Paul Solomon 3307 Meadow Oak Drive Westlake Village, CA 91361

Paul.solomon@pb-ev.com

April 18, 2021

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

Subject: Questions for Subcommittee Hearing on F-35 Issues on April 22

Dear Subcommittee Chairman Norcross:

Please read this letter immediately. It includes questions that you should ask at the upcoming hearing, "Update on F-35 Program Accomplishments, Issues, and Risks," to get to the truth regarding the status of the F-35 Block 4 Modernization program.

I have been a past adviser to Chairman Ike Skelton and to Sen. McCain on the F-35 program and on DOD acquisition reform. My advice to Sen. McCain included specific oversight questions to ask at hearings. Please see the attached letters to and from Sen. McCain and recent letters to Chairman Adams for background.

Please ask questions to address recent GAO findings and recommendations.

GAO Assessment of Ineffective F-35 Metrics

GAO has repeatedly reported on the failures of F-35 Block 4 software development. In the report, GAO-21-226, *F-35 JSF, DOD Needs to Update, Schedule, and Improve Data on Software Development*, GAO concluded that after 3 years of effort, the F-35 program continues to have issues with effectively implementing the C2D2 (Agile) approach to develop and deliver Block 4 capabilities.

- Contractor continues to deliver capabilities late
- Remaining schedule contains significant risk and is not achievable based on the pace of past performance
- Program is likely to continue falling short of its expectations, and the warfighter will have to wait longer for the promised capabilities
- Block 4 metrics for software quality, performance, cost, schedule provide limited insight into aspects of software development quality under the Agile software development approach.
 - Current metrics do not include the number of planned features and the number of completed features for each software increment, which would provide insight into progress against the planned schedule and help ensure that all capabilities are delivered as planned in the first increment of each software drop.

.GAO recommendation:

GAO recommended that program officials should measure progress against the target and forecast the amount of work needed to complete a software drop until the increment is complete. By comparing the delivered functionality to the goal, program officials can see how much further the contractor needs to go, and then use that knowledge to help ensure the contractor delivers full functionality in the first increment of a software drop.

Recommended Hearing Questions

I recommend that you ask the following questions:

- 1. Have you established targets for critical software quality and forecasted the amount of work needed to complete a software drop until the increment is complete?
- 2. Do targets include the number of planned features for each software increment and do you report the number of completed features for each software increment?
- 3. Do you report progress towards meeting those targets in monthly Earned Value Management System Integrated Program Management reports or other, contractually required reports?
- 4. Do you account for deferred functionality in your forecasts (of final cost and schedule) for completion when you fail to complete the planned features or other quality targets on schedule?
- 5. Are your monetary incentives based on meeting established targets for critical software quality?
- 6. If monetary incentives are not based on meeting critical software quality targets, what are the incentive criteria?
- 7. Considering deferred functionality and other quality/technical performance issues, when will the F-35 Block 4 Modernization Program be complete and what is the final cost estimate?

I would be glad to assist you in any way.

This letter and other, related letters to HASC, SASC, and DOD may be downloaded from www.pb-ev.com at the Acquisition Reform tab.

Yours truly,

Paul J. Solomon

CC:

Hon. Adam Smith, Chairman, HASC

Paul 9 Solom

Hon. Joni Ernst, SASC

Mr. Andrew Hunter, Biden-Harris Transition Team

Hon. Kathleen Hicks, Dep. Sec. of Defense

Hon. Acting Undersecretary of Defense Stacy Cummings