Better Earned Value Management: Lessons Learned by a Whistleblower

By Paul Solomon

In November 2012, the author brought a False Claims Act (Whistleblower) action against Lockheed Martin and Northrop Grumman for making false claims against the government on the F-35 Joint Strike Fighter contract. The claims focused on the defendants' use of Earned Value Management (EVM). In December 2017, a federal appeals court affirmed a district court's decision that it lacked jurisdiction over my claims based on the Act's public disclosure bar. The court concluded that public disclosures provided "***specific details about the fraudulent scheme and the types of actors involved in it"*** that were ***"sufficient to set the government on the trail of the fraud***" and furnished "***evidence of the fraudulent scheme alleged***." This white paper provides lessons learned and recommendations for Program Managers (PM) and oversight agencies to ensure that EVM information is valid and reliable.

Per the First Amended Complaint (FAC):

The whistleblower charges are in the FAC (Solomon et al vs. Lockheed Martin Corp. and Northrop Grumman Systems Corp, U.S. District Court, Northern District of Texas, Dallas Div., 3:12-cv-4495-D):

"This is a case of fraud by two major defense contractors, who wrongfully obtained lucrative defense contracts and contract payments by submitting grossly understated cost estimates and using improper accounting to conceal their cost overruns, resulting in a loss to the United States government in the hundreds of millions of dollars. Defendants Lockheed Martin Corp. (LM) and Northrop Grumman Systems Corp (NGC)…conspired to defraud the government in at least three ways.

First, Defendants obtained a contract modification and increased funding (Over Target Baseline or OTB) for the F-35 program in 2005 by knowingly submitting grossly understated cost estimates, misleading the government into believing the F-35 program was more affordable than it actually was.

Second, after securing the contract modification, Defendants incurred substantial and foreseeable cost overruns. LM and NGC concealed these overruns by improperly diverting funds from "Management Reserve (MR)," a budget reserve that is set aside for unanticipated future needs and is specifically prohibited from being used to cover cost overruns.

Third, by covering up their cost overruns, presenting a misleadingly rosy picture of their performance on measures of cost control, and setting performance goals which they knew all along they would not be able to meet, LM and NGC were able to secure larger profits in the form of higher performance-based Award Fees than were warranted based on their actual contract performance."

Defendants' Reply to First Charge: Public Disclosure that OTB based on "Should Cost" not Most Likely EAC

The appeals and district courts did not rule on the first charge, regarding understated Estimates at Completion (EAC), because that charge was included in the amended complaint but not in the original complaint. However, in their July 2015 replies to the district court, both defendants moved to dismiss the charge because, per NGC, "The critical elements of the alleged fraudulent inducement were publicly available and would have been clearly understood by government officials."

Per NGC, "that Defendants used EAC3 estimates that were lower than "most likely" cost projections due to aggressive savings assumptions, were publicly disclosed. The 2004 F-35 Year in Review statement makes clear that the "should cost" EAC3 targets used by the F-35 contracting team were lower than estimates that did not assume cost efficiency goals would be met. That LM "allocated" EAC3 "should cost targets" among the contractor team is significant. It was an announcement that the contractors' EAC3s were not pure "most likely" estimates of the total costs of their workshares." NGC further stated that "the announcement that Defendants used "'should cost' targets" with "unprecedented efficiency factors" provided ample notice to the government that the contractors' estimates may not have been pure "most likely" cost projections.

Per LM, "the fraudulent inducement allegations are based upon public disclosures…news articles discussing the 2005 re-plan."

Lesson Learned: Government officials should verify that requests for Over Target Baseline (OTB) approval include the most likely EAC, not a "should cost" estimate.

Defendants' Reply to Second Charge: Using MR to Cover Cost Overruns

Per the appeals court, "public disclosures will be sufficient if they provide details "such that the defendant's misconduct would have been readily identifiable" and "furnish evidence of the fraudulent scheme alleged.…LM and NGC cite to three potentially relevant public disclosures in arguing for application of the FCA jurisdictional bar. These are a 2007 DCMA EVMS compliance report, a March 2008 GAO report, and the model Joint Strike Fighter Systems Design and Development contract."

"The…DCMA report...found LM had "misapplied (MR) budgets to open, internal, discrete work packages in order to prevent the cost performance index (CPI) from worsening." While LM referred "to this practice as a risk mitigation strategy, the government review team concluded that the actual purpose was to improve the CPIs of various [Work Breakdown Structure] elements." The DCMA report stated that the approach "misrepresents the actual condition of cost and schedule status." Similarly, the March 2008 GAO report stated that the "DCMA [report] found that [LM] was using MR funds to alter its own and subcontractor performance levels and cost overruns." Per the FAC, in concluding that LM's cost estimates were unreliable, the GAO report relied in large part on the findings of DCMA's November 2007 Compliance Report, which in turn relied in part on information uncovered by Solomon.

