

Stenographic Transcript
Before the

Subcommittee on Airland

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

HEARING TO RECEIVE TESTIMONY ON
MODERNIZATION EFFORTS OF THE DEPARTMENT OF
THE AIR FORCE IN REVIEW OF THE DEFENSE
AUTHORIZATION REQUEST FOR FISCAL YEAR 2023 AND
THE FUTURE YEARS DEFENSE PROGRAM

Tuesday, May 17, 2022

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7
8 U.S. Senate

9 Subcommittee on Airland,

10 Committee on Armed Services,

11 Washington, D.C.

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13 The subcommittee met, pursuant to notice, at 2:30
14 p.m., in Room 222, Russell Senate Office Building, Hon.
15 Tammy Duckworth, chairman of the subcommittee, presiding.

16 Subcommittee Members Present: Senators Duckworth
17 [presiding], Peters, Rosen, Kelly, Cotton, Tillis,
18 Sullivan, Scott, and Hawley.

1 OPENING STATEMENT OF HON. TAMMY DUCKWORTH, U.S.

2 SENATOR FROM ILLINOIS

3 Senator Duckworth: [Technical problems] -- here today
4 to discuss Air Force modernization are Lieutenant General
5 David Nahom, Deputy Chief of Staff for Plans and Programs,
6 Lieutenant General Joseph Guastella, Deputy Chief of Staff
7 for Operations, and Lieutenant General Duke Richardson,
8 Military Deputy Office of the Assistant Secretary of the
9 Air Force for Acquisition, Technology and Logistics.

10 Welcome, gentlemen.

11 I want to extend a warm welcome to and thank each of
12 our witnesses for appearing before this subcommittee today.
13 I look forward to hearing your testimony. Last week, the
14 subcommittee heard from the Army witnesses about challenges
15 in the Army modernization program.

16 And I look forward to hearing from our Air Force
17 witnesses about the challenges and opportunities they face
18 in modernizing the Air Force, as we finish our scheduled
19 hearings before we mark up the DOD authorization request
20 for Fiscal Year 2023.

21 Our witnesses this afternoon face huge challenges as
22 they strive to balance the need to support ongoing
23 operations and sustained readiness with the need to
24 modernize and keep the technological edge that is so
25 critical to successful military operations.

1 I am especially interested in examining how the Air
2 Force plans to manage multiple major modernization
3 programs. After all, it is not just the F-35s, the B-21,
4 and the KC-46. The Air Force is seeking to modernize these
5 platforms while also launching new programs, including
6 procuring so-called Wedgetail aircraft to replace some of
7 the E-3 airborne warning and control system aircraft, and
8 replacing JSTARS' capability with advanced battery
9 management system.

10 It is vital that we strike the optimal balance between
11 swiftly delivering capabilities to our warfighters,
12 protecting taxpayer dollars, and avoiding irresponsible
13 program risks that may jeopardize the Air Force's ability
14 to support Combatant Commander requirements.

15 One area in particular I would like to draw attention
16 to is the Air Force's plan to truncate the HH-60 Whiskey
17 program after Fiscal Year 2023. That would leave the Air
18 Force roughly 40 percent short of its original plan to
19 modernize the combat search and rescue or CSAR fleet of
20 aircraft. We need to hear how this change will affect the
21 Air Force's ability to conduct CSAR operations in future
22 conflicts.

23 Shifting focus to procurement policy, the Air Force
24 has been aggressively implementing accelerated acquisition
25 authorities, including for major defense acquisition

1 programs. However, it remains to be seen whether expedited
2 procedures will be the silver bullet to unlocking
3 dramatically improved -- dramatic improvement and meeting
4 milestones, reducing cost overruns, and most importantly,
5 delivering promised capabilities.

6 Notably, the Air Force began its program to replace
7 the B-52's engines under accelerated authorities but has
8 agreed to shift that program back to the normal acquisition
9 process at the next acquisition milestone review. I will
10 close by stating the obvious. The Air Force will be
11 critical in determining whether we successfully implement a
12 new National Defense Strategy.

13 I was not surprised that the President proposed
14 providing the Air Force with the largest increase of all
15 the services in the Fiscal Year 2023 budget, and I look
16 forward to examining how meeting the request for an
17 additional \$13.5 billion above Fiscal Year 2022 enacted
18 appropriation would enhance the Air Force's modernization
19 efforts.

20 Again, I want to thank our witnesses for their service
21 and for appearing before the subcommittee this afternoon.
22 I am going to reserve some time for the Ranking Member,
23 Senator Cotton, but in the meantime, in light -- to just
24 expedite matters, I am going to go ahead and move on to the
25 witnesses and ask you to go ahead and provide us with your

1 opening statements.

2 General Richardson: Thank you, Senator. I was going
3 to give a single opening statement for all three of us.

4 Senator Duckworth: Okay.

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1 STATEMENT LIEUTENANT GENERAL DUKE RICHARDSON,
2 MILITARY DEPUTY, OFFICE OF THE ASSISTANT SECRETARY OF THE
3 AIR FORCE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS

4 General Richardson: Chair Duckworth, Ranking Member
5 Cotton, and members of the subcommittee, thank you for
6 having Lieutenant General Nahom, Lieutenant General
7 Guastella, and I here to provide testimony on the Air
8 Force's Fiscal Year 23 budget request. In recent years,
9 the Air Force's combat advantage over potential peer
10 adversaries has been under pressure.

11 With completion of the 2022 National Defense Strategy,
12 the strategic direction for the United States Air Force is
13 clear, we must modernize our air and ground forces and
14 capabilities to overcome the pacing challenges posed by the
15 People's Republic of China and deter the threats of other
16 strategic competitors.

17 Through the lens of Secretary Kendall's Seven
18 Operational Imperatives, we continue to look critically at
19 our investments to ensure our resources are properly
20 aligned to a force design that will give our adversaries
21 pause. The Air Force has had to make a number of tough
22 decisions to strike a balance between short term and future
23 risks.

24 This budget request is a result of a thoughtful and
25 deliberative process that responds to the rapidly evolving

1 threat. We sincerely appreciate Congress's approval to
2 divest 80 percent of requested aircraft in Fiscal Year
3 2022, allowing over \$1 billion to be invested in other top
4 Air Force priorities.

5 In '23, Fiscal Year 2023, we welcome the opportunity
6 to once again work with Congress to accelerate the
7 development of a more modern and operationally relevant
8 fighting force and deliver capabilities to the warfighter
9 at the pace with which the current strategic environment
10 demands. I would like to take a moment to highlight a key
11 -- a few key points in our '23 budget submission.
12 Readiness and relevance require training improvements in
13 both the live and synthetic domains.

14 We are fully committed to advancing and modernizing
15 our live and synthetic programs to provide relevant and
16 realistic training for tomorrow's force. The Air Force is
17 continuing investment efforts in its trainer platforms,
18 including critical modernization programs for the T-6 and
19 T-38 fleets. Earlier this year, we conducted the rollout
20 of the first T-7A training aircraft.

21 The F-35 -- excuse me, the Fiscal Year 2023
22 President's budget requests continues the T-7A program's
23 EMD and early aircraft flight test efforts, and procures
24 long lead support equipment, ensuring we meet the 2026
25 initial operational capability milestone.

1 Nuclear modernization is our top priority. GBSD,
2 LRSO, and B-21 are key to the Air Force plan. The Air
3 Force remains focused on achieving a fighter force mix that
4 provides a capable, sustainable, survivable, and affordable
5 force that can operate across the entire range of mission
6 sets. Our proposed four platform fighter fleet achieves
7 just that.

8 Together, the F-35, the NGAD family of systems, the F-
9 15 and the F-16, provide complementary capability and
10 capacity to meet worldwide demands. The Fiscal Year 2023
11 President's budget request decreases the F-35 procurement
12 quantity as we prioritize investments in the F-35 fleet,
13 seeking modernization, infrastructure, and advanced
14 weapons.

15 The Air Force will continue to work with the F-35
16 Joint Program Office, the Navy, and industry to identify
17 and evaluate opportunities to increase depo repair capacity
18 and further reduce the cost of material and manpower.

19 Hypersonic weapons provide an important capability for
20 Combatant Commanders. The Air Force is committed to
21 ensuring our long range strike platforms can employ these
22 systems. We are pleased to report on the 14th of May 2022,
23 the Department of the Air Force successfully completed
24 booster test flight 2b of the ARRW from a B-52
25 Stratofortress.

1 The next booster test flight is scheduled for later
2 this summer. Winning in future high end conflict requires
3 accelerating investments, and that includes transitioning
4 our ISR force structure into a connected, persistent, and
5 survivable force. In Fiscal Year 2023, we request funds
6 for two production representative prototype E-7, 8 aircraft
7 to support testing evaluation efforts as we work to replace
8 the aging E-3 AWACS.

