

Stenographic Transcript
Before the

Subcommittee on Strategic Forces

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

TO RECEIVE TESTIMONY ON UNITED STATES STRATEGIC
COMMAND AND UNITED STATES SPACE COMMAND IN
REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR
FISCAL YEAR 2026 AND THE FUTURE YEARS DEFENSE
PROGRAM

Wednesday, March 26, 2025

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1 TO RECEIVE TESTIMONY ON UNITED STATES STRATEGIC COMMAND AND
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5
6 Wednesday, March 26, 2025

7
8 U.S. Senate

9 Committee on Armed Services

10 Subcommittee on Strategic Forces

11 Washington, D.C.

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13 The subcommittee met, pursuant to notice, at 9:30
14 a.m., in Room SD-106, Dirksen Senate Office Building, Hon.
15 Deb Fischer, chairman of the subcommittee, presiding.

16 Committee Members Present: Fischer, Cotton, Wicker,
17 Rounds, Tuberville, Banks, King, Reed, and Kelly.

1 OPENING STATEMENT OF HON. DEB FISCHER, U.S. SENATOR
2 FROM NEBRASKA

3 Senator Fischer: The hearing will come to order.
4 Good morning, everyone.

5 The Strategic Forces Subcommittee meets today to
6 receive testimony on the posture of the United States
7 Strategic Command and the United States Space Command. I
8 want to begin by thanking our witnesses, General Cotton
9 from STRATCOM, and General Whiting from SPACECOM.

10 General Cotton, this is likely one of the last times
11 you will be speaking before our Committee. You have always
12 been open and forthright with this Committee, and I want to
13 thank you for your service and dedication as you approach
14 your final year as Commander of STRATCOM.

15 Today we face a threat environment more dangerous than
16 we have seen since the Second World War. For the first
17 time in history, the United States faces two adversary
18 nuclear powers, in Russia and China. Russia has nearly
19 completed modernizing its nuclear triad, and continues to
20 expand and improve their tactical nuclear forces. China,
21 meanwhile, which used to be considered a lesser-included
22 case, is expanding its own arsenal at a breathtaking pace.
23 China now has more ICBM launchers than the United States,
24 and is expected at least to triple its stockpile by 2035.
25 I would also note that China has outpaced every previous

1 estimate that we have made.

2 General Cotton, as you well know, this is an extremely
3 important time for STRATCOM. Each leg of our triad is
4 undergoing a generational modernization. This includes the
5 Columbia-class submarine to replace the Ohio-class; the B-
6 21 bomber to replace the B-1 and B-2 bombers; and the
7 Sentinel ICBM, to replace the Minuteman III.

8 Given the ages of the legacy programs, it is essential
9 that these modernization efforts be prioritized and
10 properly resourced to ensure we have capabilities fielded
11 in time to meet the growing threat. While it is the
12 responsibility of the services to get these programs back
13 on schedule, it is STRATCOM who must mitigate risks
14 associated with any delays. I look forward to hearing more
15 in the closed session about your plans to do so.

16 Additionally, the nuclear-armed sea-launched cruise
17 missile, or SLCM, remains a critical program to deter our
18 adversaries from believing they can use tactical nuclear
19 weapons. I look forward to hearing from you, General
20 Cotton, on your work with the Navy on SLCM.

21 I would be remiss if I did not also underscore the
22 importance of NC3, what Senator King and I refer to as the
23 fourth leg of the triad. NC3 underpins all aspects of
24 nuclear deterrence. General Cotton, I appreciate the focus
25 that you have given NC3 modernization during your time in

1 command, and I will be eager to receive an update on the
2 implementation of the NC3 roadmap.

3 General Whiting, the space domain is now, as you point
4 out in your opening statement, a highly contested strategic
5 environment. China and Russia possess growing counter-
6 space capabilities that hold U.S. space assets at risk.
7 Russia is developing the capability to place a nuclear
8 weapon on orbit, while China is investing in maneuverable
9 satellites that could target our satellites. And these are
10 just the threats that we can discuss in this open setting.

11 While I look forward to a more robust discussion on
12 how we need to address these threats in a classified
13 session, I am eager to hear from you during this open
14 session on your priorities for fiscal year 2026, and how we
15 can leverage emerging technologies to field more dynamic
16 space-based systems. I am also eager to hear an update on
17 how SPACECOM is working with the other combatant commands,
18 the services, and the intelligence community to ensure that
19 we are developing the right capabilities, sharing
20 information with warfighters in real time, and that the
21 services and interagency partners are integrated
22 appropriately.

23 I will make one final point before I turn it over to
24 Senator King for his opening statement. Both of your
25 combatant commands rely on access to critical

1 electromagnetic spectrum to carry out your missions. As we
2 know, there are efforts underway to force DoD to vacate
3 portions of those spectrum bands. Such an outcome would be
4 detrimental to U.S. national security and result in
5 significant costs, as various DoD equities are forced to
6 invest the resources to redesign, procure, and field new
7 systems to operate in different spectrum bands, if that is
8 even feasible.

9 General Whiting and General Cotton, I look forward to
10 hearing from both of you on the importance of spectrum to
11 your missions. Before any decisions are made on whether to
12 auction off DoD spectrum, the American people deserve to
13 understand the risks there would be to national security.

14 Again, thank you both for appearing before us today.
15 I look forward to hearing your testimony.

16 Senator King, you are recognized.

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1 STATEMENT OF HON. ANGUS S. KING, JR., U.S. SENATOR
2 FROM NEW HAMPSHIRE

3 Senator King: Thank you, Senator Fischer. I want to
4 first thank both of you for your service and for the
5 incredible work that you have done, both in managing the
6 assets that are in your purview but also in thinking about
7 how to move forward.

8 This is a posture hearing. It is really a status
9 report. It is a combination of a status report, where are
10 we now but where do we need to be, and what do we need in
11 the way of resources in order to get there.

12 General Cotton, deterrence is the keystone of our
13 entire defense strategy. We often forget that. We get
14 lost in counting tanks or airplanes or Navy ships. But the
15 whole idea of all of these resources is that they never be
16 used, that they be such a terrifying prospect for a
17 potential adversary that they will never be used. And in
18 fact, deterrence had worked in the nuclear area for 75, 80
19 years. So that is really what we need to talk about today.

20 Modernization the triad, which we are in the middle of
21 right now, is an expensive proposition. But to shortchange
22 that process, in my view, would be disastrously short-
23 sighted. So I hope to hear where we are on modernization
24 with parts of the triad, but also where we need to be, what
25 necessary authorities there are that we need to be talking

1 about, and also necessary funding. I refer to nuclear
2 modernization as the pig in the budgetary python. It is,
3 unfortunately, just by history, we are having to do all
4 three legs at once, and that is a very expensive
5 proposition, but it is something that we have to do in
6 order to maintain the deterrence strategy that has
7 protected this country for so long.

8 In terms of the space assets, of course, it is no news
9 to anybody that space was an uncontested domain 20 years
10 ago. Ten years ago, it began to be contested, and today it
11 is highly contested. So, General, we have really got to be
12 understanding the status, where we are, particularly when
13 we are talking about a potential conflict with China, which
14 would involve the vast expanse of the Pacific Ocean and
15 naval power, and how that will be subject to space assets
16 and how we can protect ourselves in a time of potential
17 conflict. Of course, we all hope that conflict can be
18 avoided. That brings me back to deterrence.

19 So I think the important message that I have is that
20 decisions we make here today, and over the next 6 months,
21 will have profound impacts in the future. And that is what
22 is so important about what we are talking about today. I
23 can think of no two more important people right now in
24 thinking about how to posture this country in order to
25 maintain deterrence and the security of the American

1 people.

