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"F-35 Joint Strike Fighter: Ensuring Safety and Accountability in the Government's Trillion Dollar Investment"

Before the
Committee on Oversight and Reform
U.S. House of Representatives
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Chairwoman Maloney, Ranking Member Comer, and members of the committee, thank you for inviting me to appear before you today to discuss the Department of Defense Office of Inspector General (DoD OIG) report titled "Audit of F-35 Ready-for-Issue Spare Parts and Sustainment Performance Incentive Fees," which we issued on June 13, 2019.

I am the Assistant Inspector General for Audit, Acquisition, Contracting, and Sustainment, the DoD OIG directorate that conducted the audit of F-35 ready-for-issue (RFI) spare parts and sustainment performance incentive fees. In my testimony today, I will discuss our concerns regarding the F-35 program. This program is already proving to be more expensive to sustain than originally planned, and as the DoD adds more F-35 aircraft to the fleet, the strain on the aircraft logistics system will only increase. If the DoD and Lockheed Martin do not address the concerns I am here to discuss, issues related to non-RFI spare parts will continue to multiply and affect the readiness of the F-35 fleet and the already increasing sustainment costs.

Our audit determined that the DoD received F-35 RFI spare parts that did not meet contract requirements, and paid performance incentive fees on sustainment contracts based on inflated and unverified F-35 aircraft availability hours.[1] The F-35 Joint Program Office (JPO) did not conduct adequate oversight of Lockheed Martin's performance related to receiving F-35 spare parts and verifying aircraft availability hours. As a result, the DoD received non-RFI spare parts and has spent up to $303 million between 2015 and 2018 on labor costs for DoD personnel to bring the spare parts to RFI condition. Furthermore, until Lockheed Martin consistently delivers RFI spare parts that meet the contract requirements, the DoD will continue to pay an

[1] According to the contract, RFI means that spare parts: 1) are ready for aircraft maintenance personnel to install on the aircraft, and 2) have an Electronic Equipment Logbook (EEL) assigned, which includes information such as part history and remaining life (hours). Spare parts without an EEL are considered non-RFI.

estimated cost of up to $55 million annually to resolve issues related to non-RFI parts. In addition, by not independently collecting and verifying aircraft availability hours, the DoD has potentially overpaid $10.6 million in performance incentive fees.

Background on F-35 Program

The F-35 Joint Strike Fighter (F-35) is the DoD's largest acquisition program, with estimated acquisition costs of more than $406 billion as of March 5, 2018. The F-35 is a joint, multi-national acquisition program developed as the next-generation strike fighter aircraft that will replace or complement a variety of fighter aircraft for the Navy, Air Force, Marine Corps, and international partners.

The F-35 Joint Program Office (JPO) is responsible for managing the total life cycle of the F-35, including coordinating program objectives, requirements, schedules, and budgets. The JPO also manages and oversees the support and sustainment functions required to field and maintain the readiness of the F-35 fleet.

Lockheed Martin Aeronautics (Lockheed Martin) was selected in October 2001 as the prime contractor to develop and produce the F-35. The company manufactures the F-35's forward fuselage and wings, and assembles the aircraft at its facility in Fort Worth, Texas. In addition, Lockheed Martin is responsible for providing sustainment support for the F-35 aircraft, including the supply chain, logistics system, depot maintenance, and pilot and aircraft maintenance training. As of February 2019, the DoD and its partners had accepted delivery of 349 F-35s. The JPO estimated that the fleet will comprise 658 F-35s by August 2021.[2]

[2] The JPO provided this estimate as of November 2018.

The Defense Contract Management Agency (DCMA) works directly with Defense contractors to ensure that the contractors deliver supplies and services on time and at projected cost, and that they meet all performance requirements. The JPO assigned the DCMA as the contract administrator for the F-35 sustainment contracts. In this role, the DCMA is expected to monitor the contractor's performance and management systems to ensure that cost, product performance, and delivery schedules comply with the terms and conditions of the sustainment contracts.

F-35 Sustainment Contracts

Over the last 4 years, the JPO has awarded annual cost-plus-incentive fee contracts to Lockheed Martin for the sustainment of the F-35. The DoD has paid Lockheed Martin for its incurred costs plus an adjustable performance incentive fee based on cost and performance since F-35 sustainment efforts began in 2015. The latest contract, awarded December 30, 2019, has a current total contract value of $1.9 billion and covers the period of December 30, 2019, through December 30, 2020.

