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Shortening The Defense Acquisition Cycle: A Transformation Imperative

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If program managers want their program to survive, they must solve and resolve the riddle of why commercial cycle times are measured in weeks, months or just a few years, while DoD's cycle time is measured in decades.

*—VADM (Ret.) Arthur Cebrowski, Director,
U.S. Office of Force Transformation
(Defense News, October 21-27, 2002)*

The Case for Revolutionary Thinking

Today's compelling need for all Services to respond rapidly and decisively across the full spectrum of military operations requires revolutionary, not evolutionary acquisition strategies. Initiatives must be taken to bring defense cycle times closer to those of the commercial sector. The current 15-20 year acquisition cycle is not responsive to the Service's requirements for operating in the information-centric strategic environment. Systems that take longer to field than it takes for the system operator to be born, raised, trained and assigned most likely will come under attack for not being relevant to the threat. The Army's Crusader and Comanche programs, the Air Force's F22 Raptor, and the Navy's DD 21 Destroyer demonstrate the truth of this statement. Given the current political and strategic environment if it takes longer than ten years for a weapons system to go from concept to Initial Operational Capability (IOC), its chances of surviving are greatly reduced. Creating an acquisition strategy that is responsive and supports transformation requires more than new legislation and the application of rational policy. It must address the challenges posed by the entrenched cultures of the defense acquisition community and the traditional defense industrial base.

Charged with addressing a security environment that is multidimensional, noncontiguous, precise and simultaneous, the response capabilities of industry and the defense acquisition community have been found wanting. The first evidence of this capability shortfall came following the Chief of Staff of the Army's October 1999 announcement of the Army's transformation to the Objective Force. When challenged to field an Objective Force unit of action by 2010 the initial reaction was business as usual rather than the innovative initiative required for achieving this goal. The 15 + years acquisition cycle for major systems was treated as a tenet of the Natural Law, rather than just the accumulation of directive legislation, policy, and business practices that need to be drastically modified.

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Industry In A Changing World

When the Berlin Wall fell in November 1989 it set in motion events that eliminated the stability and surety of the Post-World War II bi-polar global community. Uncertainty became the order of the day, and the clamor for a “peace dividend” with the resulting shrinkage of defense spending impacted heavily on the world’s defense industries. In the United States the members of the defense industrial base responded in one of four ways - they consolidated, monetized, diversified, or evaporated. Participants in these restructuring strategies met different levels of success. Monetizers and Evaporators provided opportunities for Consolidators to acquire, and Diversifiers to widen their market reach. Since the starter’s pistol was fired at the “Last Supper”^{*} in Spring, 1993 by then-Deputy Secretary of Defense William J. Perry, the North American defense industrial base has shaken out to the point that there are now only five major corporations capable of total system integration: Lockheed Martin, Northrop Grumman, Boeing, Raytheon, and General Dynamics. Consolidation moves by these companies focused on infrastructure and capability. Though these actions achieved substantial reductions in the asset base devoted to defense in both the government and commercial sectors, they did not produce the agility and innovative capabilities necessary to address the transformational challenges of the 21st Century.

Driven by the slowing economy, today’s industrial base leaders are concerned with maximizing the synergies resulting from a decade of retrenchment and consolidation. This innate conservatism forces them towards evolutionary rather than revolutionary solutions. Exacerbating this situation, both the defense acquisition community and the defense industrial base populate their workforces with personnel familiar with “how the system works.” Knowledge of how things are done today is the currency of their worth. Overcoming this propensity to resist revolutionary change requires creative leadership.

Establishing The Mark On The Wall

The Army’s Future Combat System (FCS) is a networked “system of systems” containing both manned and unmanned equipment. It is the key enabler to achieving the Objective Force Package Concept. Success by the Army in getting the FCS into the force by the end of the decade is the accomplishment against which the progress of acquisition and industrial base transformation will be measured.

The difficulty of the challenge was highlighted when MG Joseph L. Yakovac, Program Executive Officer, Ground Combat Systems, sought to tap into industry for ideas on how the acquisition and development cycle might be streamlined so that the CSA’s end of the decade deadline for the fielding of an FCS-equipped unit of action can be achieved. During an Army FCS Industry Day presented by the National Defense Industrial Association (NDIA) in August 2002, MG Yakovac asked industry participants to define the parameters for a Brave New World of Systems Acquisition. This proved a difficult task since the involved organizational cultures - the Defense Industrial Base and the Defense Acquisition Community - are more comfortable with the past and the present than with a revolutionary future. A Brave New World is not what they seek.

This resistance to revolutionary change has created a drag on the defense industrial base’s contribution towards the scheduled fielding of the Army’s Objective Force initial unit of action. Industry, instead of standing in 2025 and looking back, tied itself to evolutionary thinking by staying in 2002 shielding its eyes from the morning sun. Rather than FCS proposals featuring aggressive applications of cutting-edge technology, industry’s initial efforts tend to look like something “we already have.” An example is the Lockheed Martin full page ad for the TRACER in the September 23-29, 2002 “Defense News.” According to the narrative the TRACER “...already meets many requirements for the U.S. Future Combat System.” Look no further! Such inertia will result in the Objective Force reshaping the defense industrial base rather than being shaped by it.

