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April 8, 2024

The Honorable Robert J. Wittman
Vice Chairman, HASC
2055 Rayburn House Office Building
Washington, DC, 20515-4601

Subj: Systemic Shipbuilding Delays, Congressional Defense Modernization Caucus, and Earned Value

Dear Vice Chairman Wittman:

Your outrage at systemic delays to our marquee shipbuilding programs are understandable. Were you surprised by the breadth and magnitude of the schedule delays. Do you know their impact on cost overruns (Estimate at Completion or EAC) and funding needs? You should not have been surprised if earned value management systems (EVMS) worked as intended and if effective EVMS compliance or surveillance reviews were performed.

I reported to you and to Congressmen Waxman, Skelton, McCain, Smith, Norcross, and others, that compliance with the EVMS standard guidelines does not provide:

- Timely and accurate schedule and cost status
- Situational awareness of program execution for proactive resolution of issues impacting cost, schedule, and technical objectives.

I also urged that systems engineering should be integrated, not stove-piped, with program management. My assessments are based on 30 years of experience on aircraft programs including B-2, Global Hawk, Fire Scout, and F-35. I found similar problems when on loan to an Integrated Baseline Review of the Littoral Combat Ship program in 2004.

So, let's right the ship of integrated program management. Please request that GAO review a sample of the Navy programs that are in trouble. The *DON EVM Implementation Guide* provides guidance for EVMS surveillance, as follows:

2.3.3.1 Purpose of Surveillance

Surveillance is a recurring process that assesses the continuing compliance of the company's EVMS with EIA-748, as described by the EVMSIG and the company's written system documentation.

Surveillance *ensures* that the contractor's EVMS:

- Provides timely, reliable, and integrated cost, schedule, and technical performance measurement information summarized directly from the contractor's internal management system
- Complies with the Guidelines
- Provides timely indications of actual or potential problems
- Maintains baseline integrity
- Provides information that depicts actual conditions and trends
- Provides comprehensive variance analysis at the appropriate levels, including proposed corrective action in regard to cost, schedule, technical, and other problem areas
- Discusses actions taken to mitigate risk and manage cost and schedule

Does surveillance ensure that the contractor's EVMS accomplishes the preceding objectives? Do Navy program managers get timely and accurate EVMS status reports and schedules? Do contractors receive award or incentive fees that are based on inaccurate status? Do the HASC and SASC receive timely and accurate status reports, including EAC?

Congressional Defense Modernization Caucus

I am pleased that you and Congressman Pat Ryan launched the Congressional Defense Modernization Caucus to advance the national security ecosystem through the integration and adoption of emergent technologies. Congressman Ryan said that he is "working to find ways to break down barriers for innovative and disruptive technologies." The DFARS EVMS clause is a barrier to entry to non-traditional contractors. So, please authorize and consider the results of the GAO review as you build a path to break down those barriers.

Can we get accurate program status without the regulatory burden of EVMS? If EVM is as good as the hype, then contractors will use it without regulation. Is good schedule management sufficient to provide early warning of future cost problems, as GAO asserts? Again, did we get early warning on those Navy programs? A picture is worth 1,000 words. The following pictures are applicable.



EVM: "...easily Manipulated and Inadequate to the Task" (a)



- EIA-748 Enables Easy Manipulation:**
- 4 legs of the stool to foot:
1. Measure work (SOW), not technical performance (Product)
 2. % Complete Earned Value Technique with "90% Rule"
 3. Rework not planned (Budget from MRI)
 4. Deferred Functionality not Accounted For

(a) Commission on PLANNING, PROGRAMMING, BUDGETING AND EXECUTION
 Report finding: "EVM systems have long been criticized as..."

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CC:

Hon. Donald Norcross, HASC

Hon. Adam Smith, HASC

Hon. Elizabeth Warren, SASC

Hon. Robert J. Wittman, HASC

Hon. Congressman Pat Ryan

Hon. Heidi Shyu, (USD(R&E))

Hon. Andrew Hunter, AF Asst. Sec. for AT&L

Anthony Capaccio, Bloomberg News

Hon. William LaPlante USD(A&S)

Hon. Nickolas Guertin (ASN RD&A)