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October 6, 2020

The Honorable Adam Smith
Chairman, HASC
2216 Rayburn House Office Building
Washington, D.C. 20515

Subject: HR 6395 EH, Sec. 1710N, Agile Program and Project Management; **Maximum Viable Profit for Minimum Viable Product?**

Dear Chairman Smith:

I am pleased that NDAA HR 6395 EH contains Sec. 1710N, Report on Agile Program and Project Management (Agile P/PM). It calls for GAO to submit a report which includes seven topics regarding evaluations and analyses of the use of Agile P/PM used within DoD and an eighth topic, "Such other information as the Comptroller General determines appropriate."

It is recommended that GAO be requested to provide other information regarding the effectiveness and use of incentive and award fees when Agile P/PM is used to acquire software that is embedded in weapon systems and other military-unique hardware systems, as described in DoD Instruction 5000.87, Operation of the Software Acquisition Pathway, dated October 2, 2020 (DoDI 5000.87).

This letter is a follow up to my previous letters to you in which I requested that you consider oversight actions or legislation that pertain to Agile P/PM, as follows.

Feb. 6, 2020, Subj: F-35 Software Deliveries Using Agile Methods; Schedule Slips and "Technical Debt" per DOT&E:

Excerpts:

1. Software delivery problems continue to plague the F-35 Joint Strike Fighter (JSF) Program despite the use of an allegedly better method, Agile Methods.
2. The Director for Operational Test and Evaluation (DOT&E) reported that Lockheed Martin's (LM) use of the Continuous Capability Development and Delivery process (C2D2), aka "Agile," has not delivered new increments of capability at the pace originally planned.
3. There is a growing "technical debt."
4. DOT&E assesses the Agile process as "high risk."

Feb. 16, Subj: Award/Incentive Fees for Software Deliveries Using Agile Methods

There are two recommendations:

1. DOD should consider a revision to DOD Instruction 5000.021, "Operation of the Adaptive Acquisition Framework," that would add award/incentive fee criteria that are dependent on:

- a. Achieving the goals and features of each software iteration and increment in the Product Roadmap on a timely basis and
 - b. Reducing the total open deficiencies in the Technical Debt, especially Type I or critical deficiencies.
2. The Armed Services Committees should include a provision in the NDAA for FY 21 for DOD to perform two reviews regarding the use of Agile methods and to submit respective reports to the Committees.

May 12: Subject: Request for Supplemental GAO Investigation, F-35 Modernization

The GAO just published its latest report, “F-35 JOINT STRIKE FIGHTER Actions Needed to Address Manufacturing and Modernization Risk on the F-35 Program,” GAO-20-339. This time, please consider initiating oversight actions that address the GAO findings. In my opinion, the current findings are symptoms of chronic Lockheed Martin F-35 failures to perform and to report the truth.

GAO reported that Lockheed Martin “did not deliver the Block 4 capabilities it planned to deliver in 2019. Specifically, according to the plan outlined in its May 2019 report to Congress, the F-35 program was going to deliver eight Block 4 capabilities in 2019. However, the program delivered only one.”

(Note: The delinquent Block 4 capabilities are being developed using Agile P/PM, as described in the letter dated Feb. 6, 2020).

Pertinent Content of DoDI 5000.87

DoDI 5000.87 contains

- Programs will ...actively manage **technical debt**.
- The Program Manager and the sponsor will use an iterative, human-centered design process to define the **minimum viable product (MVP)** recognizing that an MVP’s definition may evolve as user needs become better understood. Insights from MVPs help shape scope, requirements, and design.
- Each program will develop and track a set of metrics to assess and manage the performance, progress, speed, cybersecurity, and quality of the software development, its development teams, and ability to meet users’ needs.

DoDI 5000.87 Silence on Incentive or Award Fees

Neither DoDI 5000.87 nor the other acquisition policies and guides in the Adaptive Acquisition Framework (AAF) cover the use of incentive or award fees to “acquire products...that satisfy user needs with measurable and timely improvements to mission capability, material readiness, and operational support, at a fair and reasonable price” (DoD Directive 5000.01, “The Defense Acquisition System”).

