

SMDC Moves Into Space Planning for Army Transformation

By Bob Clarke

Planning is such an important part of any process. It's no fun and nobody likes to do it, particularly when it involves looking far into that nebulous, intangible place called "the future." In organizations as widely diverse as the Department of Defense and the U.S. Army, without planning you are destined to follow the courses of the loudest or most influential voices. In an environment driven by the resources of manpower, money and time, volume and influence carry loud voices. And those voices become screams the closer to program implementation and the wider the political and industrial support they have enlisted. All too often, it seems that a new piece of equipment hits the field and we look back and ask ourselves, "How did that happen? What was the requirement?"

Planning can help resolve such runaway programming — the phenomenon that occurs when concepts evolve to programs without adequate analysis to prove the need in the first place. It can help combat developers in the Army to focus on providing support to the Warfighter, keeping those forces who execute the nation's will — on the ground and in the trenches — properly organized, equipped and trained. Planning, separate from the more tangible aspects of programming and budgeting, allows the freedom of thought to provide that support, allowing the process to get out in front of the influence peddlers. A plan, well conceived, analytically founded, collaboratively built and committed to by the implementing leadership provides a good vector for the programmers. If articulated well to "the outside," good plans also lead to innovative thought from the users and industry alike. The enemies of this process are those that say we analyze too much; "just buy the thing and get it out to the soldiers." Equipment that results from this reaction most often fails in the long course because of inadequate doctrine, organization, training, materiel, leader development, personnel and facility (DOTMLPF) foundation.

We in the Army consider ourselves good planners and executors. In the combat developments arena, however, we rarely are. There are dozens of reasons why. We have processes galore: Army Requirements process; Concept-Based Requirements System; the Planning, Programming, Budgeting and Execution System; Joint Strategic Capabilities Planning Process; and scores of others. They're complicated, twisted by parochial interests and frustratingly long. We are often overcome by the industry-provided whiz-bangs for which we strive to find military utility, and we spend more time protecting our interests than developing them. Who hasn't heard the expression: "it's obsolete before we get it fielded?" The Army Space business is particularly subject to these criticisms. The problem clearly drew the attention of the 2000 Rumsfeld Space Commission Report that the Services were all over the map on Space planning and control, unable to keep pace with technology advancements.

Relative to the Fiscal Year 2003 \$365 billion defense appropriation, Space-related programs demand as much as 10 percent; the Army's portion of that approaches \$500 million per year. Yet the size of the funding for individual Army Space programs doesn't necessarily measure their importance or value. "Space programs" in their many forms are critical to the execution of our newest Defense Planning Guidance and the Army Transformation campaign. The American military in these times has no choice but to leverage the fullest extent of Space-related programs to be successful on the battlefield. But without adequate planning, the small, seemingly unimportant Space programs can easily be marginalized out of existence; some simply slip off the table, undefended. The Army can't be satisfied with the survival of only a few of the most visible Space programs. Do we simply accept that our current level of Space program success leaves us with the glass half full? Half empty? Or will DoD say the Army simply has