9 It is critical that we deliberately modernize our
10 tanker fleet through continuous recapitalization of KC-135s
11 and procurement of the KC-46. Keeping KC-10 divestment
12 actions on track will not only free up ramp space to allow
13 for delivery of the KC-46, but it will also free up the
14 Airmen we need to continue maturing the KC-46. The KC-46
15 is currently cleared for 85 percent of the missions tasked
16 by U.S. TRANSCOM, including bombers, tankers, airlift, ISR,
17 and fighters.

18 Our airlift fleet is the envy of air forces around the
19 world, and this year's budget continues to invest in the C-
20 5, C-17, and C-130 fleets. We look forward to working with
21 this subcommittee to ensure the Department of the Air Force
22 maintains sufficient military advantage to secure our vital
23 national interests and to support our allies and partners
24 in Fiscal Year 2023 and beyond.

25 We stand ready to address your questions.

1 [The prepared statements of Generals Richardson,
2 Nahom, and Guastella follow:]

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1 Senator Duckworth: Thank you. At this time, I would
2 like to recognize the ranking member for his opening
3 statement.

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1 STATEMENT OF HON. TOM COTTON, U.S. SENATOR FROM
2 ARKANSAS

3 Senator Cotton: Thank you. Pardon my tardiness.
4 Gentlemen, welcome back. Thank you for being here this
5 afternoon and for your many years of distinguished service.
6 First, I want to commend you for taking bold steps to
7 modernize the Air Force as best as you can with what I
8 think is an inadequate budget.

9 I want to add my voice to the many voices saying that
10 the Administration is still underfunding our military in a
11 dangerous global environment. I also appreciate that you
12 are focusing on China as the most serious threat we face in
13 the long term. There are a lot of big moving pieces in
14 this budget.

15 And as I have said before, I want to give you the
16 opportunity, as a force to divest the old and outdated
17 aircraft and invest and procure what we need in terms of
18 new and modern aircraft and weapon systems. But I also
19 want to make sure your plan ensures that we have the
20 necessary ability to maintain air superiority in the short
21 term, the next five to seven years. We can't trade
22 security now, in the future either.

23 Also, I would like to hear you address your concerns
24 from critics that these big divestments and procurement
25 moves the Air Force wants to make, that there is not enough

1 interoperability between new capabilities and old
2 technology that the joint force still needs. I hope these
3 critics are wrong, and I think you have good answers to
4 them, and I look forward to hearing what you have to say on
5 this topic and other topics. Thank you.

6 Senator Duckworth: Thank you, Senator Cotton. I now
7 recognize myself for opening round of questions for five
8 minutes. The Fiscal Year 2023 budget request would retire
9 roughly half of the E-3 airborne warning control systems,
10 AWACS aircraft, or 15 of 31 aircraft in the fleet.

11 The Air Force just announced its intent to award a
12 sole source contract to Boeing to buy an aircraft called
13 the E-7 Wedgetail to replace some of the E-3 fleet. Air
14 Force officials, including Secretary Kendall, indicate that
15 we could get the first aircraft for testing by 2027.

16 If that is the case, it would be several years before
17 there would be any substantial number of Wedgetail aircraft
18 available to support the Combatant Commanders.

19 My first question is for each of you. Why do you
20 believe we can afford to cut the AWACS force structure and
21 wait for -- on a replacement for the E-3 aircraft for more
22 than five years?

23 General Nahom: Senator Duckworth, thank you for the
24 question. I will start out and then I certainly want to
25 let General Richardson talk about the E-7 development as

1 well. When you look at the E-3 fleet right now, and you
2 talk about taking 15 to 31 airplanes away, and we are
3 concerned with the gap.

4 Unfortunately, right now with the condition of the E-3
5 fleet, we have a gap right now. The E-3 has got
6 maintainability issues as well as capability issues. And
7 the capability, we can talk a little more in a classified
8 session, certainly, but there are things that the E-3
9 cannot do that we need it to do right now when you look at
10 peer threats, peer competition.

11 On the maintainability side, we struggle to keep
12 roughly half that fleet airborne. It is a -- the airplane
13 was delivered in the 70s. It is a 707 with aging engines
14 on it. Significant maintainability challenges with that
15 airframe.

16 By divesting the 15 airplanes, we took the entire --
17 the entirety of the savings and reinvested it into the E-7
18 program so we can get the E-7 as quickly as possible. We
19 recognize that this is a gap, but unfortunately the gap
20 exists right now with the current condition of that fleet.

21 General Richardson: Madam Chair, what I would say --
22 what I would add on to that without repeating it is, on the
23 acquisition side, what we are trying to do is move out very
24 swiftly to address this effectively emergency situation
25 that we have got.

1 So we moved very quickly to do the market research to
2 see -- you know, which is part of our standard process. We
3 are now working towards the strategy build process with
4 Honorable Hunter, the acquisition executive.

5 And so we are really pushing hard to make sure that
6 we, you know, get on contract just the first part of the
7 year. We want to make sure that we do that smartly. So,
8 you know, so we don't want to just quickly rush too fast
9 there. So we will go through a series of two or three
10 solicitations with Boeing to make sure we get the
11 requirement correct.

12 We are going to try to make sure that we minimize,
13 only to things that are mandated, any changes to the actual
14 E-7 that has already been developed. And so we are hoping
15 that we can go as fast as we can to try to close that gap.

16 And so right now, the only things that we are doing
17 would be mandating things like M-Code GPS, adding that on
18 for example -- as one example, and a couple other things
19 like cybersecurity cleanup.

20 But for the most part, this is a, just a non-
21 developmental effort on top of a obviously a commercial
22 derivative aircraft over.

23 Senator Duckworth: Thank you. So are you saying that
24 the cost savings that General Nahom mentioned -- by
25 decreasing the number of E-3s, you are going to take that

1 cost savings and put it towards expediting the acquisition
2 of the next, of the replacement aircraft, in this case
3 probably the E-7? Is that going to accelerate that
4 timeline so that we get it before 2027? Or are you saying
5 that doing this will only get us to 2027 -- we are going to
6 have that gap regardless.

7 General Richardson: Doing this gets us to 2027,
8 Senator. There is a couple of year lead time on the green
9 aircraft side and there is a couple year lead time on the
10 mission equipment, specifically the radar that is part of
11 the system.

12 And then we will go into a test period. So, the 2027
13 would be -- so the '23 budget request asks for two
14 prototype aircraft, and the first one of those would be the
15 one that would be delivered in 2027. They will start
16 flowing after that.

17 Senator Duckworth: So but that is a separate line
18 from -- you are saying that if you cut the E-3, so the cost
19 savings from that, you are going to put towards expediting
20 the E-7s?

21 General Nahom: Well, ma'am, I would say when we
22 worked this program for our budget request, the divestment
23 of the E3s went into getting this program started. We are
24 going as quickly as we can. And that money was -- you
25 know, in confined resources, we needed that money to get

1 this E-7 program started. And that was part of the
2 resources required for the E-7 itself.

3 Senator Duckworth: Is there any other potential for
4 shortening the timeline mentioned by Secretary Kendall, the
5 2027 timeline, in a responsible fashion?

6 General Richardson: I think there is really two ways
7 to do that, Senator. One is to, you know, we have looked
8 at options of maybe instead of starting out with two
9 prototype aircraft for test, if we had a third, it would
10 speed things along.

11 We don't think it is smart to rush to get on
12 contracts, so we are not going to, you know, swiftly move
13 to get on contract. We want to make sure that, you know,
14 with our Boeing partner that we get that contract, the
15 terms of that contract correct so that we don't get off on
16 the wrong foot.

17 Once we get started, there is an option there, there
18 is an opportunity to maybe have a third aircraft at the
19 beginning of the effort. But the real way that I think we
20 can quickly replace the E-3 capability is by procuring more
21 -- once we are done with that certification work, is
22 procuring at a faster rate in the backside of it, over.

23 General Nahom: And ma'am, if I could add too. Once
24 we get the aircraft, going operational as quickly as
25 possible. And we are actually -- that we can actually work

1 some ahead of time because our Australian partners fly this
2 aircraft and they have already offered to help us.

3 So we can get crews trained ahead of time, both
4 maintainers and pilots and air battle managers, so when the
5 airplanes are delivered, we can go operationally very
6 quickly, and we have not been able to do that before.

7 Senator Duckworth: So that gap is going to stay
8 there, though, is what you are seeing, from the E-3 to the
9 E-7s? So I am just deeply concerned that we have got a gap
10 there that we have not figure out how to mitigate yet.

