

LETTERS TO THE EDITOR

We welcome letters to the editor. Please send to: Department of Defense, Defense Systems Management College, ATTN: DSMC Press, 9820 Belvoir Road, Suite 3, Fort Belvoir, VA 22060-5565.

From:

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In a recent issue of *Acquisition Review Quarterly*,¹ two articles appeared which had a common thesis: It is possible to determine/project with some certitude the success factors for acquisition programs. One study sought to identify factors that contribute to program success.² The second article had as its central thought that the use of critical success factors in the development of critical management information systems for the DoD program manager would have significant benefit.³ In both articles, the selection of the program management databases raises a number of questions.

What is Missing?

Of note are the factors not considered significant in the data, such as technical difficulty (this has been the most significant factor in program failure or success and gave rise to Dr. John Foster's *Unknown-Unknowns* when he was Director of Defense Research and Engineering (DDR&E)). No mention is made of the contract, which is the primary interface between government and industry, and has been the cause of much program disruption (C-5, F-111, Army Helicopter, F-14, DD-963). Proper contract administra-

¹ *Acquisition Review Quarterly*, Volume 5, No. 1, Winter 1998.

² Maj. Kenneth J. Delano, USAF, *Identifying Factors That Contribute to Program Success*, 1989.

³ James H. Dobbins and Richard G. Donnelly, Ph.D., *Summary Research Report on Critical Success Factors in Federal Government Program Management*, 1998.

tion can make or break a program. More of concern was the statement in the first article “Judged least important were meeting logistics supportability objectives....”

Since logistic support is between 60% and 80% of the cost of a system and without it or even with marginal support, systems fail. Something is amiss in the training and education of our program managers if logistics has no recognized priority. Perhaps an inspection of today’s cannibalized aircraft or other systems used to keep others operating might be a good object lesson. No mention in the first study is made of today’s most recognized success factor and that is the management information system and the accompanying diagnostic expert system. The second study has it as the number one success factor. Given the advances in risk management, an essential factor in successful programs, it is hard to believe that the first study does not include it, and it ranks number 10 in the second study. Lastly, no mention is made of one of the most difficult barriers to a successful program; transition from development to production.

It is believed that from the data provided by the two articles, all the items listed have a high priority to an individual PM; (a) depending on a his or her experience, (b) where the program was in its cycle when the survey was accomplished, (c) the level of PM training, (d) the level of technical difficulty of the program.

Where We Have Been

The first substantive investigation of defense procurement was the Truman Committee in the 40’s after WWII. This effort was primarily focused on corruption. With the creation of the Defense Department under James Forrestal, there was a major push to bring order out of chaos; however, procurement problems during the Korean conflict demonstrated that much remained to be done. In the late 50’s after extensive testimony from all the services, the Blue Ribbon panel was created, and the results were more regulation and laws plus an effort to professionalize both the contracting field and the program managers. Its results were limited. The McNamara Initiatives in 1961 brought zero based budgeting, cost effectiveness, and other financial legerdemain, again with limited results in improving the probability of program success.

More Studies

Then the flood started⁴: The Fitzhugh Commission (1970), The Commission on Government Procurement (1972), the issuance of OMB Circular 109 (1976), Defense Science Board Acquisition Cycle Study (1978), Defense Resource Management Study (1979), Defense Acquisition Improvement Program (1981), Grace Commission (1983), Packard Commission (1986), Goldwater-Nichols Defense Reorganization Act (1986), Defense Management Review (1989) Reinvention Initiatives 1992-?. There was a common thread in the recommendations of these various panels as it pertained to the attributes for successful programs. These are best exemplified by the Packard Commission’s “Acquisition Model To Emulate.” The features are (1) clear command channels, (2)

⁴ GAO/NSIAD-93-15/December 1992, Weapons Acquisition, A Rare Opportunity for Lasting Change.

stability, (3) limited reporting requirements, (4) small high quality staffs, (5) communication with users, and (6) prototyping and testing.

Add Management Theory

In the meantime, many new management theories were put forth to try and improve the opportunity for program success; Best Practices, Successful Companies, Total Quality Management, Total Quality Leadership, Drs. Demming and Juran, Cost Schedule and Performance Measurement, Zero Based Budgeting, Zero Defects, Theory X, Theory Y, Theory Z, Milestones, Inch Stones, Critical Path Analysis, Management by Objectives, Fly before Buy, Technology on the Shelf, No Concurrency, Concurrent Engineering, Reinventing the Government, and the list goes on. Useful theory, but each requires careful application and results analysis.

