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Subcommittee on Airland

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

HEARING TO RECEIVE TESTIMONY ON AIR FORCE MODERNIZATION IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2017 AND THE FUTURE YEARS DEFENSE PROGRAM

Tuesday, March 8, 2016

Washington, D.C.

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1	HEARING TO RECEIVE TESTIMONY ON AIR FORCE MODERNIZATION IN
2	REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR
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4	
5	Tuesday, March 8, 2016
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7	U.S. Senate
8	Subcommittee on Airland
9	Committee on Armed Services
10	Washington, D.C.
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12	The subcommittee met, pursuant to notice, at 2:31 p.m.
13	in Room SR-222, Russell Senate Office Building, Hon. Tom
14	Cotton, chairman of the subcommittee, presiding.
15	Subcommittee Members Present: Senators Cotton
16	[presiding], McCain, Inhofe, Wicker, Rounds, Ernst, Lee,
17	Manchin, Blumenthal, and Donnelly.
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- 1 OPENING STATEMENT OF HON. TOM COTTON, U.S. SENATOR
- 2 FROM ARKANSAS
- 3 Senator Cotton: This hearing will come to order.
- 4 The Airland Subcommittee meets today to consider Air
- 5 Force modernization in the context of review and oversight
- of the fiscal year 2017 defense budget request.
- 7 I welcome our witnesses, Acting Assistant Secretary of
- 8 the Air Force for Acquisition, Ms. Darlene Costello; the
- 9 Military Assistant to the Secretary of the Air Force for
- 10 Acquisition, Lieutenant General Arnold Bunch; Deputy Chief
- 11 of Staff for Strategic Plans and Requirements, Lieutenant
- 12 General James Holmes; and Deputy Chief of Staff for
- 13 Operations, Lieutenant General John Raymond. Thank you all
- 14 for your service and we appreciate your testimony here
- 15 today.
- 16 At \$18 billion less than last year, the President's
- 17 defense budget request for this fiscal year is
- 18 disappointing. The President has submitted five budgets
- 19 since 2011. Each budget has under-resourced the military,
- 20 while the President has also portrayed the world as safer
- 21 than it was when he took office or asserted that the U.S.
- 22 needed to step back from the world stage. The current
- 23 budget request has rhetorically acknowledged an increase of
- 24 worldwide threats and that our military's capabilities are
- 25 eroding. However, it still conforms to arbitrary budget

- 1 caps put in place 5 years ago.
- 2 This is nowhere more apparent than in the Air Force
- 3 modernization program. Atop the service's priorities are
- 4 the F-35A next generation fighter aircraft, the KC-46A air
- 5 refueling tanker aircraft, a replacement for the legacy
- 6 KC-135, and the B-21 long-range strike bomber. While all
- 7 three are needed, the focus on these three priorities could
- 8 put at risk modernization in future years and gives our
- 9 priorities the appearance of being somewhat unfocused.
- 10 For example, they are the highest priority. The
- 11 President's budget cuts procurement of five F-35A fighters.
- 12 Further, it cuts modernization of F-15 fighter aircraft and
- 13 reduces procurement of C-130J aircraft by \$724 million.
- 14 Unfortunately, unlike the other services, the Air Force
- 15 did not grow much during the post-9/11 buildup. Rather, it
- 16 got smaller as older aircraft were retired and replacement
- 17 programs, such as the F-35, experienced excessive delays in
- 18 bringing new aircraft into the fleet. For example, air
- 19 superiority is overwhelmingly being supported by the F-15,
- 20 which makes up 71 percent of air superiority platforms but
- 21 has consumed over 90 percent of its estimated 30-year
- 22 service life. The eventual retirement of 438 F-15's in the
- 23 fleet and the replacement by only 177 F-22's, with eventual
- 24 support from the F-35, is a serious gamble.
- 25 We cannot afford to assume that the enemy will resemble

- 1 threats of recent wars, nor can we assume that future fights
- 2 will not require greater numbers of advanced aircraft. We
- 3 have to be ready to fight tonight on any battlefield and
- 4 with any foe. The current investment strategy is too risky
- 5 and will prove only to be riskier in the near future.
- To that end, in January of this year, the Center for
- 7 Strategic and International Studies released a report
- 8 detailing the impending modernization bow wave for the DOD.
- 9 When you also include all the other Air Force modernization
- 10 imperatives, the annual price tag for this wave peaks in
- 11 2023 at nearly \$35 billion and accounts for more than half
- 12 of the entire DOD's investment wave.
- 13 Yet, modernization, particularly capability and
- 14 capacity, cannot be placed at odds with readiness or other
- 15 needs. Simply reducing quantities of other aircraft,
- 16 retiring legacy systems, or deferring modernization on other
- 17 programs will not achieve the Air Force the Nation needs for
- 18 the next fight. Increasing the top line of defense spending
- 19 is the only solution that will ultimately blunt the bow wave
- 20 and achieve the concurrent capability and capacity we need.
- 21 After that, we should next consider fencing off funding
- 22 for platforms and systems crucial to the Nation's nuclear
- 23 deterrent and maintaining the nuclear triad. Second, we
- 24 should continue investment and procurement of next
- 25 generation technologies to build capability while also

Τ	maintaining and upgrading the legacy fleets to preserve
2	capacity. Both are essential to preserving America's global
3	dominance of the skies.
4	Again, I want to thank our witnesses. We look forward
5	to your testimony.
6	Senator Manchin?
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- 1 STATEMENT OF HON. JOE MANCHIN III, U.S. SENATOR FROM
- 2 WEST VIRGINIA
- 3 Senator Manchin: Thank you, Mr. Chairman.
- 4 And, Mr. Chairman, I want to extend the welcome and
- 5 thank each of our witnesses for appearing before this
- 6 subcommittee today.
- 7 I also want to thank each of you representing the men
- 8 and women of the armed forces for the wonderful jobs they
- 9 are performing in Afghanistan and all around the world. We
- 10 keep all of those who are serving right now in our thoughts
- 11 and prayers and also remember that both they and their
- 12 families are serving and sacrificing every day.
- Our witnesses this afternoon face huge challenges as
- 14 they strive to balance the need to support ongoing
- 15 operations and sustain readiness with the need to modernize
- 16 and keep the technological edge so critical to military
- 17 success.
- 18 These challenges have been made particularly difficult
- 19 by the spending caps imposed in the Budget Control Act, caps
- 20 that were relieved somewhat for fiscal year 2016 and 2017 in
- 21 the Bipartisan Budget Act of 2015 that we enacted late last
- 22 year.
- However, these caps are scheduled to resume again in
- 24 fiscal year 2018 and beyond. Unless modified for years
- 25 after fiscal year 2018, they will threaten our long-term

- 1 national security interests.
- 2 Every year we are challenged to make decisions
- 3 balancing a number of competing demands for resources,
- 4 including resources for current operations and investment in
- 5 future modernization. In this case, we will be assessing
- 6 plans and programs regarding the current status and future
- 7 prospects for tactical aviation programs. Again, this year,
- 8 the Air Force is proposing further reductions in the future
- 9 years defense program, including eliminating the entire A-10
- 10 aircraft fleet.
- 11 The Air Force awarded the long-range bomber, the LRS-B,
- 12 contract last fall. The Air Force has named the bomber the
- 13 B-21. The award just came through the protest with the
- 14 Government Accountability Office, GAO, denying the protest.
- 15 The Air Force awarded a contract that provides for a cost
- 16 plus incentive fee structure for the engineering and
- 17 manufacturing development phase of the program, with fixed
- 18 price contracts for production. I know that Chairman McCain
- 19 has taken exception to this contracting approach. So I look
- 20 forward to hearing from our witnesses about why they think
- 21 the Air Force plan represents the best value for the
- 22 taxpayer.
- There are several other force structure adjustments
- 24 that are of concern. The Air Force plans to eliminate six
- 25 Compass Call EC-30H aircraft in fiscal year 2019. There are

- 1 other reductions, including the AWACS and JSTARS, that are
- 2 planned for later in the future years defense program.
- 3 While there is a plan to recapitalize the JSTARS with new
- 4 aircraft and a radar program, I am concerned that the Air
- 5 Force plans to retire aircraft like AWACS and Compass Call
- 6 with no planned replacement in sight.
- 7 There are a number of other issues that we may discuss,
- 8 but in the interest of time, I am going to stop here.
- 9 Again, I want to thank our witnesses. I look forward
- 10 to hearing your testimonies.
- And I want to thank you again, Mr. Chairman, for this
- 12 hearing.
- 13 Senator Cotton: Thank you, Senator Manchin.
- Ms. Costello?

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- 1 STATEMENT OF DARLENE J. COSTELLO, ACTING ASSISTANT
- 2 SECRETARY OF THE AIR FORCE FOR ACQUISITION; ACCOMPANIED BY:
- 3 LIEUTENANT GENERAL ARNOLD W. BUNCH, JR., USAF, MILITARY
- 4 DEPUTY, OFFICE OF THE ASSISTANT SECRETARY OF THE AIR FORCE
- 5 FOR ACQUISITION; LIEUTENANT GENERAL JAMES M. HOLMES, USAF,
- 6 DEPUTY CHIEF OF STAFF FOR STRATEGIC PLANS AND REQUIREMENTS;
- 7 LIEUTENANT GENERAL JOHN W. RAYMOND, USAF, DEPUTY CHIEF OF
- 8 STAFF FOR OPERATIONS
- 9 Ms. Costello: Chairman Cotton, Ranking Member Manchin,
- 10 members of the committee, thank you for your continued
- 11 support of the U.S. Air Force, our airmen, and their
- 12 families. We welcome today's opportunity to discuss the Air
- 13 Force's current and projected operations around the world,
- our plans for the modernization of key Air Force weapon
- 15 systems, and to allay our concerns regarding the
- 16 programmatic impacts that budget uncertainty brings. It is
- 17 a privilege to be here, and we look forward to answering
- 18 your questions.
- 19 For the past 25 years, the U.S. Air Force has been the
- 20 most globally engaged Air Force on the planet. Within the
- 21 past year, our 24,000 deployed airmen have flown missions
- 22 over the Korean peninsula with F-22's and B-52's to dissuade
- 23 the North Korean regime and demonstrate our resolve to our
- 24 South Korean allies.
- Our bombers are patrolling the South China Sea to

- 1 validate the right for all nations to maintain freedom of
- 2 navigation in internationally recognized waters.
- 3 Remotely piloted aircraft, combat search and rescue,
- 4 and mobility assets are operating throughout Africa
- 5 combating transregional violent extremist organizations.
- 6 We have invested in building partner capacity with our
- 7 friends and allies in South America, as well as conducting
- 8 counternarcotics operations.
- And of course, we continue our commitment to Europe
- 10 through our strategic partnerships and deployment of theater
- 11 security packages.
- 12 We continue prosecuting operations against the Islamic
- 13 State of Iraq and Syria, and we provide training and
- 14 operational support to the Afghan National Defense and
- 15 Security Forces in Afghanistan.
- 16 The Air Force has done all this while committing over
- 17 200,000 airmen in place to defend the homeland, operate
- 18 remotely piloted aircraft, control our nuclear space and
- 19 cyber forces, and provide rapid global mobility.
- However, during those 25 years of continuous combat
- 21 operations, budget decisions have taken a toll on our
- 22 ability to provide for the joint force in the future.
- 23 For example, the Air Force has simultaneously reduced
- 24 total force military and civilian personnel over 30 percent,
- 25 cut combat-coded fighter squadrons by 59 percent, and

