

Stenographic Transcript  
Before the

COMMITTEE ON  
ARMED SERVICES

## **UNITED STATES SENATE**

TO RECEIVE TESTIMONY ON THE POSTURE OF UNITED  
STATES SPACE COMMAND AND UNITED STATES STRATEGIC  
COMMAND IN REVIEW OF THE DEFENSE AUTHORIZATION  
REQUEST FOR FISCAL YEAR 2027 AND THE FUTURE YEARS  
DEFENSE PROGRAM

Thursday, March 26, 2026

Washington, D.C.

ALDERSON COURT REPORTING  
1029 VERMONT AVE, NW  
10TH FLOOR  
WASHINGTON, DC 20005  
(202) 289-2260

1 TO RECEIVE TESTIMONY ON THE POSTURE OF UNITED STATES SPACE  
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6 Thursday, March 26, 2026

7  
8 U.S. Senate

9 Committee on Armed Services

10 Washington, D.C.  
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12 The committee met, pursuant to notice, at 9:30 a.m.,  
13 in Room SD-G50, Dirksen Senate Office Building, Hon. Roger  
14 Wicker, chairman of the committee, presiding.

15 Committee Members Present: Wicker, Fischer, Cotton,  
16 Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville,  
17 Schmitt, Banks, Sheehy, Reed, Shaheen, Gillibrand,  
18 Blumenthal, Kaine, Warren, Rosen, and Kelly.  
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1           OPENING STATEMENT OF HON. ROGER WICKER, U.S. SENATOR  
2 FROM MISSISSIPPI

3           Chairman Wicker: The Committee will come to order.

4           We meet this morning to receive testimony on the  
5 posture of United States Space Command and United States  
6 Strategic Command. We are joined today by General Stephen  
7 Whiting and Admiral Richard Correll. I thank our witnesses  
8 for again appearing and for their long service to our  
9 nation.

10          Over 2 years ago, the Congressional Strategic Posture  
11 Commission reached the unanimous bipartisan conclusion that  
12 the United States must fundamentally update our strategic  
13 capabilities to have any hope of countering growing threats  
14 from Russia, China, North Korea, and Iran.

15          The progress we have made since then has been limited,  
16 but Russia and China have advanced by leaps and bounds in  
17 their nuclear and space programs. Even North Korea has  
18 outpaced our efforts as Kim Jong Un steadily expands his  
19 nuclear and missile arsenals.

20          As we enter the fifth year of war criminal Vladimir  
21 Putin's war against Ukraine, Russia remains a major  
22 strategic threat to the United States. Moscow owns the  
23 world's largest and most modern nuclear arsenal, giving it  
24 a 10-to-1 advantage over the United States in tactical  
25 nuclear weapons.



1           Russia has also developed new weapons unlike anything  
2 in the U.S. inventory. It stocks nuclear-powered, trans-  
3 oceanic, autonomous torpedoes and intercontinental cruise  
4 missiles.

5           For its part, Xi's China is rapidly becoming an even  
6 greater threat. Beijing is expanding its nuclear arsenal  
7 at breakneck speed, likely outpacing the U.S. by the early  
8 2030s. Already, it has successfully deployed an  
9 operational strategic triad of nuclear missiles, bombers,  
10 and submarines.

11           Over the past few years, China quadrupled the size of  
12 its nuclear arsenal and built an ICBM network larger than  
13 our own here in the United States. The Chinese have flown  
14 a missile that can drop nuclear warheads from orbit  
15 anywhere on Earth, with virtually no warning.

16           Both Russia and China understand that space is a  
17 battlefield. They are openly developing and testing  
18 capabilities to degrade or destroy our satellite  
19 constellations. Each country has obliterated operational  
20 satellites, scattering thousands of fragments of debris,  
21 and endangering hundreds of other orbital objects.  
22 Unfortunately, these aggressive actions only scratch the  
23 surface of Moscow's and Beijing's militarization of space.

24           North Korea is a less-immediate threat than China or  
25 Russia, but it is a threat, nonetheless. Kim Jong Un is



1 increasingly able to attack the United States and our  
2 allies. North Korea is conducting frequent missile tests  
3 and is working to field ballistic missile submarines. Both  
4 actions make one thing clear: Kim Jong Un believes he can  
5 achieve his goals through nuclear threats.

6 The Golden Dome initiative is a long-overdue  
7 reassessment of the capabilities we need to defend our  
8 homeland from strategic attacks. The President allowed the  
9 outdated New START treaty to expire, and he exposed  
10 Moscow's and Beijing's illicit nuclear testing. I believe  
11 both actions helped reset the strategic balance that has  
12 tipped against us for decades. Operations Midnight Hammer  
13 and Epic Fury eliminated the threat of a nuclear-armed Iran  
14 -- permanently, I hope.

15 Still, there is much more we need to do.

16 We must restore the National Nuclear Security  
17 Administration's basic industrial capabilities. We must  
18 make progress on the Sentinel intercontinental ballistic  
19 missile, the Columbia submarine, and the nuclear sea-  
20 launched cruise missile programs. We must explore what  
21 additional nuclear and space capabilities we need to deter  
22 Putin's, Xi's, and Kim's ambitions.

23 These efforts require sustained investment and  
24 innovation. We can afford no less.

25 During this hearing, I would like to hear how we are



1 managing the risk of maintaining critical military  
2 capabilities that are both too old and too few in number to  
3 meet the threats of today, much less the threats of  
4 tomorrow.

5 I would also like to leave this hearing understanding  
6 better how our witnesses see the roles of their commands  
7 evolving under the latest National Defense Strategy. It is  
8 no secret that I believe this NDS falls short in several  
9 areas. I am particularly concerned that the current  
10 strategy does not address space and nuclear threats with  
11 anywhere near the urgency they deserve.

12 So undoubtedly we will talk about that today, and I  
13 now turn to my friend and colleague, Ranking 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, Mr. Chairman, and  
4 good morning to our witnesses.

5           General Whiting, let me begin by thanking you for 36  
6 years of service to our nation. I understand this will be  
7 your last posture hearing, and I want to wish you and your  
8 wife, Tammy, all the best as you go forward. Thank you for  
9 your service, sir. And Admiral Correll, welcome. This is  
10 your first posture hearing before the Committee, and I  
11 thank you, as well, for your service and the dedication of  
12 your family.

13           We are operating in a historically dangerous strategic  
14 environment. With the expiration of the New START treaty,  
15 for the first time in half a century the United States and  
16 Russia lack a framework to regulate their nuclear forces.  
17 I believe we must pursue a successor agreement. The  
18 alternative, an unconstrained arms competition, would serve  
19 no one's interest.

20           At the same time, we now face two near-peer nuclear  
21 rivals. China is rapidly expanding its arsenal with  
22 projections indicating it could reach rough parity with the  
23 United States and Russia by 2030. This problem is already  
24 shaping the operational environment, including increasingly  
25 coordinated military activity between Russia and China,

1 such as joint strategic bombing patrols near Alaska and in  
2 the Western Pacific.

3 In addition, the concept of extended deterrence, the  
4 bedrock of our alliance system, particularly with NATO, is  
5 under serious strain. For generations, the U.S. nuclear  
6 umbrella has reassured allies, deterred adversaries, and  
7 helped prevent the proliferation of nuclear weapons.  
8 Today, confidence in America and its extended deterrence is  
9 eroding. In Europe, there are growing discussions of  
10 alternate deterrence arrangements outside NATO. In Asia,  
11 allies are opening reconsidering their nuclear options.  
12 This trend has profound implications. If allies doubt the  
13 credibility of U.S. commitments, weapons proliferation  
14 becomes a rational response. Admiral Correll, from your  
15 perspective I would like to know how you assess the risk of  
16 overlapping or competing deterrence frameworks and any  
17 update you have on how Strategic Command is adapting its  
18 posture, planning, and doctrine to this more complex  
19 dynamic with China and Russia.

20 I also want to address the recent discussions about  
21 resuming nuclear testing. I do not believe nuclear testing  
22 would be necessary or constructive to our nuclear  
23 capabilities. We have invested \$10 billion in the National  
24 Ignition Facility, which allows us to study weapons physics  
25 without underground testing, a capability that Russia and



1 China lack. Our laboratories have certified annually, for  
2 nearly 25 years, that we have no technical need to test.  
3 Additionally, it would invite others to follow suit,  
4 enabling nations such as North Korea and potentially India  
5 and Pakistan to advance their own designs while eroding  
6 longstanding nonproliferation norms. Admiral Correll, I  
7 would value your perspective of the strategic cost and  
8 benefits of testing, particularly in terms of how it might  
9 shape the behavior of the other nuclear-armed states.

10 General Whiting, space is now a contested domain, and  
11 nearly every aspect of modern military operations depends  
12 upon space-based capabilities. Early phases of any future  
13 conflict will hinge on our ability to maintain command and  
14 control while denying the same to our adversaries. To the  
15 extent you can discuss this in an open setting, I would  
16 like your assessment on the resilience of our space-based  
17 command and control systems and the military services'  
18 progress toward delivering integrated, space-based effects  
19 into operational planning.

20 I am also interested in SPACECOM's role as a  
21 supporting command. As a warfighting domain, space  
22 requires new battle management capabilities, especially the  
23 ability to detect a threat in space and to relay that  
24 information to a weapons system. This battle management  
25 directly affects our ability to protect troops on the



1 ground, and SPACECOM must continue to fully integrate their  
2 capabilities, including command and control, with the other  
3 combatant commands. I would like to know what challenges  
4 you face in integrating with combatant commands such as  
5 INDOPACOM and what additional authorities or capabilities  
6 you need to meet those demands.

7 I recognize many of these issues will be explored  
8 further in closed session, but it is important that we  
9 articulate, to the extent possible, the stakes and the  
10 trajectory in this forum, as well.

11 Thank you both again for your service, and I look  
12 forward to your testimony. Thank you, Mr. Chairman.

13 Chairman Wicker: Thank you, Mr. Ranking Member.  
14 General Whiting, would you like to make an opening  
15 statement, sir.

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1           STATEMENT OF GENERAL STEPHEN N. WHITING, USSF,  
2           COMMANDER, UNITED STATES SPACE COMMAND

3           General Whiting: Yes, Mr. Chairman. Chairman Wicker,  
4           Ranking Member Reed, and distinguished members of the  
5           Committee, it is an honor for Chief Master Sergeant Simmons  
6           and me to appear before you today, alongside Admiral  
7           Correll and Command Sergeant Major Naumann, and I am  
8           privileged to testify before this Committee for a third  
9           time as the Commander of the United States Space Command,  
10          representing the men and women who work tirelessly to  
11          ensure the United States maintains our dominance in space.