Results

Our program success rate has not greatly improved, lead time remains excessive, the drive for new untried technology still remains and delays new systems as unk-unks come to haunt the acquisition. Cost overruns are still with us (see Everglades rehabilitation project), and we ignore history as did the program managers in the first study (logistic support in the Balkans). Both the Committees' of Congress and the General Accounting Office is a tremendous repository of corporate memory. The GAO has issued over 900 reports and testimonies on virtually all aspects of the weapons system acquisition process.⁵ These are quality reports even where there are disagreements on recommendations. They should not be ignored. The staffs in the hill Congress reviewed many acquisition successes and failures, sharing knowledge with them can save later problems, and to ignore them is to do so at your peril. It seems we continue to look for a silver bullet or perhaps several, but perhaps history provides better clues.

How Do We Get There From Here

The common cry of a troubled program manager normally is to blame the big three to which most management problems are addressed; "If I only had more funds, or if I could only get good people, or if this program was only stable." Programs do not always work that way. In the competitive economic environment in which we operate, there is always competition for funds, and also always short falls. The same holds true of people and program stability.

FBM Program

The Fleet Ballistic Missile program was a success not only because it met the Packard Commission model before the model was even articulated, but also because it followed significant management practices: open communication, independent internal evaluation, on-site management representation at contractor plants, strict configuration

⁵ GAO/NSIAD93-15/December 1992.

management for approved designs and manufacturing processes, and incentive contracting at the prime level and extensive competition at the subcontract level.⁶ It is interesting to note that the average tenure of the Program Manager was years and for 40% of civilian personnel over 10 years.⁷ The PMs were men of outstanding technical and management capability.

Some Lessons and a Proposal

Program success factors are many and varied and no one set suits all programs. It is evident that the discipline of management, supported by an extensive information system, coupled with an expert IT system to pick out areas that need attention, is a start. Each Program should be supported by modeling and simulation. Starting with the management discipline, it is apparent that the application of the principles of Systems Engineering should be applied to all programs. Unfortunately most PMs have not been trained in Systems Engineering, and the training received at DoD Schools such as the Defense Acquisition University do not emphasize this, but rather group training in many short courses.

An excellent management information system is the second ingredient. The Computer Aided Acquisition and Logistics Program has been in existence for over ten years but how many program managers incorporate it in their programs? An excellent Program Manager Manual HBK 59 exists, we have gone a long way with automated manuals, The Contractor Integrated Technical Information System (CITIS) specification exists, and provides an excellent basis for data exchange with the contractor. A review of the outstanding MIS program for the disposal of hazardous material at Rocky Flats is a good model for the complex programs. There are many excellent simulation and modeling programs available that it is a shame more managers do not take advantage of them, at the minimum use they use as an excellent staff training tool.

A program manager must keep Business Management and Technical Management in balance and a well developed MIS system can aide in this process. The Programs Strategic Plan using the Systems Engineering Process will not guarantee success, but it provides a tried and true technique for program management and a discipline for the program staff. Each program is different, has different goals and objectives, and varying critical areas which can change with the next fax or e-mail. Recognizing what is important is the PM's first priority, and the data system should be defined for his needs, incorporating the factors that he and his contractors are critical, modifying them over time and base lining these against the contract provisions so that he remains within its framework. It is unfortunate that the PM will seldom be around when 20/20 hindsight is used to determine the program's success, but he can console himself with the understanding that if he was promoted for his efforts and the program subsequently failed, he avoided the well known stages of many programs which are; enthusiasm,

⁶ GAO/NSIAD-90-160 Defense Acquisition. Fleet Ballistic Program Offers Lessons for Successful Programs.

⁷ *Ibid.*

disenchantment, panic, search for the guilty, punishment of the innocent, and decoration of all those who took no part.

End Notes

There are many fine volumes on management, and when frustration grows in a program manager, he should read one or more of the following: *Up The Organization* by Robert Townsend, *Parkinson's Law* by C. Northcote Parkinson, *The Peter Principle* by Lawrence Peter, *The Peter Prescription* by Lawrence Peter, *Self Renewal* by John Gardner, *Five Golden Rings* by Miyamoto Musashi, and *Augustine's Laws* by Norman R. Augustine.

There is no cookbook for successful acquisition management. The system delivered to the operating forces must work and be well supported and remember it must be operated by people. In the words of Admiral Jellicoe at the Battle of Jutland—"The prelude to battle is the work of the engine room"—and so it is with the program manager.

This is a longer than desired critique, but the authors had at least twice the volume, and the body of historical data is very large, but seldom reviewed or really explored. It would be an interesting research effort to really try and define the boundaries of successful project/programs (military and Civilian) over the last three decades.

Very respectfully,
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