Part II: Expeditionary Warfare and Battlespace Management

Eugene A. Razzetti

RECENTLY, I ATTENDED A BRIEFING BY A MAJOR THEATER COMMANDER ON THE STATE OF READINESS of his area of responsibility. He used present-day terms like: “Battlespace”, “Expeditionary Warfare”, “reach-back,” and “lethal weapons” but then sprinkled in discomforting, but not unfamiliar, expressions like “fight with what you have,” “no space uncontested,” and “no safe havens.” Warfighters live with these terms and expressions every day; program managers and contractors, however, may lose sight of them and may need to be reminded.

In my first article on system integration and program management (in the November-December 2019 issue of Defense Acquisition magazine), I stressed the need to incorporate:

- Risk management and gap analysis
- Operator/Warfighter participation in program management
- Meaningful feedback, follow-up, and accountability

Razzetti, a retired U.S. Navy captain, is a management consultant, auditor, military analyst, and frequent contributor to Defense Acquisition magazine and the former Defense AT&L magazine. He is the author of five management books, including Fixes that Last—The Executive’s Guide to Fix It or Lose It Management.
• Modeling and simulation, to include tabletop exercises and/or wargames
• Non-materiel solutions for materiel shortcomings

This is Part II, linking system integration and program management with expeditionary warfare and battlespace management. It is here where we emphasize the sense of urgency. Put another way: Do everything you have to do—but do it faster. As is often the case, the troops have been waiting too long already.

By way of review, system integration is the process of bringing together the component sub-systems into one system. It is an aggregation of subsystems cooperating so that the resultant system is able to deliver an overarching functionality or capability, by ensuring that the subsystems function together as one system. In information technology, it is the process of linking together different computing systems and software applications physically or functionally, to act as a coordinated whole. An integrated system streamlines processes, reduces costs, and increases efficiency.

System integration connects multiple discrete subsystems from different sources to work as one. Some subsystems are old, some are new. Program managers usually find that putting the subsystems together as early as possible in the program’s development improves mission effectiveness and helps to ensure seamless connectivity, enabling commanders at the front and at the rear to better execute and evaluate strategic and tactical accomplishment.

Figure 1, partially from the first article, graphically displays system integration as an essential subset of program management. It summarizes system integration well enough (I think), including the need for Warfighter involvement. It goes on to show the linking of system integration to the battlespace. This direct and unimpeachable linking may be missing (and/or presumed lost) on contractors and program personnel.

Please note again in Figure 1 the need for “Warfighter involvement,” “technological yield,” and “connectivity.” They are essential, in the beginning and throughout a program’s life cycle. They often are neglected in a program’s early stages, but are indispensable not only for managing the program, and for ensuring that subsystems and components successfully address the mission, but for integrating those subsystems into a viable end product (e.g., a weapon system, with all hardware, software, training simulators, and logistic support).

Expeditionary Warfare and Battlespace Management
Expeditionary warfare means deploying our fighting forces abroad, normally away from established bases. Historically, U.S. ability to project forces into distant areas has served as an effective diplomatic lever, influencing decision-making.

**Figure 1. The System Integration Process and the Battlespace**

Key: C4/ISR = Command, Control, Communications, Computers/Intelligence, Surveillance, and Reconnaissance; CONOPS = Concept of Operations; CONUS = Continental United States; MEDEVAC = Medical Evacuation.

Figure and table by the author.
The unfortunate cliché in the briefing room becomes the unhappy battle cry at the front.

making processes and acting as a potential deterrent on other states’ inappropriate behavior or adventurism.

The aircraft carrier strike group, strategic bomber, ballistic missile submarine, and strategic airlifter are all examples of power projection platforms. Military units designed to be light and mobile, such as airborne forces (paratroopers and air assault forces) and amphibious assault forces, are utilized in power projection. Forward basing is another method of power projection, which, by pre-positioning military units or stockpiles of arms at strategically located military bases outside a country’s territory, reduces the time and distance needed to mobilize them.

