had been no way to identify Space knowledgeable personnel short of a detailed inspection of their records. There was no organized training within the Army although Army personnel could attend such training at the Naval Postgraduate School, various U.S. Air Force courses and university training. Since no Space organizations existed, there was no requirement to manage personnel with Space as a specialty. Space expertise was being managed in a few areas such as intelligence where image interpreters had specialty codes identifying them as well as certain communications fields. But they were managed as intelligence or communication specialists – not as Space specialists.



EDUCATION/TRAINING

The Army Space Initiatives Study advocated integrating Space into the normal education by which officers entered the Army and then in the various schools they attended during their career. As a practical matter this meant the inclusion of course material on Space and the inclusion of Space capabilities into military education at U.S. Military Academy, within Reserve Officer Training Corps curriculum, and within Branch Basic/Advanced courses; Command and General Staff College and Army War College programs of instruction all needed to have Space added. To a large degree this was done in all but the basic courses although its relevance and course content varied greatly amongst the various instructional venues.

Command and General Staff College added an elective as an educational means by which the 3Y Additional Skill Identifier for Space activities could be earned. Army War College enhanced an elective and designated a professor as the lead for Space related studies. Intelligence, Signal and Engineer courses added more Space. Additionally, the Army has continued Training-With-Industry positions and encourages a small number of officers to do post-graduate academic work in Space-related degrees each year.

The 1998 creation of the FA40 Space Operations Officer designation created a need for a qualification course. This course has created several hundred Space educated Army officers. This was a major step forward for the officer ranks. Starting in the summer of 2001, U.S.

Army Space and Missile Defense Command's Future Warfare Center (Force Development and Integration Center at the time) began teaching FA40 Qualification Courses in Colorado Springs, Colo. Through 2007 there have been 13 classes with 264 attendees.

Warrant Officers, Enlisted and Civilians: Other than that already associated with specific skills no Space education was developed for these personnel. The exception was Warrant Officer Tom Hennen who became an astronaut (payload specialist) and flew on the Space shuttle. As a Terrain Analyst, he worked an Army Space Exploitation and Development Program/Intelligence/Corps of Engineers demonstration called Terra Scout.

General: All of the above categories of personnel were encouraged and sometimes required to attend joint education in special mission areas such as intelligence and Space control.

Over the years, the vigor of the various education efforts waxed and waned as budgets and perception of the value of Space fluctuated. With the recreation of an "Army Space Institute like" organization called the Force Development and Integration Center (FDIC) there was once again an organization interested in Space education/training as a whole. This has continued with the FDIC training moving out of Crystal City to Colorado Springs in 2000. As FDIC was reorganized and incorporated into the SMDC Future Warfare Center, the training piece has stayed intact and remained in Colorado Springs where it manages and executes the FA40 Basic Qualifying Course.

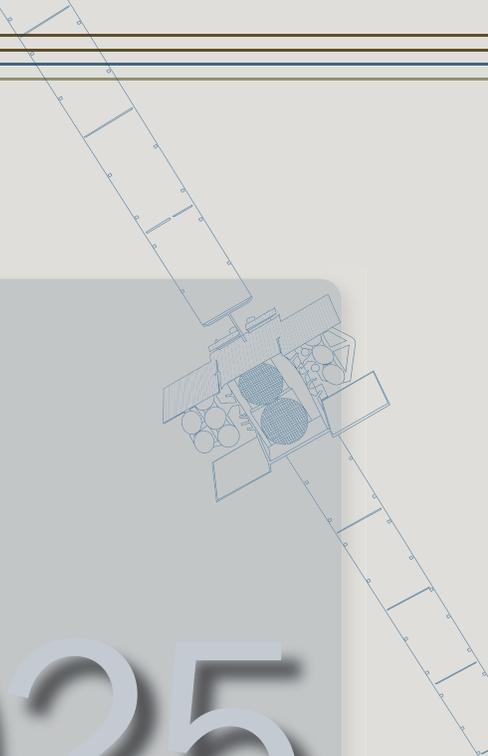
PERSONNEL MANAGEMENT

At the time of the Army Space Initiatives Study, there was no practical way to follow or obtain Space knowledgeable people other than those few categories in Intel and Signal that had Space functions. The study advocated that personnel management include military occupational specialties for both Officers and Enlisted and to consider an equivalent designator for civilians.

The 3Y additional skill indicator was put into use for Officers and eventually for enlisted Soldiers. This allowed personnel managers to search for it during the assignment process. Thus it was possible to track Space knowledgeable personnel although actually getting a Space knowledgeable person remained an intensively managed process as new “Space” positions were created or old positions were recoded to include the 3Y requirement for the positions.

In 1998, the Army 21 review processes resulted in a restructure of the personnel system including the creation of the FA40 Space Operations Officer within the Information Operations Career Field. With Space and Missile Defense Command designated as the Space Proponent, it began to actively manage the FA40 Officer Cadre. The initial number of documented positions was 112. It has grown steadily from that number as more positions are documented across the Army and Joint communities.

No coding for Warrant Officers, Enlisted or Civilians has ever been created or even seriously worked within the system. Periodically, there was some discussion of creating a coding – particularly for civilians. However, the efforts have typically been sponsored by one or more military officers either at Headquarters Department of Army or Space and Missile Defense Command on their own initiative – once they retired or permanently changed stations, the initiatives faded away. SMDC/ARSTRAT goals and objective documents have indicated a command position supporting such coding, but the lack of



2025

commitment of resources and senior level lobbying necessary to achieve these goals and objectives has resulted in nothing happening.

FUTURE

The creation of the FA40 is probably the most significant action the Army has taken with respect to people in the Space mission area. By having FA40s, the Army has a cadre of knowledgeable personnel to help educate the Air Force and others as to the Army’s needs. Although frequently intangible, over the length of my career, I have seen a subtle shift in the attitude of the Joint Space community that is a positive response to input from this Army cadre. My prediction is growth in the FA40 assignments to include more Office of the Secretary of Defense, National, and Joint positions will continue and enhance this positive trend. Any effort to reduce this increase in positions because of short-term needs must be resisted – they represent the future. When Space systems take decades to build and last decades, a few people working on the early stages will ensure the Army benefits from the billions of dollars invested to create these capabilities. Efforts to create an Acquisition Space Center of Excellence are one way to pursue this – as long as the acquisition leadership does not staff it with people who have never participated in Army field operations. |.....▲