

## **Performance Measures and Metrics: A Pragmatic Approach to Project, Program, and Portfolio Management**

Rex B. Reagan

*The narrative describing the administration, management, and monitoring of U.S. Federal Government projects continues to grow. The approach to describing the tremendous cost of non-oversight of the underlying element of our major projects often rests with the Acquisition contracts and a critical need for a method, tool, or technique for measurement of the contractor's performance that may predict success of these increasingly complex projects. The author will introduce a tool that could aid significantly for executing the contract portion for successful project management.*

At the heart of most projects, programs, and portfolios there exists a document that initiates that entity to begin work. That document is most often the "Contract". In the world of contracting, there are contract vehicles that require pronounced oversight, regular and strict reporting, and contractually required deliverables that provide detailed accounts of those accomplishments and contributions by the contractor. However, a tangible tool has been absent from much contract administration that presents a clear and present technique that will capture the performance observed by the customer. That tool is essentially a "scorecard" that is comprised of relevant criteria or standards that the contractor will be measured against.

Is it not time to entertain the thought of revising the venerable Earned Value Management (EVM) formulas, or at least introducing a variable that might be an option for those who require a comprehensive approach to realistic performance? 1967, the Department of Defense established a criterion-based approach, using thirty-five criteria, entitled the "Cost/Schedule Control Systems Criteria (C/SCSC)". Afterward, until additional attention was placed on this much-needed approach, C/SCSC was viewed as a financial control technique that could be placed in the hands of financial analysts. Frequently, these techniques did not reach the in-box of Project Managers, in its early days. Much of earned value management (EVM) methodology has remained (for fifty years) the bedrock of project performance report, in particular for cost-contracts. During this time, project, program, and portfolio complexity has evolved to warrant addition of an application, or at least a tool, that would address performance.

This article provides an outline of the "Contractor Assessment of Monthly Performance" (CAMP), a brief, one-page, non-software-driven effort with multiple criteria or standards that are based on traditional work elements. It is designed to capture the levels of proficiency, on a monthly basis, encountered within the main factors that are active during execution of a contract. The CAMP has been used on contracts for the Department of Defense and the Department of Homeland Security and has been well received by both the contractor and government with appreciation. These assessments have resulted in mutual benefits from early upfront notification of concerns or content of contract performance. This article will explore the benefits from employing a standard, uniform, yet concise tool to capture contractor performance. A suggestion of the usage of this CAMP will appear later in illustrations and how this index would support, strengthen, and increase information for regular and consistent reporting on contracts and projects that the customer requires.

## CONTRACTOR TASK PERFORMANCE ASSESSMENT (EXAMPLE)

Name of Contractor: Doe, John  
 Task Order Number:  
 Period of Performance: November, 2016  
 Date of Review: December 5, 2016  
 Task Title:  
 Task Description:  
 Location of Performance:  
 Task Manager:

Programmatics (Rating 1-5 or N/A)

1. How well is the contractor planning, managing, and controlling the task?	( 5 ) ( 5 )
2. How does the completed product relate to the original task as directed?	( 4 ) ( 5 )
3. How well are previously documented action items being properly worked?	( 5 ) ( 5 )
4. How well is the contractor controlling risk?	( 5 ) ( 5 )
5. Are deliverables on schedule and of a high quality?	( 5 ) ( 5 )
6. Were multiple submissions necessary to get an acceptable deliverable?	( 3 ) ( 5 )
7. How adequate is staffing (quantity and skills)?	( 5 ) ( 5 )
8. How well does the contractor have control of his subcontractors and vendors?	( 5 ) ( 5 )
9. Were rejected deliverables resolved and accepted in a prompt and timely manner?	( 5 ) ( 5 )
<b>Total:</b>	<b>( 42 ) ( 45 )</b>

Cost/Budget

1. Are expenditure rates, including ODCs, in sync with projected progress and	( 5 ) ( 5 )
2. Accomplishments to date and are vacancies justified?	( 5 ) ( 5 )
<b>Total:</b>	<b>( 10 ) ( 10 )</b>

Schedule

Is the contractor on schedule?	( 4 ) ( 5 )
Have discrete, measurable, and definitive milestones been developed, adhered to?	( 4 ) ( 5 )
How well has the contractor identified the critical path?	( 4 ) ( 5 )
<b>Total:</b>	<b>( 12 ) ( 15 )</b>