11 General Nahom: Yes, ma'am. We -- and --

12 General Guastella: Yes, ma'am. Just to reiterate,
13 General Nahom's point, the aircraft has been -- the
14 aircraft is exhausted. It has been deployed continuously.
15 And we have -- which much of the Air Force's fleet is in
16 that condition. It is not maintainable out there in the
17 field, and it is also -- it has a significant capability
18 gaps. So those two together have put us in the situation.

19 The one thing that reducing the fleet size will allow
20 us to do will be to invest in the remaining fleet, get that
21 fleet as healthy as we can, and then employ things such as
22 dynamic force deployments, which essentially deploy the
23 AWACS in healthy packages to locations that need it just
24 long enough to get missions done and the return them back
25 and restore their health, so that episodic shorter duration

1 employment, dynamic force employment is our new construct.
2 And that is one of the ways to global force management that
3 we will try to mitigate through this gap.

4 Senator Duckworth: Okay. Thank you. Senator Cotton.

5 Senator Cotton: Thank you. I didn't mind you going a
6 few minutes over because I share those concerns as well.

7 So I will cross that question off my question list, but
8 just know that I share the chairwoman's concerns as well.

9 General Nahom, I got another question on my list here.

10 The Navy has requested to divest 25 of its Growlers,
11 which I think highlights a capability gap in the Air Force
12 that has existed since the retirement of the F-111s in the
13 mid 1990s. What is the Air Force plan for stand in
14 electronic attack?

15 General Nahom: [Technical problems.]

16 Senator Cotton: Sure.

17 General Guastella: Sir, if I could and obviously
18 respectful of the room that we are in here, all the
19 services absolutely support each other. This is a case
20 where the Growler is a critical element of the joint force,
21 and it supports all the other services.

22 And so electronic attack, electronic warfare,
23 electronic ESM mission is something that is critical to the
24 joint force. And it is a global force managed asset, as
25 are many of the aircraft in the Air Force's inventory. And

1 so from our perspective, it is a critical aspect of the
2 force.

3 Senator Cotton: Has the Air Force considered
4 developing its own organic platforms for stand in
5 electronic attacks?

6 General Nahom: Sir, we have not.

7 Senator Cotton: Okay.

8 General Nahom: We rely on our joint partners for that
9 capability, sir.

10 Senator Cotton: I mean, so this is -- it is a key
11 enabler for our low observable aircraft, right?

12 General Guastella: Sir, it is a key enabler for the
13 success of the joint air campaign because it is a full team
14 effort, whether it is fourth gen or fifth gen team together
15 with electronic attack, to create a strike capability or
16 air superiority. All of it weaves together and it is a
17 critical piece of that --

18 Senator Cotton: Do you do you have concerns about the
19 Navy divesting these aircraft and what it means for the Air
20 Force?

21 General Guastella: Sir, I would say it is a critical
22 capability for the joint force that the joint force has to
23 have.

24 Senator Cotton: Let me go to another question that I
25 may not get answers in this setting for.

1 [Laughter.]

2 Senator Cotton: The B-21. I just want -- at a very
3 high level, I know that we can have a classified briefing
4 at another time. General Nahom, can you give us an update
5 on the status of the B-21? Is it on schedule and on
6 budget?

7 General Nahom: It is on schedule, on budget, sir.
8 And I -- just this is the second -- second time I am
9 passing, but I got my acquisition professional right here
10 to my left. Probably give you much better, better details
11 on that.

12 Senator Cotton: Okay. General Richardson.

13 General Richardson: Senator, it is on schedule and on
14 budget and has been. So we are -- not a lot we can say
15 about it here other than there is -- you know, I think
16 there are six articles on build, as you have probably seen,
17 but yes, sir, it is on schedule and budget.

18 Senator Cotton: Okay. What, if anything, do you need
19 from Congress to make sure you maintain that on schedule,
20 on budget status with this aircraft?

21 General Nahom: From the programmer side, just the
22 steady investment. And I think we have had that. And I
23 think that is one of the Pentagon successes, this program,
24 because we have had steady investor in this program. And
25 so we have been well resourced, which has kept it on track.

1 General Richardson: And I think what I would add to
2 that is just keep doing what you are doing. I mean, I
3 think we are a great team on this and so there is a lot of
4 interest in it, you know, in Congress.

5 And so, you know, the only warning that I would give
6 is we got to just know that it is a development program and
7 we have got a lot of work ahead of us. And so, the program
8 is going really, really well. There is a lot of work to
9 go.

10 And so whatever -- I don't know what bumps might come,
11 but there will be bumps along the road and we -- and you
12 know, as we finish out the program and we just have to get
13 -- we have to work through them.

14 And so just the patience there to, you know, to
15 continue working with us as we work through whatever bumps
16 are there. And to be clear, I don't know of any, I am just
17 -- you know, through all my years of experience, most
18 programs worth doing have bumps along the road.

19 Senator Cotton: Okay. I guess I have been here long
20 enough now that I can say I have followed this program
21 since its infancy. And while the department, both yours
22 and the big department, take sometimes justified criticism
23 about programs that are overbudget and overdue, I think
24 this program has been fairly exquisitely managed for a very
25 key capability for many decades to come.

1 Gentlemen, I hope I can ask you another question. If
2 you kick it to another one of these Generals this time, I
3 am going to say you should be a Senator at a press
4 conference in the middle of the controversy who looks to
5 his other Senators to answer hard questions. I have heard
6 some rumors that a leading contributor to the F-35's
7 lagging mission capable rate is a shortage of spare
8 engines. Is that correct?

9 General Nahom: Sir, we are working through some
10 engine challenges. And we are -- we have made some strides
11 in the past few months, but it is a challenge based on the
12 nature of that motor and the way we operate it, and we have
13 seen some challenges.

14 Senator Cotton: So let me ask -- an implication of
15 that answer is that if Congress were to increase the number
16 of F-35s procured in Fiscal Year 2023 beyond the number on
17 your unfunded party list, would it cause a similar problem
18 or exacerbate the problem we already have?

19 General Nahom: I don't necessarily think it would
20 exacerbate the problem, sir, because the -- but you will
21 notice that last year we did -- we did, in '22, did put in
22 for extra motors and extra parts for motors because of this
23 phenomenon. And we are starting to see some improvements
24 based on that.

25 So I think we will continue to work it. But more F-

1 35s are not necessarily going to exasperate that right now,
2 especially as the newer F-35s come off the line with the
3 motor.

4 Senator Cotton: Whether it is off of your unfunded
5 priority list or even above the number on your unfunded
6 priority list?

7 General Nahom: Sir, it wouldn't exacerbate the
8 problem. Yes, sir.

9 Senator Cotton: Okay. Thank you.

10 Senator Duckworth: Thank you. Senator Tillis.

11 Senator Tillis: Thank you, Madam Chair. Gentlemen,
12 thank you for being here and for your service. Maybe I
13 will start on the F-35. Can you talk a little bit about
14 the importance of the adaptive engine transition program
15 and why do you think it is important for the increasing
16 demands put on this platform?

17 General Nahom: Sir, you know, and I will be careful
18 here about talking about F-35 modernization, it is
19 unclassified environment, but it is very critical that we
20 modernize the F-35 in the Block 4, because when we first
21 got in this game with the F-35, 20 something years ago, the
22 threat was different.

23 And so the current airplane with the motor and the
24 power demand on that motor was just different. Now, as we
25 improve the capabilities, there is going to be increased

1 power needed from the motor. So, looking at the future of
2 advanced power on the F-35 is critical.

3 Senator Tillis: How is the Air Force with respect to
4 compliance on the F-35 for the requirement modernization,
5 requirements on the F-35? Are you tracking towards
6 compliance on the requirements?

7 General Nahom: We are tracking towards compliance --
8 and do you have anything specific on that, but --?

9 General Richardson: Senator, can you be more
10 specific? When you say compliance, what are you referring
11 to, sir?

12 Senator Tillis: Just the specific requirements that
13 have been set forth by Congress? Are you track -- are all
14 your programs tracking to achieving those requirements?

15 General Richardson: As far as I know, Senator, I
16 think, you know, the reports, the F-35 reports that are
17 mandated, we are working towards those, whether that is,
18 well, the two reports that are outstanding right now. The
19 warfighter requirements, we are certainly working towards -
20 - very hard towards those. We are behind where we should
21 be. So as far as I know, Senator, we are.

22 Senator Tillis: Okay. I want to get to the KC-10 and
23 the KC-46. I am looking forward to the KC-46 being able to
24 achieve all of its mission requirements. Seymour Johnson
25 is going to be a main base for KC-46s, so I want its health

1 and hygiene to be great as quickly as possible.