Expeditionary forces are the precursor of the rapid deployment forces. They must be (at least initially) self-sustaining, with a viable logistics support capability and with constant and undeviating Stateside connectivity.

As the distance between a fighting force and its directing headquarters increases, command and control inevitably become more difficult. Modern-day power projection requires high-tech communications and information technology to succeed. Ships at sea in surface action groups (e.g., an aircraft carrier and assigned cruisers and destroyers), capable of communicating with each other, must now coordinate with supplementing forces of other nations and with rear echelons. Missions, as well as forces, must be coordinated. Information, the one weapon that can be in more than one place at the same time, must be disseminated—rapidly and precisely. And you cannot do that if communications systems are not totally integrated and uncompromisingly reliable.

Strategy in the briefing room becomes tactics at the front; and “fight with what you have” —the unfortunate cliché in the briefing room becomes the unhappy battle cry at the front.

Table 1, like Figure 1 above, expands the original table in Part I to include expeditionary warfare and battlespace

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Program Mgmt.</th>
<th>System Integration</th>
<th>Expeditionary Warfare</th>
<th>Battlespace Mgmt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission planning; concept development</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Design/development (including hardware/software)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Modeling/simulation</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Research and development</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Risk management plan</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Gap analysis</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Core team developed; responsibility/accountability assigned</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>(including decision makers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warfighter involvement</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Performance-oriented; metrics developed/consistent/actionable</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Test plans developed; tech yield identified</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Contract in place; executable</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Connectivity/feedback</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Configuration/change management process defined/in place</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Internal/external security procedures in place</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Life-cycle management plan</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>
management. The requirements are the same, and a short-
coming at the beginning carries through to the end.

Having (notionally) brought operating forces into the
theater, the next step is to organize, manage, and optimize
operations in the battlespace.

The military operational environment has transformed
from primarily a time and space-driven, linear understand-
ing (a “battlefield”) to a multi-dimensional system of
systems understanding (a battlespace)—a system of sys-
tems. Battlespaces are more complex, primarily because
of the information age. Today, militaries are expected to
understand the effects of their actions on the operational
environment as a whole, and not just in the military domain
of their operational environment.

Battlespace management describes a unified military
strategy to integrate and combine expeditionary and allied
armed forces in military theaters of operations; includ-
ing land, air, sea, space, and cyberspace, to successfully
apply combat power, protect the force, and complete the
mission. Our Warfighters must work with allied forces and
often within different chains of command and spans of
control. Artillery fire, Naval gunfire, and close air support,
(e.g.; during amphibious landings), often delineated with
imaginary boundary lines, challenge compatibility and
connectivity. Similar goals and objectives must be achieved
using dissimilar forces and resources.

Superiority in the battlespace also means that the speed at
which the warfighting organization develops and trans-
forms knowledge into actions for desired effects in the
battlespace must be faster than the opposition at doing the
right actions at the right time and place.

Battlespace agility depends upon the quality of situational
awareness and holistic understanding of the battlespace,
in order to determine the best actions—a logic that has be-
come a driving force behind a renaissance of interest in the
quality of military intelligence. It is also about executing the
most effective actions in the most efficient manner relative
to achieving the desired impact.

It is worth remembering that, if a weapons system or plat-
form has reached the battlespace, it had better reflect the
absolute best tenets and efforts of Department of Defense
(DoD) program management. It may be impossible to fix a
problem in theater, with any degree of timeliness.

Once the system or platform is in theater, reach-back sup-
port must be structured, streamlined, and responsive, to
to ensure optimum performance. Unfortunately, even in the
cyber age, connectivity between key nodes of the supply
chain Stateside and the Warfighters in the battlespace
continues to be sluggish, erratic, and bordering on dysfunc-
tional. This after more than 18 years in Afghanistan and
twice that long in the Middle East.