2 So I thank you for being here, I look forward to your
3 questions, and now I think it is time to turn it over to
4 the Chair.

5 Senator Fischer: Thank you, Senator King. We are
6 joined today by Chairman Wicker and Ranking Member Reed,
7 and I would ask each of them to give an opening statement
8 if they so desire at this time. Chairman Wicker.

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1 STATEMENT OF HON. ROGER WICKER, U.S. SENATOR FROM
2 MISSISSIPPI

3 Chairman Wicker: Thank you, Madam Chair, and I want
4 to thank the Chair and Senator King for working together as
5 a team for years on this topic. I think it should be clear
6 to people listening that there is no space between them.
7 They are approaching this in a bipartisan manner. They
8 understand how important it is. And yes, Senator King is
9 correct. We are talking about preventing. We are talking
10 about being strong enough to prevent a nuclear war, and
11 nothing could be more important. And yes, it is going to
12 be expensive, but there is no question about it, we are
13 going to have to spend the money as wisely and efficiently
14 as we can to get the job done.

15 I want to thank Senator [sic] Cotton for his service
16 and wish him well as he prepares to transition into private
17 life, and thank you, General Whiting, for being here.

18 I am going to put my statement in the record and just
19 say that today I hope to understand how you are managing
20 the risks of critical military capabilities that are both
21 too old and too few to truly meet the threats of today,
22 much less those of tomorrow.

23 Secondly, how to understand better the roles of your
24 commands evolving as the new Administration develops
25 updated strategies and guidance, and then hear your

1 thoughts on areas where you believe this Committee can help
2 improve the effectiveness of our strategic deterrent and
3 space posture.

4 With that I will ask unanimous consent to include my
5 statement in the record, and yield back.

6 Senator Fischer: Without objection.

7 [The prepared statement of Chairman Wicker follows:]

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1 Chairman Wicker: Thank you, gentlemen. Thank you,
2 Madam Chair.

3 Senator Fischer: Thank you, Mr. Chairman. Ranking
4 Member Reed.

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1 STATEMENT OF HON. JACK REED, U.S. SENATOR FROM RHODE
2 ISLAND

3 Senator Reed: Thank you very much, Madam Chairman.
4 Welcome, gentlemen. We look forward to your testimony. I
5 want to commend General Cotton for his 39 years of service
6 to the country and to the Air Force, and I wish you and
7 your wife, Marsha, the very best in your retirement.
8 General Whiting, thank you for joining us this morning
9 also.

10 General Cotton, there are reports that indicate that
11 the Administration is considering removing the dual-hatted
12 role the Commander of U.S. European Command currently holds
13 as the NATO Supreme Allied Commander Europe, or SACEUR.
14 The SACEUR position was created, in part, to ensure that
15 our nuclear weapons, and hence our nuclear umbrella
16 provided to our NATO allies under Article 5, was always
17 kept under the control of the United States. Indeed, the
18 release codes for our nuclear weapons which are carried by
19 NATO planes come from the President through SACEUR to
20 unlock the weapons. If the U.S. walks away from this
21 position, we are lessening the protection of our extended
22 nuclear deterrent to our allies, and I believe we are
23 harming U.S. national security and global security.

24 For over six decades, the U.S. nuclear umbrella has
25 provided an iron-clad guarantee to deter the Soviet Union

1 and now Russia, and it has been successful.

2 I am also concerned about the signal it may send to
3 our Asian allies, especially South Korea, who also relies
4 on the credibility of our nuclear umbrella.

5 These are difficult issues, and I hope in the course
6 of the questioning we can get more details from you about
7 that.

8 Again, thank you, Madam Chairman.

9 Senator Fischer: Thank you, Senator Reed. And now I
10 would like to have our opening statements from the panel.
11 General Cotton, would you go first, please.

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1 STATEMENT OF GENERAL ANTHONY J. COTTON, USAF,
2 COMMANDER, UNITED STATES STRATEGIC COMMAND, DEPARTMENT OF
3 THE AIR FORCE

4 General Cotton: Good morning, Chairwoman Fischer,
5 Ranking Member King, Chairman Wicker, and Ranking Member
6 Reed, and distinguished members of this Committee. It is
7 an honor for Sergeant Major Kramer and I to be here,
8 alongside General Whiting and Chief Master Sergeant
9 Simmons, and a privilege to continue representing the
10 servicemembers, civilians, and families of United States
11 Strategic Command.

12 I would like to thank this Committee and Congress for
13 its continued support in providing us with the resources
14 required to execute our assigned missions. Above all else,
15 I extend my gratitude to the American people for their
16 enduring support of the military.

17 In my third and final year of serving as STRATCOM
18 Commander it has been the most rewarding experience of my
19 39-year career. I have submitted my 2025 posture statement
20 for the record.

21 I will begin by assuring you that the nation's nuclear
22 forces, which are foundational to our national security,
23 are safe, secure, effective, and credible. As I speak,
24 STRATCOM and its components are deterring our adversaries
25 and stand ready to respond decisively, whether underground,

1 in the air, or beneath the seas, should deterrence fail.

2 And our mission has never been more important. Today
3 the United States, its allies and partners are confronted
4 with a deteriorating security environment. The Chinese
5 Communist Party is rapidly expanding its nuclear forces
6 into a fully functional triad, with more than 600 nuclear
7 warheads, and counting. Russia has modernized the majority
8 of its nuclear arsenal. North Korea continues with its
9 unlawful and destabilizing programs in pursuit of weapons
10 of mass destruction and ballistic missiles. And Iran
11 continues to pursue uranium enrichment.

12 Additionally, the tools of war are changing, from
13 novel missile systems to counter-U.S. space capabilities,
14 from cyberattacks against critical infrastructure to
15 competition in the electromagnetic spectrum. These are
16 rapidly developing threat vectors across multiple domains
17 and regions, to include the Arctic.

18 To effectively defer our adversaries across the
19 spectrum of threats requires sustained legacy triad systems
20 and urgently completing the multigenerational, decades-long
21 modernization of all three legs of the nuclear deterrent
22 and its critical NC3 systems.

23 No portfolio is in need of recapitalization more than
24 a nuclear portfolio, and the modernization I am advocating
25 for requires continued, uninterrupted funding and an

1 industrial base capable of steady and continuous
2 production. Commitment to modernization will ensure that
3 U.S. strategic weapons continue to deter aggression, assure
4 our allies and partners, and allow us to achieve national
5 objectives if deterrence fails.

6 Thank you again for your support and focus on our
7 mission, and I look forward to answering your questions.

8 [The prepared statement of General Cotton follows:]

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1 Senator Fischer: Thank you, General Cotton. General
2 Whiting.

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1 STATEMENT OF GENERAL STEPHEN N. WHITING, USSF,
2 COMMANDER OF UNITED STATES SPACE COMMAND, DEPARTMENT OF THE
3 AIR FORCE

4 General Whiting: Chairwoman Fischer, Ranking Member
5 King, Chairman Wicker, and Ranking Member Reed, and members
6 of the Subcommittee, thank you for your support and the
7 opportunity to represent the warfighters of U.S. Space
8 Command. It is truly an honor to testify alongside my
9 friend, General Cotton, once again, and to discuss our
10 vital role in achieving peace through strength.