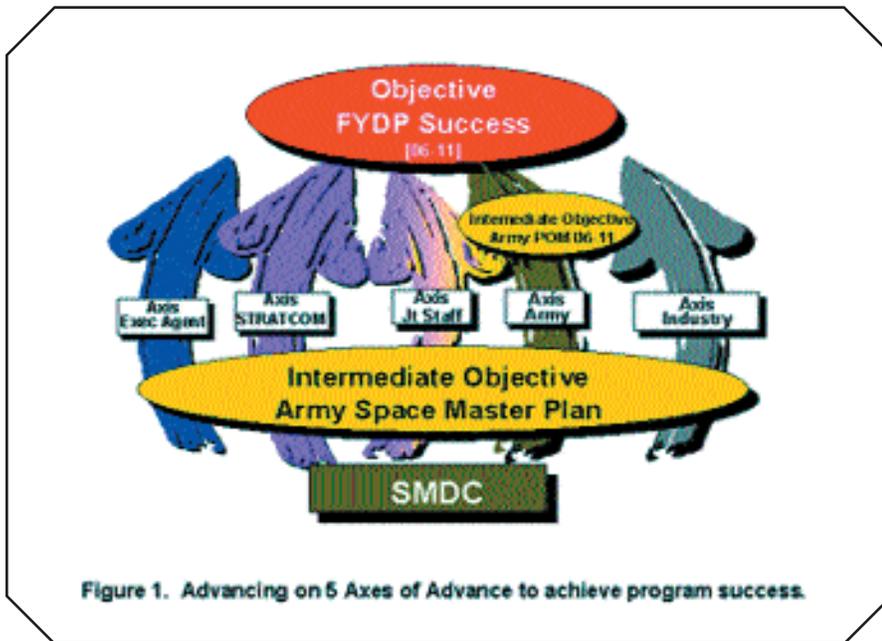


Figure 1. Advancing on 5 Axes of Advance to achieve program success.

too much glass?

Pursuant to Secretary of Defense Donald Rumsfeld's direction, DoD is moving out with a more concerted and controlled effort to "get its act together" in Space. Rumsfeld appointed the Secretary of the Air Force (also Director of the National Reconnaissance Office) the Space Executive Agent for DoD. Also at his direction, the DoD Comptroller established what is today a "virtual" Major Force Program (MFP)-12: Space.

The contents of Joint Pub 1-02 notwithstanding, the definition of "Space program" is arguably unclear — for example, it's easy to posit that a particular program is not "Space" because it only "uses" Space sources. But, in a programmatic sense, by including specific program elements in MFP-12, DoD is defining what it means by Space programs. Service Space programs have always existed in the Future Years Defense Program somewhere, but now they are more easily identified as such and can be more easily analyzed and compared. One day, when the "virtual" MFP turns real, it is likely that DoD, prompted by the Space Executive Agent using its National Security Space Plan yardstick, will exert much greater control of Service Space programs.

In light of the potential for significant DoD oversight, the Army's reasons for solid, collaborative Space programming could scarcely be stronger than they are today. First, global warfighting is more dependent on the technologies of Space than ever before. Military commitments come on ever-decreasing warning times requiring en route planning, accurate and timely intelligence assessments, specialized training and long-range communications. Combat units must be smaller and lighter, fight more dispersed, move more quickly over longer distances and yet produce greater, more focused firepower — and some of the bullets we shoot come in the form of electromagnetic radiation. Forces must use equipment that is interoperable and con-

nectable between and among other forces, and this all has to be done seamlessly — both physically and in time. The Army is transforming itself to fight in this new environment, and its Space program must support these changes. Second, the existence and ultimately the power of the Space Executive Agent will force the Army to develop plans and respond with programs that will fit within the National Security Space Plan. This will cause Army planners to provide the analytical underpinning that justifies the need for its Space programs and the quantifiable rationale if Army programs must be uniquely Army ... or join willingly with other Service programs where the support is logical and efficacious. Third, in the proverbial environment of increasing demands on resources, the Army must ensure that it stewards its funding prudently. That charge implies that duplication is avoided where possible, that technologies are shared and proliferated when they reveal strong military utility, and, most importantly, that other-than-materiel solutions are sought first rather than last.

In 2003, the U.S. Army Space and Missile Defense Command (SMDC) will discharge its responsibility as the Army's specified Space proponent by executing a collaborative Space planning process (SP2). Founded soundly on an identified need, articulated in the Army Transformation campaign plan and the more recent Army Strategic Planning Guidance for 2005-2020, the process will consist of simultaneous efforts along five primary axes (Figure 1). The SMDC approach aims to achieve its first major objective: to optimize the resourcing of Army Space-related programs in the next major Future Years Defense Program build for Fiscal Years 06-11. Action officer activities on each of the axes — from those involved with the Executive Agent in National Security Space Plan development to those involved with U.S. Strategic Command in developing the combatant commander's Integrated Priority List to those Deputy
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The Middle Zone is a buffer between the Homeland Zone and the Forward Zone. It is the air, land, sea and Space immediately surrounding the Homeland Zone. In this area, the United States exercises influence because of its regional proximity. In this zone, DoD protects the homeland by defeating adversaries before they reach U.S. shores. The risks in this zone include threats to maritime shipping or air avenues of approach to the homeland, illegal immigration, transnational criminal enterprise, ballistic and cruise missiles and cyber attacks.

