

## DOT&E's Gilmore Contradicts DoD's Kendall on McCain's F-35 Questions

(Source: compiled by Defense-Aerospace.com; posted Jan 12, 2017)

PARIS --- In the wake of negative news and additional technical failures revealed late last year, the Chairman of the Senate Armed Forces Committee, Senator John McCain, demanded that the Defense Department provide precise written answers to ten questions regarding the precise status of the F-35 Joint Strike Fighter program.

McCain was particularly displeased that positive and reassuring testimony that Pentagon officials provided to his committee in November was shortly later shown to have been insincere and inexact. In a [Nov. 3, 2016 letter](#), he said he was "extremely disappointed to learn of yet another delay in the completion of the System Development and Demonstration (SDD) phase of the F-35 Joint Strike Program with an associated cost overrun that may be upwards of \$1 billion."

### McCain at the charge

McCain also wrote that "This latest setback appears to call into question some of the recent determinations and actions of Department of Defense senior leaders regarding the development of this critical but troubled program."

What's worse, he continued, "other senior Department leaders appear to have foreseen this latest delay and cost overrun."

In a [Jan. 10 statement](#) on the F-35 program, McCain said he was also "disappointed that the Department chose to downplay the cost of this new delay" of six months he discovered subsequently to the hearings.

The statement lambasted the Pentagon's handling of the program, and was accompanied by a separate letter in which he scolded Lockheed Martin CEO Marillyn Hewson for not having yet started to "drive down the [F-35's] cost aggressively," as she had promised President-elect Donald J. Trump after having met with him on Dec. 23.

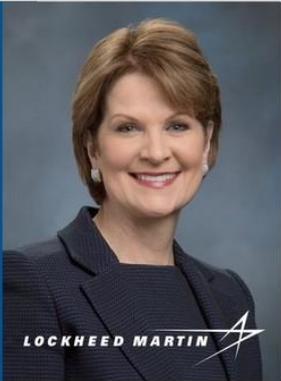


 **Lockheed Martin** @LockheedMartin · 23 Dec 2016

LM CEO just had a good conversation with [@realDonaldTrump](#)... she personally committed to drive down the cost of the F-35!

"I had a very good conversation with President-elect Trump this afternoon and assured him that I've heard his message loud and clear about reducing the cost of the F-35. I gave him my personal commitment to drive the cost down aggressively. I know that President-elect Trump wants the very best capability for our military at the lowest cost for taxpayers, and we're ready to deliver!"

- Marillyn Hewson, Chairman, President and Chief Executive Officer, Lockheed Martin

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"If Lockheed Martin believes it is possible to aggressively drive down the cost of the F-35, it is time for the company to reveal its plans to do so to the Congress and to American taxpayers," McCain said.

### **"At best, misleading and, at worst, prevarications"**

Also on Jan. 10, McCain released the Pentagon's [Dec. 19 response](#) to his questions on the program status.

This response was signed by Frank Kendall, the Undersecretary of Defense for Acquisition, Technology and Logistics, and among other things confirmed a seven-month delay to the end of the System Development and demonstration phase, and additional cost the Pentagon "hopes" to keep under \$500 million.

"I do not accept the most pessimistic recommendations from OSD staff organizations," Kendall wrote to McCain, "as in my judgement the revised schedule of executable" and that "all of this [extra] cost can be covered from funds within the program."

But in early December, the Pentagon's Director of Operational Test & Evaluation, J. Michael Gilmore, warned that "Pentagon officials have been preparing a misleading assessment of progress" on the F-35.

"If not changed, the existing responses would at best be considered misleading and, at worst, prevarications," Gilmore wrote in an internal memo criticizing the draft response, which was seen by [Bloomberg News](#).

### **Gilmore goes to bat**

Obviously, Gilmore still considers Kendall's response to be unsatisfactory, because he decided to publish his own response, which he included in his final FY2016 DOT&E Annual Report.

It is unprecedented that two senior Pentagon officials make their differences public, especially on a subject as controversial as the F-35. Gilmore's decision to contradict his boss, the Undersecretary of Defense, so visibly should be seen as a sign of how strongly he feels it necessary to provide Congress with the true facts, since the F-35 enterprise has shown itself capable of "misleading" to the point of "prevarication."