- 1 slashed annual procurement of fighter aircraft by 88
- 2 percent, all while standing up new ISR and cyber missions.
- 3 When combined with the fiscal restraints levied by the
- 4 Budget Control Act and our extended combat operations in a
- 5 permissive air environment, our Air Force today stands at
- 6 less than 50 percent ready for full spectrum conflict and
- 7 operates the oldest fleet of aircraft in its history at an
- 8 average age of 27 years.
- 9 Additionally, during that same quarter century, our
- 10 adversaries have shrunk the technological gap. They have
- 11 deployed new air, space, cyber, surface-to-air, and surface-
- 12 to-surface capabilities aimed at neutralizing the American
- 13 air, space, and maritime advantages that underwrite the
- 14 joint force. Iran and North Korea have acquired new
- 15 capabilities that threaten our allies and the stability of
- 16 the regions where they live. Islamic extremists have
- 17 expanded conflict from the Middle East into Africa and
- 18 created a heart-rending flow of refugees. In short, we face
- 19 new capabilities and new threats that will require new ways
- 20 of thinking and consistent investment to counter.
- To frame the discussion of our fiscal year 2017
- 22 presidential budget, it is important to understand the
- 23 environment in which our strategic decisions were made. The
- 24 limited resources available since the Budget Control Act of
- 25 2011 have hampered our ability to balance readiness,

- 1 capability, and capacity. The fiscal year 2017 presidential
- 2 budget trades modernization, particularly the F-35
- 3 production rate and fourth generation fighter modifications,
- 4 along with delayed recapitalization of the C-130H fleet, to
- 5 sustain the capacity necessary to meet the combatant
- 6 commanders' urgent needs for air, space, and cyber forces
- 7 and begin recovering readiness levels after 25 years of
- 8 continuous combat.
- 9 And while we are grateful for the additional resources
- 10 the Bipartisan Budget Act provides, compared to the Budget
- 11 Control Act caps, we need your support in the form of stable
- 12 and predictable budgets if we are going to build the Air
- 13 Force that ensures the joint force can continue to deter,
- 14 deny, and decisively defeat any enemy that threatens the
- 15 United States or our national interests. Any return to
- 16 sequestration-level funding will force us to chase short-
- 17 term requirements at the expense of long-term strategic
- 18 planning, modernization, and readiness, and our budget
- 19 problems will only get worse between now and the end of this
- 20 5-year plan.
- 21 On the acquisition front, first let me say that I am
- 22 humbled by the selection to this position by the Air Force.
- 23 I have watched the Air Force from my oversight roles with
- 24 the Office of the Under Secretary of Defense for
- 25 Acquisition, Technology, and Logistics, and I have seen a

- 1 transformation over the last few years. Through the
- 2 development of Air Force acquisition priorities, the
- 3 wholesale adoption of better buying power practices, and
- 4 through their own bending-the-cost-curve initiatives, the
- 5 Air Force has emerged as a disciplined, deliberate, value-
- 6 focused enterprise that is stretching every dollar to obtain
- 7 capability for our warfighters. I am proud to now lead this
- 8 enterprise, if only temporarily, as we all look forward to
- 9 the appointment of a permanent Assistant Secretary for
- 10 Acquisition and Logistics as soon as possible.
- 11 Again, thank you for your service to the United States
- 12 and for your continued support of our airmen, both military
- 13 and civilian, serving our great Nation.
- I would like to introduce the other witnesses you have
- 15 invited today. It is a privilege to be sitting here next to
- 16 my partner in acquisition, the Military Deputy, Lieutenant
- 17 General Arnie Bunch, and two of my distinguished colleagues:
- 18 Lieutenant General Mike Holmes, who leads the development
- 19 and integration of the Air Force strategy, long-range plans,
- 20 as well as operational capabilities-based requirements; and
- 21 Lieutenant General Jay Raymond, who is responsible for Air
- 22 Force operations to include air, space, cyber, irregular
- 23 warfare, counterproliferation, homeland security, and
- 24 weather.
- You have assembled a broad group here, and we all look

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forward to your questions. Thank you.
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          [The prepared statement of Ms. Costello, General
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     Holmes, General Raymond, and General Bunch follows:]
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- 1 Senator Cotton: General Bunch?
- 2 General Bunch: Sir, we have given the one statement.
- 3 She spoke for all of us. We now look forward to answering
- 4 the committee's questions.
- 5 Senator Cotton: Outstanding. We will have to do that
- 6 with members of the committee.
- 7 [Laughter.]
- 8 Senator Cotton: I would like to start, Ms. Costello,
- 9 with the B-21 bomber. As you know, we have had a classified
- 10 hearing last week, in which we explored it. I think we need
- 11 to explore some elements here in this open setting.
- 12 Why did the Air Force choose a cost plus incentive fee
- 13 contract vehicle over a fixed price contract for the
- 14 engineering and manufacturing development phase of the B-21?
- 15 General Bunch: So, Senator Cotton, if I can sir, most
- 16 of those will come my way. So I will just go ahead and let
- 17 you know that now.
- 18 To start off with, sir, the determination of a contract
- 19 type -- there is no one-size-fits-all. You have to look at
- 20 each individual acquisition case and you have to look at the
- 21 risks involved with that acquisition and the maturity of the
- 22 technologies and variety of different factors. And that is
- 23 what we did in this case.
- 24 After carefully considering the full spectrum of
- 25 contracting options and looking at all the factors that go

- 1 into selecting a contract type, the Milestone Decision
- 2 Authority determined that the most appropriate contract
- 3 vehicle for the acquisition of the B-21 was a cost plus
- 4 incentive contract.
- 5 The key factors that went into making that decision
- 6 were the technical risk, and that falls into two categories.
- 7 One of those is that we did use mature technologies to meet
- 8 this requirement and deliver this capability, but those
- 9 mature technologies must now be integrated together on a
- 10 never-before-built platform. So the risk is in the platform
- 11 development of something that has not been built ever and
- 12 the integration of those mature technologies.
- 13 The other factor that was critical in this was the
- 14 determination of the contractor's ability to continue the
- 15 operation if they were to be put in a loss environment or
- 16 where they were losing profit. And in the case of the KC-46
- 17 right now, Boeing is running at about a 25 percent loss over
- 18 what the contract was. In the case of the KC-46, that
- 19 contractor can capitalize on the commercial market to be
- 20 able to get additional continued sales or they can
- 21 capitalize on foreign military sales to make up any losses
- 22 that they may have had. In the case of the long-range
- 23 strike bomber with highly classified activity going on and
- 24 highly classified technologies, there is not a commercial
- 25 application.

- 1 Senator Cotton: General Bunch --
- 2 General Bunch: Yes, sir.
- 3 Senator Cotton: -- if I can interject here.
- 4 So you said something similar last week --
- 5 General Bunch: Yes, sir.
- 6 Senator Cotton: -- at the Subcommittee on Seapower.
- 7 So what bearing does that particular characteristic have on
- 8 the decision that should ultimately hinge on best value to
- 9 the taxpayer?
- 10 General Bunch: Sir, we believe -- well, it is best
- 11 value for the taxpayer, but it is also a capability that we
- 12 need to be able to meet a critical gap, a gap that was
- 13 identified through the entire Department as a way looking at
- 14 the technologies that were out there. So it is a balancing
- 15 act of trying to ensure that we get it in the most cost-
- 16 effective manner and also meet the capability gap that we
- 17 need to meet from a requirements perspective.
- 18 Senator Cotton: So some of the things you have cited,
- 19 though, like the mature technologies or stable requirements,
- 20 specified aircraft price, and the inability to recoup cost
- 21 overseas, when you think about it in the context value, I
- 22 mean, those characteristics would seem to point at least as
- 23 strongly in favor of a fixed price contract as they would
- 24 cost-plus because they should give you a fairly definite
- 25 idea of what that price is going to be. Is that wrong?

- 1 General Bunch: Sir, the mature technologies -- I
- 2 believe we do have a good idea of what those would be. The
- 3 risk involved is the integration of those technologies and
- 4 building a never-before-built aircraft. And that moves it
- 5 on the risk perspective more to the cost-plus arena than it
- 6 does to the fixed price arena.
- 7 Senator Cotton: I have seen reports that during
- 8 industry discussions prior to the bid submission, that one
- 9 potential offeror indicated that they would not bid on the
- 10 RFP if it was a fixed price development contract. Do you or
- any of our witnesses have any knowledge of that?
- General Bunch: Sir, I will take that for the record to
- 13 make sure that I answer that in appropriate classification
- 14 levels of what I am supposed to be doing.
- 15 Senator Cotton: General Holmes?
- 16 General Holmes: I do not have any knowledge of that,
- 17 sir.
- 18 General Raymond: I do not have any knowledge of that
- 19 either, sir.
- 20 General Bunch: So I will take that for the record,
- 21 sir.
- 22 [The information follows:]
- 23 [SUBCOMMITTEE INSERT]

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- 1 Senator Cotton: Let me speak hypothetically for a
- 2 moment. What would be the impact on value to the taxpayer
- 3 if the Air Force issued an RFP for such a major weapon
- 4 system under a fixed price contract vehicle and only one
- 5 vendor submitted a bid?
- 6 General Bunch: Under that construct, we would still go
- 7 into the -- we would get the proposal in. We would evaluate
- 8 what we believe the performance of that could be, and then
- 9 we would look and make sure that we were getting a fair and
- 10 reasonable price for what we were doing, and we would
- 11 determine if it was a contract that we could let.
- 12 Senator Cotton: In my final question, let me ascend
- from this particular point to a more general question
- 14 related to this matter, General Holmes. In discussions with
- 15 the committee and staff, you have championed a return to
- 16 developmental planning, experimentation, prototyping, and
- 17 developing future capabilities. So we all understand the
- 18 severe budget constraints the Air Force has faced for the
- 19 last 7 years. But hypothetically, if sufficient funds were
- 20 available from a capabilities development perspective, do
- 21 you believe that a return to prototype development and so-
- 22 called "fly before you buy" methodology for large, complex
- 23 weapon systems before down-selecting a winning manufacturer
- 24 would be the preferred approach?
- 25 General Holmes: Senator, thanks for the question.

- I think it depends on the system, both in complexity
- 2 and the cost. So we are moving forward, and we hope to
- 3 continue to expand the prototyping and experimentation to
- 4 look at specific aspects and to reduce risk in different
- 5 programs. If you are going to go to a weapon system that
- 6 has a unit cost of \$500 million, then you would have to
- 7 weigh the cost of competing prototypes built at that initial
- 8 fly-away cost against what you think you could learn in risk
- 9 reduction in systems first. So I think it would depend on
- 10 the aircraft or on the program.
- 11 Senator Cotton: Thank you.
- 12 Senator Manchin?
- 13 Senator Manchin: Just to follow up very quickly on
- 14 that, I think the concerns we might have is because the F-35
- 15 strike fighter -- was it not a cost-plus?
- 16 General Bunch: It was, sir.
- 17 Senator Manchin: So you can understand our chairman's
- 18 consternation about that, and I think you have heard it over
- 19 the years. So we are looking for every way possible not to
- 20 repeat the mistakes of that type of a contract, and I think
- 21 that is what we are kind of all leading to.
- 22 So how can you assure us we are not going to go down
- 23 that same path?
- General Bunch: Yes, sir. That is a valid question
- 25 because we are very worried about cost growth, and it is

- 1 something that we want to make sure we control as we execute
- 2 the program. So the two things that we have done -- two of
- 3 the main things -- we have done more than two, but two of
- 4 the main things we have done to control cost growth on the
- 5 program -- the first of those is we conducted an independent
- 6 cost estimate outside the program office, which is something
- 7 that the SASC was a champion for with SARA to form an
- 8 independent cost estimate so that a program office that may
- 9 be optimistic about what it might cost to develop a
- 10 capability would not be able to do that. So it is an
- 11 independent cost estimate. In this case, we actually had
- 12 two. Those were very close numbers, and we funded to the
- 13 higher of the two numbers. So that is a key indicator, in
- 14 past studies by RAND and others, of controlling costs is to
- 15 have an independent cost estimate to make sure you are not
- 16 overly optimistic as you start.
- 17 The second one is stable requirements, and we have had
- 18 no changes in the requirements since 2013. And our
- 19 requirements control officer is our Chief of Staff of our
- 20 Air Force. He has made that very clear to all of us that he
- 21 controls the requirements and he does not wish to see those
- 22 change because he knows if you change requirements, you can
- 23 increase the cost and you can change what you are trying to
- 24 get in the technology perspective, and he wants to control
- 25 that.

