

F-35 Joint Program Office
Questions for Response from the
House Committee on Oversight and Reform
(Maloney, Gosnar, Norman, Higgins)
22 July 2020 Testimony by
Hon Ms. Lord, LtGen Fick

Questions from Chairwoman Maloney

Question 1a. When was the 90 percent threshold established for parts to be delivered that are “ready-for-issue”?

(U) Response. In the Fall of 2019, the US Services requested 90 percent of all parts be Ready for Issue (RFI) upon arrival at base supply within six months. In response, the F-35 Program Executive Officer established a government/industry Electronic Equipment Log (EEL) Improvement Team. After assessing the issue, in October 2019, the EEL Improvement Team established a threshold of 70 percent and an objective of 90 percent. The F-35 Joint Program Office (JPO) is including RFI requirements on the FY21-23 Lockheed Martin (LM) sustainment contract (currently in the negotiation phase).

Question 1b. What is the deadline for Lockheed Martin to meet at least the 90 percent success rate for spare parts delivered ready-for-issue?

(U) Response. The 90 percent Ready for Issue (RFI) rate is not specifically called out in the current sustainment contract. The F-35 JPO anticipates reaching the 90 percent target by the end of 2020, and is working with LM to drive down non-RFI parts due to EELs.

Question 2a. If Lockheed Martin does not meet that threshold, will there be a penalty for that failure?

(U) Response. Currently, no penalty can be applied because the Electronic Equipment Logbook Supply Ready for Issue metric was established after the 2020 Sustainment Contract with LM was signed. However, the JPO and LM are currently negotiating the use of a non-RFI metric in the FY21-23 sustainment contract to incentivize LM to further reduce the number of non-RFI parts.

Question 2b. If yes, what is the penalty?

(U) Response. A penalty is not applicable as described in 2a.

Question 3a. What are estimates for the lifetime cost of ODIN?

(U) Response. PB21 contains \$547M for ODIN development. Most of the ODIN development occurs in FY21-23 with continued development in the out years at a reduced amount to maintain air system alignment, ensure cybersecurity, and support changing warfighter needs. The F-35 Life Cycle Cost Estimate includes \$25.2B for development, procurement, and sustainment from now until the end of the program. The DoD portion of that amount is \$22.1B;

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the remaining amount is paid by the JPO Partners and Foreign Military Sales countries. This estimate is based upon ALIS remaining the system of record for the life of the program. Replacing ALIS with ODIN will reduce that life cycle sustainment cost. Annual updates to the life cycle cost estimate will reflect ODIN as the development matures.

Question 3b. What entities other than the Department of Defense (DOD) and Lockheed Martin do you plan to contract with for ODIN?

(U) Response. Multiple government organizations and industry partners are part of the ODIN effort to include the Air Force's Kessel Run, the 309th Software Engineering Group, the Naval Information Warfare Center, Lockheed Martin, and Pratt & Whitney. Other government and industry partners may also be added in the future depending on the best value to the Government.

Question 4a. How much has DOD spent on ALIS to date?

(U) Response. DoD has spent a total of approximately \$833M on ALIS, including development, procurement, and sustainment funds. DoD spent approximately \$571M on ALIS development, and \$262M on hardware procurement and fleet operations.

Question 5. On July 10, the Defense Department announced it would pay Lockheed Martin \$87.5 million to begin the development of ODIN and start the transition from ALIS. What will that initial work by Lockheed Martin include?

(U) Response. On 10 July 2020, the F-35 JPO awarded a \$87.5 million Indefinite Quantity, Indefinite Delivery (IDIQ) contract. The contract allows for task orders to be issued for ODIN development up to the total cap of \$87.5 million. The JPO issued the first two task orders (\$2.2 million total) for test support and ODIN software development within a week of the overall IDIQ contract award. Additional task orders are under development for ODIN hardware integration and testing, and additional software development.

Question 6. Since this program has had significant cost overruns in the past, how does DOD plan to ensure that the cost of ODIN stays within the department's estimates?

(U) Response. The Department's ODIN strategy capitalizes on lessons learned from ALIS development to reduce development costs. The program is leveraging commercial hardware to the maximum extent possible, instead of developing ALIS-specific hardware, to reduce costs and enable the program to continue to advance with commercial industry. For application development, ODIN combines government-developed applications, contractor-developed applications, and COTS products to combine best of breed in a cost effective manner. The use of open infrastructure and delivery of data will enable the program to regularly evaluate

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the performance of applications and shift to other developers as needed. For contractor-developed software, the program shifted from larger contracts focused on defined requirements to smaller delivery orders with more level-of-effort supporting, giving flexibility for agile development and more consistent development costs over time.

Question 7. What performance metrics has DOD set for ODIN and what is the timeline for when those metrics need to be met?

(U) Response. In alignment with the DoD Software Acquisition Pathway Interim Policy, the F-35 JPO worked with the U.S. Services, International Partners, and other stakeholders to build the ODIN Capability Needs Statement (CNS). A short, high-level living document, the CNS focuses on operational needs and conveys high-level features, enhancements to existing operational capabilities, and priorities. It also includes the desired ODIN performance metrics such as ODIN equipment size (footprint and weight) and durations to execute ODIN steps to generate aircraft sorties. The CNS is in final coordination with approval anticipated in September 2020 from the JSF Executive Steering Board. The CNS is meant to be a flexible product and will be periodically updated to reflect the capability baseline and user priorities. The JPO is working with the users to prioritize the capabilities (and corresponding performance metrics) required for the Initial System Delivery in September 2021, and Full System Delivery by December 2022.

Questions from Representative Gosar

Question 1. Lt Gen Fick, Did the Government purchase a warranty for these spare parts?

(U) Response. Given our current Acquisition Strategy for Initial Spares, we're unable to realize the benefits to be derived from the procurement of Warranties as the enforcement and claims adjudication would be extremely difficult and likely cost prohibitive. In lieu of Warranties, we work to leverage cost effective mechanisms to incentivize Contractor behavior and measure performance.

Question 2. ... [JPO] will be requiring Lockheed Martin to deliver and maintain spare parts with 99% RFI. Is this a reasonable contractual position as I understand that LM is not responsible for all EEL / RFI issue? How will this be accounted for?

(U) Response. The F-35 JPO will hold LM accountable only for parts that are directly shipped from LM or suppliers that LM manages. LM will not be accountable for parts that are transferred within the F-35 fleet by the US Services or Partners that are outside of their control.

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Question from Congressman Norman

Question 2. There was discussion at the hearing on whether inaccurate or missing EELs have impacted aircraft safety, can you provide your perspective on this issue?

(U) Response. The Services have procedures in place to prohibit a non-Ready for Issue (RFI) part from being installed on an aircraft if the part is a safety of flight or life-limited part. The F-35 unit commanders from the USAF, USN, and Marine Corps confirmed to the HCOR in March 2020, and again to USD(A&S) in July 2020, that no non-RFI part had been installed onto an aircraft that would jeopardize flight safety.

Question from Representative Higgins

Question. Lt. Gen. Fick, would you please provide the total program cost estimate for the life of the F-35 program?

(FOUO) Response. The following table reflects the JPO’s latest official program office estimates. The figures based on the May 2020 estimates and the Sustainment 2020 v1.0 ACE. Key assumptions:

- These are life cycle estimates in \$ Billions
- Base Year 2012
- These are US-only costs (no Partner / FMS included)

(CY12\$B)	Program Office Estimates – May 2020
F-35 Program Total	\$965.5
RDT&E	\$74.3
Procurement	\$247.3
MILCON	\$3.1
O&S	\$640.5
Disposal	\$0.3