Each of these sustainment contracts included a clause that established performance metrics to evaluate the contractor's ability to sustain F-35 fleet operations. The DoD paid performance incentive fees based on Lockheed Martin's ability to meet these performance metrics. Lockheed Martin had the potential to earn more than $150 million in performance incentive fees for the 2016, 2017, and 2018 sustainment contracts combined and has the potential to earn $60 million in performance incentive fees for the current 2019 sustainment contract.

F-35 Contract Oversight

The JPO is responsible for overall oversight of F-35 sustainment contracts and uses the DCMA to perform oversight at the warehouse and contracting officer's representatives (CORs) to conduct oversight at the F-35 sites. As the administrative contracting office for F-35 sustainment contracts, the DCMA is required to conduct contract surveillance to ensure that Lockheed Martin complies with contract requirements. In this role, the DCMA can issue administrative changes or contract modifications. The DCMA may also issue corrective action requests to the contractor asking for a remedy or solution for contract noncompliance. In addition, the JPO has CORs who are also responsible for conducting contract surveillance to verify that the contractor is fulfilling contract requirements and to document the contractor's performance.

In FY 2020, the DoD will spend $1.85 billion for 96 additional F-35 aircraft and associated spare parts, and an additional $156 million in advance procurement to increase the Air Force's planned procurements of F-35s in FY 2021. It is imperative that the JPO address identified weaknesses related to the F-35 as the DoD continues to spend more taxpayer funds for the aircraft.

I will now discuss our findings on the F-35 RFI spare parts and incentive fees for sustainment performance. With the DoD expecting to spend over $1 trillion to operate and maintain the fleet for 66 years, these findings highlight the importance of ensuring that F-35 program costs are affordable and sustainable long term.

F-35 Ready-For-Issue Spare Parts

Lockheed Martin is required to deliver RFI F-35 spare parts. RFI spare parts should be ready for aircraft maintenance personnel to install on the aircraft, and should be assigned an Electronic Equipment Logbook (EEL). The EEL is electronically attached to the parts and tracks modification, maintenance, and part usage information—information critical to ensuring that use of the part does not exceed the part's life limit—in an automated logistics system.

If a spare part is delivered without an EEL attached, the part is considered non-RFI and DoD personnel are required to quarantine the spare part, then follow a seven-step process to attempt to correct the EEL issue before submitting an action request asking Lockheed Martin to fix the EEL issue.[3] Lockheed Martin charges the DoD for the costs to resolve action requests. While a missing EEL does not mean a part is defective, it can create life and safety concerns for aircrews. When a part does not have an assigned EEL, DoD personnel must manually track part information outside of the automated logistics system and then manually update the system when the EEL issue is resolved. However, DoD personnel could make mistakes when manually tracking and updating the hours that parts are flown, thereby creating risk when using life-limited spare parts without an EEL.

During the audit, we found that Lockheed Martin has been providing a significant number of non-RFI spare parts to F-35 sites since 2015 when sustainment efforts began. Despite being aware of this problem, the JPO did not resolve the issue or require DoD personnel to track the number of non-RFI parts that sites received. However, DoD personnel at the three sites we contacted during the audit (Luke Air Force Base, Arizona; Hill Air Force Base, Utah; and Marine Corps Air Station Beaufort, South Carolina) had started tracking the receipt of non-RFI

[3] The Sustainment Supply User Guide, Volume 2, May 11, 2017, instructs DoD personnel to go through a seven-step process to make the spare part RFI and available for use.

parts because Lockheed Martin continued to deliver parts that were not RFI. For example, of the 263 spare parts that Lockheed Martin delivered to Luke Air Force Base in June 2018, 213 spare parts (81 percent) were non-RFI.

DoD personnel submitted more than 15,000 action requests from December 2015 to June 2018 to correct non-RFI issues. The cost reimbursement sustainment contracts included a clause that allowed the contractor to charge the DoD for additional replacement or correction costs to bring spare parts delivered to the RFI condition required by the contract. The clause stated that the Government could require the contractor to replace or correct any supplies that were nonconforming at time of delivery. However, the DoD accepted the non-RFI spare parts that Lockheed Martin provided, and developed site-specific local policy and ad hoc manual processes to allow aircraft to fly to meet operational and training mission requirements instead of grounding aircraft.

Due to the number of non-RFI spare parts that Lockheed Martin provided to F-35 sites, the JPO issued guidance in October 2018 allowing aircraft to be flown with spare parts that had EEL issues, contradicting previous JPO guidance that required spare parts with EEL issues to be quarantined and not used until the issues were resolved. However, we determined that DoD personnel at F-35 sites had been flying aircraft with non-RFI spare parts since as early as August 2017. For example, Luke Air Force Base personnel provided information showing that 12 aircraft flew with EEL-related issues. In addition, at Luke and Hill Air Force Bases—the installations with the largest number of F-35s—DoD personnel had developed local policy to allow aircraft to fly with non-RFI spare parts installed in order to meet mission requirements.