12          U.S. Space Command's area of responsibility is the  
13          ultimate high ground, from which we provide critical  
14          capabilities and overwatch that enhance the entire Joint  
15          Force. In space we also protect American interests from  
16          the threats now arrayed against our space systems, to  
17          include our opponents' capabilities that allow them to  
18          conduct space-enabled attacks.

19          Thanks to the steadfast support of Congress, U.S.  
20          space capabilities ranging from precision navigation and  
21          global communications to missile warning and real-time  
22          intelligence provide the Joint Force with unmatched  
23          precision, accuracy, reach, and lethality. We saw the  
24          Joint Force's unmatched integration of multidomain  
25          capabilities in Operation Midnight Hammer, Operation

1 Absolute Resolve, and more recently, Operation Epic Fury,  
2 during which space effects were critical to mission  
3 success. As the Chairman of the Joint Chiefs of Staff  
4 recently highlighted, space and cyber forces were the first  
5 movers, employed layered and non-kinetic effects to enable  
6 freedom of maneuver for the Joint Force.

7 General Caine's remarks underscored the importance of  
8 achieving and maintaining space superiority, not only to  
9 safeguard the systems essential for precision strike,  
10 missile warning and tracking, and security communications,  
11 but also to provide overwatch for terrestrial forces  
12 operating in harm's way. Should an adversary degrade or  
13 destroy our space capabilities, the Joint Force's ability  
14 to fight as it is sized and designed would be immediately  
15 and materially impacted.

16 At U.S. Space Command, we command and control  
17 offensive and defensive capabilities provided by the  
18 military services to conduct operations that set favorable  
19 conditions for our joint warfighters. This operational  
20 imperative aligns with Secretary Hegseth's observation  
21 during his Arsenal of Freedom tour that, quote, "space is  
22 the ultimate high ground, and we must deliver supporting  
23 fires from our positions of advantage to cover our maneuver  
24 forces."

25 Make no mistake. Our opponents are moving at an



1 alarming pace, developing and deploying capabilities to  
2 deny us the use of space. China's on-orbit presence has  
3 grown exponentially, now operating over 1,300 active  
4 satellites, a 667 percent increase since 2015, including  
5 more than 510 intelligence, surveillance, and  
6 reconnaissance satellites. They are using these  
7 capabilities to integrate space-enabled effects across  
8 their forces, making them more lethal, precise, and far  
9 ranging, while fielding weapons purpose built to  
10 outmaneuver and destroy our satellites.

11 At the same time, Russia continues to demonstrate  
12 capabilities designed to disrupt our assets, including the  
13 potential placement of a nuclear weapon on orbit, the  
14 single greatest threat to our space architecture. These  
15 developments threaten our Joint Force in every domain,  
16 since the control of space shapes outcomes on land, at sea,  
17 in the air, and in cyberspace.

18 To ensure U.S. Space Command can deter conflict and  
19 maintain deterrence in space, we request continued  
20 congressional support of our key fiscal year 2027  
21 priorities. This includes fielding integrated space fires,  
22 active protection of our high-valued satellites, enhancing  
23 our battle space awareness, building an integrated command  
24 and control system, sustaining our forces' freedom to  
25 maneuver, and providing sufficient cyber defenses of our



1 space enterprise.

2 We thank Congress for its support this past year,  
3 which has enabled us to begin the disciplined transition to  
4 our permanent headquarters at Redstone Arsenal, as directed  
5 by the President. To guarantee mission continuity, we are  
6 executing a phased relocation, operating from interim  
7 facilities, while a new, purpose-built command and control  
8 headquarters is constructed. Our people are central to  
9 this effort, and we are using retention and relocation  
10 incentives to keep our mission-critical talent throughout  
11 the move. Your continued support and authorizations for  
12 fiscal years 2026 and 2027 are essential to accelerate the  
13 completion of this modern headquarters and ensure our  
14 uninterrupted readiness.

15 With the continued support of Congress, U.S. Space  
16 Command will remain prepared to address the evolving threat  
17 landscape, deter aggression, counter adversary actions, and  
18 safeguard America's interests in space today, and for  
19 generations to come. Armed conflict in space is not  
20 inevitable, but should deterrence fail, the integrated  
21 space power of our team will provide a decisive advantage.

22 Chairman, my posture statement is submitted for the  
23 record, and I look forward to answering your questions.

24 [The prepared statement of General Whiting follows:]

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1 Chairman Wicker: Thank you, and yes, you are going to  
2 need the continued engagement and the doubling of effort  
3 from the Congress. Thank you for your statement.

4 Admiral Correll, you are recognized.

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1           STATEMENT OF ADMIRAL RICHARD A. CORRELL, USN,  
2           COMMANDER, UNITED STATES STRATEGIC COMMAND

3           Admiral Correll: Good morning, Chairman, Ranking  
4           Member Reed and distinguished members of the Committee.  
5           Command Sergeant Major Naumann and I are honored to appear  
6           before you today alongside our teammates, General Whiting  
7           and Chief Master Sergeant Simmons. It is a privilege to  
8           represent the dedicated men and women of United States  
9           Strategic Command and to discuss the critical role we play  
10          in safeguarding our nation's security.

11          I would like to begin by taking a moment to honor our  
12          fallen U.S. servicemembers. Joint Force is eternally  
13          grateful to those that have paid the ultimate sacrifice in  
14          service of our country. Our thoughts and prayers remain  
15          with their families, and their legacy inspires us to  
16          continue our mission with unwavering resolve.

17          This is my first time addressing this Committee as  
18          Commander of U.S. Strategic Command, and I want to express  
19          my sincere gratitude for this Committee's steadfast  
20          support. Your commitment to providing the resources  
21          necessary for us to execute our mission during this bi-  
22          generational period of modernization and recapitalization  
23          is deeply appreciated.

24          I also extend my heartfelt thanks to the American  
25          people. Their unwavering support helps us to remain the

1 most advanced, lethal, and credible fighting force in the  
2 world. It is their trust and confidence that drive us to  
3 excel in our mission every day.

4 Our nation's nuclear forces, the foundation of our  
5 national security, are safe, secure, effective, and  
6 credible. My confidence in this assessment is not based  
7 solely on our combat capability but rather on the  
8 extraordinary professionals at U.S. Strategic Command.  
9 They are the very essence of our credibility. And their  
10 expertise and dedication ensure that we remain ready to  
11 deter aggression and respond decisively when directed.

12 As I testify before you today, STRATCOM and its  
13 components stand ready, not seeking out confrontation, but  
14 deterring strategic attack and underpinning all Department  
15 of War operational plans. The strategic capabilities  
16 provided by each leg of the triad, coupled with assured  
17 Nuclear Command, Control and Communications, or NC3  
18 systems, underpin everything the Department does in defense  
19 of our Nation and American interests abroad.

20 Our fundamental challenge, one that we successfully  
21 face each and every day, is to deter great power conflict  
22 and manage the complexities of deterring multiple nuclear  
23 competitors simultaneously, all while adapting to rapid  
24 technological change and advancements. This change is most  
25 evident in five evolving threat vectors: cyber, counter-

1 U.S. space capabilities -- in other words, what can the  
2 adversary do to us in space to challenge what we deliver  
3 from space for the Joint Force -- a contested  
4 electromagnetic spectrum, novel missile systems, and supply  
5 chain challenges. Adapting to today's strategic landscape  
6 demands sustained focus, vigilance, and modernization of  
7 our strategic forces.

8 As we bring the B-21 bomber, the Columbia Class  
9 submarine, and the Sentinel Intercontinental Ballistic  
10 Missile system online, we will ensure the credibility of  
11 our deterrent for decades to come.

12 Thank you once again for your support and trust in the  
13 soldiers, sailors, airmen, guardians, Marines and civilian  
14 professionals who comprise U.S. Strategic Command, and for  
15 dedicating your time and effort to our mission and  
16 portfolio. I look forward to your questions.

17 [The prepared statement of Admiral Correll follows:]

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1 Chairman Wicker: Thank you, Admiral Correll. It is  
2 going to take quite a bit of resources, quite a plus-up of  
3 resources to make good on the last statement you made about  
4 putting us where we need to be for decades to come. Can  
5 you comment about that?

6 Admiral Correll: Senator, I pay very close attention  
7 to the ability to sustain all three legs of the triad and  
8 bridge to the next generation of capability. This  
9 Committee and the legislature have been very supportive in  
10 providing funding to bring those new capabilities online  
11 and sustain the existing capabilities. That will be, as  
12 you said, Senator, that will be for the next 15 years, that  
13 transition, and we will need to continue to pay very close  
14 attention to that. In terms of the --

15 Chairman Wicker: And resources, when we pay close  
16 attention that is going to require a great deal more  
17 resources, is it not?

18 Admiral Correll: The resources are going to be  
19 approximately 5 percent of the defense budget to sustain  
20 existing capability and bridge to the new capability. And  
21 I would offer that that is an existential insurance policy  
22 for our country, and a good value proposition for our  
23 nation. And again, I appreciate the Committee's support.

24 Chairman Wicker: Yeah, absolutely a required  
25 insurance policy. You know, it certainly is obviously that



1 both of you are in this together, and we had some testimony  
2 about a nuclear-armed space. How close is anyone to  
3 getting to that? And I will stay with you, Admiral  
4 Correll, and then move over to General Whiting.

5 Admiral Correll: Russia has indicated, and it has  
6 been publicly acknowledged, that they are working on a  
7 nuclear capability that could be placed in space.

8 Chairman Wicker: What is your estimate of how soon  
9 that might be?

10 Admiral Correll: With respect, I would prefer to  
11 answer that in a closed testimony session.

12 Chairman Wicker: It would amount to a major game  
13 changer, would it not?

14 Admiral Correll: Very, very significant, and we have  
15 to account for it in terms of the architecture that we have  
16 and what we can do about it. And the Department is very  
17 focused on that, and we do have some options.

18 Chairman Wicker: General Whiting, we will be in a  
19 closed session down in the SCIF, but what can you tell the  
20 American public in answer to my question?

21 General Whiting: I associate myself with Admiral  
22 Correll's comments, Chairman. The reports are that Russia  
23 has developed a nuclear anti-satellite weapon that they  
24 could potentially place on orbit. They have not done that  
25 today. If they did that, that would be an indiscriminate



1 weapon that, if detonated on orbit, would immediately place  
2 at risk every country's space capabilities in low earth  
3 orbit, the United States, China, Russia, Japan, Europe, you  
4 name it. And so that would violate the Outer Space Treaty  
5 and would not be a development, obviously, that we could  
6 tolerate.