It is regrettable that Gilmore is leaving his job as the new Administration takes office, as he is one of the few public servants whose professional integrity is matched by the courage to speak out even against his superiors.

It is hard not to feel that, unless the new Director of OT&E is – very improbably – a straight-shooter of Gilmore's caliber, the F-35 enterprise will no longer have any checks to balance its overly optimistic and misleading assessments.

To allow readers to easily compare the two sets of responses, and thus to form their own opinion as to which one is more credible, we have posted them side-by-side below.

*Both original responses, in PDF format, are available here:*

-- [Undersecretary Kendall](#)

-- [Director OT&E Gilmore](#) (see page 104, right-hand column)

## McCain's Ten Questions on the F-35 Status and Delays

<b>Question #1: When will the Department complete the SDD phase of the F-35?</b>	
<b>Response of USD AT&amp;L (Frank Kendall)</b>	<b>Response of Director OT&amp;E (Michael Gilmore)</b>
<p>The majority of the SDD effort will complete following the correction of significant Block 3F software deficiencies and the successful completion of the flight test program.</p> <p>My direction as a result of the DAB review is to plan for a <b>May 2018 completion of developmental testing</b>, however there is still some risk associated with this date because of discoveries that may occur in testing.</p> <p>Completion of Developmental Test will be followed by a period of engineering analysis required to validate and verify specification compliance.</p>	<p>SDD will close out in multiple phases. Developmental flight testing is projected to end <b>no earlier than mid-2018</b>, based on independent estimates on completing mission systems flight testing – the testing that will likely take the longest to complete.</p>
<b>Question #2: How many additional funds, in each upcoming fiscal year budget, will be required to complete F-35 SDD?</b>	
<p>Completing SDD will require at least <b>\$500 million more than previously budgeted.</b></p> <p>These funds will be required beginning in FY 2018. A more accurate projection will become available over the next few months as additional testing occurs. There are program funds available to cover over 80 percent of the shortfall we currently anticipate and the balance can be made up by diverting a fraction of the planned FoM funding to completing SDD.</p> <p>The final FY 2018 budget request will identify any changes to the funding required to complete SDD.</p>	<p>Although DOT&amp;E does not conduct independent cost estimates, CAPE estimated that the program would need an additional \$550 Million in FY18 to finish the necessary and planned developmental test points and produce additional software versions to fix and verify the important known and documented deficiencies, then an additional \$425 Million in FY19 and \$150 Million in FY20 to complete SDD.</p> <p><b>These estimates add up to an additional \$1.125 Billion required to complete SDD.</b> The Program Office estimate is about one-half of the CAPE estimate.</p>
<b>Question #3: What other Service priorities will not receive funding in fiscal year 2018 due to the SDD delay and cost overrun?</b>	
<p>Since most the SDD cost increase can be funded with other F-35 program funds, <b>we do not anticipate significant adjustments to other Service priorities</b> in the FY 2018 budget request.</p>	<p>Although the program recently claimed that their estimated SDD overrun can be covered by reallocating existing JSF program funding (other than \$100 Million in flight test risk), <b>the SDD cost increase will be much larger than the current program estimate</b> for the reasons described in this report.</p>

	Therefore, the overrun will not be completely covered with only program funds and <b>the Services will likely need to address the SDD cost increase from within their budgets</b> , or funding currently designated for Follow-on Modernization (FoM) will need to be reallocated to complete SDD.
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**Question #4: Is Secretary James' Block 3F full combat capability certification, as required by the Fiscal Year 2016 NDAA, still valid?**

