The Honorable William M. "Mac" Thornberry
Chairman
Committee on Armed Services
United States House of Representatives
Washington, DC 20515-6035

Dear Mr. Chairman:

(U) I have attached at Tab A my report evaluating test adequacy, operational effectiveness, and operational suitability of the RQ-21A Blackjack Small Tactical Unmanned Aircraft System (STUAS) during Initial Operational Test and Evaluation (IOT&E). The classified annex to this report evaluating cybersecurity testing is attached at Tab B. This report satisfies the provisions of Section 2399 of Title 10 United States Code requiring my report be submitted prior to a full-rate production decision. In the report, I conclude the following:

• (U) The RQ-21A is not operationally effective, demonstrating a low probability of successfully completing realistic missions. Only 42 percent of missions launched on time, supported assigned tasking, and remained on station for the duration of the assigned period. The RQ-21A detachment was unable to provide any support at all one-third of the time such support was required by Commanders. While the electro-optical/infrared sensor provides accurate target locations, operators using the sensors were unable to correctly classify 1-meter targets as required by the Capability Production Document, which would allow for consistent classification of hostile/non-hostile intent on the part of individuals by identifying such items as rifles, rocket-propelled grenade launchers, and shovels.

• (U) The RQ-21A is not operationally suitable. The RQ-21A demonstrated a Mean light Hour between Abort for the System (MFHBA SYS) of 15.2 hours versus the 50-hour requirement. Because of air vehicle reliability, overall system availability did not meet the 80 percent key performance parameter threshold (demonstrated value = 66.9 percent). The average service life of the propulsion modules was 48.9 hours, which does not meet the manufacturer's stated 100 hour capability. Production quality control issues contributed to the system's poor reliability and availability.

• (U) Cybersecurity testing demonstrated that the system has exploitable vulnerabilities. The classified appendix contains additional detail regarding cybersecurity testing.

• (U) The RQ-21A testing was adequate and executed in accordance with the DOT&E-approved test plan.

(U) Section 2399 provides that the Secretary of Defense may submit separate comments on my report, if he so desires. I have sent copies to him; the Under Secretary of Defense for
Acquisition, Technology and Logistics; the Secretary of the Navy; the Vice Chairman of the Joint Chiefs of Staff; and the Chairmen and Ranking Members of the Congressional defense committees.

Enclosures:
As stated

cc:
The Honorable Adam Smith
Ranking Member

Michael Gilmore
Director
Dear Mr. Chairman:

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• (U) The RQ-21A is not operationally suitable. The RQ-21A demonstrated a Mean Light Hour between Abort for the System (MFHBA_SYS) of 15.2 hours versus the 50-hour requirement. Because of air vehicle reliability, overall system availability did not meet the 80 percent key performance parameter threshold (demonstrated value = 66.9 percent). The average service life of the propulsion modules was 48.9 hours, which does not meet the manufacturer’s stated 100 hour capability. Production quality control issues contributed to the system’s poor reliability and availability.

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J. Michael Gilmore
Director

Enclosures:
As stated

cc:
The Honorable Peter J. Visclosky
Ranking Member
The Honorable John McCain  
Chairman  
Committee on Armed Services  
United States Senate  
Washington, DC 20510-6050

Dear Mr. Chairman:

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• (U) The RQ-21A is not operationally suitable. The RQ-21A demonstrated a Mean Light Hour between Abort for the System (MLHBA_SYS) of 15.2 hours versus the 50-hour requirement. Because of air vehicle reliability, overall system availability did not meet the 80 percent key performance parameter threshold (demonstrated value = 66.9 percent). The average service life of the propulsion modules was 48.9 hours, which does not meet the manufacturer’s stated 100 hour capability. Production quality control issues contributed to the system’s poor reliability and availability.

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J. Michael Gilmore
Director

Enclosures:
As stated

cc:
The Honorable Jack Reed
Ranking Member
The Honorable Thad Cochran  
Chairman, Subcommittee on Defense  
Committee on Appropriations  
United States Senate  
Washington, DC 20510-6025

Dear Mr. Chairman:

(U) I have attached at Tab A my report evaluating test adequacy, operational effectiveness, and operational suitability of the RQ-21A Blackjack Small Tactical Unmanned Aircraft System (STUAS) during Initial Operational Test and Evaluation (IOT&E). The classified annex to this report evaluating cybersecurity testing is attached at Tab B. This report satisfies the provisions of Section 2399 of Title 10 United States Code requiring my report be submitted prior to a full-rate production decision. In the report, I conclude the following:

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Enclosures:
As stated

cc:
The Honorable Richard J. Durbin
Vice Chairman

J. Michael Gilmore
Director