2 When you are talking about our refueling requirements
3 now and the retirement strategy for the KC-10, do we have
4 any current requirements, refueling capacity that is in the
5 yellow or red? Are we able to achieve our mission
6 requirements?

7 General Guastella: Sir, our tanker fleet is in
8 constant global demand. And we manage that demand much as
9 we do with the AWACS, with dynamically allocating resources
10 where they need to be. I think the Air Force has a good
11 plan to manage the demand as we recapitalize to the much
12 needed KC-46.

13 Senator Tillis: Okay. But in your opinion, the
14 current retirement schedule for the KC-10 is not in any way
15 impacting your ability to meet minimum requirements?

16 General Nahom: No, sir. And I think the KC-10
17 retirement has to continue on. One of the most important
18 things we do in the coming years is we have to have a
19 continuous recap of our tanker fleet. And keeping the KC-
20 46 on track is important. And the KC-10, as incredible as
21 that platform is, is expensive to maintain.

22 And getting to that, the modern KC-46 capability as
23 quickly as possible and keeping it on track and then
24 continuing -- after the first contract, when we get into
25 KC-Y, continuing tanker recapitalization because

1 unfortunately our KC-135, as amazing as they are, the
2 newest one is a 1962 model, and we have to continue to
3 recap that fleet.

4 Senator Tillis: The reduction in the F-35s in favor
5 of the Block 4, the decision to do that, was it at all
6 influenced by the fact that you ran out of money, or would
7 you have done it even if you had money on account?

8 General Nahom: Well, sir, I would say in our fighter
9 fleet -- if you look at our investment in Fiscal Year 2023,
10 in our fighter fleet, we increased our investment, overall
11 in the fighter portfolio by over \$1 billion. There
12 certainly was a balance. And, you know, no company, no
13 organization has unlimited resources.

14 The Air Force is no different in that. But when you
15 look at where we put our money in the fighter portfolio,
16 whether it was a next generation or dominant systems, the
17 F-22 upgrades F-35 Block 4, the F-15EX, the fourth gen
18 modifications to the F-16s, and the F-15Es that are in
19 North Carolina, these are very critical things to make sure
20 that we fund it as well.

21 In a perfect world, would we have all the -- would we
22 get to 72 fighters a year? Absolutely. But we have to, in
23 given resources, we have to strike a balance because we
24 need that capability for that high end threat, as well as
25 we need that capacity for what the Combat Commanders are

1 demanding today.

2 Senator Tillis: Last question I had in response to
3 the update on the bomber program was that, keep doing what
4 you are doing, General Richardson, I think that is what you
5 said. Would that include a CR, can -- or is there any
6 disruption in terms of future funding or anticipated future
7 funding if we fail to get through regular order
8 appropriations and just put forth the CR?

9 General Richardson: Senator, I think the answer
10 depends on how long the CR, you know, proceeds. So, but
11 for the development program itself, we could go a pretty
12 good distance without a CR concern so as long as it is not
13 -- it turns into a full year, I think we would be able to
14 work through most of it.

15 I would like to -- if it drags out, we would obviously
16 work with you to let you know the hard dates for, you know,
17 production kinds of awards that would potentially be more
18 impacted than the development effort.

19 Senator Tillis: Well, just in closing, Madam Chair,
20 one thing that, I mentioned this in a hearing last week,
21 one thing that I would urge you to do, if it is a short
22 term CR, I get it. If it is a series of CRs, it is going
23 to have some impact.

24 So that if that did occur, take note, so the next time
25 we come in here and flog you for having a program behind,

1 you can respectfully submit that some of that was a
2 disruption in future funding streams and make no apology
3 for that.

4 We need to understand the consequences when we fail to
5 actually provide the resources that, in your opinion, are
6 required to keep it on budget and on track. Thank you,
7 Madam Chair.

8 Senator Duckworth: Senator Hawley.

9 Senator Hawley: Thank you, Madam Chair. Thanks to
10 all of you for being here. General Nahom, General
11 Guastella, would you agree with me that PACAF is critical
12 to project air power in our facing theater in INDOPACOM?

13 General Nahom: Yes, sir.

14 Senator Hawley: I would think so as well. When I
15 asked Secretary Kendall recently whether the Fiscal Year
16 2023 budget meets all of PACAF's posture requirements, he
17 said he didn't know. So maybe you can tell me. Can you
18 confirm that all of the posture requirements identified
19 either by PACAF or for PACAF in the '23 budget cycle are
20 funded in this year's request?

21 General Nahom: Sir, I guess there is a -- there is
22 certainly, there is always posture concerns and certainly
23 with some of the aircraft we are replacing, if you look at
24 what we are doing at again with the F-15Cs. Certainly with
25 the E-3, we just mentioned, there is certainly concern as

1 we recapitalize airplanes.

2 I am not aware of any budgeting concerns with the
3 posture requirements other than replacing aging airplanes,
4 is my number one concern because we do have a lot of aging
5 airplanes in the Pacific, not just F-15Cs, the Kadena, but
6 the A-10s sitting in Korea, as well as some F-16s in the
7 Western Pacific as well.

8 And they will be a significant concern in the coming
9 years as we recapitalize our fleets.

10 Senator Hawley: So, are you telling me that you think
11 that meeting those challenges, that that is not
12 sufficiently funded in this budget of the Fiscal Year 2023?

13 General Nahom: What I would say is, we have talked
14 for many years about getting 72 fighters a year. And that
15 number, as we looked at our fleets and we looked at
16 airplanes that are retiring, and over the next about 10
17 years, all the legacy airplanes will be out of the Air
18 Force. And that is your F-15Cs, your older F-15Es, your
19 pre-Block, your older F-16s, your older F-22s, certainly
20 your A-10s.

21 That is a significant number of airplanes. And if we
22 don't purchase airplanes to replace those, then we either
23 get smaller as a fighter force or we will have some
24 locations that will have not as many airplanes as we would
25 need.

1 And so that is a concern because if you -- and that is
2 why our Chief has said continuously and we have been very
3 consistent over the last several cycles that the 72
4 fighters a year allows us to recapitalize the fighter fleet
5 and keep the capacity where we have it now.

6 Senator Hawley: So what do we need to do in the
7 Fiscal Year 2023 budget to address these concerns?

8 General Nahom: Sir, I could say with the fighters, we
9 have paid a lot of attention to the fighter fleets. We
10 have increased the funding, but we did, in given resources,
11 have to maintain a balance between the capacity that we
12 would like and ascertain the capabilities that we need for
13 a China threat.

14 Senator Hawley: Do you have anything to do add to
15 that, General Guastella?

16 General Guastella: Sir, I and General Nahom, coming
17 from I thinking in the -- in our plan, there is a net
18 increase to PACAF's posture over time. One thing we are
19 doing real time -- because the National Defense Strategy
20 has us clearly focused on the threats in that region and
21 our services is definitely moving in that direction.

22 We are using some outstanding, I think, techniques and
23 some different applications of air power, such as dynamic
24 force deployment, to episodically appear and operate air
25 power out of significantly different locations across the

1 region. That has a deterrent value. And we are also
2 asking for support and agile combat employment.

3 That is a logistical element to that for positioning
4 and robusting locations across the theater to make air
5 power usable, even though if it is retained in the United
6 States, it can rapidly deploy anywhere in the world. And
7 we think those factors together actually respond very well
8 to PACAF's posture needs.

9 Senator Hawley: Okay. Okay. Fair enough. While I
10 have you, General Guastella, let me ask you about the Guam
11 cluster. That is going to play an important role,
12 obviously, in future air operations in the Pacific. Can
13 you talk about how the request supports development of
14 operational locations or other activities in the Guam
15 cluster?

16 General Guastella: Sir, I don't know if I can answer
17 that specifically. You know, and also given the room -- I
18 will say that obviously Guam and the cluster there is a
19 critical capability for us. It is also a main operating
20 area that we will always want to robust and ensure it is
21 viable in various threat levels.

22 Will -- in addition to that, we need other operating
23 locations. And that is something I have talked about with
24 Agile combat employment. It is a combination of robusting
25 the Guam cluster as well as investments in locations across

1 some of the Pacific area.

2 Senator Hawley: Would you feel more comfortable
3 responding in a different environment? I mean, would that
4 be preferable?

5 General Nahom: Yes, sir. We will probably get some
6 specifics --

7 Senator Hawley: We will follow up with you on it.

8 General Nahom: Yes, sir.

9 Senator Hawley: I will follow up with you on that.
10 Let me ask you here just in the few seconds I have
11 remaining, General Nahom back to you. QUICKSINK, can you
12 talk about how that will contribute to the Air Force's
13 ability to deny a Chinese invasion of Taiwan, or is it
14 intended for other scenarios?