- 1 So those are the two main drivers that we have seen
- 2 over the years that have driven cost.
- 3 The other piece that we are doing is we are using
- 4 mature technologies. The analogy that I use here is we do
- 5 not have developmental programs going on inside a major
- 6 developmental program for the platform. So I am not
- 7 developing a brand new radar at the same time I am building
- 8 a never-before-built aircraft. I am not building a brand
- 9 new defensive management system at the same time I am
- 10 building an aircraft that has never been built. So the
- 11 mature technologies -- the risk there is the integration.
- 12 The technologies are proven, and we should be able to do
- 13 those. That is another one to control costs, sir.
- And the last of those is we have crafted an incentive
- 15 structure for the contract so that the contractor must
- 16 perform on cost and schedule to be able to garner or gain
- 17 the profit and the fee that is associated with the contract.
- 18 So it is made up of two components. It is made up of cost
- 19 and it is made up of performance. The performance aspect is
- 20 based on schedule. And the schedule incentive is the
- 21 heavier weighted of the two, and it is not just making a
- 22 date. It is delivering capabilities and meeting
- 23 requirements. And that schedule incentive is loaded toward
- 24 the back of the EMD phase, and it goes larger as the program
- 25 goes forward such that if the contractor is not able to make

- 1 those dates, then they will lose a portion of the incentive
- 2 fee up to the point that they will lose it all for that
- 3 scheduled event. And if they do not execute on cost and on
- 4 schedule, they end up executing the program at no profit and
- 5 with no fee.
- 6 Senator Manchin: Thank you, sir.
- 7 I want to go to General Holmes real quick. But I want
- 8 to say on that, General Bunch, we would like to compare that
- 9 to the anticipation we had when we started the F-35 strike
- 10 fighter. Some of us who were not there when that started,
- 11 if this was the same anticipation as you have now with this
- 12 set of criteria, it was the same back then. What have we
- 13 learned? We are just hoping that we do not repeat the same.
- 14 And I will get into that in more detail with you, sir, if I
- 15 can.
- 16 General Bunch: Yes, sir.
- 17 Senator Manchin: General Holmes, I mentioned in my
- 18 opening statement, the Air Force is planning to retire some
- 19 aircraft, including AWACS and this EC-130H. Why would they
- 20 plan to retire aircraft in high demand without planning to
- 21 replace them? I think that is about as straightforward as I
- 22 can make it.
- General Holmes: Thank you, Ranking Member Manchin.
- So if we go back to the fiscal year 2012 President's
- 25 budget and we compare the spending levels that we expected

- 1 to see between 2012 and this year, from the President's
- 2 budget that was turned in, the Air Force has lost about \$70
- 3 billion in buying power. From the 2012 budget as it was
- 4 enacted, which was actually a little lower than that, the
- 5 Air Force has lost about \$40 billion in buying power. So to
- 6 try to upgrade all of the Air Force, the money is just not
- 7 there to do it. So we are forced to make some tough
- 8 choices.
- 9 Senator Manchin: The only thing I say is should we
- 10 assess the risks of failing to meet combatant commander
- 11 demands. These are people on the front lines. These are
- 12 aircraft they very much need.
- General Holmes: Absolutely, sir, we do. And
- 14 everything I have in the Air Force is very much in need by
- 15 the combatant commanders. They participate in the budget
- 16 review process. They participate at every step on the way
- in building our budget, and the budget that we provide you
- 18 is a combination of the Air Force and the combatant
- 19 commanders' best military advice on where to accept risk.
- 20 We are accepting risk in areas we do not want to. We
- 21 know we are accepting risk in areas they do not want to. We
- 22 are just trying to make the best budget we can within the
- 23 buying power that we have left under the BCA, as modified by
- 24 the BBA that we are grateful for.
- 25 Senator Manchin: Then why would we eliminate?

- 1 General Holmes: Sir, because we only have enough money
- 2 to do -- we do not have enough money to do all of the things
- 3 that you expect the Air Force to do.
- 4 So we hope not to eliminate. We have a plan to
- 5 recapitalize the EC-130. We plan to bring that forward to
- 6 you next year. We have brought a plan to you to
- 7 recapitalize the JSTARS. For the AWACS, our plan is to draw
- 8 down a portion of the numbers so that we can make money
- 9 available to upgrade the rest of the fleet to be effective
- 10 for the combatant commanders and the missions that they are
- 11 expected to do. And so in general, we are trying to do the
- 12 best we can to provide all the combatant commanders'
- 13 requirements within the budget limit that we have and in
- 14 consultation with them.
- 15 Senator Manchin: Thank you, sir.
- 16 Senator Cotton: Senator Inhofe?
- 17 Senator Inhofe: What you are saying is it is budget-
- 18 driven. And I think that the other two Lieutenant Generals
- 19 there with you would agree with the statement that General
- 20 Holmes just made. Is that correct?
- 21 You know, I can remember back when the discussion was
- 22 -- we were talking about the F-15 and F-16. And that was
- 23 quite some time ago. But again, at that time, the argument
- 24 was always, well, you can do it with one or the other, but
- 25 not both of them. And yet, we know now that the missions

- 1 were different at that time. We knew it at the time.
- 2 And we are going through kind of the same situation now
- 3 with the F-22 and the F-35. The F-22 has been carrying a
- 4 load that it should not have carried. Originally -- and I
- 5 recall this, and each one of the three of you remember this
- 6 also -- there were going to be -- what -- 750 F-22's and
- 7 that slowly went down to -- I cannot remember who it was.
- 8 In 2008, it went down to 381. Then Gates changed that to
- 9 243. Now we are down to 187 operational F-22's.
- 10 All we hear about is how great -- what a great job they
- 11 are doing. In the statement that was made -- let me see who
- 12 it was who made this. I think it was when we had Secretary
- 13 James and General Welsh in here at our general committee. I
- 14 said I understand the F-22 has been deployed against ISIL in
- 15 Iraq, Syria, has been deployed in the Pacific, Middle East,
- 16 and Europe. And the Air Force chose to cut its force
- 17 structure over the past several years. It is now paying for
- 18 it.
- 19 A lot of us complained about this back when we decided
- 20 that we were going to be downsizing the F-22. And I think
- 21 that probably all of you would agree now that probably was
- 22 not a good idea. There was a reason for coming up with the
- 23 750 to start with, and I have just always wondered what the
- 24 reasoning was, other than the budget, of bringing it down
- 25 over the last 7 or 8 years. Do you agree that that was the

- 1 problem?
- 2 General Holmes: So, sir, I think it was certainly a
- 3 budget involvement there. So 750 is about the same number
- 4 that we built of the F-15A and C in our air superiority role
- 5 in the Cold War.
- The budget came down for a couple reasons, one, budget-
- 7 driven. I think you are right. Also, I think the
- 8 Department and the Congress made a decision that we would
- 9 not see a near peer threat within a number of years, and
- 10 that decision also proved to be -- that judgment also proved
- 11 to be optimistic. We have seen both Russia and China
- 12 develop airplanes faster than was anticipated.
- 13 Senator Inhofe: And I appreciate that.
- 14 Staying on the F-22, I am not sure who they are
- 15 quoting, but it was in the "Air Force Times." They said the
- 16 biggest challenge for the F-22 Raptor community now is to
- 17 stretch the limited fleet so the Air Force can guarantee air
- 18 superiority until a successor aircraft comes along. That
- 19 may not happen for another 20 years. The biggest deficiency
- 20 in the F-22 fleet, though, has to do with the number of
- 21 F-22's. There just are not enough of them.
- I have often wondered. At least I have not heard the
- 23 discussion in our Senate Armed Services Committee about
- 24 reopening that line. Is there any thought along that line?
- 25 I think we all know we do not have enough F-22's. What are

- 1 the arguments against trying to go back and reopen the line?
- 2 General Bunch: Senator, there have been RAND studies
- 3 in that area. They have looked at it and there are rough
- 4 order of magnitude numbers that are in the billions of
- 5 dollars and years. And we viewed it in the light of the
- 6 balancing act we are already doing between readiness and
- 7 modernization as something that would be cost prohibitive,
- 8 and we would have to take something else out that we value
- 9 right now to try to meet the requirements to be able to do
- 10 that. So we have not put any further analysis into that.
- 11 Senator Inhofe: As far as the F-35, we really need
- 12 more of those, and cutting it down from 48 to 45, I do not
- 13 know what that amount does to the cost. Was that a decision
- 14 you agreed with, or is it another budget-driven --
- 15 General Bunch: Sir, I will address the cost. It did
- 16 not increase our costs. We are in a different position on
- 17 the F-35 program than we were on the single Air Force
- 18 program on the F-22. The Navy, the Marine Corps, our
- 19 partners and foreign military sales have continued to fill
- 20 the production line so that the cost estimates have
- 21 continued to come down. That is still on track. And we did
- 22 not pay increase for the aircraft that we got through the
- 23 FYDP at this time.
- 24 Senator Inhofe: In his opening statement, Senator
- 25 Manchin talked about the current plan to replace the AWACS.

- 1 Does anyone want to tell us what the current plans are to
- 2 replace the AWACS?
- General Holmes: So, Senator, we are looking in the
- 4 long term at a replacement. Our short-term plans were
- 5 focused on upgrading the airplanes we have and making them
- 6 both able to keep flying and relevant as they keep flying
- 7 through the block 40 and block 45 upgrade. We have taken a
- 8 recent study to look at our air superiority needs starting
- 9 in 2030. One of the factors that has come out of that will
- 10 be choices in what we need to do with the recapitalization
- 11 program.
- We hope that our JSTARS recapitalization program can
- 13 provide a model for recapitalizing the rest of what we are
- 14 doing now with the wide body aircraft fleet and a way to
- 15 bring the radar -- the air battle management and an airframe
- 16 together in a way that is cheaper to be able to continue to
- 17 do those missions.
- 18 Senator Inhofe: Okay. I appreciate it. My time has
- 19 expired, but I am hoping some of the other members might
- 20 bring up the shortage of pilots, fighter pilots, that we are
- 21 facing right now.
- Thank you, Mr. Chairman.
- 23 Senator Cotton: Senator Donnelly?
- 24 Senator Donnelly: Thank you, Mr. Chairman.
- 25 As you may know, Indiana is home to Grissom Air Base

- 1 and the 434th air refueling wing. Our Hoosier airmen had
- 2 the opportunity to host Secretary James at Grissom a few
- 3 months ago. They were able to share with her the incredible
- 4 job they are doing flying and maintaining the KC-135's they
- 5 have. And Grissom was among the Air Force's top candidates
- 6 in the last KC-46 basing round. I expect they will be
- 7 topping the list next time.
- 8 General Holmes, in the last KC-46 decision, the Air
- 9 Force emphasized the importance of Reserve-led associate
- 10 units. This aligns with the recommendation of the Air Force
- 11 Commission report in 2014 that recommended expanding the
- 12 number of associate units in the Air Force. Can you speak
- 13 to how associations are a force multiplier in air, space,
- 14 and cyber and whether you anticipate the Air Force creating
- 15 more Reserve-led associate wings in the future.
- 16 General Holmes: Yes, sir. Thank you, Senator
- 17 Donnelly. That is a great unit you have at Grissom. I have
- 18 hidden from many a hurricane there from the east coast,
- 19 bringing fighter airplanes there.
- 20 Senator Donnelly: I can tell you where you will get a
- 21 good meal, sir.
- 22 General Holmes: They serve a great service to us.
- We have a KC-135 associate that is a Reserve wing with
- 24 an Air Force association on it at Seymour Johnson Air Force
- 25 Base in North Carolina, and that is probably our highest

