One of the most memorable events at the 2002 Space Symposium in Colorado Springs, Colo., was the address by David Thompson, President and CEO of Spectrum Astro, a small satellite manufacturer recently acquired by General Dynamics. Thompson spoke of his experience with the National Reconnaissance Office (NRO). In the mid-1990s, the NRO launched a satellite with the extra capability of a power system that enabled it to continue operating at full capacity instead of having to go into partial shutdown mode during its period of solar eclipse. They were able to do this for a mere $200 million. This $200 million, according to Thompson, produced a rechargeable battery to provide an additional five days of full operating capability a year. Those of us who have to produce a receipt to get reimbursed when our parking at the Colorado Springs Airport exceeds $25 might have trouble understanding how anyone could justify a decision to expend that much money for so little return. The answer is quite simple. It’s about accountability … or a lack of it. This same big risk would exist with an independent Space force.

Even since troops had their family members mail them commercial global positioning system (GPS) receivers from home during the first Gulf War, the Army has made great strides integrating Space and making it useful to the Soldiers that shape the battlefield. This integration is where we, the Army’s Space forces, show our value to the “Big A” Army. But a separate Space force would reverse the progress we’ve made over the last 15 years.

Here are a few of the dangers of an independent Space force. First, The Army’s Space force has had to sell every Space program we need to the warfighter. In a resource constrained environment, selling Space is not easy. Space programs do not turn enemy tank battalions into glass, make loud noises on the battlefield or otherwise make a big impression on the Army generals that dole out the money. It’s tough enough to make these sales pitches when you wear the same uniform. The Space force would have to try it as another service. Imagine if the Air Force had to get the Army to contribute payment for F-15 Strike Eagles. One thing the community has to do, though, is demonstrate the utility of Space programs to the maneuver forces. Not because we need their support to build and employ these systems (we do), but because we need to employ these systems to help the infantry and armor succeed on the battlefield. That is our responsibility to them. We are accountable to the Soldiers in Iraq and Afghanistan. To be accountable requires a common understanding of operations and the needs of the tactical Army.

Even though the Army needs these programs, we have had only marginal success in convincing Army leadership of the cost benefits.

The Soldier will tell you that he needs GPS, his cell phone, his computerized map, a weather report and his intelligence briefing, but he does not need “Space.” Educating leaders that position/navigation, satellite communications, joint tactical

**EDITORS NOTE:** The intent of the Pro and Con section of the Army Space Journal is to encourage conversation on lightning rod Space issues. It provides a free flowing discussion by people involved with the issues. We want to stimulate ongoing dialog among Space professionals. The opinions expressed in these articles are those of the author and do not necessarily reflect the views of the Army Space Journal, U.S. Army Space and Missile Defense Command or the Department of the Army.

**By Miller Belmont**

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**THE SEPARATE SPACE FORCE**

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**Army Space Journal  Winter 2005**
Lightning rod Time for a new Space force? Not so fast!

Army Space & Missile Defense Command, Army Forces Strategic Command, Redstone Arsenal, AL, 35809

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ground station (JTAGS) and intelligence, surveillance, and reconnaissance products need to be integrated is part of the ongoing education and advocacy aspects of underlying Army operations up and down the chain of command. While recent lessons learned, wargames and exercises have been generally supportive, the Army has not given a “strong buy” recommendation to other enabling programs such as Space control, a reserve force structure for Space, or integrated commercial imagery beyond an ad hoc basis.

Joint Support

When Leonid Brezhnev initiated the coup against Nikita Khrushchev, one of his first moves was to rearrange all the phone numbers in Moscow. As a result, Khrushchev was unable to locate any of his supporters. This is essentially what U.S. Strategic Command (USSTRATCOM) did when they merged with U.S. Space Command and acquired Space as a mission area. One senior officer said: “We’re going to take all the pain at once.”

Although this approach proved effective for the coup in the Soviet Union, it has not worked quite as well in the reorganization of military Space. The reorganization of offices (down to the office symbols), mass relocation of active duty personnel and the acquisition of additional mission areas beyond Space left USSTRATCOM in a state of continuing reorganization and reprioritization. Military Space never emerged as a major focus. In addition, the exodus of many in the civil service and contract work force left USSTRATCOM with only a handful of civilian Space experts and a military cadre with rapid turnover averaging two years on station. As a result, there is little in the way of a joint force to draw from to establish a separate Space force.