15 General Nahom: And sir, was that term --?

16 Senator Hawley: QUICKSINK. Sir, this is the new
17 joint direct attack munition that the Air Force recently
18 demonstrated.

19 General Nahom: Sir, I would have to take it off the
20 record and get back to you.

21 Senator Cotton: Okay, that is fine. And I see my
22 time has expired. Thank you, Madam Chair.

23 Senator Duckworth: Thank you. Senator Rosen.

24 Senator Rosen: Well, thank you, Chair Duckworth,
25 Ranking Member Cotton. Today's hearing is so important

1 because Nevada is the proud home to Creech, Nellis, and
2 Nevada Air National Guard, so we got a lot of questions for
3 you today about Air Force modernization. And I just really
4 want to thank you for your service.

5 And so I do want to talk about C-130J
6 recapitalization, as I highlighted to Secretary Kendall and
7 General Brown when they testified before this committee
8 earlier this month, the Nevada Air National Guard's 152nd
9 Airlift Wing in Reno, it flies its legacy C-130s in some of
10 the hottest temperatures, highest elevations, and most
11 challenging mountainous environments of any C-130 unit in
12 the Nation.

13 Integral to their mission is flying the maps, a
14 modular airborne firefighting system. Of course, we know
15 what is happening in the West with wildfires. So upgrading
16 the Nevada Air National Guard C-130H fleet with C-130Js
17 would have a substantial impact on their readiness and on
18 their firefighting capabilities in Nevada and the Western
19 United States, where every year the wildfires keep getting
20 worse and worse, more devastating.

21 And so with this in mind and at my urging, Air Force
22 leadership at the past two years posture hearing has
23 committed to considering making the maps mission part of
24 the Air Force basing criteria for the C-130J.

25 So, General Nahom, can you update the committee as to

1 where you are in that process? And can I get a commitment
2 that the 152nd Airlift Wing in Reno will be seriously
3 considered for an upgrade given its need, mission, and
4 readiness to host the C-130J?

5 General Nahom: Well, thank you, Senator, for the
6 question. The -- we do have 20 C-130s that were part of
7 the '22 appropriation, 16 to the Guard, 4 to the Reserves,
8 and over the next year we will be working through our
9 basing process to place this aircraft. The spray and maps
10 will be part of that process, those specific requirements,
11 and that will certainly be addressed as part of the
12 process, ma'am.

13 Senator Rosen: Thank you. I also want to follow up
14 with you, General, that about adversary air training. Of
15 course, I was just at Nellis Air Force Base last week and
16 the contractor providing adversary air training at Nellis
17 was recently notified by Air Combatant Command that ACC
18 does not intend to continue the contract, which expires
19 next month.

20 So ACC intends to operate adversary air support
21 completely organically. So in written responses to my
22 staff, the Air Force states that it will use Nellis' F-16s,
23 and I am going to quote you here, "while ACC built an F-35
24 aggressor capability, but timing of this capability and
25 growth is yet to be determined."

1 So I am really concerned by these responses and the
2 capability gap that is going to exist until the Air Force
3 can completely compensate for the adversary air training
4 currently being performed today at some future unspecified
5 date.

6 So, General Nahom, given the Air Force does not
7 currently have the capability to carry out sole adversary
8 air missions without reducing training capacity, why has
9 ACC taken this past path without the aircraft or even the
10 pilots, particularly when the Air Force has warned for
11 years of a growing pilot shortage?

12 General Nahom: Senator, thanks again for the
13 question. So on the adversary air piece, with the contract
14 at air, and these companies do wonderful work for the Air
15 Force, especially at our formal training units or FTUs,
16 where we train basic fighter pilots how to fly, the
17 contracts are very, very effective. What we are finding
18 now, though, is these contracts aren't very effective at
19 Nellis in that high end training environment at the Nellis
20 --

21 Senator Rosen: How are you going to bridge the gap,
22 General?

23 General Nahom: Well, what they provide is not giving
24 us what we need. What we are using is not only the -- our
25 adversary, our RADR professionals there in the 64th

1 Aggressor Squadron there at Nellis. We also augment that
2 regularly with F-35s, other aircraft that regularly play
3 RADR.

4 We have ways to augment the RADR. Adversary air is
5 something we have to be attuned to, especially as we get to
6 fifth generation. The interesting thing is, you know,
7 five, six years ago, we wouldn't be talking about F-35s
8 being adversary air because our adversaries didn't fly
9 fifth generation airplanes.

10 Well, the Chinese do now. So that way, when we have
11 to -- as the China threat has stepped up, we have to step
12 up our replication. And what the contractor is providing
13 there at Nellis for that high end piece that we get at the
14 NTTR, and only -- the only place, the NTTR and the JPARC in
15 Alaska, the only two places you get that high end training
16 anywhere in the world, that contract, what they are
17 providing is not meeting what we need.

18 Senator Rosen: Well, I am still going to be
19 concerned. 63 percent of aggressor flying hours, their
20 contractors are responsible for, that is a very large gap.
21 I know I only have nine seconds left so we can -- if
22 somebody wants to add or we will just take it from the
23 record.

24 General Guastella: And I could just add one thing,
25 Senator, and that is, while the Nellis training range is a

1 national treasure, it is very important that we maintain
2 that high end capability, there is also a transition that
3 our service is making to more and more virtual training.

4 It is critical because a lot of the things that cannot
5 be replicated in real -- flying hours are critical, real
6 flying is critical, adversary air is critical, but
7 investment, which our program has done, to invest in the
8 virtual and the simulation environment is also something
9 that we do to ensure our aircrews maintain that edge.

10 Senator Rosen: I appreciate it. All these are years
11 away, however, and the threats are now. So thank you,
12 gentlemen. Thank you, Madam Chair.

13 Senator Duckworth: Senator Peters.

14 Senator Peters: Thank you, Madam Chair. General
15 Nahom, when speaking with Air Force magazine on April 13th
16 of this year, you stated that the Air Force needs to buy 72
17 new fighters a year in order to recapitalize a fighter
18 force that can win and fight against peer threats such as
19 China.

20 Yet the Fiscal Year 2023 Air Force budget only calls
21 for 33, F-35s and 24, F-15EXs to be purchased. So the
22 question for you is, do you stand by your comment and your
23 assertion that we need 62 fighter squadrons and a
24 procurement rate of 72 advanced fighters per year to meet
25 that goal? And if so, why is that not in the request?

1 General Nahom: Sir, I certainly stand by 72 fighters
2 here. And as I said previously, we have increased our
3 investment in the fighter portfolio this year, over \$1
4 billion from last year. But we certainly have to strike a
5 balance because we do need the capacity because of what the
6 combatant commanders are asking our Airmen to do worldwide
7 every day.

8 But at the same time, we have to make sure we are
9 investing in the capabilities that are needed for an ever
10 increasing peer threat, so that that balance was important
11 as we prepared our budget request.

12 And certainly, I do stand by the 72 fighters a year
13 because we have an aging fighter force. Right now, the Air
14 Force fighter force is in excess of 29 years fleet average.
15 There is no other relevant Air Force in the world that has
16 that old of a fleet. We have got to refresh these
17 aircraft.

18 Senator Peters: So we are sort of falling short in
19 that goal that you set this year. So that means next year
20 we are in the hole and that could continue to get deeper
21 and deeper. Are you concerned about that? What should we
22 -- how should we be thinking about this?

23 General Nahom: Sir, absolutely. We are absolutely
24 concerned by -- we do have some aging platforms. You are
25 watching us divest the F-15Cs now. The airplanes, many of

1 them, majority of them are flying past their intended
2 service life.

3 And that is why you are seeing us try to get to the F-
4 15EXs and so we can get these aircraft to these locations
5 as quickly as possible, so we can offer what the combatant
6 commanders need today.

7 But at the same time, sir, we have to maintain these
8 investments for the future, whether it is the JADM missile,
9 next generation air dominance system, F-22 upgrades, F-35
10 Block 4. We have to balance these investments.

11 Senator Peters: General Richardson, certainly we
12 always want to be focused on ensuring that our aircraft
13 maintain both the tactical and technical edge. But clearly
14 we can't just be investing in the most expensive platforms.

15 Perhaps related to the reason we have a smaller number
16 of some of these fighter aircraft is because of their
17 expense and it makes it difficult to balance all of the
18 various objectives that you have to achieve. And so we
19 just can't be investing in them.

20 Secretary Kendall has mentioned the potential of
21 complementary uncrewed aircraft as a solution to increase
22 both the quantity and the capability at a lower cost than
23 the crewed aircraft.