The GAO report also discussed the adverse impact that the reduction of MR had on the balance of the program. Per the report, “by mid-2007, the development program had completed one-half of the amount of work scheduled but had expended two-thirds of the budget. MR had shrunk to about $400 million, less than one-half the amount officials believed necessary to complete the final 6 years of development. At the same time, the program faced significant manufacturing and software integration challenges, costly flight testing, and $950 million in other known cost risks. The plan to recapitalize MR at the expense of test assets is risky with potential major impacts down the road on costs, performance requirements, and fielding schedules.”

Per the Court, “We also conclude that the DCMA and GAO reports allege facts that make a potentially fraudulent scheme readily identifiable…The public disclosures must therefore provide “‘specific details about the fraudulent scheme and the types of actors involved in it’ sufficient to ‘set the government on the trail of the fraud[.]’”

The FAC cites examples in which NG “continued concealing cost overruns through the issuance of MR but had to utilize different terminology to disguise the practice from the government. This new terminology was “Failed Enablers,” and “Change Cost Curve.”

Lesson Learned:

PMs and oversight personnel should verify that MR is not being used to cover or reduce cost overruns and should verify that new statement of work in work packages is real work, not “risk mitigation,” Failed Enablers,” or “Change Cost Curve.”

Defendants’ Reply to Third Charge: Award Fees based on Understated Cost Overruns

Per NGC’s January 2016 brief, “According to Relator, the government would have paid little or no award fees in these Periods had it known Defendants’ “true cost performance numbers.” But the model SDD Contract that JPO has long hosted on its public information website made clear the link between performance on the EVMS cost reports and award fee. With that information, the effect of an overstatement of cost performance on award fee is on public display.

Thus, public information had disclosed both that the contractors’ alleged manipulation of MR had improved their reported cost performance and the link between the improved performance and the amount of award fee.

Lesson Learned: PMs and oversight personnel should verify that claims for award fees are based on true cost performance that was not altered by misuse of MR.

Regulatory and Oversight Environment

It is useful to understand the regulatory and oversight environment at the time of the alleged fraud to determine if it enabled, instead of prevented, the contractors’ actions. Were there ambiguities or loopholes that facilitated the contractors’ actions? It is also

useful to examine the actions or inactions by the government program manager (PM) and the oversight agencies to determine if they contributed to the success and longevity of the alleged fraud. Finally, do ambiguities and loopholes exist today that may fail to ensure transparency, honesty, and accountability in contracts for which EVM is required?

Chronic, Pervasive MR Violations Not Corrected by NG Management

During the period of the allegedly fraudulent activity, both defendants had EVMS procedures which clearly and unambiguously forbade the use of MR to offset cost overruns. In fact, LM's procedure was commendable. It stated that "MR is held for current and future needs and must not be used to offset accumulated overruns and underruns." Furthermore, "Increases in costs that "do not" qualify for MR should be addressed with EAC recognition including: a. In-scope work evaluated through the EAC monitoring process, rework, and recovery to schedule." NG was contractually required to comply with LM EVM procedures as well as its own.

In August 2007, in NGC surveillance Finding TD21-EVM-07-70, Solomon stated that in the opinion of the EVMS joint surveillance team, "there are chronic and pervasive problems regarding baseline revisions and the accuracy of the Performance Measurement Baseline (PMB)."

Consequently, the EVMS fails to provide accurate or timely reporting of cost and schedule performance against the plan. In some cases, true cost and schedule performance is overstated…there are …open findings regarding the following practices:

1. Budget was transferred or added without associated Statement of Work (SOW).
2. MR budget was used to offset cost overruns.
3. Retroactive changes were made to (earned value)…without EVMS Management approval.

Chronic, Pervasive EAC Violations Not Corrected by Management

Also, in August 2007, in "Finding TD-21-EVM-07-69, Solomon told (the NG VP and F-35 PM) Pamiljans and Settle that several of his previous findings had not been addressed and remained open. Solomon warned that Northrop's portion of the EAC 5 cost estimate (which had been completed in June 2007) may be understated by as much as $50 million. The EAC 5 estimate was not a "most likely" estimate because it excluded numerous requests from Control Account Managers for budget increases."

Per the DCMA report, "The effect was substantial: "EACs of 17 major subcontractors have been routinely altered by [LM], resulting in unreported overruns of ~$124M."

No Corrective Actions: Lesson Learned

"On August 22, 2007, shortly before he was transferred away from the F-35 program, Solomon issued Finding TD21-EVM-07-71. In this memorandum,…Solomon reiterated numerous findings of systemic problems he had reported going back to 2005, which were never corrected."

Lesson Learned:

Government officials should insist that contractors submit and execute corrective action plans for chronic, pervasive EVM violations and take appropriate punitive actions if violations persist.

Conclusion

The whistleblower law suit was terminated. Thus, there was no jury trial and there will be no decisions on the allegations. However, the lessons learned herein should be applied by Program Managers and EVM oversight personnel to obtain more reliable and usable cost performance information and EACs.

Note: The FAC, Solomon's affidavit (Declaration), and other legal briefs are available at www.pb-ev.com at the F-35 Whistleblower Case tab.

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