Technical/Performance

How well does the contractor meet and perform the requirements?	( 3 ) ( 5 )
How well have customer issues been resolved?	( 3 ) ( 5 )
How well is the contractor performing Logistics Support & Sustainment?	( 3 ) ( 5 )
How well has Quality Control and Assurance been applied and adhered to?	( 4 ) ( 5 )
How well are technical data requirements being applied?	( 3 ) ( 5 )
<b>Total:</b>	<b>( 16 ) ( 25 )</b>

Program Documentation:

Are required deliverables on schedule. Are all Governance documents on schedule?	( 5 ) ( 5 )
<b>Total:</b>	<b>( 85 ) ( 100 )</b>
<b>Grand Total:</b>	<b>( 85 ) ( 100 )</b>

Reviewed By:  
 Office Code:  
 Phone Number:  
 Signature of Grader:

Figure 1: The CAMP

The value of this tool resides within its simplicity, a basic one-page scorecard that contains the primary criteria for assessing project performance measures in a uniform and consistent manner to the prime contractor each month. This scorecard can easily grow in complexity and use, but objections to its use will undergo similar phases.

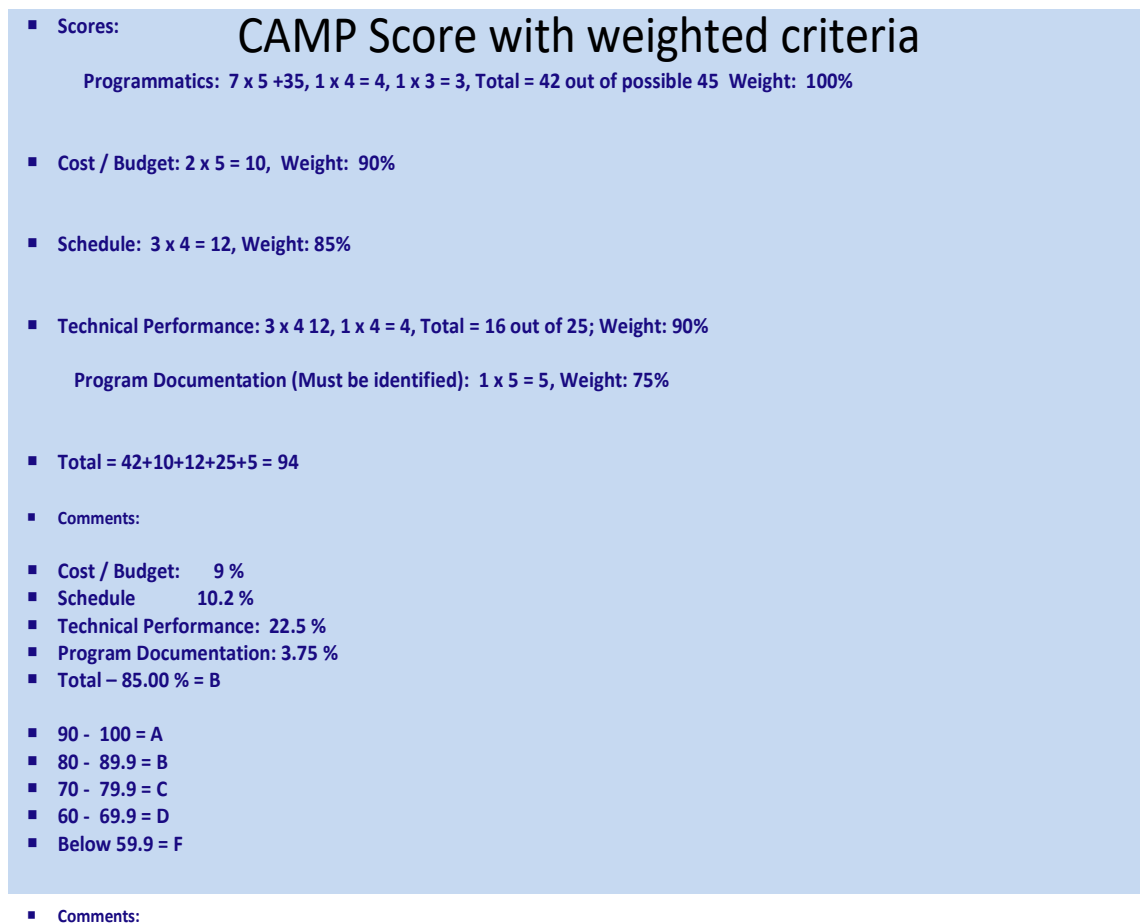


Figure 2: An example of how the scoring of a month’s performance might be viewed by the Contracting Officer Representative, or their delegate. Notice how weights may be placed upon different criteria within the performance parameters

As noticed, the CAMP is straight-forward project management contract assessment tool comprised of 20 criteria or standards that are a normal part of contract and project execution, with scoring of 1 to 5 points per standard resulting in a maximum score of 100. The CAMP is normally based upon performance of the contractor’s work during a standard 30-day period of performance that is time-driven. These standards are usually consistent throughout CAMPS; meaning that these standards are not subject to modifying based upon customer, contractor preferences but may be examined upon project changes that may occur due to funding or political priorities..