To manage the volume of non-RFI parts that Lockheed Martin provided, F-35 sites reassigned DoD personnel to focus full-time on informally resolving EEL issues in a more timely manner. For example, Luke and Hill Air Force Bases reassigned 20 DoD personnel, including aircraft maintenance personnel (maintainers), from their normal duties to work exclusively on correcting issues with non-RFI parts provided by Lockheed Martin. In some cases, this preempted the need to create an action request and therefore created the inaccurate impression to the JPO that the issue of Lockheed Martin delivering parts without EELs was improving. The DCMA calculated that the reassignment of these personnel cost the DoD more than $1.3 million between December 2015 and September 2018. According to the DCMA, the DoD spent between $7,000 and $11,000 in labor charges each time DoD personnel attempted to resolve a problem involving non-RFI spare parts. In some instances, the reassigned DoD personnel were unable to resolve the problem and still had to contact Lockheed Martin representatives or submit an action request to Lockheed Martin, incurring additional charges because of the clause in the contract that allowed the contractor to charge for correction or replacement costs once the spare parts were accepted.

In another attempt to mitigate the impact of non-RFI parts, personnel at the F-35 sites resorted to using white boards and spreadsheets to track flight hours when non-RFI spare parts were used on aircraft. For example, DoD personnel installed a non-RFI seat survival kit assembly—a critical safety part—on an aircraft, then tracked the hours that the assembly was flown on a whiteboard. Critical safety parts require accurate tracking to ensure that the parts are not used beyond their life limit, and to avoid critical damage, or worse, loss of life. The DoD's use of local guidance and ad hoc manual processes allowed aircraft to fly and complete missions instead of the DoD grounding aircraft due to receiving non-RFI parts from Lockheed Martin.

However, the JPO needs to hold Lockheed Martin accountable for delivering non-RFI spare parts by contractually requiring Lockheed Martin to compensate the DoD each time a spare part is delivered in non-RFI condition.

Lockheed Martin Performance Incentive Fees

The DoD is in an environment in which it is dependent on Lockheed Martin for information related to the F-35, including contractor performance, because the Government did not maintain its own data. Specifically, the DoD paid performance incentive fees on the sustainment contracts based on inflated and unverified F-35 aircraft availability hours. DoD personnel installed non-RFI spare parts on aircraft to make them available to fly and perform missions rather than quarantine non-RFI parts. This practice inadvertently inflated aircraft availability hours. For example, Luke Air Force base personnel provided information indicating that 20 of 22 aircraft in one unit had non-RFI spare parts installed with a total of 172 EEL-related issues. However, Luke Air Force Base personnel reported all 20 aircraft as available to fly at least one mission that day because maintainers installed the non-RFI spare parts. This resulted in inflated aircraft availability hours used to pay the contractor incentive fees for those 20 aircraft on that day.

Because the JPO has not directed F-35 site personnel to track non-RFI spare parts, the DoD has no way to determine the total number of hours that F-35 aircraft have flown with non-RFI spare parts and inflated aircraft availability hours. Furthermore, the JPO relied solely on contractor-reported information on availability hours to pay Lockheed Martin $32 million of the $38 million in performance incentive fees for 2017 and 2018. The JPO validated the hours by comparing availability hours on one Lockheed Martin-generated report to another Lockheed Martin-generated report because the JPO did not track or collect aircraft availability hours.

The DoD's efforts to fly aircraft with non-RFI spare parts resulted in Lockheed Martin receiving incentive fee payments that were earned through the use of DoD labor rather than the contractor's ability to meet its performance metrics.

According to JPO officials, on any given day, 50 percent of the F-35 fleet is flying with non-RFI spare parts. However, the JPO does not require F-35 site personnel to collect aircraft availability hours and has not developed a process to track the hours that aircraft fly with non-RFI spare parts installed. Because the JPO has not required F-35 sites to collect this information, the DoD has no way to determine the total number of hours the F-35 has flown with non-RFI spare parts. As a result, the JPO potentially overpaid performance incentive fees on the 2017 and 2018 sustainment contracts.

Additionally, the JPO did not verify that CORs collected and reported information to the contracting officer on the number of non-RFI spare parts received, the ad hoc manual processes the DoD used to keep aircraft flying when non-RFI spare parts were used, and the number of aircraft availability hours reported at each F-35 site to assess contractor performance. Instead, oversight performed by CORs at some sites included verifying serial numbers on parts and flight training metrics related to training simulators. In addition, the JPO did not assign a COR at three of nine F-35 sites in the United States and, for one site, 3 of the 14 assigned CORs were not performing oversight on the 2018 sustainment contract.