24 So my question to you, General Richardson, do you
25 envision this concept exclusively with fighters or are

1 uncrewed platforms also envisioned for a variety of other
2 functions that the Air Force needs?

3 General Richardson: So thank you, Senator, for the
4 question. When Secretary Kendall describes this as part of
5 his operational imperatives, he is really looking at sort
6 of two different concepts. One would be for, you know, as
7 part of a fighter team and then also with the actual B-21.
8 And so it kind of plays both ways.

9 So we are looking at both of those constructs now.
10 And I should also add, when he is talking about fighters,
11 he is not just talking about the NGAD family systems, he is
12 also talking about F-35.

13 Senator Peters: Okay. General Nahom, every combat
14 commander I have spoken with praises the State partnership
15 program because of the relationships and the
16 interoperability that it builds with partners around the
17 globe.

18 A few weeks ago, NATO highlighted the nearly 30 year
19 partnership between the Michigan Air National Guard and the
20 Latvian military, specifically the vital joint terminal
21 attack control training that Latvian troops received at
22 Camp Grayling in my home State of Michigan. Clearly, this
23 type of training builds competence, capacity, and at a
24 moment that is really needed given Latvia's close proximity
25 to Russia.

1 So my question for you is, how can the Air Force
2 ensure that the National Guard bases are outfitted with
3 relevant platforms and capabilities to support our
4 warfighting functions that actually maximize the partner
5 force integration that we are trying to achieve?

6 General Nahom: Thank you, Senator, for the question.
7 I absolutely agree. You know, the place that I have been
8 in the Pacific, in the Middle East, I watched these State
9 partnerships, unbelievable force multiplier. I couldn't
10 agree more.

11 And as we look at the future of our fleet and the
12 future of the Air Force and as we bring our new
13 capabilities, we are certainly going to continue to balance
14 the Guard reserve, the Guard, reserve and active, because
15 we get benefits from both sides. The reserve component,
16 and the active component.

17 It is important that we strike the right balance
18 moving forward. Our Air Force may be a different size,
19 maybe a different form in the coming years, but we must
20 maintain the right balance between active reserve component
21 and continue to take advantage of these State partnerships.

22 Senator Peters: Right. Thank you, General. Thank
23 you, Madam Chair.

24 Senator Duckworth: Senator Kelly. And after that, if
25 no other Senators arrive, we will do a second round of

1 questions. Senator Kelly.

2 Senator Kelly: Thank you, Madam Chair. General
3 Nahom, as the military continues to invest in new and more
4 sophisticated tactical airplanes, you know, I am thinking
5 continued investment in the F-35 and NGAD beyond that,
6 investments in infrastructure necessary to support proper
7 training will have to grow as well.

8 In Arizona, the military and community leaders that I
9 have spoken to are actively trying to come up with workable
10 solutions to the issue of limited training airspace. And
11 what I am getting at is as we have increased speeds of
12 airplanes and range of air to air missile systems, we need
13 bigger ranges.

14 So last -- well, first of all, would you agree that
15 the range space is critical to the Air Force's
16 modernization goals and efforts?

17 General Nahom: Yes, Senator. Absolutely. And what
18 Arizona offers, the Barry Goldwater Range complex, the
19 weather we have down there, the bases is absolutely
20 critical to our training as an Air Force.

21 Senator Kelly: So thinking ahead with the -- as the
22 stick gets bigger here and it will, so because of that,
23 last year I authored report language in the Fiscal Year
24 2022 NDAA that urged the Secretary of Defense to consult
25 with the Secretary of State in Mexico on the possibility of

1 negotiating with Mexico to establish some shared use
2 agreements for airspace near the US-Mexico border.

3 And this is intended to help meet the increasing
4 demand for airspace, as I mentioned, and as you mentioned,
5 at the Barry Goldwater Range. So the analysis required by
6 the NDAA was due to Congress in March.

7 Have you been involved in providing input to Secretary
8 Austin, and do you have an update on when this report will
9 be delivered to the committee?

10 General Nahom: Senator, I don't have an update and we
11 have not been involved that. We did hear about the process
12 moving forward, but we have not any updates or been
13 involved along the way, sir.

14 Senator Kelly: Could you get me an update?

15 General Nahom: Yes, sir.

16 Senator Kelly: All right. Thank you. General
17 Richardson, so a couple of weeks ago, I asked Secretary
18 Kendall about the value of our electronic warfare
19 capability, specifically jamming capability, and our
20 ability to suppress enemy air defenses with electronic
21 warfare capabilities of our systems. And as you know, this
22 is, you know, one way that helps us achieve and maintain
23 air superiority.

24 You know, so specifically what I was referring to is
25 the Compass Call program, which was on pace to replace 14

1 EC-130s with 10 Compass Call EC-37B aircraft. It was on
2 pace until Fiscal Year, the '23 budget request was
3 submitted to Congress, and I am concerned with the Air
4 Force's decision to delay the EC-37B purchases and place
5 the remaining four airplanes on the unfunded priorities
6 list rather than requesting funding for them.

7 So, General, what would be the operational impact, and
8 maybe this question is for anybody, but particularly given
9 the sophisticated integrated air defense systems that is
10 being fielded by China, if we don't have the additional
11 funding for these EC-37Bs.

12 General Richardson: Senator, I will just give you a
13 very short update and then I will pivot to General Nahom
14 and General Guastella. So the good news, we have got six
15 of them on contract. The first two have actually completed
16 their supplemental type cert work and are now at L3 under
17 mod.

18 So we are looking pretty good to start -- to deliver
19 the first one in the first quarter of Fiscal Year 2023 to
20 start the testing. So that is really going well. The
21 other thing I would mention about the capability, before I
22 ask General Nahom to answer the second, the question you
23 asked about the four, the other four aircraft is, that is
24 also a, I would say a marquee program for us for this new
25 digital acquisition method.

1 So we are making sure that we build them so that they
2 are very rapidly reprogrammable. So once we do get those
3 aircraft, that we can quickly software change them out, so
4 to speak, without years of time. And so I will ask General
5 Nahom to answer your direct question.

6 General Nahom: Yes, sir. We do want to get to a
7 fleet of 10, and 6 is too small. You know, if you take a
8 couple away for training, maybe one or two away for
9 maintenance, you are not left with a lot for operational
10 use. And there is a lot of use for those airplanes right
11 now, the EC-130 certainly.

12 And we know the EC-37 will be in high demand as well.
13 So we, when you look at the balances we made on this year's
14 POM in this year's budget submission, we just -- we do not
15 have -- we had limited resources, and this is one of those
16 places we just could not get to the whole 10 aircraft.

17 That is why the Chief did put it on his unfunded
18 priorities list. But we do see the need for a fleet of 10
19 so we can train, we can fix, and we can employ all at the
20 same time. And I would be concerned with a fleet of only
21 six airplanes, sir.

22 Senator Kelly: Okay. Well, thank you. Thank you,
23 General.

24 General Richardson: I would just add on and just say,
25 for the balance of the four, we are keeping a sharp eye on

1 the used Gulfstream 550. And so there are some available.
2 And we are also looking at when the Rolls Royce engine line
3 shuts down for new orders in December. So all that stuff
4 is part of this mix. So, but we are watching it closely.

5 Senator Kelly: So the EC-37B uses these Rolls Royce
6 engines?

7 General Richardson: Yes, sir. So we are keeping an
8 eye on that. That particular engine stops taking new
9 orders, new engine orders in December. Gulfstream already
10 stopped taking new Gulfstream 550 orders. Thankfully,
11 there is a pretty healthy use market, so we can get some
12 very lower aircraft to finish those last four. We will do
13 the same thing with the engines if we need to.

14 Senator Kelly: Do plan on getting some spares --?

15 General Richardson: Yes, sir.

16 Senator Kelly: For the 10 aircraft?

17 General Richardson: Yes, sir. Absolutely.

18 Senator Kelly: All right. Well, I am willing to work
19 with you to make sure we get the additional four airplanes.
20 Thank you.

21 Senator Duckworth: Thank you. We will now begin a
22 second round of questions. I recognize myself for five
23 minutes. I mentioned in my opening statement concerns
24 about the Air Force plan to truncate the HH-60 Whiskey
25 program after Fiscal Year 2023.

1 That would leave the Air Force roughly 40 percent
2 short of its original plan to modernize the combat search
3 and rescue fleet of aircraft. General Nahom or General
4 Guastella, why do you believe that truncating the HH-60
5 Whiskey helicopter program will be an acceptable risk?

6 And how will a much smaller combat search and rescue
7 force structure affect the Air Force's ability to conduct
8 these operations in future conflicts?