I cited problems with of award fees on cost plus award fee contracts that were based on subjective and allegedly false claims in excerpts from the following letters:

Feb. 6 letter:

Acquisition reforms should have the following objectives:

1. Deter contractors from submitting deceptive cost and schedule status reports.

2. Receive cost and schedule status reports from contractors that are based on valid, objective measures of software technical, schedule, and cost performance.

3. Base award or incentive fees on verified, objective measures of technical, schedule, and cost performance.

Feb. 16 letter:

DOD Actions

a. Pertaining to DOD-wide use of Agile Methods, review DoD Instruction DODI 5000.021, "Operation of the Adaptive Acquisition Framework," to consider whether the Software Acquisition Pathway Policy and Procedures should include procedures and criteria for award/incentive fees, including:

i. Should award/incentive fee criteria include unambiguous, **objective** measures of progress towards meeting goals and features of each software iteration and increment in the Product Roadmap?

ii. Should the decision authority use the Value Assessments of progress on the program as a basis for award/incentive fees.

iii. Should end users determine if the mission improvements and/or efficiencies realized from the delivered software capabilities meet the criteria for award/incentive fees

iv. Should award/incentive fee criteria include quantitative goals to reduce the total open deficiencies in the Technical Debt, especially Type I or critical deficiencies.

b. Pertaining to Use of Agile methods on the F-35 Program: Review the award/incentive fees paid to Lockheed Martin for the F-35 Program Block 4 Operational Flight Program (OFP) software updates since the inception of C2D2/Agile methods, the initial criteria for those fees, any revisions to the criteria, the justification for any revisions to the criteria, and the reductions or increases in the Technical Debt, including Type I open deficiencies.

c. Submit respective reports to the Armed Services Committees by (date TBD)

Background on Award/Incentive Fee Issues

Both former Secretary of Defense Ashton Carter and Sen. Joni Ernst have expressed concerns about undeserved award fees. Sec. Carter gave a speech at Harvard on May 16, 2014. It was entitled, "Why Does Government Not Work? Winning Back the Trust." He discussed how a former F-35 program executive officer was fired in 2010 after explaining that he based the government's decision to award Lockheed Martin 85 percent of the potential award fee, even though the F-35 program was suffering from major cost growth on his desire to protect the job of his Lockheed Martin counterpart. Although not applicable to DOD, the U.S. Senate passed Sen. Ernst's measure that bans federal agencies from paying bonuses to government contractors for federal projects that don't meet outcome standards. Per the Senator, "If projects are billions over budget and years behind schedule...the federal contractors working on these boondoggles are incomplete or poorly done, then they sure as heck shouldn't be awarded a bonus."

Award fees are based on subjective, not objective, criteria.

Conclusion

It is recommended that you request GAO to expand the scope of requested Report on Agile P/PM, to include “other information” that includes:

1. An assessment of the effectiveness and use of incentive and award fees when Agile P/PM is used to acquire software that is embedded in weapon systems and other military-unique hardware systems.
2. An assessment of the extent to which DoD completed actions that were recommended in the Feb. 16 letter.

I am concerned that the current policies, guidance, and regulations do not provide sufficient incentives to deliver the MVP within cost and schedule objectives and to reduce the technical debt. More importantly, the lack of disincentives or financial penalties provide no deterrence to contractors from continuing to receive undeserved award fees. Without more contractual definition and oversight, contractors are enabled to earn the **Maximum Viable Profit** despite delivering a subjectively defined and downwardly revised **Minimum Viable Product**.

This letter may be downloaded from www.pb-ev.com at the “Acquisition Reform” tab. Please contact me for additional information or support.

Yours truly,

A handwritten signature in cursive script that reads "Paul J. Solomon". The signature is written in black ink on a light-colored background.

Paul J. Solomon

CC:

Sen. Joni Ernst, SASC

Sen. Kamala Harris, HSGAC