11 At U.S. Space Command our guiding principle is clear.
12 To secure peace, we must be well-prepared for conflict in
13 space, and if deterrence fails, we will fight and win.
14 U.S. Space Command is upholding this principle in the face
15 of operational threats, which continue to expand at a
16 breathtaking pace, and which are being fielded deliberately
17 to challenge the United States, the American way of life,
18 and hold the Joint Force at risk. These novel and
19 unprecedented developments include China's robust counter-
20 space weapons and space-enabled kill chains, Russia's
21 reported pursuit of an on-orbit nuclear anti-satellite
22 weapon, and wide-ranging ballistic cruise and hypersonic
23 missile threats.

24 Despite the growing threats, the United States
25 maintains advantages in space thanks to the unified mission

1 focus of our superb joint warfighters, our unmatched
2 commercial space sector, and our expansive and more
3 empowered alliances and partnership. Our foremost
4 advantage, and the cornerstone of U.S. Space Command, are
5 our officer, enlisted, and civilian personnel. No other
6 nation can match our team's understanding of the
7 complexities of space and the requirements to effectively
8 operate in the most challenging area of responsibility.
9 Our military has the best-trained, most capable space
10 warfighting force in the world, and they stand dedicated to
11 fight for America.

12 Since my last testimony, U.S. Space Command published
13 our new campaign plan, integrating and synchronizing the
14 Command's operations, activities, and investments with the
15 Joint Force and the interagency, leaving no doubts to our
16 opponents that we are stronger, more capable, and ready to
17 counter any threat.

18 Over the last year, U.S. Space Command's commercial
19 integration cell grew to 17 commercial mission partners,
20 enhancing our threat information sharing at classified
21 levels and improving our crisis action planning.

22 We also expanded Multinational Force Operation OLYMPIC
23 DEFENDER to seven nations, with the addition of Germany,
24 France, and New Zealand. This growth further strengthens
25 partnerships and enables our allies to share the burden of

1 collective space security.

2 That said, these advantages, and our ability to deter
3 potential adversaries, cannot be taken for granted.

4 Deterrence in space is consistent with other domains. It
5 requires a keen understanding and clear communication of
6 what we are deterring against; credible, acknowledged
7 capabilities to impose costs on those who attack us; and
8 resilient architectures to dissuade attack by making any
9 effort futile.

10 Accordingly, U.S. Space Command is fully integrated
11 into, and contributing to, the Department of Defense's
12 implementation of the President's executive order to
13 establish a Golden Dome for American missile defense
14 shield.

15 U.S. Space Command appreciates Congress' significant
16 support of numerous critical space superiority programs and
17 in the recent fiscal year 2025 appropriations law. Looking
18 forward to fiscal year 2026 and beyond, U.S. Space Command
19 requires stable funding as well as effective and efficient
20 acquisition programs, delivering advanced space
21 capabilities to enable a balanced space deterrence force
22 structure.

23 Most pressing are the delivery of integrated space
24 fires, enhanced battle space awareness, and integrated
25 command and control capabilities to achieve space

1 superiority to defend the homeland and protect and enable
2 the Joint Force. The Unified Command Plan directs U.S.
3 Space Command to protect and defend U.S., and as directed,
4 allied and commercial space capabilities through necessary
5 offensive and defensive space operations. Like other
6 combatant commands, we require combat-credible kinetic and
7 non-kinetic means to deter and counter adversary actions.

8 By investing in space superiority capabilities we send
9 a clear message: the United States has the advantage, and
10 we remain committed that space will be safe, secure, and
11 stable. We are ready to repel all challengers, and any
12 attempt to turn space into a battle field will fail.

13 Although many challenges lie ahead, the future of
14 space holds tremendous promise for America, if we actively
15 and thoughtfully protect it. I am grateful for Congress'
16 support to U.S. Space Command and continued investment to
17 advance America's strength in space. Your continued
18 backing not only ensures that U.S. Space Command protects
19 our interests in space today but also protects that future
20 which is coming.

21 Madam Chairwoman, I have submitted my posture
22 statement for the record, and I look forward and the
23 Subcommittee's questions.

24 [The prepared statement of General Whiting follows:]

25

1 Senator Fischer: Thank you, General Whiting. We will
2 begin with 5-minute rounds of questions.

3 I strongly believe that the Bipartisan Strategic
4 Posture Commission's 2023 report should be required reading
5 for everybody in the Department of Defense. It clearly
6 articulates the threats that we face, and it concludes,
7 rightfully concludes, that we are woefully underprepared.

8 Based on the recommendations of that report, last
9 year's NDAA directed the Department to develop a deterrence
10 strategy that would pace this projected threat. This
11 strategy must also include an assessment of the amount and
12 type of nuclear weapons and delivery systems necessary to
13 implement that strategy.

14 General Cotton, can you tell me how the development of
15 this strategy is coming along?

16 General Cotton: Thank you, Madam Chairwoman. If you
17 recall, when I first took over as the Commander of U.S.
18 Strategic Command, one of the first thing we did was we
19 instituted a nuclear recapitalization and transition cross-
20 functional team to do exactly that, because one of the
21 things we wanted to assure ourselves was did we have the
22 capacity and capability and posture correct. That was in
23 alignment with the study and the Commission's report, and
24 it pretty much mirrored everything that was said in the
25 Commission.

1 Since that time, what we have done is looked at the
2 options that are available on all three legs of the triad.
3 We are currently sufficient -- currently -- but in order to
4 maintain sufficiency as we continue to have legacy systems
5 online before the new systems come on board, there are some
6 options within all three legs of the triad to increase
7 capacity and capability.

8 Senator Fischer: General Cotton, you recently said
9 that the Air Force should procure at least 145 B-21
10 bombers. From your position, as STRATCOM Commander, can
11 you share with us why you assess that that should be the
12 new procurement floor?

13 General Cotton: Yes, Senator. When we first looked
14 at the numbers of what would be required for the next
15 generation of bombers to replace the B-1 and the B-2, that
16 was a different geopolitical environment. We actually
17 started a study in 2020, to ensure that our numbers were
18 correct in regard to what we wanted to see the B-21 fleet
19 look like.

20 At that point, the conversation from the Department
21 would be a minimum of 100 B-21s should be procured, as we
22 looked to see what the environment brought to bear. The
23 other number that we would always talk about would be the
24 145 number, which would bring the total of the bomber force
25 for the United States and allies -- because the bomber

1 force represents all the bombers for the Western world --
2 would be about 220, and that would include the B-21s as
3 well as the modified B-21J models that would come out.

4 Senator Fischer: Thank you. General, as you know,
5 this Committee, on a bipartisan basis, strongly supports
6 SLCM, the nuclear-armed sea-launched cruise missile, and a
7 program of record was included in our fiscal year 2024
8 NDAA. In your view as STRATCOM Commander, will SLCM-N
9 address a capability gap?

10 General Cotton: It will, ma'am, and what it does for
11 us is twofold. It gives the President a broader range of
12 options, and I think that is my role and my job as a
13 combatant commander is to present a broad range of
14 capability and option for the President. It also provides
15 -- it is a regional tool that can be used, as well. So we
16 can actually benefit from our geographic combatant
17 commanders, which they support the idea of SLCM-N, as well,
18 because from a regional perspective, it can hold
19 adversaries at risk.

20 Senator Fischer: And yes or no. Do you see
21 opportunities to speed up that program?

22 General Cotton: I would hope so, Madam Chairwoman,
23 and the reason is I know that there is a program of record
24 that has been established in the Department of the Navy. I
25 would love to see some acceleration from that team to see

1 what we can do to get the assets a little quicker and move
2 it to the left.

3 Senator Fischer: Thank you. General Whiting, I want
4 to get one question in for you at this point, as well.
5 Every service relies on your assets that are based in
6 space. I do not think that gets enough attention. Are you
7 coordinating with the other combatant commands and also
8 with the services, with the intelligence community, to make
9 sure that these assets under your command are going to be
10 integrated appropriately?