Modification or altering the standards may reduce the integrity of the assessment and incorporating other standards that may be perceived by the contractor as “customizing” the CAMP. Should the customer be warranted to note performance that would be in addition to stand project deliverables, then he would simply amplify “supplemental points”; that the contractor may emphasize and reduce the possibility of standards that reflect more technical areas that present the possibility of risks or technical challenge. There may be decisions made

by the government to add 1–2 or more, additional points to the final score during the monthly performance for innovative ideas or coming through with a quality product on a sensitive issue on very short notice. The reverse, reducing the final score by 1–2 or more points, may also result when the contractor misses a deadline or lateness in meeting attendance or contributions.

The CAMP has been used on a limited number of contracts in both the Department of Defense and Department of Homeland Security. In only about 10 percent of actual cases have the contractor preferred not to receive regular, consistent, and uniform customer feedback concerning its performance. The feedback that the CAMP affords will allow proper and official notification to be made regarding the performance of the contractor and, as important, establishing the customer as results-driven and concerned about customer performance and products provided to the customer.

Even in its simplicity, the CAMP can be, and has been used for documentation for contract modification, formal notice for correcting deficiencies, and nothing less than stellar performance. Contractor Performance Appraisal Reporting System (CPARS) reference for input, performance reporting, metric generation of contract execution, input for award panel decisions, evidence of contract monitoring and oversight, and uniform and consistent feedback to the contractor for correcting deficiencies and less than stellar performance. A paramount reason for using the CAMP, or other assessment tool, is to provide clear notice to the contractor of the customer concern for performance and for attaining the levels of proficiency necessary for continued success. The scoring criteria can be reviewed at regular intervals for possibly revising criteria for improved scoring and may be needed as scope or contract changes evolve. Current statistics on the subject of contract performance follow the graphical depiction of a typical CAMP:

In the past thirty years, EVM has matured as a Project Management tool that must be understood and used when feasible by managers and executives, not just financial or program analysts. In 1989, EVM leadership was elevated to The Office of the Undersecretary of Defense for Acquisition, thus making EVM an element of project, program, and Portfolio management, to include contract administration and management. In 1991, the Nation's Secretary of Defense cancelled the Navy's [A-12 Avenger II](#) program because of performance problems detected by EVM. Could the circumstances that warranted this cancellation be detected far earlier that would have resulted in the saving of untold taxpayer dollars and probably valuable jobs, be realized much earlier had a tool such as the CAMP been utilized? Are there similar Government Acquisition projects, programs, and perhaps portfolios that may be faced with similar decisions? This article may answer that question. It is past the time to incorporate (if not change) additional factors into EVM methodology that will bring a more enhanced measurement of project performance and increase the information and value for management and project reporting.

The very presence of a performance program or technique is predicted to result in improved performance. It has been estimated that performance is 27% better on average in the rated categories for those entries that have performance measuring techniques for programs versus those that do not have one in force. Possible challenges to use of the CAMP includes a potential perspective that the CAMP might be viewed as an assessment instead of the more often used word "evaluation", due to its temporary nature. The CAMP is a snapshot of contractor performance in time and during a phase of the contract execution. At this juncture of a snapshot,

multiple inferences are made from this singular total score. After notification of a very possible less-than-deal score on, for example, technical performance, the contractor is going to be resolute to gain back the proper score that he desires and views as deserving and just. The result of this action is expected to be a marked increase in score for the following month, and for the contractor to get back on the performance track of choice. It is an inescapable part of all assessments or evaluations that the human factor is present and at work.