- 1 performing KC-135 unit. When you combine a Reserve unit
- 2 with the experience that goes with the aviators and
- 3 mechanics you find in a Reserve unit with a small active
- 4 duty component that makes the aircraft a little more usable
- 5 -- they can deploy more often than a citizen airman can on a
- 6 more regular basis -- then there is a synergy there that
- 7 makes both sides of it more effective.
- 8 Over the last year, we have looked at 100 percent of
- 9 the Air Force's mission areas in our Reserve and active
- 10 component mix. We have taken steps in each of the last
- 11 three budgets to adjust that mix, and we will continue to do
- 12 that as we go forward in the places where it makes us better
- or it helps us save money.
- 14 Senator Donnelly: Well, let me ask you this again. Do
- 15 you anticipate the Air Force creating more Reserve-led
- 16 associate wings in the future?
- General Holmes: Yes, sir, I do, but I could not tell
- 18 you where they would be yet.
- 19 Senator Donnelly: General Raymond, concerns that
- 20 warnings from our military about growing threats to U.S. air
- 21 superiority posed by advanced adversaries are often
- 22 dismissed as distant and far away. But in fact, while we do
- 23 have to prepare for large-scale conflict, the more immediate
- 24 concern is the spread of advanced Russian and Chinese weapon
- 25 systems into the wars we are already fighting. We are

- 1 seeing advanced air defenses spread to countries throughout
- 2 the Middle East and Africa, including Syria where our pilots
- 3 are flying as we are here.
- 4 So how is the Air Force responding to the proliferation
- 5 of these very present threats to our air superiority?
- 6 General Raymond: Thank you for the question.
- 7 Let me go back real quick, if I could, to the mobility.
- 8 I was just in the AOR, and on the mobility piece of it, our
- 9 mobility aircraft are doing incredible work. They are
- 10 passing over 2.75 million pounds of fuel a day to feed that
- 11 fight.
- On the question that you just asked now on what are we
- 13 doing, clearly the Air Force has a modernization program and
- 14 we say that we fly, fight, and win in airspace and
- 15 cyberspace. There are several things that we are doing.
- 16 One, you have to be able to fly, and that is the SLEP
- 17 programs that we have got going on to increase the age of
- 18 our aircraft to be able to maintain those in years to come.
- 19 Then there is the part to fight. We are looking at
- 20 modifications and modernization programs to be able to do a
- 21 better electronic warfare, to have better radars, to have
- 22 better ability to share data back and forth between
- 23 platforms, to have better command and control over those
- 24 capabilities, to have better weapons that they can drop to
- 25 be able to do that fight.

- I agree with your assertion that the technology gap is
- 2 closing, and we need to move on with those modernization
- 3 programs.
- 4 Senator Donnelly: Well, how concerned are you for our
- 5 airmen if they have to face the S-400 in the near future?
- 6 General Raymond: I am very concerned for our airmen
- 7 against the advanced threats.
- 8 Senator Donnelly: General Holmes, would you care to
- 9 comment?
- 10 General Holmes: Yes, sir. So specifically to your
- 11 question, in this budget we will have to continue to spend
- 12 money to improve the capability of both the F-22 and the
- 13 F-15 while we work our way through to a replacement.
- 14 But air superiority is about more than just those air-
- 15 to-air airplanes. It is about being able to attack advanced
- 16 systems like the S-400 or neutralize them with electronic
- 17 combat or cyber attacks. We will continue to try to hold
- 18 onto the gap that we have while we try to work out a way to
- 19 move to the future and start with another higher gap in our
- 20 air superiority capability, a gap between our performance
- 21 and theirs. We need to make that bigger again.
- 22 Senator Donnelly: Ms. Costello, is the Air Force
- 23 committed to commonality as a means to modernize and
- 24 maintain the triad? And if so, what elements do you see as
- 25 most applicable for commonality with the ICBMs?

- 1 Ms. Costello: So for the GBSD program, we are
- 2 committed to commonality, and we are working with the Navy
- 3 on how we can achieve commonality in there. We are early in
- 4 the analysis there to find out where we can pursue that
- 5 further. We are heading towards a milestone, and we are
- 6 working closely with the Navy in order to do that within
- 7 that program in particular.
- 8 Senator Donnelly: Mr. Chairman, thank you.
- 9 Senator Cotton: Senator Rounds?
- 10 Senator Rounds: Thank you, Mr. Chairman.
- I would like to follow up on Senator Inhofe's line of
- 12 discussion with regard to the F-22 for just a few minutes,
- 13 recognizing that at one point with the B-1 program we
- 14 started that line up again, and it is a good thing that we
- 15 did.
- 16 Now we clearly understand that the near peer threats
- 17 have increased over what had been anticipated. I am
- 18 wondering when we talk about a successor aircraft, it may be
- 19 20 years in the future. But somewhere down the line, we are
- 20 going to have an additional cost with regard to the planning
- 21 and the layout and the modernization that goes into a brand
- 22 new aircraft. And yet, we have taken the F-35 and we have
- 23 been modernizing the F-22 based upon what we learned with
- 24 the new technologies in the F-35.
- 25 Has there been any analysis as to what the actual costs

- 1 would be to start up that F-22 line with the new systems
- 2 that are currently available with the F-35 and how that
- 3 would compare with the extended life that we might get out
- 4 of that aircraft versus a new aircraft being developed as
- 5 its successor 20 years from now?
- 6 General Bunch: So we have not analyzed as, again,
- 7 there were some initial rough order of magnitude estimates
- 8 as to what the costs would be. We have not estimated what
- 9 it would be to reopen the line and populate it with more
- 10 modern technology. We have not done that at this time, sir.
- 11 General Holmes: Senator Rounds, the Air Force and the
- 12 Navy have been collaborating on a future capability that was
- 13 called the next generation air dominance platform. We have
- 14 worked together in our studies. We have worked together in
- 15 providing technology together. The Navy has gone ahead and
- 16 moved toward an analysis of alternatives. We delayed a year
- 17 because we wanted to take a broader look at the picture. We
- 18 will move forward next year with a plan on how we want to
- 19 get after a solution there.
- 20 I think because we want to do it faster and we cannot
- 21 afford to do another 20-year development program for a host
- 22 of reasons, we will try to go with technology that is at a
- 23 high readiness level now with manufacturing capabilities
- 24 that are at a high readiness level now. And I think it is
- 25 completely possible, as we get to a requirement, that there

- 1 may be competitors that bid on modification of an existing
- 2 technology or platform like the F-22 and the F-35.
- 3 Senator Rounds: Very good. Thank you.
- 4 Let me go back. Now that we have talked a little bit
- 5 about the items which we add to the cost, I want to just
- 6 touch base -- the other day in open committee hearing, there
- 7 was a discussion about the A-10. And we did not get very
- 8 far into it because it seemed as though at that stage of the
- 9 game, it was more a matter of sending the message that we
- 10 wanted the A-10 to remain operational.
- And yet, I would like to hear from you, just in terms
- 12 of -- my personal opinion is that while we would all like to
- 13 see F-15's available throughout the areas in which right now
- 14 the A-10's are out there, we do not have enough F-15's to go
- 15 around unless we start determining that we have got some
- 16 that can be in two places at the same time. We do not have
- 17 that. And so the A-10 seems to be working right now in this
- 18 area where we do not have -- or, as they would call it, a
- 19 low-threat environment.
- I understand that long-term you do not want to continue
- 21 down the line where you may very well need an aircraft that
- 22 can handle near peer challenges. But with regard to the
- 23 A-10 right now, it looks to me like we need it right now
- 24 because the demand is there for it in the field of battle
- 25 today. And yet, you are trying to do modernization.

- 1 How do we work these two together? What is your
- 2 analysis about how and where do we go with the A-10 and
- 3 modernizing the other platforms that are there?
- 4 General Holmes: So, thank you, Senator.
- 5 You know, I have heard it said that the Air Force wants
- 6 to move away from this mission. What I would tell you from
- 7 my experience, including as a wing commander in Afghanistan
- 8 with the F-15E and the A-10, is that over the last 12 years,
- 9 the Air Force has moved to turn almost our whole combat Air
- 10 Force's fleet into airplanes that are capable in this
- 11 mission. And what does that mean? It means we took
- 12 airplanes that did not have all the capabilities they needed
- 13 and we added the radios so that a strike Eagle crew member
- or a B-1 crew member can talk directly to the ground
- 15 commander, directly to the JTAC, and directly to the air
- 16 operations center. Flying the F-15E in Afghanistan, I can
- 17 talk on UHF SATCOM over the high mountains there to the
- 18 command and control element. I could have one radio with
- 19 the JTAC who was in the battalion TACP who was looking at
- 20 the picture from my targeting pod next to the battalion
- 21 commander, and then one radio talking to the platoon leader.
- 22 We added advanced targeting pods that combine the
- 23 geolocation capability so that when you type in a
- 24 coordinate, it will look exactly at that spot and --
- 25 Senator Rounds: General, what I am really curious

- 1 about -- and I do not mean to interrupt, but I am going to
- 2 run out of time.
- 3 General Holmes: Yes, sir.
- 4 Senator Rounds: Are you saying that you have enough
- 5 F-15's that are capable today of actually doing the jobs
- 6 that the A-10's are doing, that you have got enough aircraft
- 7 right now to replace those one for one?
- 8 General Holmes: So all the airplanes that we use have
- 9 some unique capabilities that they bring to the situation.
- 10 Some are faster, some stay out there longer, some carry a
- 11 bigger load, some can get down lower. We are using all
- 12 those in the right place for them.
- 13 My problem is I need no less than about 54 fighter
- 14 squadrons or the 1,900 limit that the Senate gave us in the
- 15 NDAA last year. But I cannot afford any more than 54
- 16 fighter squadrons either. So the problem is, as I stand up
- 17 F-35 squadrons, that would be a 56th squadron and a 57th
- 18 squadron. Then without additional funds, I have to take
- 19 some squadrons down to go through that.
- 20 Our best judgment, as we came forward to this point,
- 21 was that the way to do that was to start to retire our aging
- 22 A-10 squadrons, but we know we are going to work with the
- 23 Congress to come up with that what that solution is. We
- 24 think we need at least 55. We are unable to afford more
- 25 than that. We are not retiring any squadrons this year, and

- 1 we hope to work with the Congress to find out what the right
- 2 answer is as we move forward.
- 3 Senator Rounds: Thank you, sir.
- 4 Senator Cotton: How many fighter squadrons did we have
- 5 in the Gulf War?
- 6 General Raymond: Sir, we had 134 fighter squadrons in
- 7 the Gulf War.
- 8 Senator Cotton: Wow, astonishing.
- 9 Senator Blumenthal?
- 10 Senator Blumenthal: Thank you, Mr. Chairman.
- I was struck by the comment in your testimony, and I am
- 12 going to quote it. The Air Force is currently 511 fighter
- 13 pilots short of the total manning requirement, and our
- 14 projections indicate this deficit will continue to grow to
- 15 approximately 834 by 2022. That sounds pretty alarming.
- 16 General Raymond: It is alarming, Senator. It is one
- 17 of great concern for our Air Force. It is one that we are
- 18 putting a lot of attention and focus on. On the one hand,
- 19 we have got the airlines that are hiring about 3,500 fighter
- 20 pilots every month. Our focus is increasing the pipeline,
- 21 bringing pilots in and maximizing the UPT that we have to
- 22 ramp up those numbers. We also have to look at absorption,
- 23 being able to season those fighter pilots and working total
- 24 force requirements to put fighter pilots in cockpits to be
- able to do that seasoning. And then we are working very