11 General Whiting: Madam Chairwoman, absolutely. In
12 fact, I have a liaison element that I have assigned to each
13 of the other combatant commands. So there is a liaison
14 element from U.S. Space Command that sits inside of U.S.
15 STRATCOM as well as all the other combatant commands to
16 persistently do that type of coordination, to make sure
17 that our operational plans are advancing together, that our
18 real-time operations are considering each other's
19 capabilities.

20 We do that with our intelligence community, as well,
21 primarily through the National Reconnaissance Office.
22 Again, we have an exchange of liaison officers and
23 operational centers that work together. And then with the
24 services, at the Joint Headquarters I have not only
25 components from each of the services assigned to me but I

1 have personnel from all of those services, which keep us
2 tightly linked with their future plans, as well.

3 Senator Fischer: Thank you. Senator King.

4 Senator King: Thank you, Madam Chair. A couple of
5 preliminary questions about staff. Both of you mentioned
6 in your testimony that you rely upon not only military
7 personnel but civilians. My question to each of you is,
8 are you under any orders or have orders come down, or have
9 you already started to implement, or has somebody started
10 to implement reductions in force -- firings, people who
11 have taken I call it the early retirement option? General
12 Cotton what is the status of your civilian workforce?

13 General Cotton: Well, our civilian workforce, we are
14 about 65 percent civilian in the headquarters, but that
15 does not count for the 41,000 that make up the componencies
16 that work under my charge.

17 Right now, Senator, very small amount of folks that
18 took the early retirement activities, but the option for
19 them to do so still exists. But right now we are not
20 seeing an effect. The numbers are pretty small.

21 Senator King: And no firings.

22 General Cotton: We have not fired anyone.

23 Senator King: Are you under any orders to reduce that
24 staff by any certain percentage?

25 General Cotton: You know, we are looking for the

1 efficiencies piece, but right now it is all voluntary. And
2 like I said, from our perspective, from STRATCOM, the
3 numbers have been very, very small.

4 Senator King: And are you subject to a hiring freeze?

5 General Cotton: I am.

6 Senator King: So those people who are leaving, you
7 are not allowed to replace. Is that correct?

8 General Cotton: Well, we have an opportunity to get a
9 waiver approved because of our mission set, and if there is
10 a requirement for us to do a waiver to see if we can get
11 someone through the hiring freeze, we can process that.

12 Senator King: General Whiting, same set of questions.

13 General Whiting: Senator, my answers are almost
14 identical to General Cotton's. About 60 percent of my
15 headquarters staff is government civilians. We have had a
16 small number who have volunteered for the deferred
17 retirement program. We are under no orders to fire anyone.
18 We are aware that we need to look for efficiencies, as
19 General Cotton discussed. We also are under a hiring
20 freeze, and we have the opportunity for critical positions
21 to ask for exemptions to that.

22 Senator King: Thank you. General Whiting, I was
23 interested. You mentioned, I think it is called the
24 Artemist Accords, which is clearly based upon allies. I am
25 concerned that we seem to be in a process of alienating our

1 allies. Talk to me about the importance of the Artemis
2 Accords in order to carry out your mission.

3 General Whiting: Senator, the Artemis Accords are
4 overseen by NASA and the Department of State, and that is a
5 civil exploratory set of agreements about shared principles
6 in space between countries. On the military side, I have a
7 named operation called Operation OLYMPIC DEFENDER, which
8 includes seven countries, which is the United States plus
9 the Five Eyes nations, Germany, and France, where we
10 cooperate in space together to understand what is happening
11 there.

12 Senator King: Those relationships with other
13 countries are important to the execution of your mission.
14 Is that correct?

15 General Whiting: They are, Senator.

16 Senator King: A question that I have not been able to
17 get a clear answer on is what is the concept of the Golden
18 Dome? In other words, would it be 1,000 THAAD batteries,
19 or is it conventional missile defense? Is it directed
20 energy? What is the underlying concept of Golden Dome
21 other than to protect the homeland, which is certainly a
22 worthy goal?

23 General Whiting: Senator, the Department right now
24 has been going through a series of meetings and working
25 groups to define what that architecture will look like.

1 But in the executive order it lays out that the President
2 is asking the Department to develop a series of
3 capabilities that will protect against these new,
4 modernized threats like hypersonics, maneuvering vehicles,
5 that put the homeland at risk.

6 So I think it will be a layered system that will have
7 to account for all of those threats, at multiple phases of
8 the lifecycle of the missile.

9 Senator King: Well, that is the mission. I
10 understand. But I take it we are some distance away from
11 the operational concept of what it will consist of.

12 A very specific question. Both of you rely heavily on
13 Kwajalein Atoll for training and testing purposes. My
14 understanding is the infrastructure there is woefully
15 inadequate. Can you speak to an effort to try to upgrade
16 that infrastructure so that atoll can continue to be an
17 important part of our Strategic Deterrence Initiative?

18 General Whiting: Senator, Kwajalein Atoll is very
19 important for our space mission. I visited there last
20 summer. There are five sensors there that support our
21 mission. We have advocated, with the Department of the
22 Army, for investments there, to make sure that the
23 infrastructure can support those missions, and, in fact, my
24 combatant command is in the process right now of defining
25 exactly what the support requirements are that we need

1 there, so we can put those into our next O plan, to make
2 sure the Army understands exactly what requirements we
3 need. But that is a very important location for us.

4 If you can just keep the Committee informed of that,
5 of what the need is, whether it is authorities or funding,
6 it could be an important part of our ongoing deliberations.
7 Thank you. Thank you, Madam Chair.

8 Senator Fischer: Thank you, Senator King. Senator
9 Rounds, you are recognized.

10 Senator Rounds: Thank you, Madam Chair. First of
11 all, General Whiting and General Cotton, I want to thank
12 you both for your service to our country and for the role
13 that you play in keeping our country safe.

14 General Whiting, I will begin with you, and I am going
15 to have the same question for General Cotton, as well. How
16 important is it that the use of the electromagnetic
17 spectrum, in particular areas of the lower 3 GHz band and
18 the 7-8 GHz band of the spectrum, be maintained by the
19 Department of Defense? I have asked this of over 24
20 separate uniformed officers over the last 2 years, and the
21 answer has been consistent. But I wanted to hear it from
22 both of you again today, in terms of the need to have that
23 access for the defense of our country.

24 Would you, General Whiting, explain, at least, or
25 confirm clearly the need for the Department of Defense to

1 maintain its ability to use that unimpeded, in that
2 particular range of the spectrum, please?

3 General Whiting: Senator, thank you for the question.
4 I totally agree that those two bands are very important to
5 our mission, in fact, vital. The lower three, or that 3
6 GHz, is an area where we have radars and sensors which
7 allow us to detect, track, and engage targets through all
8 weather, and we have a number of capabilities there like
9 the SPY-1 and SPY-6 radars, which are on Navy ships, that
10 can support our mission; the long-range detection radar in
11 Alaska, which is critical for missile defense; the Space
12 Fence and the future Deep Space Advanced Radar concept.

13 And then in the higher bands that you discussed, the 7
14 and 8 GHz, that is vital for SATCOM and special missions
15 that we execute there, and we could not do our global wide-
16 band satellite communication mission without that spectrum,
17 sir.

18 Senator Rounds: Thank you, General Whiting. General
19 Cotton, same questions.

20 General Cotton: Senator, I would echo exactly what my
21 dear friend said in regard to the lower bands. If we lost
22 the ability for early detection, that takes away decision
23 space for decision leaders and decision makers in regard to
24 being able to execute operational plans. So when we talk
25 about what it affects in regard to ISR, it is going to be

1 incredibly important.