7 Chairman Wicker: And then tell us about this debris  
8 that was caused by the destruction of one of the  
9 satellites, or one or more of the satellites.

10 General Whiting: Chairman, in early 2007, China  
11 executed a hit-to-kill anti-satellite weapons test against  
12 one of their own defunct satellites. They did it at a  
13 relatively high altitude in low earth orbit, and it created  
14 over 3,600 pieces of long-lived debris that we still have  
15 to deal with today. And then in November of 2021, Russia  
16 executed a hit-to-kill ASAT test against one of their  
17 satellites, and that was about 3 months before they invaded  
18 Ukraine, which seemed to be they were sending a signal to  
19 the United States and to the West that they could hold our  
20 satellites at risk. And that created about 1,500 pieces of  
21 debris that we had to deal with at the time. That even  
22 caused their cosmonauts on board the International Space  
23 Station to have to take shelter because of a potential  
24 collision between that debris and the International Space  
25 Station. Fortunately, that did not happen, but it was a

1 reckless test, nonetheless.

2 Chairman Wicker: It has been almost two decades since  
3 China did this, right?

4 General Whiting: That is correct, Senator.

5 Chairman Wicker: And more recently for Russia. Do  
6 you think China realized that they should never do this  
7 again, or do you think it is just a matter of time?

8 General Whiting: I think the fact that they have not  
9 reconducted a similar test indicates that they realized  
10 that they made a mistake at the way in which they executed  
11 that test and the fact that we and they still have to deal  
12 with that debris. I hope that is the case, and we would  
13 not want to see a similar test like that happen again.

14 Chairman Wicker: And when we deal with debris, as you  
15 said, we have to deal with it, are we removing some of it  
16 somehow, or are we just having to deal with it by avoiding  
17 it?

18 General Whiting: Chairman, we do not have any way to  
19 remove it today other than just to allow natural gravity to  
20 pull it back into the Earth's atmosphere, but depending on  
21 the altitude, that can take decades. So today we track it  
22 and then we provide warnings out to all satellite owner-  
23 operators around the world so that they can maneuver their  
24 active satellites away from that debris if they are able to  
25 do that.



1 Chairman Wicker: Thank you, Senator Reed.

2 Senator Reed: Thank you very much, Mr. Chairman.

3 Admiral Correll, from a cost benefit perspective, including  
4 not just monetary costs but political costs, do you see a  
5 military need right now for nuclear weapons testing?

6 Admiral Correll: Senator, the Department of Energy  
7 determines the need for nuclear warhead testing. The  
8 Department does a variety of tests with our launchers and  
9 missile systems to validate the performance of those  
10 systems. And I would associate myself with the comments  
11 from the Department of Energy with respect to nuclear  
12 warhead testing.

13 Senator Reed: Uh, can you update us on the current  
14 comments from the Department of Energy?

15 Admiral Correll: From the Department of Energy?

16 Senator Reed: Yes. Are you aware of their taking a  
17 position that they have to test, or that they are not  
18 testing?

19 Admiral Correll: That they have taken a position? I  
20 am sorry.

21 Senator Reed: That they have taken any type of  
22 position with respect to testing, i.e., no further testing  
23 necessary we must test, et cetera.

24 Admiral Correll: On an annual basis I am obligated to  
25 review a letter that is a joint letter between the



1 Department of Energy and Department of Defense that looks  
2 hard at whether or not we need to do anything more in terms  
3 of nuclear warhead testing. And in that most recent letter  
4 that came forward to Congress it indicated we have the  
5 capabilities and sufficient testing to satisfy ourselves on  
6 the reliability and efficacy of our nuclear warheads, but  
7 we monitor that very closely, and I will continue to  
8 provide my best military advice.

9       What I would say is we would want to be in a position  
10 where if we needed to resume some kind of testing that we  
11 had thought through that and have the capabilities, and  
12 then to deter other nations from resuming or doing any kind  
13 of nuclear yield testing. And those nations are signatory  
14 to a treaty that obligates them not to do that.

15       Senator Reed: Thank you, sir. General Whiting, you  
16 have stated, very precisely, that the opening stages of  
17 recent operations stressed the reliance on space-based  
18 command and control. I mean, that is going to be the first  
19 sort of area of conflict in any major conflagration. Are  
20 you concerned regarding the vulnerability of our space-  
21 based command and control at this point?

22       General Whiting: Sir, today our command and control  
23 does rely on a number of systems, some of which are legacy  
24 and were built before the era we find ourselves in today,  
25 where they face a number of ground-based and space-based



1 threats. And so we have to figure out ways to continue to  
2 defend those capabilities while they are modernized. We do  
3 have some new capabilities that are starting to arrive,  
4 such as proliferated low earth orbit constellations, and  
5 that has added to our resiliency. So I think we are on the  
6 right path. We continue to need to execute on the programs  
7 that will continue to make us even more resilient going  
8 forward.

9 Senator Reed: Thank you. A question for both of you.  
10 The nation's principal test range, which both of you use is  
11 at Kwajalein, and ICBM range, also space surveillance. I  
12 am told that the condition of the infrastructure there is  
13 very much deteriorated. Can each of you describe the  
14 importance of the range and your observation on its  
15 condition and what we have to do? This is a

16 General Whiting: Senator, I have visited Kwajalein  
17 Atoll, and it is a very important location for the United  
18 States military and as you indicate, it is a location from  
19 which we execute important space domain awareness  
20 operations, both under the United States Space Force and  
21 the United States Army. Also, unique missile defense  
22 testing can occur there as well.

23 So from a Space Command perspective, it is definitely  
24 a location that we want to see continued investment in so  
25 that we can continue to sustain the operations that are



1 there, and I routinely have engagements with the United  
2 States Army to help them understand my requirements there.

3 Senator Reed: Admiral?

4 Admiral Correll: I would wholeheartedly agree with  
5 General Whiting's comments with respect to the importance  
6 of Kwajalein Atoll. With respect to STRATCOM portfolio,  
7 the Air Force uses that facility to test our  
8 intercontinental ballistic missile and validate that it  
9 performs end-to-end the way we expect it to do. And we  
10 conduct three to four tests a year, and we use that range  
11 for those tests, and they provide incredibly important  
12 feedback on the accuracy and efficacy of the system. So we  
13 need to sustain it and wholeheartedly support additional  
14 investments, and I would agree that there are challenges  
15 there with the infrastructure and we need to pay very close  
16 attention to it.

17 And then the other comment I would make, relative to  
18 capabilities and insights into testing, you mentioned it in  
19 your opening remarks, Senator, the National Ignition  
20 Facility. That is a really, really important capability  
21 for our nation in terms of validating the efficacy of our  
22 stockpile.

23 Senator Reed: [Presiding.] Thank you very much,  
24 gentlemen. Thank you, ma'am.

25 Senator Fischer: Thank you, Senator Reed. Admiral,

1 welcome. I have really appreciate our conversations on the  
2 need for nuclear force posture that is relevant to our  
3 expected threat environment. Holding onto a force  
4 structure that was decided 16 years ago, that was based on  
5 flawed assumptions, is irresponsible, and risks eroding the  
6 credibility of our nuclear deterrent. For example, the  
7 program of record for at least 100 B-21 bombers no longer  
8 appears to be sufficient. Do you still agree with your  
9 predecessor that we need to procure at least 145 B-21?

10 Admiral Correll: Yes, Senator, I fully support 145 to  
11 meet STRATCOM's requirements, and it may be higher than  
12 that for the Joint Force, but through the STRATCOM lens,  
13 145.

14 Senator Fischer: And I have been encouraged by the  
15 Department's strategy to consolidate acquisition  
16 authorities into a single DRPM for the Sentinel program.  
17 How are you working with General White to ensure that the  
18 program is meeting your requirements?

19 Admiral Correll: As you mentioned, Senator, General  
20 White is a direct report portfolio manager reporting  
21 directly to Deputy Secretary Feinberg, and I would say that  
22 is a very tight linkage that he is reporting, if not at  
23 least once a week to twice a week. In terms of  
24 collaboration, coordination and common understanding of  
25 where we stand with the Sentinel program, General White and



1 myself and my component commander at Air Force Global  
2 Strike talk, at least once a week, and discuss where we  
3 stand with respect to Sentinel, what the next milestone is,  
4 and any challenges associated with that. And what I have  
5 seen, since General White has taken the position as the  
6 DRPM, is key milestones being pulled to the left, and two  
7 that I would highlight is the milestone B certification  
8 that is required as a result of the Nunn-McCurdy breach.  
9 Previously that was indicated to be occur sometime in 2027.  
10 He has now indicated that it will occur before the end of  
11 calendar year 2026. And then first launch from Vandenberg  
12 of the missile itself is expected in 2027, and that is also  
13 pulled to the left. So it is a good mechanism to lay flat  
14 the understanding of where the challenges are going  
15 forward.

16 Senator Fischer: We also need to ensure that the  
17 Minuteman III is going to remain credible, safe, efficient,  
18 and effective. What steps are you taking to make sure that  
19 that happens until Sentinel is ready?

20 Admiral Correll: Overcommunicating with stakeholders  
21 on any challenges as they as they occur, and I see my  
22 responsibility to the Department to pay very close  
23 attention to sustainment, where challenges might manifest  
24 themselves, and then articulate how we are addressing those  
25 challenges or if there are any additional resources or



1 assistance needed to address those challenges.

2 Senator Fischer: Since you have taken command do you,  
3 do you see any opportunities out there to be able to  
4 strengthen the work that we need to see on NC3  
5 modernization?

6 Admiral Correll: I would say that we are on a good  
7 trajectory with NC3 modernization. We have developed an  
8 analytic model that addresses the threats, those threat  
9 vectors that I talked about, to provide decision quality  
10 information to the Department on future capability  
11 investments. One area I would highlight, that has been of  
12 particular instance and very strong support from the  
13 Department and other supporting agencies is cyber. And you  
14 notice that I listed that as the number one threat vector  
15 and that was, you know, purposeful.

16 Senator Fischer: Do you see some opportunities to be  
17 able to work with the private sector, with respect to being  
18 able to leverage their emerging technologies that they have  
19 as well? Will STRATCOM look at that, or are you already  
20 doing that?

21 Admiral Correll: We look at that, and we look at that  
22 through what we refer to as the REACH facility. It is an  
23 arrangement that is associated with the University of  
24 Nebraska, and it is a mechanism for the command to bring in  
25 smaller companies, look at new technology and how that



1 might be employed as we look at future capabilities. And  
2 that is both for NC3 and for electromagnetic spectrum  
3 capabilities.