- 1 closely on retention issues as well to try our best to
- 2 maintain the fighter pilots that we do have in the service
- 3 as we speak.
- 4 Senator Blumenthal: We tend to be focusing here on all
- 5 the hardware and the bright, shiny objects and all the stuff
- 6 that people find glamorous about the Air Force. But if you
- 7 do not have enough good pilots, all this stuff is worthless.
- 8 Right?
- 9 General Raymond: We are an air force and we need
- 10 pilots, and we need -- all of our pilots are good pilots.
- 11 We need fighter pilots as well.
- 12 Senator Blumenthal: I may have overstated it somewhat,
- 13 but that is the way it looks like to --
- 14 General Raymond: Again, it is a big focus item for our
- 15 Air Force. I am 100 percent in agreement with you. We are
- 16 working this hard.
- 17 Senator Blumenthal: And let me ask you what can we do
- 18 to help you with either recruitment or the training or the
- 19 retention, whatever it is. Maybe you have some
- 20 recommendations.
- 21 General Holmes: Well, Senator, we are going to bring
- 22 forward a plan that will both increase production. We think
- 23 we need to stand up two more fighter training units that
- 24 train students out of undergraduate pilot training and turn
- 25 them into fighter pilots. And we are going to work with the

- 1 Guard and Reserve to ask them to absorb more of our active
- 2 duty young pilots into their squadrons. And then we will
- 3 have to increase our UPT production also to be able to make
- 4 that happen.
- 5 We think if we do that, we can start to address that
- 6 gap, and next year we will bring you a plan. We are going
- 7 to make it fit into our budget, but there will be something
- 8 else that falls out. And we will bring you a plan next year
- 9 to address it.
- 10 Senator Blumenthal: Well, if I may just suggest, with
- 11 all respect, I think to have a plan next year is great, but
- 12 it seems to me if we are expecting a deficit of 834 by 2022,
- 13 the sooner the better.
- 14 General Holmes: Yes, sir. So in the short term, we
- 15 will use the bonus and the tools that we have to try to
- 16 retain as many of those pilots as we can. We know that
- 17 their readiness is a big part of that. To keep fighter
- 18 pilots, you need to give them a chance to be good at their
- 19 jobs and be ready, and we are working to fund the
- 20 requirements of readiness as we go through. And we also
- 21 think that there is a reduction in tempo that is a part of
- 22 that. We need to give them more time to train and more time
- 23 to have a full career in the airplane. And then we are
- 24 going to work to make sure we absorb every person we can
- 25 that leaves active duty into the Reserve or the Guard so

- 1 that we hold onto that experience.
- 2 Senator Blumenthal: I think that is a very important
- 3 point. And if I may just make a request from someone who is
- 4 a supporter, not a critic, that if you could give us a plan,
- 5 even if it is only a chalkboard plan, even if it is only
- 6 scribbles or whatever, it is not a final finished product,
- 7 but just so we can reassure ourselves that we are on track
- 8 to fill this gap.
- 9 General Holmes: Yes, sir. We will be happy to work
- 10 through that with you and your staff and tell you what we
- 11 are planning to do.
- 12 Senator Blumenthal: Thank you.
- 13 Let me just quickly ask Lieutenant General Bunch. I
- 14 think you were at last week's Armed Services Committee
- 15 hearing when Secretary James testified that the Air Force
- 16 believes that foreign military sales will protect unit costs
- 17 from increasing as a result of some of the cuts in the F-35
- 18 so that, in effect, there will be no increase in cost per
- 19 unit despite a reduction to 43 instead of 48 in the
- 20 procurement in F-35's. I asked the question where are those
- 21 foreign military sales going to go. I think that Secretary
- 22 James said she would produce more information about it.
- 23 Maybe you have some more information now.
- General Bunch: So, sir, I was not at the hearing, but
- 25 I did hear the question. It was we are not going to pay an

- 1 increase. The gap of us moving our aircraft out of the FYDP
- 2 was filled by the Navy and the Marine Corps, our partner
- 3 nations, and foreign military sales. And I thought I had
- 4 written down the three nations that we were doing the
- 5 foreign military sales with, but I do not have them in my
- 6 notes -- so I apologize for that -- that we would attribute,
- 7 and we have other ones that are there. But I will get you
- 8 that information, sir. I apologize.
- 9 General Holmes: Senator, the partners that are buying
- 10 aircraft are the United Kingdom, Italy, the Netherlands,
- 11 Australia, Norway, and Turkey. Denmark and Canada are still
- 12 making up their mind, and they may move in. And on the FMS
- 13 side, it is Israel, Japan, and Korea. And then the
- 14 combination of all those partners, plus the Navy and the
- 15 Marine Corps -- the program manager has assured us that the
- 16 price will stabilize.
- 17 Senator Blumenthal: There will be an increase
- 18 somewhere in that group.
- 19 General Holmes: The quantity is big enough that taking
- 20 that small amount down will not have much of an impact. And
- 21 then every year, each lot -- the price is going down, and
- 22 that also figures into it too. The lots that are being
- 23 negotiated now are at a lower price than the previous lots.
- 24 Senator Blumenthal: If you could or maybe she or
- 25 somebody get back to me with a somewhat more definitive

- 1 answer. I understand those are the nations that are buying
- 2 planes. I know that the Marine Corps and the Navy are
- 3 buying planes also. But if you could just give me a
- 4 rationale and an explanation, I would appreciate it.
- 5 General Holmes: Sir, we will take that. That is to
- $6 ext{me.}$
- 7 Senator Blumenthal: Thank you.
- 8 Thanks, Mr. Chairman.
- 9 Senator Cotton: Senator Ernst?
- 10 Senator Ernst: Thank you, Mr. Chair.
- 11 Gentlemen and Ms. Costello, thank you for being here
- 12 today. I appreciate it.
- I am going to go back to something that Senator
- 14 Blumenthal was mentioning with our pilots. And, General
- 15 Holmes, you mentioned moving some of those pilots'
- 16 capabilities into the Guard and Reserve. And I just want to
- 17 address the fact that Iowa -- just in recent years, our Iowa
- 18 Air Guard lost its F-15's. Those went away. And it was
- 19 replaced with an ISR unit, which is great. Unfortunately,
- 20 we lost those pilots. They had to go elsewhere. So now we
- 21 have RPA capabilities with the ISR unit.
- 22 Has there been discussions that we are not aware of
- 23 with the Guard or Reserve, or is this just an idea for the
- 24 future?
- 25 General Holmes: So, we have done several specific

- 1 things, Senator Ernst. And thank you.
- One of them is our Air Force Reserve is now taking
- 3 students straight of commissioning that there was not a spot
- 4 for them in the active duty Air Force, and they are bringing
- 5 them straight out of ROTC direct into the Air Force Reserve
- 6 without knowing what unit they will go to, send them to
- 7 pilot training, and banking on the fact that there will be a
- 8 requirement for them.
- 9 On the Air National Guard side, we have associations
- 10 where we are already sticking some of our brand new active
- 11 duty pilots there to gain more experience.
- 12 Then we are recruiting hard with our active duty pilots
- 13 that are leaving the service. There are vacancies in both
- 14 Reserve and Guards units, more in the Guard than in the
- 15 Reserve, that we are working hard to try to help them fill
- 16 either with active component airmen that are leaving active
- 17 service and want to continue to serve or by bringing in even
- 18 brand new lieutenants into the Guard and Reserve to make
- 19 sure that we keep their roles filled as well.
- 20 Senator Ernst: So we still have a need for those
- 21 pilots. I guess going through discussions a number of years
- 22 ago, I guess I am having a hard time following then why we
- 23 moved away from the F-15's in the Guard and the decision
- 24 behind that.
- 25 General Holmes: Well, so the decision, ma'am, was that

- 1 again in the Department, the Department of Defense believed
- 2 that we had excess capacity in what they call TACAIR, which
- 3 in the Air Force is our fighter force. And they decided
- 4 that we could accept some risks there. And so the Air
- 5 Force's answer for the Air Force, that meant to go down to
- 6 somewhere around 48 or 49 fighter squadrons was the fiscal
- 7 year 2015 proposal. We think that was too small. We are
- 8 happy to be back at 55, and we do not think we can go below
- 9 that. And of that 55, roughly half of those squadrons are
- 10 in the Guard and Reserve already. So we are already making
- 11 really good use of that capability.
- 12 Senator Ernst: Thank you, General Holmes. I agree it
- 13 was too low as well.
- I would like to turn to the 400 fighter aircraft that
- 15 have been retired from the Air Force since 2010. And we
- 16 have had delays in the F-35A's -- those deliveries. And
- 17 this has caused what I believe to be a combat fighter
- 18 shortfall in relation to the combatant commanders'
- 19 operations plans requirements. At least that is what it
- 20 looks like.
- Is there a current Air Force combat fighter shortfall?
- General Holmes: Thank you, ma'am.
- 23 So that 55 fighter squadrons, when applied against the
- 24 problem set that the Department asked us to model against,
- 25 we would say is barely enough. There is nothing extra in

- 1 there to be able to meet the requirement. And as we go
- 2 forward beyond this year, then because the average age of
- 3 our fighter force is 27 years old, because we curtailed the
- 4 F-22 buy, because the F-35 is not coming aboard in the
- 5 numbers we expected, and the second FYDP starting in fiscal
- 6 year 2022 is where we will start to run into a real problem.
- 7 It is going to require us to extend the service life of
- 8 older airplanes, hopefully increase the production buys on
- 9 the F-35, and then think about some options beyond that,
- 10 both some higher-end options and some lower-end options that
- 11 might be more affordable.
- 12 Senator Ernst: And with the decline in the combat
- 13 fighter squadrons, has this impacted the ability to deploy
- 14 air power assets to prosecute the air campaign against the
- 15 Islamic State? I think that is a large part of why we need
- 16 these assets.
- General Raymond: Senator Ernst, it has not impacted
- 18 our ability to deploy fighter squadrons for the current
- 19 fight. When we talk about readiness, Air Force readiness,
- 20 we talk about full spectrum readiness, and part of the
- 21 equation that goes into this is that less than 50 percent of
- 22 our fighter squadrons today are full spectrum ready. So
- 23 they are ready to do what we are asking them to do today,
- 24 but they are not ready to cover all of the requirements that
- 25 they may have to be required to cover in an operational plan

- 1 to meet a combatant commander's requirements.
- 2 Senator Ernst: And that is where the assuming risk
- 3 comes into play is that you focus in one area, but you may
- 4 not be able to cover down in other areas.
- 5 General Raymond: It comes at a cost of readiness in
- 6 the full spectrum, and it would require time to be able to
- 7 recoup that readiness.
- 8 Senator Ernst: Very good. Any other thoughts?
- 9 General Bunch?
- 10 General Bunch: So, Senator, thank you. I would just
- 11 add that we do have a continuing requirement in the combat
- in Syria and Iraq, and when you put that with the
- 13 requirements in Afghanistan, with the requirements to deploy
- 14 to the Pacific to reassure our allies and to deter potential
- 15 adversaries there, and now we have added an additional
- 16 requirement in Europe with the Russian activity where we are
- 17 now also deploying TDY squadrons there from both the active
- 18 and the Reserve component, the cost of that is readiness to
- 19 the force that we have. And every time we do that, it makes
- them less ready if they have to go fight a near peer
- 21 adversary or a very capable adversary. And so that is what
- 22 the Department has to balance, how many they provide and how
- 23 much opportunity they allow our crews to train to make sure
- 24 that they are full spectrum ready.
- 25 Senator Ernst: Certainly. Thank you very much for

- 1 being here.
- 2 Thank you, Mr. Chair.
- 3 Senator Cotton: Senator Lee?
- 4 Senator Lee: Thank you, Mr. Chairman.
- 5 Thanks to all of you for being with us today, for all
- 6 you do for our country.
- 7 I want to talk a little bit about the Utah testing and
- 8 training range. As we discuss the modernization of our
- 9 aircraft and of our weapon systems, it seems appropriate to
- 10 me that we ought to discuss the need to make sure that our
- 11 test and training ranges are there and available to be used
- 12 so that we can test fifth generation weapon systems against
- 13 emerging threats that are becoming more and more
- 14 sophisticated all the time and that are sort of closing the
- 15 gap.
- 16 I am pleased to report that just 2 weeks ago, an F-35
- 17 with the 34th Fighter Squadron at Hill Air Force Base
- 18 successfully deployed and dropped a laser-guided bomb over
- 19 the UTTR.
- I am a cosponsor of a piece of legislation, along with
- 21 Senator Hatch, that would enhance the UTTR, and that I think
- 22 would, in turn, enable the Air Force to more effectively
- 23 test the F-35 and other fifth generation aircraft in the
- 24 coming decades.
- So, General Holmes and General Raymond, I would like to