2 In the higher bands, part of my UCP is global reach
3 through global strike. The bomber force, as an example,
4 has the ability to traverse all over the world. SATCOM
5 communications are going to be vital for those weapon
6 systems today and in the future.

7 Senator Rounds: Thank you, General. Also, General
8 Cotton, you have mentioned it a little bit already, but
9 with the B-21, there was the decision about we are
10 acquiring 100 of them currently, the number has been
11 debated, should it be 145, should it be more than that.
12 And I have appreciated your indication that you have come
13 around to approximately 145.

14 I mean, this is the next gen. This is the six-
15 generation aircraft, this platform that is there. Can you
16 talk a little bit, in this open discussion, but I think the
17 American public need to understand just what a platform
18 this is and what it is capable of doing. And once again,
19 in this unclassified environment.

20 General Cotton: Thank you for that, Senator. You
21 know, when we talk about stealth, there are actually only
22 two platforms on the face of the Earth that has all-stealth
23 capability, and that is the current B-2 Spirit and its
24 next-generation replacement, the B-21. There is no other
25 all-aspect stealth aircraft on the face of the planet. The

1 B-2 is the only one, and the B-21 just will dwarf its
2 capabilities with the advanced technologies that it has.

3 It will be the predominant bomber for the United
4 States Air Force moving forward, as we move to a two-bomber
5 fleet, which will only be the B-21 and the B-52 and the
6 modified version of that, the B-52J.

7 So it is incredibly important. It is incredibly
8 lethal, with a stand-in and stand-out capability. So that
9 is why I am a big proponent on constant production that far
10 exceeds 100, to the 145 number, to get us to about 220 with
11 those two platforms.

12 Senator Rounds: I noted that you have had a view that
13 indicated the need to accelerate the B-21 production. Can
14 you explain just a little bit about why we need to
15 accelerate that production?

16 General Cotton: Sir, as we start to see the legacy
17 systems start to divest, that the fleet has, the Air Force
18 fleet, the B-1s and the B-2s, in particular, I want to make
19 sure that we do not see a large bathtub in the ability of
20 operational platforms that are available to be used.

21 Senator Rounds: We have worn our current weapons
22 platforms out.

23 General Cotton: We do.

24 Senator Rounds: Thank you. Thank you, Madam Chair.

25 Senator Fischer: Thank you, Senator Rounds. Senator

1 Reed, you are recognized.

2 Senator Reed: Thank you, Madam Chairman. General
3 Cotton, as I indicated in my opening remarks, there was an
4 issue regarding the separation of the dual-hatting of the
5 U.S. European Commander, SACEUR. What is your military
6 opinion of the effects this could have, possibly weakening
7 the extended deterrence of your force, affecting your force
8 structure in other ways, and also the potential to
9 accelerate nuclear proliferation? I would note that the
10 front page of the Wall Street Journal has an article
11 titled, "Wary Europe Eyes Own Nuclear Force." Could you
12 comment, please?

13 General Cotton: Thank you, Ranking Member Reed. I
14 think the relationship that I have as far as my operational
15 plans with General Cavoli, both as the EUCOM Commander and
16 as SACEUR, to your point in your opening, is incredibly
17 important in the execution of operational plans for me,
18 even, in STRATCOM.

19 As you know, I have a relationship with the United
20 Kingdom. I have a relationship with SACEUR in the
21 relationship of what the DCA aircraft bring to bear, to be
22 able to hold the adversary at risk. And that is done
23 through the lens of currently General Cavoli with the
24 SACEUR hat. That would change a little bit if that
25 commander was not a U.S. commander, in the relationship

1 that I would have.

2 Now, the relationship that I have with my allies and
3 partners, especially my European allies and partners, is
4 still steadfast, whether it be with the United Kingdom,
5 whether it be with France, or whether it be with the other
6 NATO nations.

7 Senator Reed: Thank you. General Cotton, one other
8 question. The Air Force has proposed a reorganization,
9 which I understand has been put on hold until the new
10 Secretary is confirmed, that would cede much of the
11 operational control of heavy bombers away from Air Force
12 Global Strike Command to new composite wings out of Air
13 Combat Command. In response to this, Section 1631 of the
14 2025 NDAA stopped this until a report is submitted. It has
15 not yet been received.

16 How concerned are you about this reorganization
17 impacting your nuclear deterrence mission?

18 General Cotton: Senator Reed, today I have one belly
19 button in the Department of the Air Force that presents two
20 legs of the triad, and 68 percent of the NC3 capability, to
21 me, as my component, and that is the Commander Air Force
22 Global Strike Command. So as a four-star, the Commander of
23 Air Force Global Strike Command has oversight and has the
24 subject matter experts in the nuclear deterrent field. And
25 he owns the bomber leg, as well as the ICBM leg.

1 You know, all I ask of the United States Air Force is
2 to ensure that when I have force presentation that I can
3 still look to one person that can give me the answers to
4 readiness, give me the answers to where we are acquisition
5 strategies, gives me the answers to where we are on
6 manpower and help that they might need. Today, I only have
7 to look to Barksdale Air Force Base and talk to the
8 Commander of Global Strike to get that answer.

9 Senator Reed: Thank you. General Whiting, are you
10 concerned about becoming overly reliant upon commercial
11 providers for too many of the Department's missions into
12 space? Do we draw a line? Do we ensure that this is a
13 competitive situation?

14 General Whiting: Senator Reed, I think the principle
15 we need to apply is balance. For those things that we can
16 go to commercial industry for, we should absolutely
17 leverage that. U.S. commercial space industry is a massive
18 advantage for this nation, and it is an advantage that has
19 widened over the last several years, and I think will
20 continue to widen.

21 But there are certain missions where we absolutely
22 need to design and build for ourselves our own
23 capabilities. For example, the space capabilities we
24 provide to Support General Cotton for nuclear command and
25 control for SATCOM, those are not capabilities that are

1 easily replicable in the commercial market. So we need to
2 design those for purpose-built reason so we can assure to
3 General Cotton, to the Secretary, and to the President that
4 they can talk to their nuclear forces when required.

5 So I think it is a matter of balance, and we need to
6 apply that lens to each mission, sir.

7 Senator Reed: Thank you very much. Gentlemen, thank
8 you for your service. Thank you, Madam Chairman.

9 Senator Fischer: Thank you, Senator Reed. Senator
10 Tuberville, you are recognized.

11 Senator Tuberville: Thank you, Madam Chair. Good
12 morning, men. General Cotton, thanks for your service.
13 Thirty-nine years. I retired after 40 years of coaching.
14 After the first week I was sitting around the house,
15 reading the paper, drinking coffee, and my wife said, "You
16 ain't been here in 40 years. Get you a damn job." So here
17 I am today. So don't think you are going to go home and
18 fish and play golf. But thank you for your service.

19 Gentlemen, in 2024, the Navy eliminated the lead
20 Columbia-class submarine, said it could not be delivered
21 for 12 to 16 months late. GAO also reported that late
22 delivery of the lead submarine could jeopardize its planned
23 availability for operations in 2030, and delays of the
24 class could impact planned transition from Ohio-class
25 submarines.

1 If Columbia-class submarines are not available,
2 General, what plans have we taken in that regard to fill
3 the gap?

4 General Cotton: Thank you for that question, Senator
5 Tuberville. And you are right. Right now we are
6 anticipating a 12- to 16-month delay for the first
7 Columbia-class.