The JPO assigned the DCMA to take the lead on addressing the non-RFI spare parts issue and, in November 2015, the DCMA issued a corrective action request to Lockheed Martin for non-performance in providing RFI spare parts. In response, Lockheed Martin submitted a corrective action plan; however, after several extension requests, Lockheed Martin estimated that it will not complete all of the corrective actions related to the EEL issue until 2021. After being

told by Lockheed Martin personnel that the EEL issue was improving, DCMA officials visited three F-35 sites, beginning in February 2018, to determine whether Lockheed Martin's completed corrective actions had fixed the non-RFI spare part issues. However, DCMA officials found that Lockheed Martin was still providing non-RFI spare parts, and the number of spare parts with EEL issues was actually increasing. Furthermore, DCMA officials found that DoD officials at the F-35 sites had increased the use of ad hoc manual processes and had reassigned DoD personnel to correct non-RFI issues. According to DCMA, the total DoD labor cost resulting from receiving non-RFI parts between 2015 and 2018 could be as much as $303 million. In addition, the DoD will continue to pay an estimate of up to $55 million annually in labor costs to fix non-RFI spare parts until the EEL issue is resolved.

In our report, we recommended that the JPO pursue compensation from the contractor for costs of non- RFI spare parts that have been delivered since 2015 on the sustainment contracts. In addition, we recommended that the JPO direct the contracting officer to add language to future F-35 sustainment contracts to allow the DoD to collect compensation for each non-RFI spare part provided by the contractor. Also, the DoD could have potentially overpaid performance incentive fees due to inadvertently inflating availability hours by flying aircraft with non-RFI spare parts. As a result, we included a recommendation in our report that would help the JPO ensure that metrics used to measure contractor performance on the F-35 sustainment contract do not allow the contractor to profit from the DoD correcting issues with parts Lockheed Martin delivered. The JPO agreed with these recommendations. In January 2020, the JPO provided the implementation status of planned corrective actions to be completed in 2020 and 2021. The recommendations will remain open until we receive documentation that supports actions taken.

According to a September 2019 media report, Lockheed Martin proposed transitioning the F-35 sustainment to a 5-year, fixed-price performance-based logistics contract.[4] Lockheed Martin also suggested that it would provide enough spare parts to keep 80 percent of F-35s mission capable or face penalties. While performance based logistics contracts can be implemented as products are fielded and logistics demand can be reasonably forecasted, the JPO needs to ensure that the sustainment environment supports the use of a long-term performance-based logistics contract, especially in light of the fact that the DoD is dependent on Lockheed Martin for information related to the F-35, including contractor performance, parts inventory, and related cost data.

As discussed earlier in my testimony, F-35 aircraft are already proving to be more expensive to sustain than originally planned. In 2016, the JPO awarded the first full-year F-35 sustainment contract to Lockheed Martin for approximately $646.6 million to sustain the 211 aircraft in the fleet at that time. In only 2 years, sustainment costs for the F-35 fleet more than doubled to $1.4 billion to sustain 349 aircraft.

As the DoD continues to add more aircraft to the F-35 fleet, the problems identified in the DoD OIG report will only compound, escalating sustainment costs, reducing mission capable rates, and increasing the life and safety risks that occur when life-limited non-RFI spare parts are installed and flown without an EEL. If Lockheed Martin does not correct its delivery of non-RFI parts, the DoD's use of ad hoc manual processes to mitigate this problem will increase. According to DCMA officials, each F-35 aircraft includes more than 8,000 parts that require an EEL. When life-limited non-RFI parts are flown without an EEL, it creates a life and safety concern for aircrews. The DoD accepted the non-RFI spare parts that Lockheed Martin

[4] GovCon Wire, "Lockheed Proposes Five-Year F-35 Sustainment Contract to DoD Officials," September 19, 2019.

provided, and developed site-specific local policy and ad hoc manual processes to meet operational and training mission requirements instead of grounding aircraft. Instead of the DoD assuming this risk and incurring additional costs to get spare parts to RFI condition, Lockheed Martin should provide spare parts with the contractually required EELs attached and be responsible for any associated costs that result when it fails to provide the DoD with RFI spare parts.

Finally, the DoD has potentially overpaid $10.6 million in performance incentive fees on the 2017 and 2018 annual sustainment contracts by not independently collecting and verifying aircraft availability hours. Until the JPO independently collects data to verify contractor performance, the DoD may continue to overpay performance incentive fees on the 2018 and future sustainment contracts.

Thank you for the opportunity to testify this morning and I look forward to your questions.