- 1 ask you detail for the committee the importance of preparing
- 2 these ranges for testing fifth generation weapon systems and
- 3 protecting them from issues that could compromise our
- 4 ability to use them.
- 5 General Raymond: Senator, it is a great point. It is
- 6 one that we are also putting a lot of focus on. As part of
- 7 our readiness pillars, one of the pillars of readiness that
- 8 we focus on is training. And over the course of this
- 9 budget, we have put forward about a billion dollars extra to
- 10 focus on that training, focusing on making sure the ranges
- 11 have those capabilities that they need to simulate that
- 12 high-end threat, to make sure that we have the airspace
- 13 required to be able to do that. We are working live,
- 14 virtual, and constructive training as well to help with that
- 15 effort. But it is something that is going to be absolutely
- 16 critical for our readiness going forward. We put some
- 17 funding into it this year to be able to start that and to
- 18 seeing that growth.
- 19 Senator Lee: I am glad to hear that.
- 20 General?
- 21 General Holmes: And, sir, we appreciate, Senator, the
- 22 efforts that you and Senator Hatch have made in your act to
- 23 avoid encroachment on the ranges. That is certainly
- 24 important to us to keep that airspace. We will have to move
- 25 a lot of our highest-end training into simulators because we

- 1 do not want people to watch us do that highest-end training.
- 2 Senator Lee: That would be fun for everyone.
- 3 General Holmes: But we are always going to have a need
- 4 for the real ranges to fly real airplanes against real
- 5 threat emitters so we can make sure that things work. And
- 6 that is where we are trying to put that money over the next
- 7 5 years that Jay talked about.
- 8 Senator Lee: Great. Well, thank you.
- 9 Several of my colleagues and I have expressed concerns
- 10 about hiring issues at Air Force depots, which is a
- 11 challenge faced by depots across the services. The time it
- 12 takes to hire civilian workers for some of these positions,
- 13 including especially things like engineers and some of our
- 14 maintenance technicians, are ridiculously long. I mean,
- 15 these are time frames that would put a private sector
- 16 business really out of business.
- So I know this is something the Air Force is working
- on, and we look forward to assisting in any way we can to
- 19 alleviate the problem. But how will these hiring issues
- 20 impact your modernization efforts if they are not addressed?
- 21 General Bunch: So, Senator Lee, thank you for the
- 22 question.
- 23 Hiring of civilians at our depots is a key concern and
- 24 one we are working very feverishly. I know that we have
- 25 been over and presented information to you and the depot

- 1 caucus on some of those initiatives.
- 2 It can impact. We make decisions based on a number of
- 3 people coming in. We have had an action team going from an
- 4 FMC. We have also got a team at AFPC and the air staff,
- 5 A-1, has rolled into this trying to streamline that process,
- 6 trying to get as many authorities as low in the organization
- 7 as is possible. And it is something that we are tracking
- 8 very closely, but it is critical that we hire more people in
- 9 a more timely manner.
- 10 Senator Lee: Well, thank you. I appreciate that.
- 11 Over the last 2 years, there have been a lot of
- 12 discussions in this committee regarding the Air Force's
- 13 plans to retire the A-10 and move its uniformed maintainers
- 14 to new F-35 units. Now that you have decided to keep the
- 15 A-10 operational, what steps are being taken to ensure that
- 16 the F-35 has the required maintenance personnel so that we
- 17 can make sure this is covered both in the short term and in
- 18 the long term?
- General Holmes: So, thank you, Senator. We are kind
- 20 of doing everything we can think of, including the
- 21 suggestions that we got from this committee in previous
- 22 years. So we are contracting out maintenance in some of our
- 23 nondeployable squadrons, particularly training units. In
- 24 this budget, we asked to hire civilian contractors to do the
- 25 work at places where we train people to fly the fighters so

- 1 that we can free maintenance people up there to go to F-35
- 2 school. We are asking our Reserve and Guard to help us in
- 3 several places, notably they are primarily at Luke and at
- 4 Hill, as we change the mission there. We are amending our
- 5 high-year tenure rules so that we can keep a tech sergeant
- 6 skilled mechanic longer than the rule set would allow them
- 7 to stay in the Air Force at that grade. We have reviewed
- 8 the bonuses for maintainers to try to retain more so that we
- 9 have a larger force. And then with the end strength that we
- 10 have requested an increase in this budget, a healthy portion
- 11 of that end strength goes to training more maintainers to
- 12 fill in that gap, and we stood up additional instructors and
- 13 classroom time in our tech training school to try to provide
- 14 people to fill those requirements.
- 15 General Raymond: Could I add? We also made a down
- 16 payment and procured some additional manpower in this budget
- 17 and specifically targeted them to maintainers. One of our
- 18 big readiness levers is having the right folks with the
- 19 right skill set, and we have started that initial
- 20 procurement of additional bodies this year.
- 21 Senator Lee: Wonderful. That is helpful. Thank you
- 22 very much.
- Thank you, Mr. Chairman.
- 24 Senator Cotton: Senator McCain?
- 25 Senator McCain: General Holmes, I believe that the

- 1 2016 NDAA required a reporting on the total number of F-35's
- 2 that will be procured. I believe that that information was
- 3 supposed to be submitted to the committee some months ago.
- 4 Do you have any response to that?
- 5 General Holmes: Senator, I believe that the Department
- 6 made that a CAPE-led study that the Air Force is
- 7 participating in. I will double check to make sure, but I
- 8 believe we are working with the CAPE to provide the answers
- 9 back in that study.
- 10 Senator McCain: Have you notified the committee as to
- 11 why you have not complied with the law?
- General Holmes: Sir, again, I will check with CAPE,
- 13 and if they have the lead on that study, I would have
- 14 expected them to.
- 15 Senator McCain: So you do not know whether they have
- 16 complied with the law or not?
- 17 General Holmes: No, sir, I do not.
- 18 Senator McCain: I am curious why not.
- 19 It is my understanding that you are keeping the cost of
- 20 the program classified. Is that correct?
- 21 General Bunch: Sir, are you addressing the B-21, sir?
- 22 I am sorry. I apologize. I misunderstood the question,
- 23 Senator.
- 24 Senator McCain: Yes, the B-21.
- 25 General Bunch: Yes, sir. At this time, we have not

- 1 released contract value to everyone. We have released the
- 2 service cost position and the independent cost estimate. We
- 3 did release that. In the base year 2016 dollars, it was
- 4 \$23.5 billion for the EMD phase.
- 5 Senator McCain: Why would you not ever want to tell
- 6 the American people how you are going to spend their
- 7 dollars?
- 8 General Bunch: Sir, one of the things that we are
- 9 doing is we had a closed session with this committee. We
- 10 are also trying to arrange closed sessions with the House
- 11 SASC.
- 12 Senator McCain: Why should the taxpayers not know?
- 13 Why should the average citizen not know what the cost of a
- 14 -- whatever -- how many tens of billions of dollars -- \$80
- 15 billion to \$100 billion program? Should the taxpayers not
- 16 know that?
- General Bunch: Sir, we are trying to balance the
- 18 transparency that we want do with the public so that they
- 19 understand what we are doing, but we are also trying to
- 20 protect the critical capabilities of this asset.
- 21 Senator McCain: By saying how much it cost?
- 22 General Bunch: Sir, we are trying to prevent the
- 23 ability of individuals to link different pieces that may be
- 24 unclassified together to get an idea of how the money is
- 25 being spent so that they --

- 1 Senator McCain: Tell me another time where we have not
- 2 told the American people the cost of something that they are
- 3 paying their tax dollars for.
- 4 General Bunch: Sir, we have given Congress and we have
- 5 given the taxpayers the amount of money that we are
- 6 expecting to pay -- what the acquisition program baseline is
- 7 and the amount of money that we, the Air Force, are
- 8 committed to get this capability delivered so that we can
- 9 serve the Nation.
- 10 Senator McCain: General, you are not serving the
- 11 Nation or the taxpayers if they do not know how much of
- 12 their taxpayer dollars are being spent. You and I have a
- 13 very different view of our obligation to the taxpayers. And
- 14 frankly, I have never heard of this before, that they should
- 15 not know how much of their dollars that they pay in taxes
- 16 are being spent because somebody might connect the dots?
- 17 What is that all about?
- General Bunch: Sir, I believe we have shared with the
- 19 public and with the committee --
- 20 Senator McCain: The public knows exactly what the cost
- 21 of it is?
- 22 General Bunch: They know our average procurement unit
- 23 cost. We have released that and we have released our
- 24 independent cost estimate and our service cost position.
- 25 Senator McCain: So you have not complied with the

- 1 laws, the total number of F-35's. You do not want to tell
- 2 the taxpayers how much the B-21 costs. And we now are
- 3 finding ourselves in a shortfall of aircraft of the F-35
- 4 which you say will not increase the unit costs because of
- 5 foreign sales. Is that correct, General Holmes?
- 6 General Holmes: The program office says that with the
- 7 total number of aircraft that are being bought that our
- 8 reduction of five will be made up by the other partners and
- 9 that we should not see any increase in cost.
- 10 Senator McCain: It will be met by the other partners.
- 11 How much is five aircraft?
- 12 General Holmes: It depends on which lot we are talking
- 13 about, Senator. But five aircraft are roughly \$700 million
- 14 I think.
- 15 Senator McCain: So \$700 million of five less aircraft
- 16 will be made up by increased foreign sales?
- General Holmes: Sir, the program office says that
- 18 total buy is big enough that a change in five in 1 year will
- 19 not have a big impact on the price.
- 20 Senator McCain: So \$700 million. That will be just
- 21 chump change.
- 22 General Holmes: Well, sir, so we pay by the airplane,
- 23 and we are not buying those airplanes. So the impact is on
- 24 the cost spread across all the fleet and there is a factor,
- 25 the more you build in a year, the cheaper they are. But we

- 1 are not amortizing that \$700 million over the rest of the
- 2 airplanes that are being bought. We are not spending that
- 3 money. We are not giving it to Lockheed. So the price is
- 4 based on the number that you buy in a year and a lot and not
- 5 on the other parts.
- 6 Senator McCain: So then why do we not do 10 less since
- 7 it would be cheaper then?
- 8 General Holmes: Because it is a capability we believe
- 9 is very important to us. But at the budget totals we were
- 10 told to plan under, that was all we could afford and hold
- 11 onto the rest of the force structure that the NDAA told us
- 12 to and meet the other requirements that we are asked to
- 13 meet.
- 14 Senator McCain: Now, is there a proposal? I
- 15 understand there is a proposal to transition out of rated
- 16 pilots for operation of drones. Is that correct?
- General Raymond: Yes, Senator McCain, there is. We
- 18 are going, starting in fiscal year 2016 or fiscal year 2017,
- 19 to begin the transition to enlisted RPA pilots for the
- 20 Global Hawk aircraft.
- 21 Senator McCain: But not the rest.
- 22 General Raymond: Not at this time. We have done a
- 23 similar thing. I grew up in space operations. Years ago,
- 24 we started out with engineer officers that flew satellites.
- 25 We went to operator officers. You did not have not have an

- 1 engineering degree. And then we transitioned to enlisted
- 2 operators. We are taking a very deliberate approach to
- 3 this. We are going to start with the Global Hawk. We are
- 4 very comfortable that our enlisted airmen are going to be
- 5 able to do that. We want the "get well" plan and the other
- 6 initiatives that we have for the MQ-1 and MQ-9 to take root,
- 7 and then we will evaluate further going forward.
- 8 Senator McCain: Do you think it was a good idea to
- 9 start with to require rated pilots, particularly given the
- 10 shortfall we have?
- 11 General Raymond: I was not in this position or in this
- 12 job at that time, but it is where we are. I think it was
- important that we have a capability. It was a technology
- 14 demonstrator with significant growth, and I think using the
- 15 pilots that we had to do that was a smart move at that time.
- 16 Senator McCain: I thank you, Mr. Chairman.
- 17 Senator Cotton: Now we will go into a second round of
- 18 questions. I have some questions first about the tanker
- 19 program, Ms. Costello.
- The delay in the first flight of the first fully
- 21 missionized KC-46 Alpha and subsequent slipping of required
- 22 testing caused a postponement of the milestone C full rate
- 23 production decision until May of this year. How will this
- 24 slip of that milestone C decision impact Boeing's ability to
- 25 deliver its required 18 aircraft by August of next year?