<p>The Secretary of the Air Force certification that was provided to Congress in September 2016 was based on a rigorous review of program information available at the time of certification.</p> <p>Since her certification, schedule pressures referenced earlier in this letter have increased the risk that LRIP Lot 10 aircraft delivered in FY 2018 <b>will not be verified to have full Block 3F software, hardware, and weapons capability</b> at the time of delivery.</p> <p>When LRIP Lot 10 jets are delivered, they will have Block 3F hardware and software installed on them; however, there may be flight envelope limitations until flight testing of the aircraft is completed. <b>Flight test completion and full weapons and envelope clearance are expected later in FY 2018.</b></p>	<p>For many reasons, <b>it is clear that the Lot 10 aircraft that will begin delivery in early 2018 will not initially have full Block 3F capability.</b> These reasons include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>-- Envelope limitations will likely restrict the full planned Block 3F carriage and employment envelopes of the AIM-120 missile and bombs <b>well into 2018, if not later.</b></li> <li>-- The full set of geographically specific area of responsibility mission data loads (MDLs) will not be complete, i.e., developed, tested and verified, <b>until 2019, at the soonest</b>, due to the program's failure to provide the necessary equipment and software tools for the U.S. Reprogramming Laboratory (USRL).</li> <li>-- Even after the MDLs are delivered, they will not be tested and optimized to deal with the full set of threats present in IOT&amp;E, let alone in actual combat, which is part of full combat capability.</li> <li>-- The program currently has more than 270 Block 3F unresolved high-priority (Priority 1 and Priority 2, out of a 4-priority categorization) performance deficiencies, <b>the majority of which cannot be addressed and verified prior to the Lot 10 aircraft deliveries.</b></li> <li>-- The program <b>currently has 17 known and acknowledged failures to meet the contract specification requirements</b>, all of which the program is reportedly planning to get relief from the SDD contract due to lack of time and funding.</li> <li>-- Dozens of contract specification requirements are projected to be open</li> </ul>
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	<p>into FY18; these shortfalls in meeting the contract specifications will translate into limitations or reductions to full Block 3F capability.</p> <p>-- Estimates to complete Block 3F mission systems extend into the summer of 2018, not just from DOT&amp;E, but other independent Department agencies, making <b>delivery of full capability in January 2018 nearly impossible to achieve, unless testing is prematurely terminated</b>, which increases the likelihood the full Block 3F capabilities will not be adequately tested and priority deficiencies fixed.</p> <p>-- <b>Deficiencies continue to be discovered at a rate of about 20 per month</b>, and many more will undoubtedly be discovered during IOT&amp;E.</p> <p>-- ALIS version 3.0, which is necessary to provide full combat capability, will not be fielded until mid-2018; also, a number of capabilities that had previously been designated as required for ALIS 3.0 are now being deferred to later versions of ALIS (i.e., after summer of 2018).</p> <p>-- The Department has chosen to not fund the CAPE estimate for the completion of Block 3F mission systems testing lasting until mid-2018, an estimate which is at least double the Program Office's latest unrealistic estimate to complete SDD. <b>This guarantees the program will attempt a premature resource- and schedule-driven shutdown of mission systems testing</b>, which will increase the risk of mission failures during IOT&amp;E and, more importantly, if the F-35 is used in combat.</p> <p>-- Finally, rigorous operational testing, which provides the sole means to evaluate actual combat performance, <b>will not complete until at best the end of 2019—and more likely later.</b></p>
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<p><b>Question #5: How will this delay and cost overrun affect the current overall schedule for Joint Strike Fighter deliveries to the Services?</b></p>	
	<p>The Program Office currently has no plans to delay the production and delivery</p>

<p>The current SDD schedule will not change the overall F-35 production deliveries to the Services.</p>	<p>schedule of aircraft to the Services. However, since Lot 10 aircraft will not initially be delivered with full combat capability, including operational MDLs for Block 3F, <b>the Services will need to plan for accepting aircraft with less capability</b>, possibly with Block 3i capability, until full Block 3F capability can be delivered.</p>
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<b>Question #6: When will you complete the operational test and evaluation phase?</b>	
<p>Initial Operational Test &amp; Evaluation (IOT&amp;E) will take approximately one year after the formal start of testing.</p> <p>IOT&amp;E is a condition-based event with well-defined criteria, and IOT&amp;E will commence when the established criteria have been met to the satisfaction of the DOT&amp;E. Using those criteria, and <b>assuming DT completes in May 2018, would mean an IOT&amp;E start in late 2018 or early 2019</b> with completion about one year later.</p> <p>Other IOT&amp;E start criteria include completion of the modification program for all of the 23 early LRIP aircraft planned for use and successful completion of the six month spin up phase.</p> <p><b>We are still evaluating alternatives that could relieve some of these schedule pressures and risks</b> associated with the start of IOT&amp;E, but we have not made a final decision on those actions.</p>	<p>The IOT&amp;E is planned to cover a span of approximately 12 months, and will start after the program is able to meet the TEMP entrance criteria and the Department certifies that the program is ready for test.</p> <p>These entrance criteria are common-sense and carefully-defined requirements that were well-coordinated with the Services and JPO as the TEMP was being staffed. Meeting these criteria to enter IOT&amp;E is necessary to ensure the test is conducted efficiently and effectively within the time span planned and to minimize the risk of failing IOT&amp;E, or causing a “pause test” and having to re-accomplish costly test trials, which would only further delay the completion of IOT&amp;E and increase program costs.</p> <p><b>Since the program will not be ready to start IOT&amp;E until late 2018, at the earliest, and more likely 2019, completion of IOT&amp;E will not occur until late 2019 or early 2020.</b></p>