9 General Nahom: Ma'am, I will start out and I will
10 pass the second half off to General Guastella. So when you
11 look at the fleet -- you know, these were decisions we made
12 in given resources. First of all, with the 75 helicopters,
13 we intend to ensure that we get those to the Guard and
14 reserve in full complement.

15 They do a lot of things in the reserve. Our reserves,
16 for example, do the -- on the Space Coast, do the
17 recoveries for manned spaceflight as well as many of our
18 Guardsmen do a lot of the decommissions around the country.
19 As we look at rescue in the future, that we have to take a
20 look at what rescue is going to look like in a contested
21 environment, it is likely not to be in a Black Hawk type
22 helicopter.

23 And so as we outfit this fleet, we also have to make
24 sure that we don't spend too much resource on this
25 capability, and then not have the resources to invest in

1 what rescue is going to look like in a contested
2 environment. And we are still doing the wargaming and the
3 analysis to determine what that is.

4 General Guastella: Ma'am, not too much else to ask --
5 I mean, the personal recovery and combat search and rescue
6 absolutely is an American mission that we have to do, and
7 we are maintaining investment in our Guardian Angels, part
8 of the team, as well as our HC-130s. But like General
9 Nahom said, the survivability of the asset has to be, and
10 the threat that it is going to enter into, has to be there.

11 And so I think it is important that we maintain the
12 right size fleet as we look for other technologies and
13 other ways to ensure we can still provide PR in face of the
14 NDS level threats.

15 Senator Duckworth: Okay. I just feel like we are,
16 again, with this decision creating a gap, but we don't have
17 anything to fill in the gap. Have you looked at the V-22
18 Osprey? I mean, it is already in the inventory.

19 Is that something that could have longer range but
20 also perform this mission? You are not sort of addressing
21 the mitigating of the risk of losing, you know, taking some
22 of these aircraft -- this asset offline.

23 General Nahom: Ma'am, we obviously do fly the Osprey
24 with our Air Force Special Ops and actually with -- when we
25 set up a personal recovery task force, the PR task force,

1 they take on a whole shape of a number of aircraft.

2 Very often we put our Guardian Angels in, you know,
3 Army Chinooks or AFSOC, CV-22s, or Army Guard Black Hawks.
4 A number of platforms that our rescue professionals fly out
5 of. So we do have personnel recovery forces moving
6 forward, not just the HH-60 Whiskeys, but our, certainly
7 are CV-22s, and then our supporting, our HC-130 refuelers,
8 and then the Guardian Angels.

9 But we do have to take a look at what this is going to
10 look like in contested environments, while we maintain some
11 resemblance of a fleet moving forward, and that work is
12 ongoing right now, ma'am.

13 Senator Duckworth: Okay. Thank you. I would like to
14 return to discussion of the F-35, but in particular, I
15 would like to talk about the lifecycle costs of the F-35.
16 As you know, 60 to 80 percent of lifecycle costs for the
17 average aircraft is sustainment.

18 At various times, there have been press reports that
19 the Air Force leadership is wondering whether you can
20 afford to buy all 1,763 F-35 aircraft you plan to buy while
21 you pay for the lifecycle costs of these aircraft.

22 General Richardson, could you tell us what avenues the
23 Air Force is investigating for reducing the lifecycle costs
24 of the F-35 so that you can afford to operate the aircraft
25 in the numbers that you want? I mean, you know, where we

1 are sitting right now at \$39,000 per hour, that is still
2 unaffordable.

3 Can you sort of address how you are going to address
4 this issue to bringing down the cost, especially under
5 sustainment?

6 General Richardson: Yes, Senator, that is a great
7 question. That is something that concerns us as well. So
8 we have actually made a lot of good measure over the last
9 couple of years. The latest contract that we just signed
10 with Lockheed for the Fiscal Year 2021 to 2023 sustainment
11 contract actually brought it down about 6 percent, at least
12 as it affects the Air Force, for the F-35A.

13 So the, you know, by the by the year 2023, we expect
14 the cost per flying hour for the F-35 to go down to about
15 \$30,000 a flight hour. So that is good news. We did that
16 through a pretty creative contract structure to where they
17 are actually incentivized to meet cost goals, but also not
18 just cost goals, but mission capability rates.

19 And so that is the first thing that I would tell you.
20 I think we are looking past that contract, though, already,
21 and so we are looking at other performance based contracts
22 to see if we can bring down the cost even lower.

23 And then even past that effort, we are also looking at
24 some pilot programs to maybe do some of the supply support
25 work ourselves to go, to contract directly with, you know,

1 with some of the suppliers of the parts that fail. We
2 talked about the engine work earlier. We are very much
3 looking very heavily at the engine right now. We have got
4 a number of holes because of that.

5 That actually drives a lot of extra maintenance and
6 cost. So the engine work, we are not exactly sure how --
7 where that is going to end up right now. You know, we are
8 studying it pretty heavily through the summer, but that is
9 another huge area. And then the Congress has been really
10 great on helping us out.

11 So we have had a number of Congressional adds over, in
12 Fiscal Year 2022, specifically to address that. And we are
13 applying most of those adds towards cost reduction
14 initiatives for lifecycle cost. But thank you for the
15 question, Senator.

16 Senator Duckworth: Thank you. It is something that
17 we will certainly be monitoring. Senator Sullivan.

18 Senator Sullivan: Thank you, Madam Chair. Gentlemen,
19 thank you for your testimony. General Nahom, you might
20 remember last year in this hearing room, about a little
21 less than a year ago, I had questions and kind of the
22 surprise that we had heard about the delay in the timeline
23 to get JPARC to the threat level force standard and that
24 General Brown had indicated that there would be a six year
25 delay due to difficulty developing the feeling of the ARTS

1 version 3, Advanced Radar Threat System, which I think
2 everybody agreed was something that we didn't want to be
3 doing.

4 Can you explain whether the budget request for the Air
5 Force is to get the JPARC threat level force standard back
6 on track by Fiscal Year 2026 and not have that six year
7 delay that I think everybody, including you, when you
8 testified here last year, thought that that was not good
9 for the Air Force and training and the overall readiness of
10 the Air Force.

11 General Nahom: Yes, sir, and absolute commitment to
12 get the JPARC and the NTTR to level four as quickly as
13 possible. I am going to take it for the record. Fiscal
14 Year 2026, I don't have the exact date when we get to what
15 we would declare a level four, but the two ranges that we
16 are getting to a level four plus is going to be the JPARC
17 and the NTTR.

18 I tell you, sir, as the threat changes, the technology
19 changes, and the emitters change because the Chinese are
20 accelerating, so what we need to emulate those threats is
21 changing constantly. You know, four or five or six years
22 ago, I mentioned it earlier, we never would imagine we
23 would need an F-22 or an F-35 to emulate a Chinese threat,
24 but we do now.

25 And so how we actually portray the threat for red flag

1 Alaska, the Northern edge, and the other -- the highest end
2 exercises we do up in the JPARC is going to continually
3 change. We are working some things. I would like to get
4 with you in a classified session and talk about some of the
5 things that are working.

6 Because it is not just ARTS, there are other things
7 that are working and we think we can get to quicker, and we
8 are working those and those -- and we do have our
9 investment there.

10 Senator Sullivan: Okay. In the classified -- in
11 unclassified setting, the Secretary of the Air Force was
12 very bullish on the need for JPARC. Can you explain again
13 to this committee why it is so important? I think a lot of
14 people, even to be honest in the Air Force, unless they
15 have trained up there, don't have a recognition of the size
16 and scope and the fact that it us over land airspace as big
17 as Florida.

18 The standoff ranges that we are going to need with
19 fifth gen training and fighting needs to be much bigger
20 than it is. To be honest, and Nellis and other places
21 where -- they are constrained. As you know, at JPARC, we
22 can expand quite a lot. We have a lot more room to grow.
23 And you can't say that of other high end rangers.

24 General Nahom: Yes, sir. In sheer size, and I would
25 say I would almost add restrictions, but it is more lack of

1 restrictions and what we can do at the JPARC is
2 unparalleled to anywhere in the world. You know, the NTTR,
3 the Nellis range offers a lot of advantages because of some
4 of the integration we can do down there with a lot of the
5 systems.

6 But you don't get that sheer magnitude of size and the
7 dynamic way in which you can train up at the JPARC. You
8 know, between those two ranges that -- you know, if you
9 look at any Air Force that we work with anywhere in the
10 world, they want to get to either the JPARC and NTTR to
11 train with us.

12 Those are the two places, are the destination places.
13 And now turn it over to General Guastella to follow on
14 that.

