

# The View From (Army) Space

## The International Competition and Space

By Terry Nelson

**T**his edition of the ASJ looks at broader issues of Space and the Army that go well beyond the individual capabilities of soldiers and hardware and beyond the contributions of the Army Space community to joint and Army warfighting. As the anchor article notes, this issue is about what the Army should do for Space rather than what Space does for the Army. A very interesting concern for the Army in its approach to Space at this higher level is what it should do to shape Space development at the national and international levels. I am not writing from the standpoint of some kind of Space altruism, but from practical utility for the Army over the longer term. The point is that because the Army needs Space dominance to ensure land warfare dominance, it needs Space technological dominance. The Army, therefore, should do its part to ensure the development and success of Space technology efforts.

Space is now a vital U.S. economic interest on which the global economy depends. Worldwide economic foundations have changed from agricultural to industrial to information. Space is a foundational element in generating and moving that information. Countries can craft economic niches that leverage Space to great advantage. Successful commercial enterprises can be based on anything from building Space systems to providing support services such as launch and satellite control to providing Space-based services such as communications and intelligence, surveillance, and reconnaissance. Development of such strengths creates centers of expertise and excellence as professionals gather to form each nexus of Space development and operational capability. This simultaneously sets the stage for dependencies to be developed for all those who don't have a particular center of excellence, but need its product. "Centers of excellence" should be read as a strength, and "dependency" as weakness.

Of secondary but major importance, the complexity and cost of military Space is so great that it cannot be

sustained for military-only purposes. It must be founded on a strong, independently profitable commercial Space sector. Therefore, it is critical that U.S. Space centers of excellence are prolific, if not dominant, in the global economy.

This should concern the Army in two vital ways. First, the United States will obviously not have the only centers of excellence in economic, technical, and production terms, so there will be a sorting process that determines which ones end up here. It is important to remember that these centers must be economically profitable and/or benefit from subsidies to remain dominant. The Army needs to exert its influence so that the technologies/products it is critically dependent upon are either U.S. assets or those of our most trustworthy allies. An implication is that the Army should avoid dependencies based on sources not predominated by U.S. efforts. Second, the Army must be careful to envision all that Space could portend for land warfare of 2020 and beyond and then actively pursue development of capabilities to ensure its dominance in that "competition among the armies of the world" as well as in the competition among the U.S. military services in their contribution to joint warfare in support of national objectives. Obviously, this means that the Army cannot view Space as somebody else's place and somebody else's mission. The Army cannot limit itself to gleaning Space benefits from the efforts of other nations, corporations, and military services. While Space is a large and fertile field, it is neither so large as to eliminate competition, nor so fertile that it will produce what is needed without diligent, focused effort.

While it is incumbent on the United States to promote development of Space technology, production, and services, it is imperative that the Army consistently invest in and stimulate those areas that can be expected to benefit from its continuing land warfare dominance. The ongoing transformation of the U.S. military continues to



Front row, MAJ Joseph D'costa, MAJ Mark T. Vande Hei, MAJ Alan Personius, CPT Mike Russell, COL David Shaffer, LTC James Woods, MAJ Chris Livingstone, MAJ Bill Beck; 2nd row, LTC Jeff Perkins, MAJ Leonard Draves, MAJ Guy M. Burrow, LTC Steve Schuler, LTC Mike Powers, LTC Mark Anderson, MAJ Michael Willis; back row, MAJ Charles Anderson, LTC Conrad Bonner, MAJ Rick Dow, LTC Jeff King, LTC Curt Stover, MAJ Jerry Shay

exchange mass and armor for precision and agility that are enabled by faster and better information. This is a challenge to nobody more than the Army. We like to remind everyone that it was the Army that was “first in Space” as it has been first in meeting many U.S. challenges. As we embrace and invest in Space properly, we can also be “first in transformation” by leading the change that ensures our continuing warfighting superiority. Watch us.

Twenty Army officers proved they had nothing to be superstitious about on Friday, June 13 this month as they began their instruction in the Functional Area 40 Space Operations Qualification Course offered by the Force Development & Integration Center-West.

This class is the fourth to take the intense eight-week instruction designed to build a corps of Space experts. Graduating officers will assist combatant commanders in using Space to support the warfighters.

They are a small class, but a very important one. Each graduating class has an impact far beyond its numbers.

The students have been asked to help in improving the course for the next class.

I told them, “Changes which effect this course are occurring every day. It’s your job to let us know what direction we should be taking.”

Course instruction for the students is divided into three segments beginning with classroom instruction.

Another segment involves off-site visits to places such as the National Reconnaissance Office and the National Imagery and Mapping Agency in Washington, D.C. This includes hands-on training with the Army Space Program Office, which developed the Tactical Exploitation of National Capabilities Space (TENCAP) support systems

in use by Army warfighters.

The culmination of the course is found in a 30-hour command post exercise designed to test each student’s proficiency in 22 individual critical tasks. After graduation, the new FA 40 officers are assigned to operational staffs and Space systems program offices.

Col. David Shaffer, commander of the 1st Space Brigade (Provisional), U.S. Army Space & Missile Defense Command, and an alumnus of the course, made opening remarks.

“This is a great opportunity for you as well as a terrific course.”

“Wherever you are assigned — you will teach and sell Space. That’s part of your mission.”

Shaffer briefed the new students on a number of subjects to include the new Provisional Brigade structure within U.S. Army Space and Missile Defense Command, the official Army Space policy (signed in April), new U.S. Strategic Command priorities (Space being at the top of the list), and Ground-Based Midcourse Defense.

He concluded, “Finally, realize that 70 percent of the learning in this class depends on you. Talk to each other and understand what is being taught. Not all of what you need is in this course so talk to those in your next Command and then look for those extra pieces of information you will need.”

“Remember, take advantage of your classmates’ experiences.”

Plans are under way for the next FA40 class — slated for August.