<b>Question #7: When will you make the Milestone C/Full-Rate Production decision?</b>	
<p>The Full Rate Production decision will be made after the completion of IOT&amp;E. This milestone is <b>currently scheduled for 2019 but would slip</b> if IOT&amp;E is delayed further.</p>	<p>Since the Milestone C/Full-Rate Production decision cannot be made until after IOT&amp;E is completed and DOT&amp;E has issued its report, <b>it cannot occur by the threshold date of October 2019 and will likely not occur until early 2020, at the soonest.</b></p>

<b>Question #8: Will you defer any planned F-35 capabilities from SDD into the F-35 Follow-on Modernization (FoM) program?</b>	

The only capability that has been deferred from SDD into the FoM program is the Prognostic and Health Management (PHM) downlink capability.

The decision to defer the PHM downlink capability was made due to security considerations and was approved by the F-35 Configuration Steering Board in March 2015. **No other deferrals are anticipated.**

**Multiple F-35 capabilities will be deferred from SDD or not function properly in Block 3F** unless the program continues testing and fixing deficiencies.

The program currently has **hundreds of unresolved deficiencies and immature capabilities, including 17 documented failures to meet specification** requirements for which the program acknowledges and **intends to seek contract specification changes in order to close out SDD.**

**Question #9: How will the SDD delay affect the Follow-on Modernization (FoM) program?**

Delays to the completion of SDD may impact the FoM program schedule. FoM work has begun and will continue to overlap the wind down of SDD, as the activities required to complete the developmental test effort are different than the engineering activities required at the beginning of the modernization effort.

We will continue to assess that impact as we progress toward completion of SDD and may have to make some adjustments to the FoM schedule.

FoM is a high priority, but completing SDD is more important to the Department.

Delays to the completion of SDD will impact both the FoM program schedule and content.

While FoM is critical for the capabilities needed with the F-35 and **the program is attempting to minimize delays**, the program does not appear to be ready to complete all prerequisites to start full development in FY18, as planned.

Also, **IOT&E will not be complete until late 2019 or early 2020, which overlaps with the planned test periods for Block 4.1.**

Finally, **the program's current plans for FoM are not executable**, for many reasons, which include the following:

-- **Too much technical content** for the production-schedule driven developmental timeline

-- **Overlapping capability increments** without enough time for deficiencies from OT to be fixed prior to releasing the next increment

-- **High risk** due to excessive technical debt and deficiencies from the balance of SDD and IOT&E being carried forward into FoM because the program does not have a plan or funding to resolve key deficiencies from SDD prior to attempting to add the planned Block 4.1 capabilities

-- **Inadequate test infrastructure** (aircraft, laboratories, personnel) in the

	<p>current FoM plan to meet the testing demands of the capabilities planned and the multiple configurations (i.e., TR2, TR3, and Foreign Military Sales)</p> <p>-- <b>Insufficient time</b> for conducting adequate DT and OT for each increment</p>
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**Question #10: When will you provide your final response either to validate the current requirement for the F-35 Joint Strike Fighter total program of record quantity or identify a new requirement for the total number of F-35 aircraft that the Department would ultimately procure?**

<p>We expect the new administration will assess the F-35 program, including quantity, prior to submitting an FY 2018 budget.</p> <p>In the near term, F-35 force structure requirements have not changed.</p>	<p>DOT&amp;E is not aware of when the Department will complete these actions.</p>
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Ends