Cold War Mentality

The remaining option, then, would be to form an independent Space force with the Air Force as the core. This presents its own set of problems. It isn’t just the difference in uniforms or services, that’s just superficial.

There are significant differences in the mindsets of the various service Space forces. The Air Force Space acquisition force, for instance, is still mired in the Cold War standard of what Space programs need to do. Air Force Space Command’s unhealthy attraction to big budget Cold War programs like Space-Based Radar (SBR) and Space-Based Infrared System (SBIRS) belie this problem. Although SBR would prove useful in tracking motorized rifle divisions moving across the Fulda Gap or armed units of the People’s Liberation Army reinforcing North Korea, no one can articulate how it would help track Al Qaeda as the terrorists walk back and forth between Pakistan and Afghanistan, or discern Toyota Land Cruisers packed with Semtex from all the other traffic on the streets of Baghdad.

This is where the Army’s fight is and will be for the foreseeable future. It may also be why the Congressional budget proposal for the Pentagon slashes SBR funding from $327 million to $75 million. This takes it off the acquisition track and relegates it to a much lower level of effort.

The Air Force on occasion complains that they must carry the burden of funding for military Space programs, while the Army and Navy get a free ride. This complaint is not totally accurate. According to the General Accounting Office, the watchdog agency of Congress, the Air Force controls 86 percent of the 2002-2007 military Space budget. The Army’s share is a paltry 3 percent. At the same time, the Air Force Space forces have to defend themselves against continuous budget raids from the air power programs. Because these are all legitimate concerns, the Air Force Space supporters use these arguments to make a strong case for an independent Space force.

A budget line for an independent Space service would be free of much of the political mud wrestling that takes place now between air and Space. An independent budget could provide the Space acquisition community more flexibility to overcome cost overruns before they cripple programs like SBIRS.

These arguments are more about protecting budgets than about fighting wars. The benefit of a streamlined budget process provides no guarantee that forming a Space service under these circumstances would provide better service to Army and Marine tactical units. Rather, an independent Space service could very well reduce the ability of Space to help shape the battlefield by removing it from the forces it needs to serve. Right now the Army and the Marines shape the battlefields in Iraq and Afghanistan. The Air Force admits as much in the press as they grapple with the same problem of integration that the Army faces.

U.S. Air Force LTG Norty Schwartz, director of operations for the Joint Chiefs of Staff, laments “the lack of a traditional warrior culture” among Space forces. One example of the effects of this absent culture is seen in how the Air Force mans Space. In the Air Force, the missile wings are essentially a separate service of the Air Force and largely excluded from the operational side of wars and deployments except for their security forces, which rotate through the hot spots. As the missile forces drew down during the 1990s, they provided a large pool of manpower for Air Force Space operations. Thus, many in the Air Force’s Space and acquisition programs have never worked the tactical Air Force. Only after extensive in-theater service in the Air Operations Centers do the Space forces gain a sense of tactical understanding. It isn’t much of a coincidence that the new Air Force Space badge is now a Space and Missile badge. These integration issues could make a separate Space force a bad deal for the Army’s muddy boots and treadheads. The civilian researchers at the Federally Funded Research and Development Corp.

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porations (FFRDCs) that build the Space architectures are even further removed from the ultimate would-be users on the battlefields. Said one corporation Space architect to an Army Space officer: “We sometimes forget that there are Soldiers on the ground at the far end of these systems.” This gap brings a whole new meaning to the term “the vacuum of Space.”

Reinforcing Failure

Integration isn’t the only problem. The Air Force has demonstrated a propensity to reinforce failure when it comes to program and budget management. As the original SBIRS high cost of $2.1 billion exploded to $4.4 billion, then was restructured for an estimated cost of $10 billion, it gradually consumed other programs of value to tactical maneuver forces such as the counter surveillance and reconnaissance system (CSRS).

Designed to protect U.S. and coalition forces from surveillance from Space, the program could potentially save the Pentagon hundreds of millions of dollars in “shutter control” and “diplomatic denial” of imagery. How? The U.S. government has the legal option to tell U.S. commercial satellite imagery companies that they are not allowed to image certain locations during a crisis. This clause is part of Department of Commerce-approved operating licenses. Our Space doctrine authorizes the option of “prevention,” the ability to use diplomatic or economic means to keep imagery out of reach of our enemies. Prevention is typically applied in terms of foreign countries or satellite companies.