- 1 Ms. Costello: That slip is not expected by Boeing to
- 2 cause a problem with the RAA. They are holding to their
- 3 belief and their expectation that they can deliver the 18
- 4 aircraft on time for RAA. The milestone C is currently
- 5 still planned for May of 2016 and the RAA for August of
- 6 2017, and we are proceeding on that path.
- 7 Senator Cotton: So we can expect 18 aircraft on August
- 8 2107?
- 9 Ms. Costello: Boeing is standing by their position
- 10 that they can deliver that, and the Air Force is cautiously
- 11 optimistic that we can, in fact, achieve that, sir.
- 12 Senator Cotton: On an anomaly, I understand there are
- 13 concerns that higher than expected axial loads on the boom
- 14 when in contact with the receiver aircraft that was
- 15 discovered during refueling test flights. Can you explain
- 16 that a little bit further and comment on any schedule impact
- 17 that it might have?
- 18 Ms. Costello: We are currently working with the
- 19 contractor in order to assess that. They have got a CDR
- 20 plan for some fixes. They are looking at the analysis. It
- 21 will be a couple weeks before we know what their recommended
- 22 solution is, and at that time, we will have to figure that
- 23 in whether it has an impact on any of our future decision
- 24 points. They will at least have to do some software work,
- 25 and we are determining what else, if anything, has to

- 1 happen.
- Senator Cotton: Let us return to today's aircraft,
- 3 specifically fourth generation fighter aircraft. General
- 4 Holmes, in the fiscal year 2017 budget request, you stated
- 5 there were additional fourth generation fighter capability
- 6 upgrades that you lacked sufficient to include in the
- 7 request. Could you please describe the upgrades, the
- 8 threats they counter, and the specific aircraft which would
- 9 be modified? Please do so in layman's terms --
- 10 General Holmes: Yes, sir, I will.
- 11 Senator Cotton: -- understood by normal citizens, not
- 12 Appropriations Committee staffers.
- 13 General Holmes: Thank you, sir.
- 14 Senator Cotton: And could also be understood by
- 15 subcommittee chairmen.
- 16 General Holmes: Yes, sir.
- 17 So the two primary airplanes we will look at for fourth
- 18 generation modifications are the F-15 and the F-16. On the
- 19 F-15 side, we have run a test to see how long the airplanes
- 20 will last. We take a test stand that is built by engineers,
- 21 and it bends the airplane and moves it around. And you can
- 22 see what the service life will be in advance by simulating
- 23 hours of flight. And we found that the F-15 will not last
- 24 in its current state as long as we hoped it would. And so
- 25 we are going to have to put some money in the depot schedule

- 1 and to repairing parts that we predict through that process
- 2 will fail. And that is so that it will be around long
- 3 enough that we can keep flying it.
- 4 Then the capabilities that they will need to stay
- 5 relevant against the threat are they will need a new radar.
- 6 An electronically scanned radar is very important to counter
- 7 advance jamming threats that have been propagated primarily
- 8 by the Russians and Chinese and others. They will need a
- 9 digital radar warning receiver which allows you to know
- 10 whether an advanced radar is looking at you or targeting
- 11 you. And they will need advanced electronic combat
- 12 capabilities to defeat that radar. And then they will need
- 13 a new computer to tie all that together and make it work.
- 14 That is pretty much it for the F-15 side.
- 15 On the F-16 side, there is some service life left on
- 16 those airplanes, and we had not planned to use it because we
- 17 thought they would be replaced by F-35's, but some of them
- 18 will not be because of the delays in that program. So there
- 19 is a very limited number of them that will have to have some
- 20 service life extension to make them last longer, and then we
- 21 will do the same kind of upgrade on them if we can get the
- 22 money to do it, which would be a new radar, a new central
- 23 computer, a new radar warning receiver, and new electronic
- 24 combat gear.
- We could not get to those as fast as we would like to.

- 1 We do make a down payment on that in this program. If we
- 2 had extra money, we would put money there. Thank you.
- 3 Senator Cotton: Ms. Costello, I want to turn to the
- 4 UH-1 November helicopter replacement program. Secretary
- 5 James recently testified that an acquisition decision is due
- 6 soon on the replacement program. She also testified there
- 7 is a sole source option under consideration to replace the
- 8 current fleet. I understand that a request for information
- 9 was issued to industry last year, which would seem to
- 10 indicate the Air Force's intention to conduct an open and
- 11 competitive bid process.
- 12 If the decision is to proceed with the sole source
- 13 award for the helicopter replacement program, are you
- 14 prepared to present this committee with the overwhelming
- 15 evidence necessary that such an award would actually provide
- 16 best value to the American taxpayer?
- 17 Ms. Costello: Yes. We would share the information
- 18 that we can gather along the way. What is going on right
- 19 now is we have gone out and mitigation efforts have been
- 20 taken over the last year, but we believe we still need to
- 21 look at what we can do with the helicopters that support the
- 22 nuclear mission especially.
- We are looking -- and we have asked for STRATCOM and
- 24 for the Air Force Global Strike Command to outline the
- 25 criticality of their requirements so we can prioritize which

- 1 helicopters need to be replaced immediately as opposed to in
- 2 the long term. When we get that information, we have asked
- 3 for our team to put together some options. Sole source is
- 4 one of those options, but they are looking at a couple COAs
- 5 right now. And they are supposed to come back over the next
- 6 couple weeks for me to hear what they are representing, and
- 7 then we will make a decision on our way forward at that
- 8 point in time.
- 9 Senator Cotton: I understand -- correct me if I am
- 10 wrong -- that the helicopter will be used both for the ICBM
- 11 security mission and then for what you might call
- 12 Washington-centric missions, continuity of government, VIP
- 13 transport, and so forth.
- 14 Ms. Costello: That is part of what we are looking
- 15 into. Right now, we are focused on the nuclear support
- 16 mission, which is the ICBM convoy, and support in that area.
- 17 We are looking at options that might break out the other
- 18 missions separately and consider that for future
- 19 procurement. It has not been decided yet, but these are the
- 20 type of COAs that are being looked at.
- 21 General Bunch: Senator Cotton, Ms. Costello is exactly
- 22 right. The nuclear deterrent that we have is safe, secure,
- 23 ready to go if needed. Our focus right now is a capability
- 24 gap that the UH-1N cannot quite meet despite the mitigation
- 25 steps that we have taken, and we are going to weigh the

- 1 risks associated with that and the critical nature of that
- 2 requirement against the urgency of need and that would be --
- 3 I am sorry, sir.
- 4 Senator Cotton: Why can it not meet those
- 5 requirements?
- 6 General Bunch: There is a time to respond and a
- 7 carriage capability they cannot quite meet. I believe those
- 8 are two that we are short in. And we are going to look at
- 9 the urgency of that requirement. And if we do decide that
- 10 we wish to go sole source, it will solely be focused in
- 11 those areas to address the nuclear mission. It will not be
- 12 used to address the entire fleet. It would be an urgency
- 13 need to meet that what we would come forward with, sir, if
- 14 the evidence that comes to Ms. Costello is appropriate for
- 15 that.
- 16 Senator Cotton: So some observers might say that a
- 17 next generation fighter or bomber is a uniquely complex kind
- 18 of platform that might need special contracting
- 19 consideration, but a helicopter to fly even long distance
- 20 with heavy loads is a pretty traditional kind of platform.
- 21 What would necessitate a sole source contract for a
- 22 helicopter?
- Ms. Costello: In this case, what we are looking at is
- 24 the time in which they need it. If they need it to be
- 25 procured in a certain amount of time and the mission

- 1 requirement is in fact validated, then we have to look at
- 2 how fast we can buy it. And there are opportunities to buy
- 3 off existing contracts that are one of the COAs as opposed
- 4 to going off and doing a whole new contracting event. Those
- 5 are the types of things that we have asked them to look at,
- 6 what are the pros and cons of each option. So a decision
- 7 has not been made yet. We have got to get the data. We
- 8 have to assess it against the timeliness required, weigh the
- 9 pros and cons, and then make a decision.
- 10 Senator Cotton: Thank you.
- 11 Senator Manchin?
- 12 Senator Manchin: Just very quickly. General Bunch,
- 13 what would be the impact of reforming the contract for the
- 14 B-21 to a fixed price contract?
- 15 General Bunch: Sir, we have looked at it and the
- 16 assessment is we cannot shape the contract that we have to
- 17 that. We would have to terminate that contract. That would
- 18 have a cost of over \$300 million to do the termination. We
- 19 would then have to have a recompete. If we did that
- 20 recompete, that would be somewhere in the neighborhood of 24
- 21 to 30 months to complete the recompete. There would be a
- 22 commensurate delay in fielding the aircraft, sir.
- 23 Senator Manchin: What is the \$300 million? What
- 24 constitutes the cost of \$300 million?
- 25 General Bunch: We are on contract with a company that

- 1 has gone out and put suppliers on contract and on order, and
- 2 they have started their business case. And the analysis
- 3 that we have done to --
- 4 Senator Manchin: There is a penalty clause by them if
- 5 we break it.
- 6 General Bunch: Yes, sir, because the contract that we
- 7 have with Northrup.
- 8 Senator Manchin: Yet, they are on a cost-plus.
- 9 General Bunch: They are on a cost-plus, sir, and they
- 10 have gone out to try to do --
- 11 Senator Manchin: You know it is not real popular here.
- 12 Right?
- 13 General Bunch: I do understand that, sir, and I still
- 14 believe it is the best choice for the contract type with the
- 15 risks associated. And we look forward to the discussion on
- 16 this because we realize there are a lot of different
- 17 opinions.
- 18 Senator Manchin: I respect that. I really do respect
- 19 where you are coming from. It is just that we all have to
- 20 get there, and I think right now there is such a bad taste
- 21 in everybody's mouth that it is going to be a tough one. We
- 22 will try it. We are going to be open-minded and try.
- 23 General Bunch: Yes, sir.
- Senator Manchin: With that being said, I think,
- 25 Secretary Costello, you General Holmes, in your prepared

- 1 statement for the record, you alluded to a possible
- 2 replacement for the A-10 and its close air support
- 3 capability. And this is what you all said. The Air Force
- 4 is funding a combat Air Force study over the next year with
- 5 a portion of this study dedicated to informing the fiscal
- 6 year 2018 to 2022 budget cycle on possible tactical air
- 7 support platform alternatives for low-intensity permissive
- 8 conflict. This will serve to ensure that other current
- 9 platforms in future systems meet future close air support
- 10 requirements.
- 11 So if the study were to lead to a decision to select
- 12 the material solution for this mission, how long would it
- 13 take to deliver a new tactical air support platform or a new
- 14 aircraft into the operational force?
- 15 General Holmes: So I will defer the how long question,
- 16 Senator. Briefly, the Department has directed in one of
- 17 their RMDs and the direction to us that came with the budget
- 18 for us to work with the study to look at low-cost platforms
- 19 and to work through that. And we will, and we will evaluate
- 20 keeping older platforms longer, adding new capabilities to
- 21 existing platforms, and developing a new platform. I will
- 22 defer to General Bunch for how long that might take.
- 23 General Bunch: So it depends how off-the-shelf we are
- 24 talking about, sir, and what kind of capabilities. We have
- 25 to look at what is out there in off-the-shelf, some of the