Reclaiming Lost Glory

In the good old days the defense industrial base was home to some of the brightest minds in engineering and other technical and scientific fields. Prior to World War II these innovators labored in the Government sector's laboratories, depots, arsenals, and shipyards. With the onset of the Cold War, research and development primacy, and the talented personnel who drove it, migrated to the defense industry's commercial sector. With the advent of the information age, many key skills are now resident outside of the traditional defense industrial base.

At the beginning of the last decade of the 20th century, bits and bytes replaced hardware development as the proving ground for forward leaning technology. The nexus of the collapse of the Soviet Union, the peace dividend, and the advent of the information age dealt a severe blow to the major defense contractors. These traditional defense companies, focused as they were on restructuring, were not well placed to compete for the best and the brightest of the digital age. Viewed as the equivalent of the old Northeastern smokestack factories by the video game generation, they lost the talent competition to the "Microsofts" and the "Oracles."

How do we recover the innovative initiative? First, serious effort must be made to set the conditions for the inclusion of non-traditional companies into the defense industrial base. In its 2002 report titled *Seeking Non-traditional Approaches to Collaborating and Partnering with Industry*, the RAND Corporation stated that "The most prominent barriers to greater collaboration between the Army (and DoD) and industry are (1) intellectual property concerns...and (2) excessively bureaucratic requirements...". To breathe life back into the moribund Defense Acquisition System, Deputy Under Secretary of Defense (Industrial Policy) Suzanne Patrick has undertaken initiatives at both the policy and legislative levels to enlarge the field from which innovative concepts and products are drawn. Particular focus is on establishing the legal framework to protect proprietary information, and on the infusion of common sense and best business practices into the acquisition process. The "Only Masochists Need Apply" sign must come down if the defense industrial base is to attract the small innovative, information intensive companies necessary for transformation to succeed.

Second, stakeholders must accept both short and long-term policy direction aimed at shortening the acquisition cycle time. Under Secretary of Defense (Acquisition, Technology, and Logistics) Mr. Edward "Pete" Aldridge's efforts to install the software community's spiral development model as a basis for what he has termed "evolutionary acquisition" is an ambitious step towards accelerating the delivery of new systems. This iterative process focuses on delivering increments of capability to the force at the earliest date rather than waiting for 100 percent capability sometime in the future. The evolutionary acquisition process ensures currency of the information systems by allowing the program manager to insert the most current technology upgrades at each bloc milestone. By recognizing that with information driven systems ultimate functionality cannot be defined at the beginning of the program, the final product will match the evolving need of the user. To implement this process requires an acquisition workforce that accepts the concept and is willing to take that leap of faith necessary to make it work. This is a critical piece of the innovation recovery puzzle.

Current workforce demographics reveal an aging population that may not possess the required adaptability. Writing in the February 2001, "Government Executive," George Cahlink informed his readers "hiring freezes, downsizing and outsourcing have all but eliminated young workers in the Defense Department's acquisition operations." Mr. Claude M. Bolton Jr., Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) reemphasized the problem when in September 2002 he told an Association of the U. S. Army (AUSA) gathering that nearly half of the Army's civilian workforce would be retirement eligible in less than ten years, and that more than half of these employees would retire. Is this, as Mr. Bolton stated, a crisis, or an opportunity to infuse needed new blood into the defense acquisition community? A requirement to replace 25-30 percent of the acquisition workforce is an opportunity that should not be squandered. Aggressive recruitment of fresh thinking, information age personnel coupled with a training

program that reflects the acquisition realities of the 21st century will ensure mission equipped warfighters in 2025.

Final Thoughts

Nothing reinvigorates a professional sports team like the arrival of a new coach, a new system, and the infusion of young, enthusiastic players. Veteran players must shake their complacency, learn the new system, and face the challenge of competition. The defense acquisition community and the members of the traditional defense industrial base are teams in need of such a shakeup. Evolutionary acquisition is the arena within which the two teams must play. Steps must now be taken to bring in the information age companies to stimulate the inventiveness and competitive tendencies of the established defense industrial base corporations. The acquisition workforce requires greater agility, adaptability, and more fresh ideas. To accomplish these objectives personnel managers must push for hiring reforms that not only attract qualified recruits, but also allow for hiring key skills at all levels without the current civil service restrictions. These efforts are necessary because achieving a major reduction in DOD's acquisition cycle time is not a goal it is a national security requirement.

ENDNOTE

* At the invitation of SECDEF Les Aspin, about 20 leaders of the defense industry met for dinner at the Pentagon, where then DEPSECDEF William J. Perry announced, "*We expect defense companies to go out of business, and we will stand by and let that happen.*" Named the "Last Supper" by Norm Augustine, then CEO, Martin-Marietta.

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