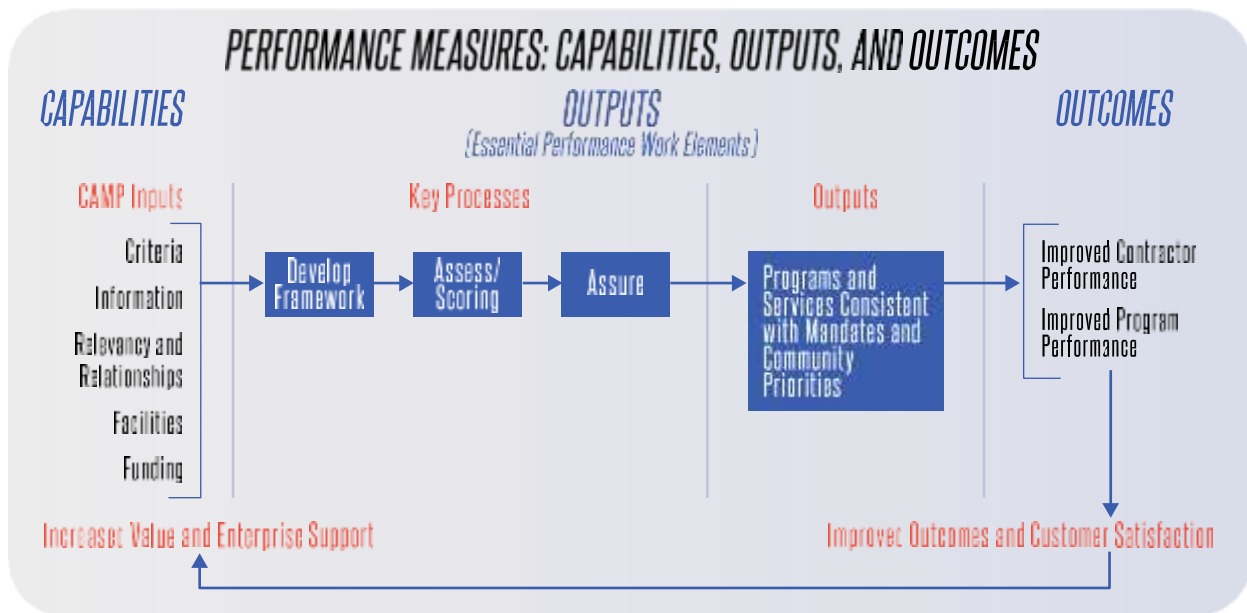


Figure 3: Elements of Performance Measures

Project Management is based upon Customer Relationship Management (CRM). This relationship can never be underplayed or taken for granted that because of a seemingly content customer. Contractors are very concerned about their performance and the assessments and want to ensure that these monthly scorecards are an accurate reflection of their work performed, an integral part of a successful project, and that these monthly scorecards are unbiased and reflect their accomplishments. The opportunity to challenge the assessment is not available. This event is not open to negotiation between the contractor and COR (or the designate). The assessment is often presented during a monthly meeting between the Government Contract Officer Representative (COR) and the Project 2 contractor representative. The assessment is the ground however, for establishing an almost immediate remedial action plan to correct undesired scores or assessments. The project itself may often be viewed as a critical element of customer (albeit sometimes intangible) success, with its resources, and future life.

Should the thought of a perception of bias or irrelevant factors be used to comprise the scores for the assessment, this thinking would result in a contractor and COR discussion to occur within the first 10 days of the following month. During this critical time, and only during these 10 days, would a revised score be permitted to be issued based upon empirical evidence and sound judgement. This arguably may afford contractors limited relief from erroneous or biased assessments because the score is then official (having been agreed upon throughout the CAMP) and the possible data or beliefs for the assessment are being carried forward into the following month. Once the kick-off meeting has been conducted, project parameters have been

formalized, the integrated baseline review finalized, the CAMP's standards are linked to the project, and the customer mission needs, then the thoughts of the team should turn to the desired results (project outcomes and project performance).

Upon notice of assessment scores of contract and project performance, inquiries must be made and define questions put forth: It is a lower level of system failures on network servers? Is it a reduction in benefit processing time for enterprise wide issues? Is it a broader dissemination or promulgation of federal directives, information, and instructions resulting in unanticipated results? What is the ultimate intended objective of the project and how does it relate to the customer's strategic mission? Fundamental questions might be the underlying priority, yet technical factors regarding any project will be apparent and should be viewed initially. Answers can often be found, not with an exhaustive or sometimes painful analysis, but through cooperative and facilitated discussion with the customer, project manager, and with the contractor.

The objectives of the CAMP are apparent and in concert with Project fundamentals:

- a. Determine the current level of project and technical efficiency that contractors are performing the work at.
- b. Deliver the project on time, budget, and the established performance requirements.