8 What is going to be incredibly important, and I say
9 this constantly, is how do we continue to fortify our
10 legacy systems until we do that. So what the Navy is doing
11 is a project called PIRA, and that is the Pre-Inactivation
12 Restricted Availability -- that is what that acronym stands
13 for -- in which they will look at up to five boats and
14 figure out which of the five boats they might be able to
15 modernize or do some extended life work to, to make it so
16 we do not lose anything from our legacy systems to counter
17 the delay and create a bathtub in our capabilities on the
18 submarine force.

19 Senator Tuberville: What is the cost of that? That
20 cost has got to be astronomical, though, right, if we are
21 running late and we have to fill in a gap with that. I
22 mean, have we looked at that, and do we have the funding?

23 General Cotton: Well, you know, I do not have the
24 numbers before me in regard to what the Navy is doing for
25 the cost of PIRA. I can get that to you. We can probably

1 talk about that and I will have it by closed session. But
2 I think bottom line in that regard, we need to ensure that
3 we keep that capability alive and well. I need to make
4 sure that the tubes that are available on the SSBNs remain
5 the tubes that are available on SSBNs, even if there is a
6 slip to the new system that is supposed to replace it.

7 So I am trying to make it so we prevent a catastrophic
8 failure in regards of creating a bathtub, in all three legs
9 of the triad, to ensure that does not happen.

10 Senator Tuberville: Thank you. And again, thank you
11 for your service.

12 General Whiting, U.S. Space Command's role in missile
13 defense, planning and operational support for Guam, how
14 critical is that? And obviously you have been given that
15 task. Where do we stand on that?

16 General Whiting: Senator, Guam is a vital location
17 for many of our national defense needs, including for
18 space. And through our Joint Functional Component Command
19 for Integrated Missile Defense we do provide that planning
20 and operational support that you highlight. And we are
21 regularly working with INDOPACOM as well as the Missile
22 Defense Agency, the Army, and the Navy to develop that
23 architecture that is being delivered to defend Guam against
24 the missile threats we now see, primarily from China.

25 Senator Tuberville: Yeah, thank you. We are doing a

1 lot of work in Guam. Obviously, an AEGIS system being put
2 on the island as a first line of defense.

3 Let me ask you, too, about the Golden Dome. The
4 President gave us obviously that referendum that he wants
5 to protect our country with some kind of Golden Dome. Do
6 you have a certain group that works with that within Space
7 Command, or is the entire Space Command working on this
8 together? How does that work?

9 General Whiting: Sir, it is a whole-of-command effort
10 support a whole-of-Department of Defense effort. So it is
11 certainly within my command, that subordinate command, the
12 Joint Functional Component Command for Integrated Missile
13 Defense has a leading role as well as my J8 Resourcing and
14 Requirements Division. In fact, that J8 division, we have
15 partnered with NORTHCOM and General Guillot there to co-
16 write requirements document for the Golden Dome for
17 America, and we will be delivering that over the next few
18 months to the Department of Defense.

19 Senator Tuberville: Thank you. Recently President
20 Trump put me on the Board of Visitors for Air Force
21 Academy. I look forward to coming out and visiting with
22 you all and possibly seeing some of your work. So thanks
23 to both of you for your service. Thank you, General.

24 Thank you, Madam Chair.

25 Senator Fischer: Thank you, Senator Tuberville.

1 Senator Cotton, you are recognized.

2 Senator Cotton: General Whiting, I want to return to
3 Senator Reed's line of questioning about commercial space
4 launch and any kind of risk it might pose us. You called
5 the commercial space industry a, quote, "massive
6 advantage." I assume you are saying it is a massive
7 advantage against our chief adversaries in this domain,
8 China and Russia?

9 General Whiting: That is correct, Senator.

10 Senator Cotton: Can you give us a sense of scale of
11 how big the -- well, first off, commercial space launch, to
12 be precise here we are talking about ULA, the United Launch
13 Alliance and SpaceX. Correct?

14 General Whiting: That has been the providers and now
15 Blue Origin has recently demonstrated New Glenn. Yes, sir.

16 Senator Cotton: So can you give us a sense of scale
17 of just how massive an advantage we have over, say, China
18 because of ULA and SpaceX?

19 General Whiting: Yes, Senator, and while I do not
20 have the numbers I can qualitatively describe those. If
21 you go back probably 5 to 10 years, the number of launches
22 we were executing compared to those in China or Russia
23 looked very similar. But over time, the U.S. has massively
24 increased the number of launches, and that equates to what
25 we call "mass to orbit." So that means we are able to put

1 more satellites on orbit, whether for commercial or
2 government purposes, and those are getting cheaper and
3 cheaper per pound, which also gives us more opportunities
4 to leverage space for various missions.

5 Senator Cotton: So you said 5 to 10 years ago we had
6 roughly equal space launch capacity as China and Russia,
7 but now we have substantially exceeded them, right?

8 General Whiting: Correct. Yes, Senator.

9 Senator Cotton: And what has been the driver over the
10 last 5 to 10 years of that substantial increase? Is it ULA
11 or is it SpaceX?

12 General Whiting: Predominantly SpaceX. Yes, sir.

13 Senator Cotton: So if it wasn't for SpaceX, we might
14 be in this position where we still are at near equivalence
15 to China and Russia in space launch.

16 General Whiting: They certainly have been innovative
17 and rapidly changed that market. Yes, sir.

18 Senator Cotton: Thank you. General Cotton, you have
19 testified in the past, as have your predecessors, that
20 China has undertaken a breathtaking buildup of its nuclear
21 arsenal. It used to have what is called "minimal
22 deterrence," a nuclear arsenal just sufficient for a second
23 strike. Obviously now it is moving on to first strike
24 capabilities, whatever its rhetoric is. I think the
25 Department estimates that has doubled its nuclear arsenal

1 since Xi Jinping took power. It is projected to double
2 again by the end of this decade, and maybe even double
3 again by the middle of the next decade.

4 Could you explain the kind of advantage this might
5 provide China, not just in the nuclear balance of power but
6 also in a conventional conflict, say if China decided to go
7 for the jugular in Taiwan?

8 General Cotton: Thank you, Senator Cotton. Nice
9 seeing you. I think when we put in perspective where we
10 were just left of probably 2018, and we saw it as a nascent
11 threat, and the breakout that my predecessor announced, you
12 are right. What it does in changing the calculus in our
13 strategy is now we must be prepared for two nuclear peers
14 instead of one. I would garner to say, Senator, included
15 in that is two nuclear peers that have a transactional
16 relationship that has blossomed over the last couple of
17 years, as well.

18 So as we look at the capabilities that we are seeing
19 in all three legs, you are absolutely right. Having an H-
20 6N with long-range strike capability is not a regional
21 hegemon weapon system. Having land-based ICBMs is not a
22 regional hegemon weapon system. Building out their
23 submarine force and having hypersonic weapons that are
24 dual-use capable and FOB'd is not necessarily seen as a
25 regional hegemon weapon system. So it makes us look at

1 things a little differently, and our strategy has changed
2 to compensate for that.

3 Senator Cotton: Thank you. I will close on a couple
4 of points. I have made them before. You have agreed with
5 them before. I would love to hear your agreement one more
6 time. Some people say about our nuclear weapons that we
7 spend way too much money on weapons we never use. I
8 respond to them that we actually do not spend that much
9 money on them. We may be spending some money modernizing
10 them now, compared to our total defense expenditures. But
11 more importantly we have used our nuclear weapons every
12 single day, going back 80 years this August, to prevent the
13 kind of war that the world saw twice in 20 years.

