

Paul Solomon
3307 Meadow Oak Drive
Westlake Village, CA 91361
Paul.solomon@pb-ev.com

August 8, 2023

The Honorable Donald Norcross
Ranking Member, HASC Subcommittee on Tactical Air and Land Forces
2216 Rayburn House Office Building
Washington, D.C. 20515

Subj: F-35 C2-D2 Oversight Issues Omitted from House Version of NDAA Sec. 219

The latest delay to completing F-35 Technical Refresh-3 (TR-3) and continuing Block 4 cost growth justify increased oversight of the C2-D2 delivery program. However, NDAA for FY 2024, Sec. 219 fails to address findings or recommendations of the GAO and DOT&E regarding the program's lack of:

1. Performance metrics and outcome-based metrics.
2. Clear articulation of the capabilities required in the Minimum Viable Product (MVP), focused testing, comprehensive characterization of the product, and full delivery of the specified operational capabilities.
3. Continual assessment of the value of capability delivered to support iterative software development.

Please revise Sec. 219 to close the project monitoring and control deficiencies cited above and to authorize GAO to assess the timeliness and effectiveness of DoD's and the program's corrective actions.

Excerpts from the GAO and DOT&E reports follow:

1. GAO-22-104687 DEFENSE ACQUISITIONS Additional Actions Needed to Implement Proposed Improvements to Congressional Reporting, Feb. 2022.
"DOD has yet to decide what information to include in acquisition reports to Congress, including performance metrics for each Adaptive Acquisition Framework pathway ... for example, the extent to which a program is meeting its baseline cost and schedule estimates."
2. GAO-22-104513 LEADING PRACTICES Agency Acquisition Policies Could Better Implement Key Product Development Principles, March 2022
DOD policies only partially implement a key sub-principle for product development, used by leading commercial companies, to "Use Iterative Design and Testing to Identify a Minimum Marketable Product."

"GAO found that DOD Directive 5000.01 implies iterative design followed by successive updates, but there is no reference to a minimum product prior to developing successive updates. By comparison, the software policy requires program officials to "use an iterative, human-centered design process to define the

MVP recognizing that an MVP's definition may evolve as user needs become better understood.”

3. GAO-23-105867 DEFENSE SOFTWARE ACQUISITIONS Changes to Requirements, Oversight, and Tools Needed for Weapon Programs, July 2023

Finding: Existing policies and guidance do not support DOD oversight of non-software pathway weapon programs using Agile. Without the use of outcome-based metrics and continually assessing the value of what was delivered against user needs, a program using Agile software development might deliver capabilities and features that are not essential to the customer and that could contribute to schedule and cost overruns.

Recommendations to Sec. Def:

1: Incorporate Agile principles into requirements policy and guidance for all programs using Agile for software development. This should include a Capability Needs Statement and User Agreement.

2. Incorporate oversight of Agile development of software into acquisition policy and guidance for all programs using Agile. This should include use of metrics, including outcome-based metrics,

Similar deficiencies were reported to you over two years ago in the attached letter, Subj: *Today's F-35 Hearing, Deceptive (or No) Performance Metrics, and Ponzi Schemes*, April 22, 2021. It apparent that neither DoD nor the program took corrective actions.

Yours truly,



Paul J. Solomon

CC:

Hon. William La Plante USD(A&S)

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

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

Hon. Jack Reed, Chair, SASC

Hon. Adam Smith, Ranking Member HASC

Hon. Tammy Duckworth, SASC

Hon. Joni Ernst, SASC

Shelby Oakley, GAO

Anthony Capaccio, Bloomberg News