4 Senator Fischer: [Presiding.] Thank you. And  
5 General Whiting, I have a question for you for the record,  
6 about working with our NATO allies on capabilities, being  
7 able to integrate with them as well so thank you.

8 Senator Shaheen, you are recognized thank you.

9 Senator Shaheen: Thank you, Madam Chair. Thank you  
10 both for being here and for your service. I want to start  
11 with the Iran war, because we have seen that the Iranians  
12 have been targeting our satellites, our radars, our  
13 communications capabilities there. We have also seen  
14 reports that they are considering strikes, cyber strikes in  
15 the United States against our systems, and we saw that they  
16 hacked Stryker Medical earlier this month, that some of the  
17 data was completely deleted and others was blocked. So,  
18 General Whiting, are you concerned about Iranian-backed  
19 hacker groups who could be targeting our satellites,  
20 cutting off our communications, trying to hack into our  
21 radar capabilities?

22 General Whiting: Senator, we are as concerned about  
23 cyber generically as Admiral Correll mentioned, because it  
24 is the soft underbelly of our space enterprise. There are  
25 countries, not Iran, but countries like Russia and China,



1 who have demonstrated they could attack us in space with  
2 ASAT weapons or co-orbital satellites. But they would  
3 rather attack us in cyber because it is cheaper for them  
4 and harder for us to attribute.

5 So I believe the defenses that we have put in place  
6 for our cyber against those kind of threats are up to the  
7 challenge of an Iranian cyberattack, but it is not  
8 something that we ever rest on our laurels, and we have to  
9 be very vigilant to make sure that we understand what their  
10 intent is and what their capability is, and then modify our  
11 defenses accordingly.

12 Senator Shaheen: And do you feel that same sense of  
13 assurance about the private sector and the threat that they  
14 also could be facing from Iran?

15 General Whiting: Um, well, ma'am, I think with the  
16 situation that you noted that was in the press here in the  
17 last couple of weeks, I think there probably are  
18 vulnerabilities there that a nation like Iran could seek to  
19 exploit.

20 Senator Shaheen: Thank you. Admiral Correll, do you  
21 have anything to add to that?

22 Admiral Correll: I agree with General Whiting's  
23 characterization of that. And it is having the sensing  
24 capability to understand when there is a sophisticated  
25 operator on the network that causes traffic patterns to



1 adjust, really sophisticated actor. We need that sensing  
2 capability and then the ability to vector the right subject  
3 matter expertise to address it where we see it.

4 Senator Shaheen: This question is also for you,  
5 Admiral Correll, because it was reported last year that the  
6 Trump administration is considering making changes to the  
7 unified command plan that would hand over U.S. command and  
8 control of nuclear weapons to the purview of the Supreme  
9 Allied Commander of NATO. I know you do not want to  
10 comment on the policy there, but can you comment on how you  
11 view U.S. command and control over nuclear weapons in a  
12 scenario where Article 5 is invoked.

13 Admiral Correll: Senator, I would say that the  
14 arrangement that we have with the Supreme Allied Commander  
15 is a mechanism that has been in place for many years, that  
16 functions appropriately for its intent, and I have had no  
17 discussions within the Department about adjustments to that  
18 arrangement, and should I be asked to, I would provide my  
19 best advice with respect to that.

20 Senator Shaheen: Thank you. We have heard since the  
21 start of this war in Iran, and actually even before, that a  
22 number of our security partners have publicly questioned  
23 whether they should have their own nuclear weapon  
24 capabilities, whether they can rely on the United States  
25 nuclear umbrella. Can you comment on that? Are you



1 concerned about that? Do you hear any of our allies and  
2 partners talking seriously about that? And how are you  
3 thinking about addressing those concerns from our allies?

4 Admiral Correll: I have reasonably frequent  
5 conversations with Secretary Colby, our Under Secretary for  
6 Policy and, at every opportunity, in mil-to-mil engagements  
7 I reinforce our extended deterrence commitment on the part  
8 of the United States. And I have detected no change in my  
9 mil-to-mil engagements in concern for our commitment and  
10 our stated commitment with respect to that. And that  
11 includes in my discussions with Secretary Colby.

12 And I would highlight that STRATCOM has several  
13 liaison officers from other countries at our command, and  
14 we are scheduled to add a liaison officer from France to  
15 help with those communications and enable those, and that  
16 individual is scheduled to report this summer.

17 Senator Shaheen: Well, thank you. I am out of time,  
18 but if I could just ask, has Secretary Colby shared your  
19 view of that situation when you had those conversations  
20 with him?

21 Admiral Correll: Oh, I feed back any conversations  
22 that I have within the Department appropriately and  
23 reinforce our extended deterrence commitments. There is a  
24 conventional burden-sharing element to the National Defense  
25 Strategy, which the Department has talked about



1 extensively, and those are part of the conversations, as  
2 well.

3 Senator Shaheen: Thank you. Thank you, Madam Chair.

4 Senator Fischer: Thank you, Senator Shaheen. Senator  
5 Rounds, you are recognized.

6 Senator Rounds: Thank you, Madam Chair. First to  
7 both you, General Whiting and Admiral Correll, thank you to  
8 you and your teams for your service to our country. I  
9 would like to begin by asking you both a specific question  
10 with regard to the many systems that your commands rely on  
11 for missile warning, space-based sensing, and nuclear  
12 command and control. Most of them depend on access to key  
13 portions of the electromagnetic spectrum. Can we talk a  
14 little bit about how critical it is to have assured access  
15 to the 3.1 to 3.45 portion of the band and the 7.4 to 8.4  
16 band of the spectrum for the systems at SPACECOM and  
17 STRATCOM use to conduct your missions, and in particular,  
18 the need for a direct access for both of you to those parts  
19 of the spectrum. General Whiting.

20 General Whiting: Senator, thank you for the question.  
21 Certainly access to those bands that you highlighted is  
22 critical for our mission. In the 3 megahertz range that  
23 you highlighted, we have key radars there that support our  
24 space domain awareness and missile defense missions, and  
25 then in the 7 gigahertz range we have key communications,



1 SATCOM communications. And so we want to be able to make  
2 sure we can continue to operate. We recognize that the  
3 President has called for the United States to win the 6G  
4 race, and we support the Department's efforts to find  
5 technological solutions and ways that we can share the  
6 spectrum, leverage the spectrum for our economy, but also  
7 ensure that we have it for national defense purposes.

8 Senator Rounds: Thank you, Admiral Correll.

9 Admiral Correll: I would associate with myself with  
10 the comments from General Whiting and just foot-stomp the  
11 incredible importance of sustaining that access. Our  
12 missile warning, missile tracking, missile defense  
13 capabilities would be severely impacted negatively.

14 Senator Rounds: Okay. Thank you. And General  
15 Whiting, just to go back on this a little bit, what I am  
16 concerned about is that both of those bands, the lower 3  
17 and the 7 and 8 bands, they are protected from spectrum  
18 auction, but some folks remain interested in shifting  
19 additional Federal users back into those bands, which would  
20 then free up that portion of the band that the Federal  
21 users had been using. But it adds additional challenges  
22 within these bands that you rely on. In your professional  
23 military opinion what would be the impact to our strategic  
24 communications, nuclear deterrence and homeland defense  
25 missions, including Golden Dome, if the military were

1 forced to share those bands with other Federal users in a  
2 suboptimal manner?

3 General Whiting: Senator, with your caveat there  
4 about the suboptimal manner, which would assume that we do  
5 not have the full usage and protection of that bandwidth,  
6 it would be a significant detriment to our mission, because  
7 the satellites we have on orbit today, we are going to rely  
8 on those for years and years, if not decades, to come. And  
9 we cannot shift them out of a band that might be using the  
10 bands that we just talked about, including I would also say  
11 that is true for our ground-based radars that use those  
12 bands as well. So we have to figure out how to be able to  
13 continue to use our legacy systems that we are going to  
14 have to rely on for years to come.

15 Senator Rounds: Admiral Correll, do you agree?

16 Admiral Correll: I agree.

17 Senator Rounds: Thank you. Would it be fair to say  
18 that Washington, D.C., is protected by radars in those  
19 bands?

20 Admiral Correll: Yes, Senator.

21 Senator Rounds: What about Hawaii?

22 Admiral Correll: Same.

23 Senator Rounds: What about Alaska?

24 Admiral Correll: Same.

25 Senator Rounds: What about the West Coast of the



1 United States?

2 Admiral Correll: The same.

3 Senator Rounds: Thank you. Admiral Correll, just a  
4 little bit of a discussion, please, on regarding the B-21  
5 and the growing demand for that particular product. It is  
6 coming online shortly. I am just curious. When you were  
7 answering the question for Senator Fisher, you indicated  
8 that you agreed that 145 was an optimal number for this.  
9 Can you talk a little bit about what the determining  
10 factors were that you used in coming up with that analysis?

11 Admiral Correll: When, when you look at the required  
12 readiness and timeliness of bomber response options with  
13 respect to STRATCOM's operational plans, that drives the  
14 number of 145. In terms of the capability of the B-21, and  
15 I could expound more in a classified setting, Senator, in  
16 terms of the capability of the B-21, I would highlight that  
17 part of the big so-what there is its ability to sense and  
18 maneuver in a contested electromagnetic spectrum.

19 So yes, it is a conventional and strategic stand-in,  
20 stand-off precision strike bomber, but it is also a key  
21 enabler for the Joint Force in terms of electromagnetic  
22 spectrum and its capabilities in that area, along with  
23 other capabilities associated that we would have to talk in  
24 a classified setting.

25 Senator Rounds: Very good. Thank you. And once



1 again, gentlemen, thank you both and your teams for your  
2 service. Thank you, Madam Chair.

3 Chairman Wicker: [Presiding] I believe Senator Kaine  
4 is next.

5 Senator Kaine: Thank you, Mr. Chair, and thanks to  
6 our witnesses for your service. I have one topic really to  
7 address with each of you. First, Admiral Correll, I want  
8 to talk about the delays in the Columbia-Class submarine.  
9 The delay in the first Columbia-class suggests that it will  
10 be delivered about 12 to 16 months after its originally  
11 planned date. What are you all doing to extend the useful  
12 life of the Ohio-class submarines so that we can take care  
13 of any delay in Columbia production?

14 Admiral Correll: Thanks, Senator Kaine. The Navy has  
15 a plan to do maintenance on existing Ohio-class submarines  
16 to extend their service life, and there is high confidence  
17 in the ability to extend their service life so that we can  
18 manage the risk of sustaining the capability we have to  
19 bridge to the Columbia-class and the new capability. And  
20 there is sufficient margin there to address that with the  
21 maintenance plans that the Navy has.