15 General Guastella: No, sir. Just to add, it is a
16 national treasure, without a doubt. And it is also
17 geographically, in addition to its size, it is
18 geographically located in PACAF. Which affords the both
19 the U.S. plus our allies the opportunity to train in
20 theater and that is critical capability.

21 Senator Sullivan: No, I know a lot of our allies, I
22 have talked to allied forces, obviously Japan, Korea, but
23 even the Indians, Singapore, they like to get up there and
24 train, and I think we need to take advantage of that.

25 Speaking of INDOPACOM, my next question is kind of a

1 general one for all three of you gentlemen, and it goes
2 through the issue of the big challenges we have with the
3 tyranny of distance in the INDOPACOM theater, whether it is
4 a potential Taiwan scenario. I know that the Air Force has
5 been working on the modernization of the B-52
6 Stratofortress with regard to range extension for that
7 platform, pretty dramatic range extension.

8 But what else are we doing in terms of combat
9 effectiveness, efficiency, tanker ops, and basing that --
10 again, that can help us get to that issue of giant
11 distances that we need to travel in the INDOPACOM theater.

12 General Nahom: Yes, sir. And I will start. I will
13 let Gus and Duke pile in after. Certainly the B-52, you
14 are right with the re-engining efficiency offers us
15 increased range. And it is not just on the bomber side.
16 You can also add the B-21 in that as well.

17 Certainly, the platforms, what we are working, the
18 modifications to the F-22. The F-35 and some of the Block
19 4 and some of the other modernization there. But I will
20 tell you --

21 Senator Sullivan: Does the Block 4 come with --

22 General Nahom: It does not come with it added. No,
23 sir, that is not part of it. But I will tell you the other
24 piece is some of our advanced weapons, because you have to
25 look at the range of weapons. It is not just the

1 hypersonics. It is some of the, I don't want to say less
2 exquisite because they are still pretty exquisite like
3 JASSM-ER.

4 And if you look at our budget right now, we are
5 maximizing our production of JASSM-ER because it is such a
6 good weapon for the Pacific for its range and capability.
7 But at the same time, you are also seeing, as you saw this
8 week with our successful test, with the ARRW hypersonic, as
9 well as what we are doing with the other hypersonic effort,
10 the air breathing hypersonic effort.

11 I think we are very committed to the ranges in the
12 Pacific and making sure that we not only have the assets,
13 but they are in the right place. You see us placing up
14 tankers in Alaska. That is because we are setting up
15 another fifth generation wing up at Eielson and those
16 airplanes are going to need tankers to get where they need
17 to be.

18 So having those tankers -- having extra tankers up
19 there at Eielson with those F-35 is critical to have them
20 to be able to respond not just in the South China Sea, but
21 into the Arctic, the defense of the Northern reaches of the
22 U.S. I think we are pretty committed to those distances in
23 the Pacific, sir.

24 Senator Sullivan: Anyone else on that, gentlemen?

25 General Richardson: I just, I would just add, if you

1 just look at it, Senator, if you just look at our
2 modernization programs, you know, HACM, ARRW, JASSM on the
3 weapons side. It is all based on the exact point that you
4 are making.

5 And then even on the aircraft side, you know,
6 continuation of some of the ones that we are doing, like B-
7 21, some of our neat fighter programs, and even E-7 are all
8 really geared towards that directly, that direct distance
9 that you are talking about.

10 Senator Sullivan: Great. Thank you. Thank you,
11 Madam Chair.

12 Senator Duckworth: Senator Cotton.

13 Senator Cotton: All right. I can't believe the
14 Senator from Alaska didn't asking the Arctic questions.
15 Would you like some extra time to do so?

16 Senator Sullivan: Well, you know, it is Arctic and
17 INDOPACOM, they are all really --

18 [Laughter.]

19 Senator Cotton: No, I am --

20 Senator Duckworth: He is a Pacific State, so.
21 Senator Hawley.

22 Senator Hawley: Yes. Thank you, Madam Chair.
23 Generally Nahom, on the B-21, I saw press reports a couple
24 of weeks ago now that the Air Force is accelerating the
25 production timeline by overlapping development and

1 production.

2 I am just wondering if there is any possibility of
3 accelerating the timeline, pulling to the left the
4 capabilities, the capability estimates, both in terms of
5 initial operational and full operational capability.

6 General Nahom: I will start that, but I definitely
7 get General Richardson in this conversation. The
8 accelerating B-21 -- right now, we are concentrating on
9 getting through the development piece. If there is any
10 acceleration, it will be after we develop and field.

11 There may be some acceleration in the numbers we buy
12 after we have a fielded aircraft. But right now, unless
13 Duke you know something, right now there is no
14 acceleration, we are just -- we are moving at a good pace,
15 but we don't see an acceleration in the near term.

16 General Richardson: No, sir, I would not recommend
17 that. I think the program is progressing well. We want to
18 make sure we stay -- you know, speed with discipline is our
19 mantra on that program, move as quickly as we can, but do
20 it in a safe, so to speak, at least from a process, from a
21 systems engineering standpoint.

22 So that is what you are seeing, is we are moving as
23 swiftly as we as we feel is prudent to do. And as General
24 Nahom mentioned, I think once we get further along in the
25 system verification or review process, we should then look

1 at doing that.

2 Senator Hawley: Got it. Okay. Got it. That is
3 helpful. General Guastella, you mentioned, I think, agile
4 combat deployment earlier. Can I just ask you to come back
5 to that? Give us a sense of what progress you have made on
6 operationalizing that and where have you met delays, if you
7 have? What are your priorities for the coming year?

8 General Guastella: Sir, agile combat deployment is
9 absolutely critical to the future as we see air power,
10 especially against a peer competitor. What, you know, we
11 are -- Americans are used to air power or Air Force winning
12 in the air. We also have to win on the ground. It means
13 we have to be survivable.

14 We have to use, and to do so -- that is why we are
15 employing actual combat employment, is to ensure that not
16 only we operate out of main operating hubs, but we have the
17 agility to go out of austere and varied landing services
18 and fields from anywhere. It creates a very complex
19 situation for an adversary. It is very -- high deterrent
20 value.

21 We are doing that in every PACAF --doing as a common
22 employment for a couple of years now. Same in CENTCOM,
23 same in EUCOM. Every major command has been doing their
24 version of -- as a combat deployment, and what we are
25 figuring out is best practices.

1 It will take investment because there is a logistical
2 element to the agile combat employment to include
3 investments in airfields as well as pre-positioning long
4 logistical kit, aircraft maintenance kit, things of that
5 nature, and we are starting to hone in on what those
6 requirements are to ensure that we can generate air power
7 not only from main bases, but from austere and varied
8 locations.

9 Senator Cotton: So what is the next step here, then,
10 in the progress of this?

11 General Guastella: Sir, we have already a draft
12 CONOPS, it was quite long actually, that shows some of the
13 best practices. We are working on identifying ways to get
14 the most out of the airmen that we have in terms of multi
15 capable airmen. So in other words, get airmen to do more
16 than one additional primary job.

17 How can they help each other to generate more with
18 fewer individuals? We are also looking at how we can
19 improve our logistics to get -- you know, our logistics
20 enterprise enabled to provide support even in austere
21 locations.

22 And so there is a lot of work there, a lot of
23 experimentation going on, and we are happy to come and talk
24 to you more in other -- in other settings, if we could.

25 Senator Cotton: Great. That is great. That is

1 helpful. Last thing for me, General Nahom, pallets,
2 munitions. I understand that this concept offers a
3 promising way to expand our strike capacity and deliver
4 long range weapons at lower cost. I understand it has also
5 been maybe controversial to some. Can you talk a little
6 bit about this, why you think the concept is promising?

7 General Nahom: It just gives you another means to
8 deliver a long range ordinance. There are times in any
9 campaign where certain airplanes have availability. And
10 that is why if you look at the Palisades munitions, it is
11 fairly platform agnostic.

12 You know, you could do on a C-17 and C-130, and
13 certainly a special ops C-130 as well, and it is going to
14 give the combatant commanders some options to deliver
15 ordnance in ways that he or she never thought about.

16 Senator Hawley: Great. Very good. That is all I
17 have got. Thanks, Madam Chair.

18 Senator Duckworth: Thank you. Gentlemen, thank you
19 so much for coming here today and answering our questions.
20 As you see, there is a pretty bipartisan concern with some
21 of the decisions that are being made to make sure that we
22 are not leaving gaps in our capabilities, but that we also
23 maintain taxpayer interest as well and bringing down costs
24 and the like.

25 And I think we are going to have to have some more

1 discussion in a secure environment for some further
2 questions. So with that, this hearing -- we are now
3 closed.

4 [Whereupon, at 3:40 p.m., the hearing was adjourned.]

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