- 1 aircraft that we are using in the more permissive
- 2 environment and determine what capabilities they have and if
- 3 those would fit the immediate need. And if it was very well
- 4 developed and did not have to have a stretch for the
- 5 requirements, we could do that in a pretty quick manner. If
- 6 it is a stretch for the requirements, then it may take
- 7 longer, and we would have to look at the individual case
- 8 study as it comes forward.
- 9 Senator Manchin: So my final would be -- I also
- 10 mentioned in my opening statement concerning the Air Force's
- 11 plans to retire, as we talked about, the A-10. We just
- 12 talked about it some more. As the new F-35A joint strike
- 13 fighter aircraft replaces them on a one-for-one basis, I
- 14 understand that while there is a one-for-one replacement for
- 15 the aircraft in squadrons under the Air Force plan, it is
- 16 not clear that close air support capability of the
- 17 modernized force will equal or exceed the close air support
- 18 capability of the current force.
- 19 So I guess, General Holmes or General Raymond, what is
- 20 the Air Force doing to ensure that as the A-10 aircraft
- 21 basically is retired, the Air Force will not be losing that
- 22 close air support? And do you believe that the F-35 will
- 23 equal or exceed the A-10 in close air support? And in the
- 24 past, you have pointed to the F-15 and F-16 as picking up
- 25 close air support missions being vacated by the retiring

- 1 A-10's. So I quess you believe that the 15's and 16's will
- 2 be able to equal or exceed, and you believe the F-35 will be
- 3 able to fill in one for one.
- 4 General Holmes: So, thank you, Senator.
- 5 We do believe that we will be able to maintain the
- 6 capacity that we need to support the close air support
- 7 mission. And all the platforms have some different
- 8 capabilities that make them better in one area than in
- 9 others. But we think we will be able to do that. We are
- 10 working to make sure that we have the procedures to do it.
- 11 We are establishing a CAS integration center at Nellis to
- 12 make sure that those airplanes are ready to do that role,
- 13 both with the tactics, techniques, and procedures and the
- 14 com systems set to do it. And ultimately we are going to do
- 15 it in the same way that the Navy and the Marines are doing
- 16 it with similar platforms.
- 17 We believe the F-35 will be a capable CAS aircraft. It
- 18 will be particularly capable in contested environments like
- in Russian doctrine, if you bring forward your air defenses
- 20 with you, there will be a limited number of airplanes that
- 21 can operate in that role. It certainly would be an
- 22 expensive way to go after a permissive environment mission,
- 23 and we hope to not have to do that. And so we will look at
- 24 other options, as you talked about before, of how can you do
- 25 that permissive environment role cheaper.

- 1 Senator Manchin: Thank you.
- 2 Senator Cotton: Just a few wrap-up questions here.
- 3 First, returning to some of Senator McCain's questions about
- 4 the B-21 program. I certainly understand the need for
- 5 secrecy among many of the programs of our military, as well
- 6 as our intelligence communities, and highly value those. At
- 7 the same time, I think we should try to be as transparent as
- 8 we can with taxpayers. If we cannot say today what this
- 9 information is -- we know it because we have had classified
- 10 briefings on it. But if we cannot say today the answer to
- 11 some of these questions like the contract award value, can
- 12 you tell us when we might be able to provide that
- information to the taxpayer?
- General Bunch: Sir, I think we will be able to provide
- 15 that in the upcoming months. We are still working our way
- 16 through the GAO reports, and we are working our way through
- 17 looking at the classification of those things. That is
- 18 something the Secretary has asked us to do. One of the
- 19 issues that we have found as we looked and tried to map the
- 20 path forward, we felt that one of the things that was not as
- 21 transparent with the American public was the way the B-2
- 22 program was handled. We are trying not to mirror that. So
- 23 we are trying to release as much information and be as
- 24 forward as we can. We just have not gotten to the point
- 25 that we can release that at this stage.

- 1 Senator Cotton: Well, as we discussed in the
- 2 classified setting last week, I hope we do not mirror the
- 3 B-2 program or the F-22 program in the sense that we
- 4 actually achieve the number of aircraft we want to since the
- 5 Air Force and our Nation badly need the B-21 bomber to be a
- 6 complete success.
- 7 General Bunch: Sir, we believe we have set in place a
- 8 contract structure and a methodology -- or an acquisition
- 9 strategy that puts us in a different place than we were on
- 10 those programs with the right oversight, the right incentive
- 11 structure, the right requirements, and the independent cost
- 12 estimate, and holding those requirements firm.
- 13 Senator Cotton: Second, I want to turn to the C-130H
- 14 AMP. Ms. Costello, the NDAA from last year authorized a
- 15 restructured AMP program and segmented the program in two
- 16 increments. The first increment was aimed at upgrading
- 17 airspace compliance and safety requirements, while the
- 18 second increment provides upgraded cockpit display and
- 19 commonality across the different aircraft variants. Can you
- 20 please explain why there is no procurement funding in the
- 21 C-130H AMP increment one for fiscal year 2017, but there are
- funds for fiscal year 2018 and beyond?
- 23 Ms. Costello: In our budget this year, we do
- 24 accelerate the increment 1 AMP program so that we do meet
- 25 the FAA mandate. We have accelerated so that all 172 H's

- 1 will have increment one installed in time for that to be
- 2 done. While most of the funding is later in the FYDP, it
- 3 does get that done. We will complete all of that work by
- 4 December of 2019 so that our aircraft will meet the mandate.
- 5 For increment 2 AMP, we also have accelerated that in
- 6 this year's budget, and we brought forward 14 years earlier
- 7 when we will complete having install of the increment 2. It
- 8 will be completed by 2028 now.
- 9 Senator Cotton: So all -- I am sorry.
- 10 General Bunch: We just released the request for
- 11 proposal for the INC-1 yesterday, so we are getting that
- 12 program started. It is early in its phases, but we will
- 13 complete it by the end --
- 14 Senator Cotton: As I understand, the budget tables
- include no funding for fiscal year 2017. Is that right?
- 16 General Holmes: Sir, let me double check that for you.
- 17 We believe we fully funded the program and we are going to
- 18 get it done.
- 19 Senator Cotton: I know the omnibus last year included
- 20 \$70 million for it. So what I am curious about is whether
- 21 that \$70 million is in your opinion adequate for the entire
- 22 fiscal year 2017.
- 23 General Holmes: Sir, can I take that for the record?
- 24 We think it is fully funded.
- 25 Senator Cotton: You may take it for the record as long

as you answer it for the record. General Holmes: Yes, sir, we will. Senator Cotton: Okay. General Holmes: I will get it back to you right away. If there is not money in 2017, I am guessing it is because we are spending it in 2016, and then there will be a gap between the procurement. But let me double check that and make sure it is all there. [The information follows:] [SUBCOMMITTEE INSERT] 2.3

- 1 Senator Cotton: What are the Air Force's plans for the
- 2 five operational C-130H aircraft that were upgraded in the
- 3 previous AMP program but are currently stored at Little Rock
- 4 Air Force Base in a non-flying status?
- 5 General Bunch: Sir, they are going to be ones that we
- 6 consider later on in the program, and we will not look at
- 7 those in increment 1 at this time. We looked at the
- 8 estimated cost to get those into the configuration to go
- 9 INC-1, then INC-2, and it is very much more expensive to get
- 10 those into the increment 1 stage first and then to go to the
- 11 increment 2, almost four to five times as much as taking a
- 12 fielded C-130H and getting them to increment 2.
- 13 So our strategy is we are going to look at that as we
- 14 go into increment 2. We will reanalyze where we are at with
- 15 our inventory, and then we will assess it as we go into
- 16 increment 2. We are not going to try to address it in
- increment 1.
- 18 Senator Cotton: Third and final. So I have heard a
- 19 lot from commanders around the world in different combatant
- 20 commands in the different services about diminishing weapon
- 21 stockpiles. General Holmes, do you have the appropriate
- 22 authority to procure munitions based on expected expenditure
- 23 rates, not simply past expenditure rates?
- General Holmes: We do this year, Senator, and that is
- 25 a new change in the way OMB is dealing with OCO and we hope

- 1 that you will too. But they allowed us to predict our
- 2 expenditures this year in 2017 so that we can reduce the
- 3 time it takes us to replace OCO munitions.
- 4 Senator Cotton: When I hear you say we do this year,
- 5 it raises a question of whether you are trying to say we do
- 6 not for future years.
- 7 General Holmes: Sir, I was not trying to avoid that
- 8 question, but the administration decided to do it 1 year at
- 9 a time and give us that authority 1 year at a time. I
- 10 believe they did not want to tie the next administration's
- 11 hands prior to them having a chance to decide. So they did
- 12 it in this year, and we expect it to follow.
- 13 Senator Cotton: So what munitions, aside from JDAMS,
- 14 do you anticipate a future need for?
- 15 General Holmes: Sir, I have got a long list of
- 16 munitions. The primary OCO munitions that are being
- 17 expended are JDAM kits, the bomb bodies that go with it.
- 18 SDB-1 and Hellfire are the ones that we are looking to buy
- in advance as we go forward. And then my preferred
- 20 munitions list to fill up the entire kind of magazine of my
- 21 requirements include also air-to-air munitions and some more
- 22 sophisticated air-to-ground munitions as well.
- 23 Senator Cotton: Do you have adequate funding for all
- 24 those munitions?
- 25 General Holmes: Sir, I believe that we could spend

- 1 more money there. It is one of the places that we need to.
- 2 It is one of the areas that, as we balance risk across the
- 3 Department, we are accepting risk there.
- 4 Senator Cotton: Not many examples of something that is
- 5 more suitable for OCO spending than replenishing rounds. Is
- 6 there?
- 7 General Holmes: No, sir. It is a great one. The
- 8 problem is that our industry's capacity is limited on what
- 9 they can do in 1 year. And so at the OCO rates we are
- 10 buying now, we are maxing the capacity on JDAM. Most of the
- 11 weapons we are buying we are buying at that economic order
- 12 quantity that the manufacturer can build without losing
- 13 money. And so to increase that procurement, we will have to
- 14 go back and also pay for increased tooling and other things
- 15 at the manufacturer to be able to buy them at a great lot in
- 16 1 year. What we would propose, if you would like to work
- 17 with it, would be a multiyear plan that gradually increases
- 18 the amounts so that we can buy back what goes in those
- 19 magazines. But we need more money if we are going to do
- 20 that.
- 21 Senator Cotton: And is that primarily a question of
- 22 budget resources and industry capacity versus your
- 23 authorities?
- General Holmes: We have the authorities, sir, in our
- 25 base budget to go out and procure munitions. It is a matter

- of deciding where we are going to take the risk. In the OCO
- 2 area, we did not press beyond what industry could do in 1
- 3 year. So I am not sure I can answer that. But we have the
- 4 authority to go out and use the predicted expenditures and
- 5 buy those in advance.
- 6 General Bunch: Senator Cotton, we are in negotiation
- 7 with Boeing on JDAM to ramp up so that we can meet not only
- 8 our needs but our allies and foreign military sales and
- 9 other requirements. We are doing those negotiations to try
- 10 to get up to a higher production rate.
- 11 Senator Cotton: The Director of National Intelligence
- 12 testified last year that the global threat environment was
- 13 as severe as he had ever seen it in 45 years. And he said
- 14 he expected to say the same thing next year, and he did in
- 15 fact say the same thing this year. It is the worst he has
- 16 seen in 46 years. He did not make a prediction for next
- 17 year. But I will ask you if you would expect us to have a
- 18 lower or a higher need for munitions in the coming years.
- 19 General Holmes: Sir, in my opinion, it will continue
- 20 to be at the same way it is now at least for years to come.
- 21 Senator Cotton: Well, thank you all very much for your
- 22 time. Thank you very much for your service. We appreciate
- 23 everything you do for our country, and we look forward to
- 24 working together over the coming months to make sure that
- 25 our Air Force has the authorities and the budget it needs to

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perform all of its missions.
          This hearing is adjourned.
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          [Whereupon, at 4:04 p.m., the hearing was adjourned.]
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