22 Senator Kaine: And if they do that successfully, is  
23 it fair to say that STRATCOM's capabilities will not be  
24 jeopardized so long as that Ohio-class extension is done  
25 well?



1           Admiral Correll:  Yes, Senator.

2           Senator Kaine:  Thank you for that.  General Whiting,  
3 we are very proud in Virginia of Wallops.  Wallops is  
4 NASA's only owned and operated launch range, and it is a  
5 national asset that supports both governmental operations  
6 across multiple governmental agencies, but also commercial  
7 spaceflight.  I think Wallops will continue to play a key  
8 role in enabling national security missions at its launch  
9 range.  How do you view Wallops as an asset for SPACECOM  
10 operations?

11          General Whiting:  Yes, Senator, I think you well noted  
12 there the importance of Wallops.  I think it has been an  
13 amazing story over the last decade as the United States  
14 military, at our ranges in Cape Canaveral, at Vandenberg,  
15 has upped the launch tempo with the commercial industry as  
16 they have ramped up.  I think as that continues to go up we  
17 are going to have to look at other launch locations to help  
18 absorb some of that capacity.  And I think Wallops, having  
19 matured the way it has, could be a potential to do that.

20          But from a Space Command perspective, we think that  
21 the capabilities at Wallops Island, Senator, and the  
22 resilience that it provides into the broader launch  
23 enterprise are very important.

24          Senator Kaine:  Last time I checked, I think there had  
25 been more rockets launched from Wallops than either



1 Vandenberg or Canaveral, but not with the attention  
2 necessarily, because they are unmanned rockets and they  
3 tend to be smaller. But the ability to hit orbits off the  
4 East Coast as compared to where the other ranges are, are  
5 very important.

6 The other thing about Wallops that is interesting is  
7 that it is is a launch range that is used both for  
8 governmental and for commercial launches. What commercial  
9 space capabilities should we be leveraging more  
10 effectively, and how do you think about the importance of

11 General Whiting: Senator, I think the U.S. commercial  
12 space industry is one of the United States' most  
13 significant advantages, not just for Space Command or the  
14 Space Force, but for our nation writ large. It is driving  
15 innovation. It is expanding economic opportunities. And  
16 so from a United States Space Command perspective, we want  
17 to make sure that we are leveraging that innovation,  
18 leveraging the cost curves that are delivering capability  
19 faster and cheaper, and then work with the services, the  
20 Space Force in particular, to be able to bring that  
21 capability into operations. So we think it is a massive  
22 advantage for us, and then we have a role, Senator, in  
23 helping to defend those commercial companies who the U.S.  
24 government most contracts with for space services, and we  
25 do that at a cell that we have in Vandenberg Space Force



1 Base in California, where we share information, threat  
2 information, up to the top secret level with those  
3 companies so they understand the domain that they are  
4 operating in and the threats that they are facing. And  
5 then they can share with us back the insights they are  
6 gaining from their operations as well.

7 Senator Kaine: Great. I think I will ask a question  
8 for the record to pick up on a comment that the Chairman  
9 made about the space debris problem. It is one thing if  
10 there is debris because of, you know, target shots on  
11 defunct satellites in orbit, continually when there are not  
12 a lot of satellites in orbit. But both governmental and  
13 private companies around the world are putting more and  
14 more satellites in orbit, for security reasons, for  
15 communications reasons. And so that the value of what is  
16 up in orbit right now makes this debris problem much, much  
17 worse in terms of trying to get a handle on it. I know  
18 there are space treaties dealing with it, and I know we  
19 generally have pretty good protocols about trying to  
20 minimize debris or avoid it. But this is going to be a  
21 larger and larger problem as more and more satellites get  
22 put up into orbit. And so it is something that we have to  
23 get a handle on, and I am glad that the Chairman raised it.

24 Thank you, Mr. Chair.

25 Chairman Wicker: Can you tell us how approximately



1 how many satellites are in space right now? All told.

2 General Whiting: Total number of trackable objects  
3 just went over 50,000. And just to give you a context on  
4 that, when Space Command was stood back up 6 1/2 years ago,  
5 from that time to today, that number has gone up almost 90  
6 percent. It has almost doubled in 6 1/2 years.

7 Chairman Wicker: And headed much higher.

8 General Whiting: Absolutely we have seen recent  
9 reports from commercial space companies that not only do  
10 they want to continue to build out these proliferated, low  
11 earth orbit communications constellations, but now going to  
12 space for data centers and artificial intelligence  
13 purposes. That is a very exciting future that is coming.

14 Chairman Wicker: Thank you very much. Senator Ernst.

15 Senator Ernst: Thank you, Mr. Chair, and thank you,  
16 gentlemen, very much for being in front of us today, and to  
17 your teams as well, and their service to our great United  
18 States of America. Admiral Correll, I will start with you  
19 and we are just going to keep hammering on this. But right  
20 now the United States is undertaking a once-in-a-generation  
21 effort to modernize all three legs of the nuclear triad.  
22 We all know it is incredibly essential to credible  
23 deterrence, but it is, of course, increasingly defined by  
24 the cost growth, the schedule delays, and of course,  
25 something we are well aware of here, budgetary pressures.

1 So we have the President that says he wants to spend  
2 another \$500 billion in defense. We have heard that we are  
3 going to get another request for \$200 billion, perhaps in  
4 the form of a supplemental, that the Department has to  
5 demonstrate that it can deliver these capabilities on time  
6 and on budget without crowding out our other critical  
7 priorities.

8 So if you can tie it up neatly with a bow on it for  
9 the Committee today, which programs are experiencing the  
10 most significant cost growth and schedule delays, and what  
11 specifically is driving those cost overruns?

12 Admiral Correll: Senator, I do not want to duck the  
13 question, but the direct report portfolio managers are the  
14 subject matter experts with respect to real-time reporting  
15 on costs and schedule with those programs. I would tell  
16 you that in my interactions with the direct report  
17 portfolio managers and their leadership -- so this is Vice  
18 Admiral Gaucher and General White and General Gutwein for  
19 Golden Dome -- they are laser focused on delivering for our  
20 country and understanding where the risks are, and  
21 addressing those risks in terms of schedule and keeping  
22 pressure on costs. And that arrangement, from my  
23 perspective, the organizational arrangement of a direct  
24 report portfolio manager with a direct report to the Deputy  
25 Secretary has been very powerful in keeping our foot on the



1 gas for delivering the capability, as you said, on schedule  
2 and on budget. And I acknowledge there have been  
3 significant challenges there in the past.

4 Senator Ernst: Yeah. Thank you, Admiral, and I  
5 appreciate you reiterating that. I think it is incredibly  
6 important. I know that we continue to place additional  
7 pressures on your shoulders, but those portfolio managers  
8 as well. But we, as Congress, we also need to keep the  
9 pressure on those primes and others that are engaged in  
10 this process, understanding that we have limited resources,  
11 and we absolutely need to modernize our nuclear triad. So  
12 pressure all the way around, including here on the Hill, on  
13 members in Congress.

14 If we can turn just briefly to SPACECOM as well. We  
15 have seen with the operations that are ongoing in Iran, we  
16 have seen then counterattacks coming from Iran, and General  
17 Whiting, we saw this incredible shot fired from Iran  
18 towards Diego Garcia. So what we are learning from this,  
19 that that missile traveled over 2,500 miles, and it really  
20 just underscores the growing range of weapons and ballistic  
21 missiles coming from our adversaries. And what can we do  
22 then in that scenario, and how do we adapt within SPACECOM  
23 to make sure that our missile warning architecture is able  
24 to account for these long-range threats like this recent  
25 attempted strike on Diego Garcia?

1           General Whiting:  Senator, thank you for highlighting  
2   that at Diego Garcia.  We have critical Space Command  
3   capabilities for our satellite command and control as well  
4   as space domain awareness, so our missile warning  
5   architecture is absolutely the foundational capability that  
6   allows our Joint Force and our national leadership to know  
7   about those kinds of launches.  Today we do a very good  
8   job, in fact, best in the world, of detecting those kinds  
9   of launches.  But ma'am, you asked about what kind of  
10  evolutions do we need?  The Congress has funded some  
11  several additional missile warning capabilities that are  
12  coming.  There will be a low earth orbit tracking  
13  constellation, a medium earth orbit tracking constellation,  
14  and then a modernized strategic constellation in  
15  geosynchronous orbit.  As those continue to come online it  
16  will allow us to track those missiles and have full custody  
17  all the way until they are impacting and that allows us to  
18  tip and cue missile defenses to be even more successful.  
19  So those are important investments, ma'am, and I would ask  
20  for the Congress's continued support.

21           Senator Ernst:  Wonderful.  And my time is expired.  
22  Thank you again, gentlemen, very much.

23           Chairman Wicker:  Thank you, Senator Ernst.  Senator  
24  Scott, it seems that you touched base 7.2 seconds before  
25  Senator Cotton, so you are recognized right now.



1 Senator Scott: Thank you, sir, that is the first.

2 Senator Coons: I call for instant replay on that one.

3 Senator Scott: Can't imagine that happened. All  
4 right. Well, thanks to both of you for being here.

5 Let me start and talk about something that is really  
6 important to Florida, space dominance. It is a pretty big  
7 issue. I got to serve as Governor of Florida for 8 years  
8 and now as Senator, so we prioritized and put a lot of  
9 effort into the Space Coast. I became governor right after  
10 manned flight was shut down so it was a big issue. We  
11 tried to make sure that the Space Coast, it is an aerospace  
12 hub and a model of what happens when we use public-private  
13 partnerships to help America's reach its exploration goals.

14 Unfortunately, we are not the only one trying to do  
15 this. We got adversaries like communist China. So I am  
16 very appreciative that the President has prioritized  
17 national security to include space, and I think the  
18 discussion today is really important. General Whiting, can  
19 you talk about, and explain to the American people why  
20 space is so important to our national security and how  
21 adversaries like Communist China, who is a complete  
22 adversary, can use it to undermine our country?

23 General Whiting: Senator, thank you for the question.  
24 Today, as we sit here in 2026, the entire United States  
25 Joint Force is sized with an assumption they will have

1 access to space capabilities through all levels of  
2 conflict. We do not have the force structure to fight the  
3 way we did before the space age, when our systems were not  
4 space enabled. We did not have precision strike. We did  
5 not have global navigation, global communications.

6 And so, Senator, it is vital that we defend those  
7 capabilities in space so that we can continue to deliver  
8 them against the threats that are now arrayed against us.  
9 And we have seen just a dramatic increase in the threats  
10 over the last several years from China and from Russia. So  
11 that is why, at U.S. Space Command, we say it is a moral  
12 responsibility to defend our space capabilities so that we  
13 can continue to support the rest of the Joint Force.