Again, the Theater Commander in his briefing used the
terms: “No safe havens,” “no uncontested spaces,” and
“lethal weapons.” DoD has serious limits on where, how
much, and how often it can exercise forces in advance of
actual operations. And we need to consider all weapons as
lethal. Therefore, training exercises, especially in advance
of a unit’s deployment, must be up to date, and as realistic
as possible, consistent with safety. Lessons learned from
the exercises must be comprehensive and meaningful—
with maximum dissemination and with realistic, measur-
able, corrective action plans.

Weapons systems and platforms (e.g., HUMVEEs [High
Mobility Multipurpose Wheeled Vehicle]), once in the
battlespace, must have all compatibility issues resolved;
and range and depth of replacement parts equal demand.
Quantities of consumables (e.g., gas masks and cannis-
ters) must reflect normal and surge requirements, and be
subject to periodic review and verification.

Tactical decisions in support of battlespace manage-
ment (e.g.; in a surface action group) must address all of
the above, under fluctuating conditions of infrastructure,
weather, terrain, and the electromagnetic spectrum; and
reflect threat assessments, intelligence, and situational
awareness within the operational areas and areas of focus.

Optimally, in-theater tactical decisions should reflect pre-
deployment fleet and/or logistics exercises, wargames,
and tried and true concepts of operations, using tried and true weapons and platforms, in accordance with well-developed concepts of operations (CONOPS). This may no longer be possible, as we run out of both time, space, and opportunity to practice core competencies. And there never seems to be sufficient funding to support meaningful training. Funding for mission essentials such as training schools, software, and simulators—which should be fenced or consigned to these uses only—often is expended during the building phase to solve a problem, and no longer available when needed for its original purposes.

Deploying units replacing their counterparts in-theater requires a comprehensive pre-deployment turnover strategy, one that reflects months of connectivity and interaction before the actual turnover takes place.

**Summary**

System Integration is an indispensable subset of Program Management. Programs become products, and products find their way to the Battlespace. They must perform as required (and sustainably) in the Battlespace; U.S. lives and missions may depend on it. If that product, be it a weapons system, platform, or a piece of communication equipment, fails—someone may not make it home alive.

If a weapon system or platform has reached the Battlespace, it had better reflect the absolute best doctrines and efforts of proactive DoD program management.

“Fight with what you have,” the unfortunate cliché in the briefing room remains the unhappy battle cry at the front.

Program managers and contractors must recognize and support what warfighters already know all too well, that:
- Weapon systems or platforms have vital end uses in support of mission commitments.
- Successful end use requires urgency of arrival in-theater, and sustainability of operations in-theater.
- U.S. lives and U.S. missions depend on those weapons systems and platforms.

And rapid deployment does not mean rapid conclusion. There are currently no short-term involvements and there are not likely to be any. Eighteen-plus years in Afghanistan proves that. Please see my articles on Afghanistan Reconstruction in the January-February 2020 and May-June issues of *Defense Acquisition* magazine.

I have spent more than 50 years in direct or indirect support of the DoD. If one of my programs showed signs of failure and I did not act, I would rather have faced a dozen unhappy flag officers in the Pentagon than one unprotected 19-year-old Service member at the front.

The author can be reached at generazz@aol.com.

---

**We’re Looking for a Few Good Authors**

Got opinions to air? Interested in passing on lessons learned from your project or program? Willing to share your expertise with the acquisition community? Want to help change the way DoD does business?

Write an article (1,500 to 2,500 words) and *Defense Acquisition* magazine will consider it for publication. Our readers are interested in real-life, hands-on experiences that will help them expand their knowledge and do their jobs better.

**What’s in It For You?**

First off, seeing your name in print is quite a kick. But more than that, publishing in *Defense Acquisition* can help advance your career. One of our authors has even been offered jobs on the basis of articles written for the magazine.

Now we can’t promise you a new job, but many of our authors:
- Earn continuous learning points
- Gain recognition as subject-matter experts
- Are invited to speak at conferences or symposia

For more information and advice on how to submit your manuscript, check the writer’s guidelines at https://www.dau.mil/library/defense-atl/p/Writers-Guidelines or contact the managing editor at defacq@dau.edu.