Discussion Paper

The organization of the United States Military continues to be transformed with each new mission. With the level of human capital and material assets in a flux the operational complexities to meet increased demands have reached a level heretofore unseen. Acquisition and deployment of information systems to support this ever moving target is nothing less than a bureaucratic maelstrom.

This effort to identify the problems with information technology (IT) acquisition within the US military was the logical first step in developing a way forward.

The committee Improving Processes and Policies for the Acquisition and Test of Information Technologies in the Department of Defense (herein after known as the IT Committee) was composed of both public and private sector information technology executives. This is good for the high level business view of these processes. There were also those with hands-on technical background. With this mixture the experience the conclusion drawn from the study would certainly be indicative of the true state of affairs.

The main issue identified with IT acquisition was the tendency to be treated in much the same manner as a large weapon system purchase. This leads to excessive time required to bring assets to the field following the definition of requirements. The Joint Strike Fighter (JSF) is a classic of such weapon system contracts. The JSF, first conceived in the early 1980, is anticipated to cost over one trillion dollars over its lifecycle and take over 20 years to deploy after the original contract for design and construction being placed. With the continuing advancements in IT this sluggish pace would all but guarantee that our armed forces are equipped with obsolete hardware and software.

The committee conclusion and recommendation reflect a basic system engineering process which is standard throughout the engineering community; define requirements, design the system, build a prototype/test bed, engineering functionality testing, end user testing, deployment, user training, ongoing operation, support and maintenance.

As with the aforementioned IT Committee the Committee on Review of the U.S. Department of Defense, Air and Space Systems Science and Technology Program (herein after known as the ST Committee) was composed of a more than adequate cadre of professionals with broad expertise.

However the attempt in 2001 to assess the general state of U.S. Department of Defense (DOD) science and technology investment did little to address information technology. Information Systems shows up in the title and front matter but is in reality barely touched on throughout the report except at a vague level. With 12 years of experience since then it is evident that greater focus could have been made on the subject of information technology. Still, since the expertise applied in the private sector has been leveraged in the public sector to the point where the majority of the DOD IT compromises are not external. This is a testament to the hard work and ingenuity of those who are known in the DOD community as Cyber Warriors.

These two works point out some of the same issues and provide similar solutions. The major difference is that the newer report identifies the fact that IT systems were treated as if they were weapon systems. This mindset tended to extend the timeframe required to bring a system to full operation and drive up the cost.

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