14 Do you agree with that, General Cotton?

15 General Cotton: I absolutely agree with that,
16 Senator.

17 Senator Cotton: Thank you. I want to finally add my
18 note of agreement, with our fantastic Chairwoman, Senator
19 Fischer, on what she said about the nuclear-armed sea-
20 launched cruise missile, also known as SLCM-N. The program
21 held on by a thread throughout the Biden era, thanks to
22 congressional support, and I am glad that you acknowledge
23 how important it is, and that if anything, we need to do
24 everything possible to accelerate that capability.

25 Thank you, gentlemen.

1 Senator Fischer: Thank you, Senator Cotton. Senator
2 Kelly, you are recognized.

3 Senator Kelly: Thank you, Madam Chair. General
4 Cotton, General Whiting, thank you for being here. I want
5 to first touch on Golden Dome, and then I want to save some
6 time for SLCM.

7 I agree nuclear deterrence keeps us safe, and General
8 Cotton, you mentioned two nuclear peers. One of my biggest
9 concerns is the third one, which is the DPRK. And I think
10 it is fair to say that most of the time, with our nuclear
11 peers, we are dealing with rational actors. We hope that
12 is the case. That is the thing, part of nuclear
13 deterrence, that they will act rationally.

14 I am not so sure that is the case with the DPRK. And
15 they are building more nuclear weapons. They are working
16 on other systems to deliver them, and they can now range
17 into the United States. I believe that is our view as a
18 nation.

19 So can you talk a little bit about Golden Dome, and my
20 concern with this is that it could potentially, even though
21 I am not against the idea of a system that can protect the
22 entire United States from incoming ballistic missiles,
23 nuclear armed. At the same time, this could accelerate a
24 growing number. Our adversaries' response to having a
25 missile defense system could be to build more nuclear

1 weapons. And if one or two get through, that is too many.
2 Right now we do have a defensive system to protect us from
3 a rogue actor in launching one ICBM, and my understanding
4 is -- and if you could share a little bit, General Cotton,
5 about how effective that system is with the interceptors we
6 have in Alaska and in California.

7 So could you provide an estimate of how much this
8 would cost and what enhanced capability we would get out of
9 this. And do you feel we can build a system that is not
10 penetrable?

11 General Cotton: Well, thank you, Senator Kelly. I do
12 not want to get out of my lane because NORTHCOM, General
13 Guillot, is the one that is undertaking that role. My
14 responsibility, from Golden Dome, is twofold in accordance
15 with the EO, and mine is to make sure that I can assure
16 that a second strike capability for the United States
17 remains, and how do we ensure that.

18 As far as the reliability of the ground-based
19 interceptors piece, once again I do not own that platform.
20 That platform belongs to NORTHCOM, and that is probably
21 best for General Guillot to answer that.

22 I do believe, and we heard my colleague talk about the
23 layered approach that is kind of the essence of Golden Dome
24 for America. I think that is the answer and the key on how
25 that system can be deliverable, moving forward.

1 Senator Kelly: All right. Thank you. Thank you,
2 General. I do agree. I think it is something we need to
3 look into, and we need to look at a cost-benefit analysis
4 of this and also consider how it would potentially change
5 the nuclear deterrence posture of not only us but China and
6 Russia.

7 On SLCM-N, I know it was brought up here also,
8 General. One of my concerns here, one of the things that
9 makes us stand out is our submarine force, especially the
10 attack submarines are incredibly effective. To integrate a
11 tactical nuclear missile into a Virginia-class sub would
12 take modifications that are significant. And you would
13 have to put the security system that we have in effect for
14 nuclear weapons. And my problem, I think, that I have with
15 this is in the Western Pacific this is a capability. Our
16 attack submarine force is incredibly capable, and I think
17 this would be somewhat disruptive. I think that needs to
18 be a consideration before we go down the road of
19 significant modifications to these systems.

20 If you could just comment briefly on that.

21 General Cotton: Senator, I think from my perspective
22 a lot of those are TTPs that the Department of the Navy
23 had, and I think they need to pull those out of the
24 cupboard and look to see what those TTPs were when we had
25 TLAM-Ns. I do not know if it would be disruptive,

1 especially now that what we are seeing, especially in the
2 INDOPACOM theater in regard to our allies and partners'
3 ability of letting us have dual-use, nuclear-capable things
4 arrive on their shores, the fact that I can now have B-52s
5 flying to Japan, where I did not before, and on the Korean
6 Peninsula. I think there is work to be done, but I think it
7 can be accomplished.

8 Senator Kelly: All right. Thank you. Thank you,
9 Madam Chair.

10 Senator Fischer: Thank you, Senator Kelly. Senator
11 Banks, you are recognized.

12 Senator Banks: Thank you, Madam Chair, and thank you
13 to both of you for being here today. General Cotton, thank
14 you for your service. You are a hero. What you have done
15 over the last 3 years is remarkable, and it has been an
16 honor to work with you on the House Armed Services
17 Committee and now again on the Senate Armed Services
18 Committee.

19 As we have talked about before, SLCM-N is meant to
20 deter China and would be launched from attack submarines.
21 SLCM-N is needed to help address capability and escalation
22 management gaps stemming from the rapid growth of China and
23 Russia's theater-range nuclear systems.

24 General, do you agree with the 2018 Nuclear Posture
25 Review that validated the need for SLCM-Ns, and if so, what

1 does this need to still stand?

2 General Cotton: I do agree, Senator, and thank you
3 for the comments that you made. What was said in 2018
4 still holds true today, I think even more so. When I talk
5 about being able to give a geographic combatant commander
6 the ability to also hold an adversary in their region at
7 risk, you can now see that what you are seeing in this
8 weapon system is more than just a strategic weapon. It now
9 can be a regional weapon and a regional deterrence, as
10 well, for my fellow combatant commanders that hold the
11 regions of responsibility.

12 Senator Banks: And what do we need to do to stay
13 committed to it?

14 General Cotton: The program of record has been
15 established. We just need to make sure we continue to pump
16 the well, to ensure that they move out. And as the
17 Chairwoman said, if we can get things to the left, I would
18 gladly accept being able to get the articles quicker than
19 later.

20 Senator Banks: Got it. Fiscal year 2024 NDAA directed
21 the Navy and the NNSA to develop and deploy an operational
22 SLCM-N no later than 2034. Do you believe that we should
23 still have SLCM-N no later than 2034?

24 General Cotton: I would love to move that to the
25 left, Senator.

1 Senator Banks: Got it. General Whiting, the
2 President's executive order to establish the Golden Dome
3 for America stresses the need for both weapons to shoot
4 down enemy missiles and the satellites to track them. The
5 EO called for the, quote, "acceleration of the deployment
6 of the hypersonic and ballistic tracking sensor layer."

7 If we are going to have an effective Golden Dome for
8 the U.S. homeland, how important is it that we expand our
9 fleet of ballistic and hypersonic missile tracking
10 satellites and space-based sensors?

11 General Whiting: Thank you for the question, Senator.
12 For the modern threats that we need to track, we will only
13 be able to do that from space, and we need to be able to
14 maintain custody of those threats, not only when they are
15 in the boost phase, when the rockets are burning very hot
16 and we can track them with our infrared satellites, but
17 then also when they are coasting, so that we can, again,
18 maintain custody to engage at the various layers. So it is
19 absolutely vital, Senator.

20 Senator Banks: And do you agree with President Trump
21 that we need to rapidly accelerate HBTSS so that we can
22 have the sensors in space that we need to target incoming
23 threats?

24 General Whiting: I do, Senator. Those threats are
25 real today, those more advanced threats, and our current

1 systems are optimized against traditional ballistic
2 missiles, not against the variants that we are seeing
3 fielded today.