The Army's roles in response to crises in this zone may include: missile defense; interdiction; interception; intelligence, surveillance and reconnaissance support to counterdrug operations; and other Joint, interagency or multijurisdictional operations. Army forces in this zone will include operationally and tactically mobile maneuver units; special operations forces; networked, enhanced command, control, communications, computer, intelligence, surveillance and reconnaissance capable units; knowledge-based air defense artillery; and ground-based midcourse defense systems.

The Forward Zone consists of the remaining land and sea areas not included in the Homeland and Middle Zones. When actionable intelligence is received, the United States may preemptively defeat the threat at the source. The risks in this zone include state-sponsored and transnational terror, aggressor rogue nations, weapons of mass destruction/effect and chemical, biological, radiological, nuclear and explosive proliferation, cyber attack, ballistic missiles and anti-access strategies and tactics.

The Army's roles in response to crises in this zone may include: deterrence, preemption, threat reduction, security of aerial and sea ports of debarkation, counter-proliferation and intelligence, surveillance and reconnaissance. In this zone, Army forces will likely include special operations forces. They will be operationally mobile with high tactical agility and will need external support for intelligence, surveillance and reconnaissance, Joint fires and effects, human intelligence and ground-based midcourse defense systems.

For the Army to conduct homeland operations, it must have an intel-

ligence, surveillance and reconnaissance architecture that ensures unity of purpose. Human and technical, manned and unmanned, terrestrial and Space-based capabilities will be needed to sense the operational environment in detecting, identifying and tracking threats. Additionally, offensive and defensive information operations will enable the Army to take advantage of superior information to achieve decision superiority. Finally, in meeting the homeland threat, the Army must be able to participate in an integrated Joint force that will detect and destroy enemy cruise and ballistic missile systems.

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Chief of Staff for Programs action officers involved in working Program Objective Memorandum (POM) issues at Headquarters, Department of the Army — must work in coordinated, collaborative fashion. To do this, the Army must have a common picture of requirements and solutions. A comprehensive Army Space Master Plan will serve as the first intermediate objective that will provide this common picture. The degree to which the second intermediate objective (the Army POM) and objective Future Years Defense Program can be significantly affected on this cycle may be

limited for this first-time effort. But ultimately, as the Army Space Master Plan process grows in strength and utility, the ability to affect the Future Years Defense Program and defend the programs therein, will increase. Hence, the Army Space Master Plan is a means to an end and not an end in itself.

On principle, the Army Space Master Plan will be founded upon a task analysis in seven mission areas. Seven Mission Area Teams (MAT) will provide the tracking of tasks from the top, Army-wide level all the way down to the specific Space-related tasks at

the user/provider level. SMDC will create and shepherd these Mission Area Teams in the taxonomy shown in Figure 2. This grouping had its genesis with the former CINCSPACE Integrated Priority List development teams and has been used in a number of Army Space planning efforts including the Space Modernization Plan developed last year (see article by Karen Oliver, "Space Modernization Strategy"). Work is under way to more precisely define these mission areas and the current programs (program elements) contained within them. Several of the Mission Area Teams