These objectives (when attained) will permit a baseline to be established for which future performance can be forecasted and measured. If objectives are not established, how can we measure project success without a fresh source of metrics for consistent, uniform, and established standards?

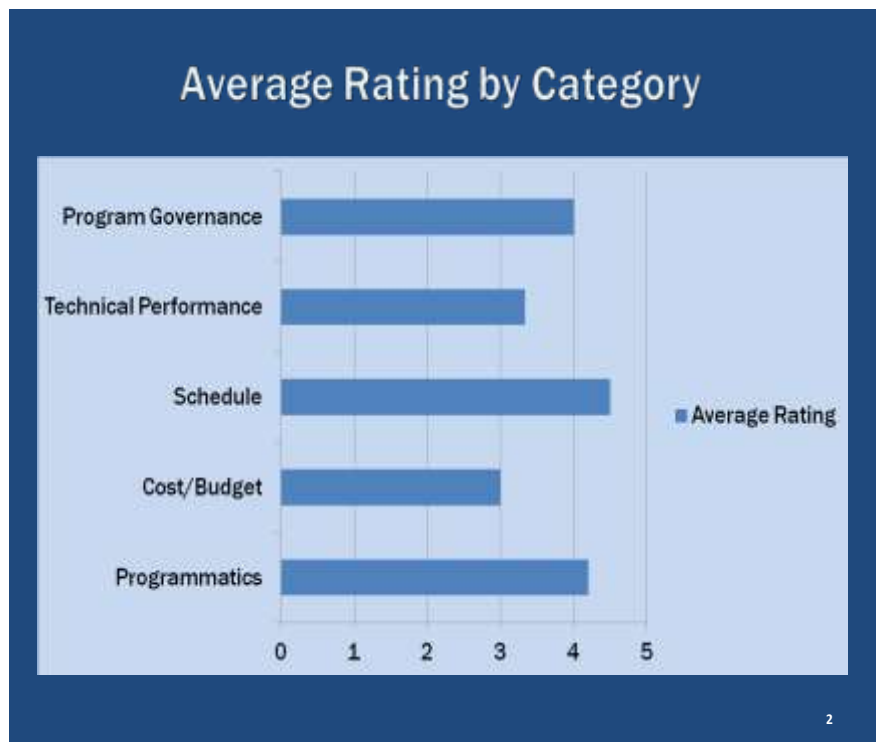


Figure 4: Results of the scoring for “snapshot” reporting



Notice that this score might indicate the need for increased attention to Technical Performance, but with the exceptional Schedule performance, this attention could well be accomplished without loss of over-all performance scores.

The basic question must be asked, “how can projects be evaluated without quantitative metrics”? To rely upon simply a quality assurance surveillance plan for establishing metrics will not result in the accuracy of government- assessed performance or indicate the true success of project, program, and portfolio management.

The CAMP is essential for the project and also needed for contractor performance to affect proper changes in his resources, manpower, and schedule completion. Quality Control guidelines are essential to have but a “hands-on “ approach with regular and uniform feedback which become a portion of systematic reporting will be paramount for a complete performance and project based project management operation.

Assess performance based on standard criteria that are identified from the contract’s performance work statement. Also, the injection of ISO 9000 or the SEI CMMI standards can be introduced for continuous process improvement and innovative techniques. These infusions of more formal criteria will increase the value and validity of criteria, standards, and the resulting scores from the CAMP. This will undoubtedly affect project completion and could add a much needed variable to EVM scores, if this methodology is being deployed.

It is essential to establish a team approach that results from the contractor proposing criteria and metrics upon which the scoring will be conducted for project success. This joint (customer and contractor) generation of the scoring criteria will assist in the buy-in and in relevant criteria for scoring. A limited number of specific criteria may be identified for these factors. As the contract matures, the criteria may evolve or change for maturity of the work performed, as we must ask ourselves “are we measuring the correct criteria and are we measuring the criteria correctly?”

As Project professionals, we must elevate the significance of contractor performance, which will be demonstrated by establishing a contract performance improvement working group that includes senior leaders that will meet at a regular (monthly or quarterly) basis to review and examine the CAMP reporting process. For major project acquisitions which are the bedrock of a major program, senior management may consider escalating this process to higher-level boards of directors, executive boards, or similar forum of their choosing.