14 Senator Scott: Can you talk about the importance of  
15 public and private partnerships at Florida Space Coast?

16 General Whiting: Yes, Senator. I have been an  
17 observer of that, not directly involved in it, but it is  
18 pretty remarkable to me how that public-private partnership  
19 is able to deliver infrastructure at Cape Canaveral and at  
20 Patrick Space Force Base to ensure that those ranges, those  
21 launch ranges, that launch range has been able to keep up  
22 with the dramatic increase in commercial launch tempo that  
23 we have seen. And I think it is true that that range has  
24 not been a constraint on commercial launch growing, and a  
25 big part of that is not only the government investment but



1 the commercial and private investment that we have seen  
2 through Space Florida.

3 Senator Scott: Yeah, when I was Governor, we put up a  
4 lot of money, but we were able to get a lot of companies to  
5 come in there and spend a lot of money, Blue Origin and  
6 Boeing, SpaceX, a lot of them spent a lot of money.

7 Admiral, as we are all aware, the very real threat of  
8 adversaries like communist China -- it is not just in space  
9 -- Communist China is also actively focused on dominance  
10 around the world. It is critical our nation is prepared to  
11 not only project peace through strength, but also act if  
12 necessary. It is no secret that the Navy has had some  
13 struggles building ships on time and on budget. Secretary  
14 Phelan, I know, was working hard to try to change that.

15 Can you talk about the importance of the Columbia-  
16 class submarine and why you need that asset now?

17 Admiral Correll: The Columbia-class submarine  
18 represents our assured second-strike capability for our  
19 nation. It does not get any more important or necessary  
20 than that, Senator. And so that submarine will be world  
21 class, decades ahead of what China or Russia can produce in  
22 terms of technology, quietness, and capability. It is a  
23 critical capability for our deterrent. And with the  
24 appointment of Vice Admiral Goucher as a direct report  
25 portfolio manager it will get laser focus, which it already



1 has, to deliver that capability for our nation.

2 Senator Scott: So the fact that it is late, does it  
3 impact the Navy's resourcing decisions?

4 Admiral Correll: The Navy is continuing to fund  
5 Columbia, so it has had no negative impact on funding for  
6 Columbia and the priority and delivery. It remains the  
7 Navy's number one priority and the Navy's budget backs that  
8 up, Senator.

9 Senator Scott: Good. Thanks, both of you, and thanks  
10 for the men and women that serve with you.

11 Chairman Wicker: Senator Warren.

12 Senator Warren: Thank you, Mr. Chairman. So  
13 President Trump has dragged us into war against Iran, and  
14 we are all paying the price. Servicemembers have died, oil  
15 prices are soaring, and we are facing a global economic  
16 crisis over the Strait of Hormuz. One big reason? Donald  
17 Trump's go-it-alone approach to blowing up long-standing  
18 American alliances. He has insulted and tariffed just  
19 about everyone, and he launched this war alongside Israel  
20 without telling our other allies, and then when he sees gas  
21 prices skyrocket, Donald Trump changes his tune and starts  
22 begging our allies to help us patrol the Strait of Hormuz,  
23 and our partners have said they want to help, but only if  
24 the fighting stops.

25 Admiral Correll, U.S. Strategic Command is responsible



1 for strategic deterrence and nuclear operations, and you  
2 have said repeatedly that alliances are critical to  
3 deterrence. So, Admiral, do Russia and China think that  
4 our alliances are strong when our partners refuse to help?

5 Admiral Correll: My military assessment is that they  
6 continue to think they are very strong, and I think China  
7 and Russia's behavior in terms of attempting to undermine  
8 those alliances demonstrates their continued concern for  
9 America's alliances.

10 Senator Warren: I just have to say, your answer makes  
11 no sense to me, that Russia and China watch us insult our  
12 allies, then beg for their help, and then our allies do not  
13 give that help. And you think Russia and China think there  
14 is an alliance that is working just great. Look, it is not  
15 only an embarrassment when the President begs and our  
16 allies say, no. It is a national security threat because  
17 our enemies take note of that. It is your job to advise  
18 the Secretary about how to deter our greatest threats, and  
19 you are telling me your view is there is no threat here.  
20 And I am just telling you that just does not bear credible  
21 analysis.

22 So look, Trump has alienated many of our allies, and  
23 those costs are becoming clear. At the same time, we have  
24 launched war with Israeli Prime Minister Netanyahu, who  
25 seems to be pursuing a completely different set of

1 objectives. And President Trump is unwilling or unable  
2 even to rein in Netanyahu. On March 18th, the Netanyahu  
3 government bombed one of the region's largest oil fields.  
4 Trump then posted that the U.S. did not even know in  
5 advance, and that we did not want further oil strikes  
6 because of the economic danger that it would pose.

7 So, Admiral, does it enhance strategic deterrence to  
8 have major partners undermining explicit U.S. policy goals?

9 Admiral Correll: Senator, I respectfully disagree  
10 with your overall assessment, and, you know, I --

11 Senator Warren: What part do you disagree with that,  
12 Trump posted that we did not know --

13 Admiral Correll: No, no.

14 Senator Warren: That he did not agree with what  
15 Netanyahu did, but Netanyahu did it anyway? What part are  
16 you disagreeing?

17 Admiral Correll: Senator, I can just speak to my  
18 portfolio and my responsibilities, and our capabilities  
19 remain ready to respond and deter, and they deter each and  
20 each and every day.

21 Senator Warren: I appreciate that, but that is not my  
22 question. My question is, does it enhance strategic  
23 deterrence to have major partners undermining explicit U.S.  
24 policy goals?

25 Admiral Correll: Strong mil-to-mil relationships and



1 our alliance network are part of our overall deterrence.

2 Senator Warren: Look, again, your answer just lacks  
3 any credibility. If this Administration cannot keep its  
4 main partner in line and cannot keep its own stories  
5 straight, then we have got a problem. In June, the White  
6 House issued a press release proclaiming that, quote,  
7 "Iran's nuclear facilities have been obliterated and  
8 suggestions otherwise are fake news." And yet now Iran's  
9 nuclear program is one of the many changing reasons that  
10 the Administration has given for this war

11 So, Admiral Correll, let me ask one more. Does it  
12 help strategic deterrence when the White House changes its  
13 story minute by minute on the reasons for this war?

14 Chairman Wicker: Senator Warren, the witness, on  
15 three occasions, has said that he is declining to answer  
16 that question because he disagrees with the premise. I  
17 appreciate that members are able to make whatever points  
18 they want, but I think it is clear why he is unable to  
19 answer your question, because he completely disagrees with  
20 the premise.

21 Senator Warren: I am glad that it is clear to you,  
22 Mr. Chairman, but with respect, I do not understand what  
23 part of the premise he disagrees with. I am stating facts  
24 here --

25 Chairman Wicker: Well --



1           Senator Warren: -- and I am asking if those facts are  
2 helpful for the United States or unhelpful for the United  
3 States.

4           Chairman Wicker: Admiral, you can answer the question  
5 if you are able.

6           Admiral Correll: I have no further comments to make  
7 other than what I have previously said.

8           Chairman Wicker: Thank you, Senator Warren. Senator  
9 Cotton.

10          Senator Cotton: Well, for the record, I think your  
11 credibility is very high, Admiral, and you are the  
12 Commander of Strategic Command. You are not the Central  
13 Command Commander. You are not the Secretary of State. So  
14 I do not think it is in your portfolio to make judgments  
15 about allies all around the world. Frankly, I commend your  
16 restraint. By the second or third time you are asked the  
17 question you do not just borrow from the internet meme that  
18 this is a Wendy's, ma'am. But I just want to press the  
19 point a little bit, this idea that we went it alone.  
20 Obviously, we did not go it alone with Israel. Israel is  
21 one of the most capable military partners we have in the  
22 world. Correct, Admiral?

23          Admiral Correll: Yes Senator.

24          Senator Cotton: And it seems like every Arab nation  
25 is with us, as well. In fact, the Ambassador from the



1 United Arab Emirates just published an op-ed today in The  
2 Wall Street Journal, explaining why we need to finish the  
3 job in Iran, and the President of the UAE, Mohammed bin  
4 Zayed, has been an unflappable ally, as has the Crown  
5 Prince of Saudi Arabia, Mohammed bin Salman. Even  
6 countries like Oman and Qatar, that tried to mediate  
7 differences, you know, maintain friendly relationships with  
8 Iran, have expressed their dismay for what has happened,  
9 not surprisingly, since what their friendly relations with  
10 Iran got them was a bunch of missiles shot into their  
11 country. So I think it is far from accurate to say we are  
12 going it alone in this war against Iran's revolutionary  
13 terror regime.

14 I want to borrow from both of your expertise about  
15 missiles and space, and build on what Senator Ernst was  
16 discussing, the launch of the intermediate-range ballistic  
17 missile towards our base in Diego Garcia in the middle of  
18 the Indian Ocean. That is bad. I am glad that it failed.  
19 I am glad that we shot down one. It also, of course, shows  
20 that the fatwa against missiles of that range is not  
21 exactly worth the paper it was written on, probably like  
22 the fatwas against other long-range missiles and nuclear  
23 weapons.

24 But let me just ask this. The technology needed, not  
25 for an intermediate-range missile, but an intercontinental



1 missile, a missile that could hit the United States, is  
2 pretty much the same as an intermediate-range missile.  
3 Isn't that right, Admiral Correll?

4 Admiral Correll: Yes, Senator. That is correct.

5 Senator Cotton: General Whiting, isn't that correct?

6 General Whiting: Yes, it is, Senator, and it is not  
7 too much different from a space launch vehicle either.

8 Senator Cotton: Yeah and, you know, you need enough  
9 booster thrust to get something into space, and you need a  
10 reentry vehicle to get it back from outer space or from  
11 space into the Earth's surface. And as you said, General  
12 Whiting, Iran has long had a space launch vehicle program.  
13 Have you, in your observations about space, have you seen  
14 any Iranian astronauts up there lately?

15 General Whiting: They do not have a manned  
16 spaceflight program.

17 Senator Cotton: Wow. Shocking. Do you think maybe  
18 the Space Launch Vehicle program is just flimsy cover for  
19 an intercontinental missile?

20 General Whiting: I do think they were developing an  
21 intercontinental ballistic missile, Senator.

22 Senator Cotton: And Admiral Correll, for a reentry  
23 vehicle, what they used for that missile going to Diego  
24 Garcia, for that matter, the medium-range missiles that are  
25 shot at Israel, that would be a suitable reentry vehicle,



1 right?