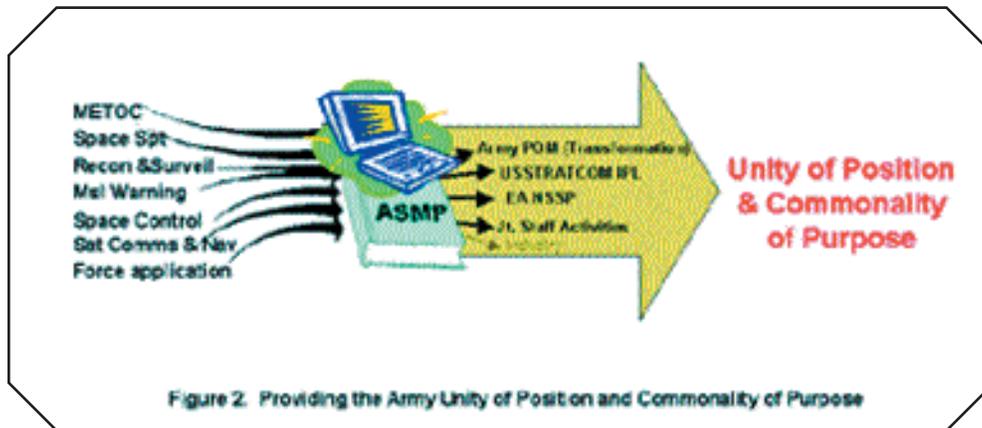


Figure 2. Providing the Army Unity of Position and Commonality of Purpose

will be chaired by key stakeholders from other-than-SMDC commands.

Each team will produce a Mission Area Analysis, a Mission Needs Analysis, a Mission Solutions Analysis and an Integrated Investment Analysis (IIA). During the IIA phase, each team will apply fiscal constraints to the solutions identified. The Mission Area Teams will strive to identify all DOTMLPF solutions to satisfy all Space-related subtasks. The Space Modernization Plan developed last year provides a good foundation for the materiel portion of the solution set.

Each of the seven teams will develop its products consistent with the methodology defined by TRADOC's Concept-based Requirements System. Army Space Master Plan project analysts will integrate them at each stage. Each team will ultimately package the results of each phase of the analysis into its Mission Area Plan. FDIC analysts will then combine the seven Mission Area Plans to produce the final Army Space Master Plan. Along the way, each stage is to be shared collaboratively with analysts performing the same methodology in Air Force Space Command (their process is called the Integrated Planning Process), Navy Space as well as with analysts in the Space Executive Agent. This cross-analysis will attempt to ensure that planning is compatible in mission and scope, that Army programs are jointly supportive and where not, Army programs are soundly justified as Army.

An important, and perhaps the hardest, part of this process is the identification of future capabilities and programs.

Participation by SMDC and other Army battlelabs, the Army Space Program Office, the SMDC Technical Center, and associated Army Materiel Command Research, Development and Experimentation Centers will allow for the consideration and insertion of Army future concepts, technologies and requirements. Further, the Space Integrated Concept Team, the TRADOC Senior Advisory Group and a Space Council of Colonels at HQDA will review the Army Space Master Plan progress to provide rudder checks and guidance. The mere foundation of these Mission Area Teams, and their continual existence under the tutelage of the Space Integrated Concept Team, provides a forum for the Functional Area (FA)-40 Space Operations Officers deployed in warfighting commands and staff positions around the world to send their ideas for future concepts.

Once SMDC has compiled and staffed the Army Space Master Plan and it is approved by TRADOC, SMDC will present it officially to the Army staff. The ultimate goal is to obtain the signature of the Army Chief of Staff — to give the document credibility as the Army's plan for the application of Space-related DOTMLPF solutions to support the Objective Force. This approval, of course, does not imply adequate funding; programs in the plan will still compete for resources in the POM process.

The process — far more important than the document itself — is designed to provide an ever-present source of the Army position on Space-related programs and future capabilities for action officers who

perform activities along the five axes of SP2 advance (Figure 1). Continuous, empirical input from deployed FA-40s will also keep the Army Space Master Plan process current and connected to real-world activities and needs.

SMDC will discharge its responsibility to act as the Army specified proponent for Space by institutionalizing the SP2 process. The Army Space Master Plan will serve as its principle vehicle for accomplishing this mission, with the process to build its most important aspect. With the concerted and collaborative efforts of all those in the Army combat developments community who work in Space-related activities, SP2 will achieve its intended vision of being the source of the Army's position on these programs. It will lay the foundation for dialoguing with the Space Executive Agent, and most importantly, it will assure the warfighter that the transforming Army is working to provide the best and most comprehensive DOTMLPF, Space-related capabilities possible.

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