In practice, shutter control and diplomatic denial translate into bulk imagery purchases of hot zones to keep them off the market and away from enemies. Since the $57 million
budget line for CSRS was zeroed out, ex-
tonishment payments to commercial imagery satellite companies remain our only op-
tion for effective imagery denial over a war zone. The present approach merely
sustains the funding death spiral without providing any additional protection for
the troops in the field.

Skewed funding priorities are not the only reason the Army should hesitate to
sign on with an independent Space service. The Army continues to grapple with
its own internal issues, and again, they all link back to accountability. In the Army's
case, it is an issue of who speaks for the Space forces. The Army would have a dif-
ficult time making a meaningful contribu-
tion to a unified Space force without first defining what exactly a unified Space
force should provide to the other services. Instead of a separate service, the Army
would better serve its maneuver and spe-
cial operations forces by combining forces
with the Air Force in certain areas.

One model that could help the Army
provide additional support to the battle-
field would be to reform the acquisition
process of Space systems. Conceivably
this could be similar to the U.S. Trans-
portation Command (USTRANSCOM)
model, where the Air Force transports the
Army equipment that does the ground
Pfeffer, one of the Air Force's long-time
Space experts, describes the purpose of
Space programs as “the transfer of bytes.”
Space is merely a transit point as informa-
tion flows from point A to point B that is
analogous to the job of USTRANSCOM
in moving troops, materiel, and supplies.
How they get there is often transparent to
the combatant commander as long as ev-
erything arrives on time and in good con-
dition. The key in the case of Space sys-
tems, however, is in making sure that the
Air Force builds the right equipment to
deliver the right bytes to the right place.

This may prove a bit more difficult
challenge than building C-130s to fly the
82nd Airborne Division. Not everything
built for the Army by the Air Force has
gone as well as the cargo haulers and troop
transports. For instance, some members
of the Army Space cadre worry about the
performance of the SBIRS Multi-Mis-
sion Mobile Processors (M3Ps). These
processors are the follow-on theater mis-
sile warning platform that when finally
delivered will replace the Joint Tactical
Ground Stations, the current in-theater
missile warning suites. This, however, is all
the more reason to enact some meaning-
ful acquisition reform that guarantees the
Army receives delivery of Space systems
that add force protection and information
dominance to its maneuver forces.

Combined Forces

In addition to better coordination be-
 tween the Army and Air Force on acqui-
sition, greater collaboration between the
Army and Air Force doctrine writers and
combat developers would serve both the
Army and the Air Force. On those oc-
casions when Air Force and Army doctrine
writers and combat developers do merge
forces, Air Force Space Command usually
calls these meetings. The Army willingly
attends these meetings, but sponsors few
events that could educate the Air Force
acquisition and Space cadre on the needs
and inner workings of maneuver units.

The Army would have more tactically
useful Space programs; the Air Force
would build Space programs with more
survivability and joint support against
raids from the better-armed air power pro-
grams. The present environment is often
an uneasy co-existence of Army force
developers grudgingly approving Air Force
acquisition plans with no real expectation
that Army needs will be incorporated,
while the Air Force claims “jointness”
that only partially incorporates Army
needs. As a result, these Air Force acquisi-
tion programs emerge into daylight with
only lukewarm Army support and rarely
receive life-saving joint support in the face
of more pressing funding requirements for
ammunition and body armor or more
politically savvy Cold War relics like the
FA-22. The ability to preserve programs
of use to the tactical Army is a serious
concern. Even CSRS, a program with ex-

cellent Army-Air Force cooperation and a
model of integration, could not withstand
internal Air Force budgetary fratricide.

The advantage of this approach is
that each service would retain its respec-
tive strengths (such as Air Force opera-
tional and delivery capability), while gain-
ing access to valuable Space programs that
could be delivered to the last tactical mile.
This would provide the solutions desired
of a separate Space service with fewer of
the risks. Rather than generating a new
layer of bureaucracy, the Army would bet-
ter serve itself and the troops in Iraq and
Afghanistan by pressing for accountability
of acquisition and doctrine development
processes that produce military Space
programs that provide data and services
to ground troops fighting America's en-
emies. This would not be a separate Space
service, but rather a truly joint integration
of doctrine and acquisition. Success in
this effort would provide the Air Force
with the support and guidance it needs
to produce meaningful Space programs
and services of use to the Army and ca-
pable of competing with the Air Com-
ponent Command budgetary juggernaut.

If we fail to take these measures, we will
only stay on our present course of more
canceled programs like CSRS and, even
worse, useless programs like the NRO’s
$200 million rechargeable battery.

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