2 Admiral Correll: That is correct, Senator.

3 Senator Cotton: So all you would have to do, in a  
4 crude but functioning fashion, is marry those two  
5 technologies and Iran would be able to strike us here in  
6 the United States. Is that correct?

7 Admiral Correll: That is correct.

8 Senator Cotton: And I have to say, I think that could  
9 be done in a matter of months, not years, and maybe not  
10 that many months. Is that on your mind, Admiral Correll,  
11 at STRATCOM.

12 Admiral Correll: Absolutely, and they have  
13 demonstrated that technology.

14 Senator Cotton: Okay. Thank you for that. I want to  
15 turn to a slightly shorter range weapons. You testified,  
16 Admiral, at the House Armed Services Committee, that China,  
17 quote, "seeks a larger and more diverse nuclear force,  
18 comprised of systems ranging from low-yield precision  
19 strike missiles" to a bunch of other stuff. I want to talk  
20 about the low-yield precision strike missiles, and also the  
21 need that you have also discussed for an enhanced, theater-  
22 capable, theater nuclear capability to counter such  
23 developments from China, from Russia, from North Korea.

24 Could you discuss what resources, capabilities,  
25 authorities you need to counter the threat of theater



1 nuclear forces?

2 Admiral Correll: Yes, Senator. In terms of the  
3 deterrence challenge associated with Russia or China and  
4 their theater nuclear force capability, part of the  
5 strategy there is to ensure that we raise the threshold for  
6 use of that capability by Xi or Putin. And so we are  
7 investing in theater nuclear forces capabilities. And  
8 SLCM-N is a primary example of that capability, intended to  
9 have a response that is in kind and could match should Xi  
10 or Putin determine to think that there was a lower  
11 threshold for use.

12 Senator Cotton: Thank you, but I do not think we can  
13 do it fast enough.

14 Chairman Wicker: Thank you very much, Senator Cotton.  
15 Senator Kelly.

16 Senator Kelly: Thank you, Mr. Chairman. Gentlemen,  
17 thank you both for being here today. Admiral, I want to  
18 start with you and talk a little bit about missile defense  
19 and Golden Dome. As I understand, the architecture  
20 envisions a much more expansive, layered system capable of  
21 defending against large-scale missile threats, maybe  
22 including up to a salvo from peer adversaries. That kind  
23 of vision requires a large number of interceptors, far  
24 beyond our current inventories -- we are talking about  
25 different ways, how we could do this -- but also



1 increasingly sophisticated electromagnetic countermeasures  
2 to deal with decoys jamming, other countermeasures. It is  
3 a complicated problem. We could be seeing issues with  
4 trying to intercept ICBMs that are on trajectories, on  
5 different orbital inclinations, because of the latitude  
6 they are launching from, some land based, some sea based.

7         So, Admiral, how do you assess the operational  
8 feasibility of this approach? I understand the argument  
9 that a more robust missile defense architecture could  
10 strengthen deterrence by denial and provide additional  
11 protection for the homeland, but at scale, this becomes a  
12 question of cost, capability, and plain physics. One of my  
13 big concerns here is we spend \$500 billion, \$1 trillion,  
14 and we get to the end of the timeline here and we have a  
15 system that just fundamentally does not work, or does not  
16 work well enough to increase deterrence.

17         Admiral Correll: From my perspective, Senator, the  
18 work initially on the sensor layer and the capability to  
19 detect and track advanced missiles, that would be advanced  
20 hypersonics, advanced cruise missiles and fractional  
21 orbital bombardment capability, that is step one in the  
22 architecture that we are talking about.

23         Senator Kelly: And I also agree. I see the benefit  
24 in that. You know, hypersonics, with hypersonic glide  
25 vehicles being able to maneuver, coming from a nonstandard,

1 let's say, direction is something we have to focus on. It  
2 is like the bigger picture of a, you know, salvo and being  
3 able to intercept, you know, multiple rounds coming at us  
4 simultaneously.

5 Admiral Correll: Yes, Senator, and there is a  
6 universe of capabilities and efforts associated with that.  
7 You talked about space-based interceptors. That is one  
8 technology that will need to mature and see what the limits  
9 are of that in terms of interception capabilities. General  
10 Guetlein is approaching it from a kill chain perspective,  
11 and understanding the whole system that goes into the  
12 ability to launch an attack against the U.S. So that  
13 includes looking closely at left-of-launch capabilities.  
14 So, you are looking at left-of-launch, you know, initial  
15 launch boost phase, and the full range of capabilities  
16 there in terms of that Golden Dome for America.

17 Senator Kelly: Do you think we can build something  
18 that achieves the requirements?

19 Admiral Correll: I think we are going to advance our  
20 understanding, our capabilities considerably with that  
21 effort, yes, Senator.

22 Senator Kelly: All right thank you. General, there  
23 have been reports that last year, China's SJ-25 and SJ-21  
24 maneuvered into prox ops, and we think they may have done a  
25 satellite refueling experiment, probably an experiment. If



1 confirmed, this would be the first time a satellite in geo  
2 refueled another. That is my understanding. That  
3 represents a significant leap, not just in sustainment, but  
4 in China's capability to conduct precise rendezvous  
5 maneuver, prox ops docking operations. So taken together  
6 with their broader investments in counter-space  
7 capabilities, they are building a dynamic and maneuver-  
8 driven approach to space, one that would allow them to  
9 persist on orbit, longer, reposition assets, and  
10 potentially hold U.S. systems at risk.

11 Can you comment about your concern and about what  
12 steps we should be taking to counter that or build our own  
13 capability to be able to match the on-orbit persistence?

14 General Whiting: Senator, thank you for the question,  
15 and we were watching that SJ-21, SJ-25 operation last year  
16 very closely. And I think your question well-articulated  
17 what is happening. China has demonstrated their  
18 sophistication on orbit to include now starting to deliver  
19 a maneuver, a broad maneuver capability on orbit. And my  
20 concern is if they develop that, they will have the ability  
21 to maneuver for advantage the way the United States has for  
22 decades on the lands, at sea, and in the air, use maneuver  
23 for our advantage. In fact, we talk about maneuver  
24 warfare.

25 So, Senator, my belief is that we need to deliver our



1 own maneuver warfare capability to make sure that we can  
2 leverage the advantages that the Joint Force has developed  
3 over the decades in space, as we have in other domains.

4 Senator Kelly: All right. Thank you, General.

5 Chairman Wicker: Senator Sullivan.

6 Senator Sullivan: Thank you, Mr. Chairman. Thank  
7 you, gentlemen, for being here. Admiral, I want to follow  
8 up on Senator Kelly's Golden Dome discussion. I have been  
9 one of the Senators that have been very focused on missile  
10 defense for a long time, including Golden Dome. Senator  
11 Kramer and I here on the Committee have focused a lot on  
12 that. Our Golden Dome Act that we introduced last year, a  
13 lot of that was in the NDAA. General Guetlein mentioned  
14 that he clearly thought we had the technology to do this.  
15 I think we have the leadership. Certainly the President  
16 has made this a priority of his, which is important for  
17 getting an initiative of this size and complexity  
18 completed. You have a lot of interest in Congress. You  
19 have good funding from the Working Families Tax Cuts Act  
20 that we got done in July.

21 But one of the things that General Guetlein mentioned  
22 that could be a challenge was actually not the technology  
23 but the organizational structure within the U.S. government  
24 to make this happen. You know, kind of in a hearing a  
25 number of months ago, he talked about this in some ways,

1 like a Manhattan Project 2.0. That is the scale.

2 So can you give me a sense, from your perspective, on  
3 how this is moving forward and where we need to continue to  
4 focus? As I mentioned, in the NDAA Senator Kramer and I  
5 were able to get a lot of elements of legislation  
6 supporting and accelerating the Golden Dome initiative into  
7 law. But I would like your assessment.

8 Admiral Correll: STRATCOM is one of the key COCOMs  
9 that is supporting Gen. Guetlein's leadership on this  
10 effort, and STRATCOM, General Whiting at SPACECOM, and then  
11 General Guillot at NORTHCOM, in particular, for the Joint  
12 Force, and from my perspective Guetlein's guidelines  
13 providing superb leadership.

14 Senator Sullivan: Yeah, I think he is doing a great  
15 job, too.

16 Admiral Correll: Yeah. And right now he is focused  
17 on the various capabilities, the as-is capabilities in  
18 terms of the architecture to sense, detect, and track, and  
19 integrating all of that information so you have a data  
20 layer that enhances our ability to detect and track any  
21 kind of inbound threat. And then integrating the command  
22 and control associated with that, to your point about, you  
23 know, the organizational alignment. What is the optimum  
24 organizational alignment associated with that? And that is  
25 where he is focused for technology demonstration this



1 summer on the command and control capability and how we  
2 have advanced that. And there are a number of innovative  
3 companies that are closely aligned and supporting that  
4 effort, and I am highly encouraged. We could talk more in  
5 a classified setting, but I am highly encouraged by the  
6 progress that they are making.

7 Senator Sullivan: Good. I am, as well. You  
8 mentioned detect, track and there is one more element in  
9 that chain and that is kill. A lot of that, currently  
10 those elements of missile defense are based in Alaska,  
11 actually, most of them in terms of ground-based  
12 interceptors tracking. One of the things I have been  
13 concerned about, Admiral, is in 2017, again, working  
14 directly with the President and his team, my bill, the  
15 Advancing America's Missile Defense Act, passed as part of  
16 the NDAA. It called for more ground-based missile  
17 interceptors at Fort Greely, which we built out 20 more  
18 silos. But they are empty, and they remain empty, which to  
19 me makes zero sense.

20 How quickly are we going to fill those 20 empty silos  
21 with the next generation ground-based missile interceptor?  
22 It seems to me a huge miss in our current posture to  
23 protect the country when we have missile interceptor silos  
24 that are built ready to go and they are empty, and they  
25 remain empty.

1           Admiral Correll:  Senator, I do not have the exact  
2 details on that.  I will take that as a lookup and come  
3 back to you and work with General Guetlein.  I know we have  
4 challenges in our defense industrial base in terms of  
5 delivering at scale some of the capabilities that we need.

6           Senator Sullivan:  And let me just thank you on that.  
7 And for the record, General Whiting, I would appreciate if  
8 you can give me a sense, and I do not want to run over my  
9 time here so I will just ask the question if you can  
10 provide it, on a lot of your missions, a key anchor point  
11 on that is clear Space Force Station in Alaska.  And I am  
12 just wondering if you are looking at other missions and  
13 capabilities and build-out of that critical area,  
14 particularly with the long-range discrimination radar that  
15 is now up and running.  It is probably the most important  
16 ground-based radar system in the world.  But if you can get  
17 back to me, a question for the record on that.