### **Why use any measuring technique or tool?**

Perhaps the underlying reason for the use of the CAMP, or any measuring tool, rests with sobering findings of the Government Accountability Office (GAO) from its report of June 2014: The number of federal contractors that have been suspended or excluded from future contracts for poor performance has more than doubled in the past five years—a development that watchdogs inside and outside of government say is positive and a very telling statistic on contractor performance and the ability of the customer to hold accountability and standards to a proper degree of customer expectations and taxpayer rights.

*After notification of a less than ideal or even desired score on technical performance, and to the greater extent, the overall score; the contractor is going to act with alacrity to resolve and rectify the observed or perceived deficiencies.*

GAO reported that contractor suspensions and debarments rose from 1,836 in 2009 to 4,812 in 2013. GAO stated that the numbers reflect greater oversight of projects that use taxpayer money and show that more contractors are suffering the consequences from overbilling, subpar performance, or ethical breaches. Critics outside government say most of the contractors that are being held accountable are small companies or individuals which, quite possibly and understandably, even more increase the critical need for implementing tools or methods for providing constructive feedback and acquiring project assessments of work performance. Recent feedback has indicated a slight decrease from realization that action must be taken (and is) from the possibility of termination of business by lack of performance.

## **Summary**

In the world of projects, programs, and portfolios with its increasing complexity, it is imperative that the Manager act with responsibility consistent with the challenge that the individual and stakeholders will face. This sometimes challenging responsibility will require the use of innovative tools, techniques, or methodologies that will become a primary ingredient and often times a driving force to success of the investment program and the underlying element of the project to manage and oversee.

Managing and measuring performance on a project to the attainment of performance goals or stated criteria and objectives entails continuous involvement of the project management team, especially the program manager and often the contracting officer's representative performing the monthly scoring. But it must be engrained within the team, that the focus should be on improving contract performance and thereby project performance and not evaluating team members. Each review should contain and answer the questions, "Are we measuring the correct criteria and are we measuring the criteria correctly?" The CAMP or similar tool should be reviewed frequently to validate proper measuring of the work performed and to determine its results.



## About the Author



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**Rex Reagan** is a Senior Project Manager with ICF, Inc. He has been a senior Federal Manager for the Departments of Defense and Homeland Security and a senior Naval Officer (SC, SCWS, CDR, Ret.). He is a graduate of East TN State University, American University, and the Naval War College. He is PMP certified and a global consultant.

Rex has a 24 year career with the Federal Government, primarily in the Department of Defense (DoD) and culminating at the Department of Homeland Security (DHS), with a parallel career with the U.S. Navy, as a Reserve Supply Officer. Establishing a foundation of knowledge in Acquisition, and financial management at DoD, transition to DHS in 2004 at the Under Secretary of Management, Office of Chief Financial Officer, Budget Division. He has held subsequent assignments as the Acquisition Chief of Infrastructure for the US VISIT Program Office with final role as the Business Financial Manager at the Domestic Nuclear Detection Office at DHS. Leadership positions were maintained in both the Federal Government and U.S. Navy (CDR, Supply Corps, SCWS, Ret) from various Reserve units as Executive. He retired from the Federal Government as GS-15 after qualifying for SES, and as Commander from the U.S. Navy. This experience has been merged with consulting experience from IBM, BearingPoint (Deloitte), and small business in various Program Management positions supporting the Federal Government and commercial entities.

Experience attained in civilian and military leadership positions have encouraged human capital improvement and innovative strategic thinking to improve performance in acquisition and program management. This focus has been demonstrated by architecting a Commander's Development and Leadership Program for a major Department of Defense Acquisition Command. Rex has introduced continued process improvements, with forward vision, to influence constant organizational improvement. Demonstrated excellent communication skills by writing, and publishing professional articles ("Earned Value Management, Its Place in the Federal Budget Process", "Preparing for a Global Acquisition Environment") in the DoD Acquisition Technology & Logistics (AT&L) Magazine, published by DAU involving acquisition, financial, and program issues, and other articles..

His formal education includes his Bachelors in Business Administration and Psychology from East Tennessee State University, Masters in Financial Management from American University and a graduate of the Naval War College.

Rex has been President of American Association for Budget and Program Analysis, (2004), Vice-President of American Society of Military Comptrollers (Quantico Chapter, 2001), and is active in the Program Management Institute (PMI) Board Member for Professional Development at PMI Silver Spring, Chapter. He is a consistent contributor to professional development efforts and designated Mentor for the American Corporate Partners for the past three years. He resides in Silver Spring, MD with his wife Margy of almost thirty years. He has two children who have entered their professional careers.