Written by Nick Sanders Monday, 16 May 2011 00:00

We **previously** reported on testimony proffered to the U.S. Senate Committee on Armed Services, Subcommittee on Emerging Threats and Capabilities, by some serious heavyweight players. In this article we want to explore the implications of that testimony.

Supply Chain Management

As we have reported in past articles, DOD is seeking to map its supply chain (a process that DOD calls its "S2T2" strategy). According to Mr. Kendall, that supply chain knowledge (or, in his terminology, "the gross anatomy of the industrial base") will be used to drive *decisions regarding DOD oversight*

. That sounds ominous, doesn't it? What can he be thinking?

One example he cited was the use of "rewards" for prime contractors that implement supply chain management strategies to reduce downstream costs (e.g., component or system integration costs). As another example of "oversight," he noted that the DOD is seeking to better align the defense industry's IR&D spend with its own technology objectives.

Well, nothing in the foregoing paragraphs strikes us as falling into the "oversight" category. One idea he noted was simply an application of a contract "incentive;" while the other idea was simply an objective. That said, we have been concerned about DOD's objective of better "aligning" contractor IR&D spend with its own technology road map. We have no objection to the goal—but we have strong concerns about the method(s) DOD intends to employ in order to reach that goal. (We most recently expressed our long-held concerns <u>here</u>.)

Speculating about the future (which is always an undertaking fraught with error), we can easily foresee a time when DOD questions/disallows any contractor IR&D expenditures that have not been pre-approved as aligning with the Agency's technology roadmap. In other words, DOD will be engaging in *centralized R&D planning and control*.

If we're right (and we fervently hope we're wrong) then generations of Soviet leaders will be smiling in their graves. And we're quite sure that such efforts will work out for the U.S. DOD just as well as they did for the former Soviet Union. Which is to say, not so well.

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Back to the testimony.

Mr. Kendall's testimony acknowledged trends that will be familiar to longtime readers of this site's articles. For example, he touched on the globalization of the defense supply chain and how that globalization introduces additional risks into program execution, including the introduction of counterfeit parts. He acknowledged the importance of successful supply chain management to accomplishment of mission (and/or program) objectives. And he noted that opportunities exist to reduce cost and schedule by working to improve supply chain management practices, particularly at the lower tiers of the supply chain. To those points, we can only say, "*Amen, brother!*"

Now, we have our doubts about DOD's ability to accomplish its stated goals. We have yet to encounter very many DOD contractors that have actually mapped their entire supply chains, program by program, and identified where lower tier suppliers support multiple programs. The burden to execute the S2T2 strategy will likely fall on the DCMA—and we don't think they're prepared for it. That said, we agree with DOD that it's a laudable—and even important—objective that needs to be accomplished.

Thoughts on Program Management

As we've asserted many times before, how defense programs are being performed today looks almost nothing like how they were performed thirty or forty years ago. We are at least two generations removed in time, and perhaps quantum levels removed in technology, from the environment in which we sent men to the moon. For example, the number of lines of executable source code in the average 2010 DOD weapon system is essentially unimaginable to a DOD program manager of 1970. As the House of Representatives Armed Service Committee Panel on Defense Acquisition Reform noted that the Polaris A3 submarine-launched ballistic missile program of the mid-1960's had less than a million executable lines of executable source code to the F-35 aircraft program, which has roughly 13 million lines of executable source code to wrestle with. Thus, effective management of the IT aspects of a modern weapon system may, in many cases, outweigh the importance of its other aspects.

Apogee Consulting, Inc. Management Axiom No. 1:

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1.

The Defense Market is complex and it is changing; it is changing faster all the time. What worked for DOD yesterday won't work today. What worked for a company yesterday is no guarantee of success in today's market.

Partners or Adversaries?

Mr. Augustine testified about the impact of acquisition and program mis-management on the ability of contractors to control cost and schedule. For instance, he said one of DOD's key problems was "Uncertainty in year-to-year funding—which precludes efficient purchasing quantities, discourages contractor investment in productivity measures, and leads to cancellation or renegotiation of sometimes thousands of subcontracts." He also said that, "American firms spend over twice as much on litigation as on research." What do those two statements have to do with each other?

The two statements identify wasteful practices that impede effective program management, and they both identify the cause of such waste—an acquisition environment that is excessively rigid, overly legalistic, and which suboptimizes almost every transaction because the interested parties are adversaries instead of partners.

Congress funds programs, and the <u>Anti-Deficiency Act</u> requires DOD to follow Congress' funding direction to the letter. Congress' unwillingness to believe in—and invest in—DOD weapon system programs for a period longer than one year costs the taxpayers millions, if not billions, of dollars each year. That needs to change.

We have pontificated about DOD's tendency to turn on, and attack, its own contractors many times on this site. Congress and the news media love to run stories about contractor waste, fraud, and abuse. Nobody wants to run stories about how DOD is partnering with its contractors on a long-term basis in order to work together to develop challenging technology. Anybody who tries that is going to be heavily criticized.

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Further, DOD's acquisition workforce is—by the admission of its own leadership—not up to the challenges of managing today's programs. The workforce is too small, it is ill-trained, and it rotates around far to quickly to develop any subject matter expertise. In short, DOD is mis-managing its acquisition workforce—and then complains when acquisition outcomes don't match intended goals.

Finally, let's not spare the defense industrial base, those DOD contractors who are the front-lines in new technology development, as well as weapon system production. Generally speaking, those contractors do very little to foster/protect their suppliers. The issues identified in the Senate testimony as pertaining to DOD are a macrocosm of those issues pertaining to the contractors' individual program supply chains. Primes award firm, fixed-price subcontracts when every indication tells them not to—all in the name of "controlling" cost growth by pushing that risk lower into the supply chain. Each purchase order is a one-off transaction, as opposed to another event in a chain of events within a partnership. Contractors need to do a better job of managing their supply chains—which includes protecting their suppliers from undue risk.

The so-far unstated common theme in the foregoing paragraphs is the role of attorneys. Attorneys comprise the majority of Congress. Attorneys advise DCMA contracting officers regarding what can, and what cannot, be done. Attorneys write purchase orders and subcontracts. Attorneys are everywhere in the acquisition environment.

We have nothing against attorneys. But we also note they have a unique skillset and specialized training that creates an advocacy role. Whether advocating for a party to a courtroom proceeding or advocating for a company when drafting purchase order, the attorneys have been trained to view the interaction in as an adversarial one. It's a win/lose environment in which they operate. They are focused on protecting their client by minimizing risk and shifting it to the other party.

And guess what, gentle readers? In the modern world of program and supply chain management, that kind of approach is going to *suboptimize the outcome for both parties*.

Apogee Consulting, Inc. Management Axiom No. 2:

1.

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We can save quite a bit of money if we manage programs better in an environment that's conducive to effective program management. Congress can save money by reducing funding uncertainty and by rationalizing acquisition statutes and regulations. DOD can save money by partnering with its contractors instead of attacking them and by improving the quality of its acquisition management workforce. And contractors can save money by partnering with their subcontractors instead of trying to maximize their own profit at the expense of their subs

As always, members of this site are encouraged to offer their own views.