4 Senator Banks: And General Cotton, China leads the
5 world in hypersonics and has hundreds of long-range
6 hypersonic missiles. As you know, China shocked the world
7 4 years ago when its hypersonic vehicle orbited the entire
8 Earth before landing. The U.S. has still not fielded a
9 functional hypersonic weapon. Naval Surface Warfare Center
10 Crane is a proven leader in hypersonics, as you and I have
11 talked about many times before. How important is increased
12 investment in hypersonics if we are going to regain our
13 military edge over China?

14 General Cotton: Senator, it is very important, and
15 the work that I have seen done by Crane has been
16 extraordinary for the Department of the Navy. I think
17 investments, but actually production, and getting them to
18 the warfighter so they can be implemented and put in our
19 arsenal.

20 Senator Banks: Got it. And finally, while we are
21 replacing most of our nuclear arsenal in the next decade or
22 two, we are keeping the B-52 bombers around well into mid-
23 century. How critical is the B-52 program if we are going
24 to keep those planes in the skies for decades to come?

25 General Cotton: Incredibly important for us, sir. As

1 I mentioned, Senator, we are going to move to a two-
2 platform bomber force for the United States of America. It
3 will be the B-21 and a B-52J. It is incredibly important
4 that we get those 75 birds and modify them with their
5 replacement of their engines, their radars, and --

6 Senator Banks: I have got 10 seconds. Can you talk
7 about the advantages of the new B-52 engines over the old
8 engines?

9 General Cotton: Yes. The Rolls-Royce engines that
10 are right there, being worked in Indiana, gives us
11 incredible increase in range and speed and durability.

12 Senator Banks: Thank you. My time has expired.

13 Senator Fischer: Thank you, Senator Banks. Senator
14 King and I would like a second round before we had to
15 classified, and I would like to follow up on some of
16 Senator Banks' comments about Golden Dome and space-based
17 sensors.

18 General Whiting, what would be the impacts to the
19 mission effectiveness of SPACECOM were the government to
20 auction off spectrum currently utilized by the Department?
21 Could Golden Dome even take place?

22 General Whiting: Ma'am, we could not execute Golden
23 Dome without full access to those two spectrums that we
24 discussed earlier, the lower 3 and then the 7 and 8 GHz.
25 We use that lower 3 band, again, through so many of our

1 radars, to be able to track from the ground, and then the 7
2 and 8 GHz band is so important for our communications and
3 other special missions. I can only see those requirements
4 getting bigger for those spectrums as Golden Dome delivers.

5 Senator Fischer: And if it was auctioned off, and if
6 it was vacated by the Department, what is the time frame,
7 not to mention the cost. What is the time frame in
8 research, development for those new sensors to be even
9 located in another spectrum that would not have the
10 capability that the current spectrum has to even accomplish
11 that. Ten years? Twenty years?

12 General Whiting: Madam Chairwoman, I do not have a
13 timeline because I think our focus has been not on vacating
14 that but figuring out if there is a way to share that
15 spectrum through dynamic spectrum sharing. And I
16 understand there are technologies there that may make that
17 available. The Department has done some studies on that
18 and laid out a series of conditions that would need to be
19 met if dynamic spectrum sharing can occur, and I endorse
20 that those conditions must be met if we are going to figure
21 out a way to share that spectrum with commercial industry.

22 Senator Fischer: Can dynamic sharing take place now?

23 General Whiting: Ma'am, I am told the technology is
24 close to being ready. I do not know if it is actually
25 ready today, but I would want to verify that, certainly.

1 Senator Fischer: You would need to test.

2 General Whiting: Yes, ma'am. Absolutely.

3 Senator Fischer: And General Cotton, same question to
4 you. If the government were to auction off spectrum
5 currently utilized by the Department, how would STRATCOM's
6 mission effectiveness be impacted?

7 General Cotton: It would be impacted, Madam Chair,
8 because what would happen is, to the point that was made by
9 General Whiting, you know, we count on understanding what
10 the threat looks like, being able to see that threat before
11 it actually comes -- we call that "left of launch" type of
12 activities -- as well as what we are talking about in the
13 higher bands on what is the capacity and capability of my
14 three legs to be able to utilize SATCOM, et cetera. It
15 would absolutely affect us.

16 Senator Fischer: Thank you, Sir. Senator King.

17 Senator King: Two things. I just wanted to follow-up
18 on the discussion of hypersonics. I believe that we have
19 missed two critical strategic technologies and are woefully
20 behind, hypersonics and directed energy. These are things
21 that we should have seen coming, and now we are playing
22 catch up. I just want to emphasize not only do we need a
23 hypersonic weapon for deterrent possibilities, but we need
24 hypersonic defense. Those aircraft carriers in the Pacific
25 are sitting ducks for hypersonic missiles coming at them

1 4,000 to 5,000 miles an hour, 100 feet above the surface of
2 the ocean.

3 So, hypersonic defense is something I think we need to
4 invest in, as well as the development of a hypersonic
5 offensive capacity in order, again, to provide a deterrent.
6 General Cotton, would you agree?

7 General Cotton: I do agree with that statement,
8 Senator.

9 Senator King: The other thing that I wanted to
10 mention, it has sort of become conventional wisdom here
11 that we are going from one near-peer adversary to two. I
12 believe we are going from one near-peer adversary to three
13 and a half because of, as I think you touched upon this,
14 the growing cooperation between China and Russia. And then
15 you put in Iran, which has also become a contributor to
16 Russia's war machine, as well as North Korea, which is also
17 contributing to Russia's efforts in Ukraine.

18 I think we need to think strategically, not two near-
19 peer adversaries, but the potential of two near-peer
20 adversaries who are working together. And that creates its
21 own strategic challenges. General Cotton, what are your
22 thoughts on that?

23 General Cotton: Senator, you are absolutely right and
24 that is what we are actually doing at STRATCOM today. When
25 we look at, and you are right, I call them third-party

1 influencers. And what I mean by that and to your point, I
2 would add, one, that I think is a little different nuance,
3 that is the new relationship that we are seeing that is
4 happening between Russia and the DPRK. So, we are talking
5 about DPRK. We are talking about Iran. We are talking
6 about China, as well as the Russian Federation.

7 Senator King: And I think we have to assume that in a
8 time of serious conflict it would not be just with one or
9 the other. It could well and probably would involve all
10 four of those powers that you have mentioned.

11 General Cotton: That is why I call them the third-
12 party influencers because what they could do is they can be
13 a distraction from the main effort that could be launched
14 by any one of those that we had mentioned.

15 Senator King: General Whiting, your thoughts on that
16 new strategic reality?

17 General Whiting: Senator, we watch those same four
18 countries that General Cotton just mentioned, and their
19 bilateral relationships with each other, and we see
20 increasingly that space is becoming an area where countries
21 with more sophisticated space knowledge, like Russia or
22 China, appear to be willing to trade off that space
23 knowledge for something that they want in return, whether
24 that is armaments or some other political agreement. So we
25 are very concerned with that and watching how they are

1 cooperating on space.

2 Senator King: I just think that this new relationship
3 needs to be part of our strategic thinking going forward,
4 to inform things like the Nuclear Posture Review and also
5 the fundamental defense strategy.

6 Thank you very much, gentlemen. Thank you again for
7 your service, and I appreciate having been able to work
8 with you. You are still at it. He is the guy that is
9 leaving. We are going to miss you, General. Thank you.

10 Senator Fischer: We have him for a while yet.

11 With that we will adjourn the open session of this
12 hearing and reconvene down in classified in order to have
13 our classified briefing from you gentlemen. Thank you very
14 much.

15 This section of the hearing is closed.

16 [Whereupon, at 10:44 a.m., the open hearing was
17 adjourned.]

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