18           General Whiting:  Thank you.

19           Chairman Wicker:  He will take that on the record.  
20 Thank you very much, Senator Sullivan.  Senator Rosen.

21           Senator Rosen:  Thank you Chairman Wicker, Ranking  
22 Member Reed, and General and Admiral.  Thank you for being  
23 here today and for your service.  You know, I want to talk  
24 a little bit about nuclear testing.  You know, as members  
25 of this Committee they have heard me raise it over and over



1 again. The Nevada National Security Site, formerly the  
2 Nevada Test Site, continues, and will continue, to play a  
3 critical role in nuclear weapons development. But some of  
4 my colleagues on the other side like to throw about nuclear  
5 response as if it were nothing, as if it were nothing, as  
6 if there were no consequences, and no consequences that  
7 last for decades, even longer in some cases.

8 Nevada was ground zero for a majority of these tests,  
9 the United States explosive nuclear testing from 1951 to  
10 1992, with 100 atmospheric and 828 underground tests.  
11 There are consequences to what my friends are just  
12 bantering around like it is nothing. And after George H.  
13 W. Bush signed a testing moratorium in 1992, the U.S.  
14 rightfully developed the Stockpile Stewardship Program and  
15 subcritical experiments, through which the Nevada National  
16 Security Site has continued to certify the reliability, the  
17 safety, the effectiveness of our nuclear stockpile, and  
18 using science and physics and math and technology.

19 We do not need explosive nuclear testing. So today,  
20 the site's underground laboratory is undergoing major  
21 mining and construction to provide Enhanced Capabilities  
22 for Subcritical Experiments, ECSE. It is going to host two  
23 of the most capable weapons radiographic systems in the  
24 world. Together with these efforts, these machines will  
25 provide even greater certainty and data about performance



1 of the U.S. nuclear stockpile, far better data, experts  
2 say, than any information that could be gleaned if the U.S.  
3 were to break that moratorium and conduct explosive nuclear  
4 tests, either below ground or above ground, as the  
5 President and some in his orbit have advocated.

6 For decades, the directors of the National  
7 Laboratories, STRATCOM Commanders, and Secretaries of  
8 Defense and Energy have annually certified the military  
9 effectiveness of our stockpile and certified that it does  
10 not require resumption of explosive testing with over a  
11 thousand subcritical experiments, robust computer modeling  
12 providing the data to support these positions.

13 So, Admiral Correll, following up on a question I  
14 asked you at your nomination hearing, now that you have  
15 taken command, do you see any technical or strategic  
16 justification for resuming explosive testing? And do you  
17 agree with these data-informed assessments that it is  
18 unnecessary for the United States to resume explosive  
19 nuclear testing of any kind?

20 Admiral Correll: Senator, as you mentioned, I review  
21 an annual assessment of our existing testing capability and  
22 its ability to certify that our warheads are safe, secure,  
23 effective, and remain credible as a deterrent, and that  
24 process will continue. And there are exquisite  
25 capabilities associated with that. You mentioned many of



1 those capabilities.

2 And in addition to that, the National Ignition  
3 Facility is another really important one that give us  
4 insights. As those warheads age we need to continue to be  
5 vigilant about that, and I will continue to provide my best  
6 military advice. With respect for the need, should there  
7 be a need to resume any testing, but I stand by the letter  
8 that I endorse, most recently this last year in terms of  
9 the sufficiency of testing. The only caveat I would put on  
10 that is having the capability to resume additional testing  
11 should the need arise, that we posture ourselves to be able  
12 to do that

13 Senator Rosen: Well, I am going to disagree with you  
14 there. Spending billions of dollars to put us in a  
15 position to resume explosive testing after all the money  
16 that we have spent on the science so far with Stockpile  
17 Stewardship Programs, Enhanced Capabilities for Subcritical  
18 Experiments, artificial intelligence for weapons design,  
19 productions of new pits to replace the aging ones -- all of  
20 these initiatives, they will affect our certainty about our  
21 warhead performance and will be able to help us go forward.  
22 So I believe we should be able to use those experiments to  
23 the safety of our American citizens, where you will be  
24 testing this thank you.

25 Chairman Wicker: Thank you, Senator Rosen. Clearly,

1 we have a disagreement on this subject between you and the  
2 witness, but thank you, ma'am.

3 Senator Rosen: Thank you, Senator Wicker.

4 Chairman Wicker: Senator Tuberville.

5 Senator Tuberville: Thank you, Mr. Chairman. Good  
6 morning. General Whiting, just a couple updates a move  
7 from Space Command. Securing a new military construction  
8 agent, today, March 26th, is the deadline. Do we have any  
9 update on that?

10 General Whiting: Senator, thank you for the question.  
11 Our move to Huntsville is moving forward, and we are right  
12 now in final discussions with elements of the United States  
13 Air Force and the Army Corps of Engineers to pull together  
14 what the team of that construction agent will look like. I  
15 believe the Secretary of the Air Force, Secretary Meink,  
16 and I will memorialize that decision in the very near  
17 future. So I am very happy that we are able to take  
18 advantage of the mil-con reform language that the Committee  
19 inserted into the last National Defense Authorization Act,  
20 which is allowing us to build our new headquarters in a  
21 different way than we would have last year, without that  
22 language.

23 Senator Tuberville: Existing facilities, what are you  
24 thinking about that, or are you thinking of new facilities?  
25 Any update on that?



1           General Whiting: Yes, Senator, as we are building  
2 that new headquarters, that will take a few years, we are  
3 modifying existing facilities on Redstone Arsenal. And in  
4 fact, next month, in April, we will do our first ribbon-  
5 cutting on a top secret SCIF that will seat over 80 people,  
6 and then we will start moving personnel there to begin work  
7 at that level. So I am happy at the progress that we are  
8 making, and that progress will continue over the next  
9 couple of years as we work to get significant portion of  
10 our staff there, even while the permanent headquarters is  
11 being built.

12           Senator Tuberville: Yeah. What is the timeline on  
13 that? My understanding, was it 3 to 7 years? Is that  
14 correct?

15           General Whiting: For the permanent headquarters,  
16 Senator? I would expect right now that that facility will  
17 break ground next year and will come online, likely in  
18 2031, and then there will be probably a year's worth of  
19 time that we are moving people into that facility. But  
20 that is the timeline we are currently looking at.

21           Senator Tuberville: Personnel transition, any update  
22 on that? Present? Future?

23           General Whiting: Yes, Senator. We have a small  
24 office that we have stood up there, about 20 people right  
25 now, and then by the end of this year we are targeting that



1 number to be closer to 200 people that will be working from  
2 Redstone, from our headquarters. Of course, that will be  
3 paced with the delivery of interim facilities that are  
4 appropriate to the security classification level we need,  
5 and that we have all of the appropriate IT networks. We  
6 are offering relocation incentives for our workforce in  
7 Colorado to consider moving to Alabama. We also are  
8 offering retention incentives, because I need my workforce  
9 to stay with me in Colorado until their function is ready  
10 to move. And so those are some of the updates that we have  
11 as we are working the movement of personnel, Senator.

12 Senator Tuberville: Talk about logistics for a  
13 second, of SPACECOM's mission. Air Force has over 10  
14 percents of its aircraft dedicated to aerial refueling.  
15 Satellites have historically been built with no way to  
16 refuel here in the U.S., but the Chinese Communist Party  
17 demonstrated space refueling capabilities for the first  
18 time last year. Any recommendations for the future?

19 General Whiting: Senator, you know well, in your  
20 question that our traditional domains -- air, land, and sea  
21 -- those military services that have lead there have  
22 extraordinary percentages of their force dedicated to  
23 enabling maneuver through sustainment and logistics. In  
24 fact, thereas a great quote from Admiral Nimitz in World  
25 War II that he said at-sea replenishment and refueling is

1 what won World War II for the U.S. Navy because they could  
2 continue to fight. And as you noted, in space, we launch  
3 typically a satellite with all the fuel it is ever going to  
4 have, and every time we maneuver, we expend fuel. So we  
5 always have to have this discussion, should I maneuver even  
6 though it is going to take life off the end of that  
7 satellite? And that creates a psychology of scarcity  
8 across our enterprise, where we do not enable tactical  
9 commanders to maneuver the way they might want to because  
10 we are concerned about the expenditure of fuel.

11 So, my recommendation, Senator, is that the United  
12 States develop an on-orbit logistics and servicing  
13 capability that would allow us to bring maneuver warfare to  
14 space, the same way that the U.S. Navy, U.S. Air Force,  
15 U.S. Army, U.S. Marine Corps execute maneuver warfare in  
16 their respective domains.

17 Senator Tuberville: Thank you. Admiral, submarines  
18 are the tip of the spear for our nuclear capabilities. The  
19 problem is, we cannot seem to build them fast enough. So  
20 what flexibility and capability does STRATCOM gain if we  
21 were able to build 16 Columbia-class submarines versus 12?

22 Admiral Correll: Senator, the existing capability we  
23 have includes 14 Ohio-class boats with 20 tubes. So that  
24 is 280 launch tubes. The program of record is a minimum of  
25 12 Columbia with 16 tubes each and that is 192. So that is



1 280 versus 192. Chairman Wicker, in his opening remarks,  
2 talked about the challenges and the complexities in the  
3 strategic environment. So additional capacity and  
4 capability at sea, in terms of launchers, is very  
5 beneficial from my perspective. There is ongoing work  
6 within the Department in terms of force efficiency, and  
7 that work will inform any future budget decisions  
8 associated with Columbia. But if you just do the math for  
9 what we have and the program of record I will continue to  
10 advocate for additional capability at sea in terms of the  
11 Columbia -class.

12 Senator Tuberville: I think Chairman Wicker is  
13 listening to that.

14 Chairman Wicker: Yes, absolutely. You are not  
15 suggesting that there are some questions I listened to more  
16 carefully than others, are you?

17 Senator Tuberville: Maybe. Maybe a little.

18 Chairman Wicker: Admiral, the first part of your  
19 answer was about our capacity right now to build, and  
20 really the thrust of Senator Tuberville's question is how  
21 much how much better defended we would be if we were able  
22 to reach the goal that he mentioned. And the answer is  
23 that we very much need to do that. Is that correct?

24 Admiral Correll: That is correct, Senator, and that  
25 maximizes flexibility and options to present to the



1 President should the need arise.

2 Chairman Wicker: Right. And I would just observe  
3 there is still time, before Governor Tuberville moves off  
4 the dais, for us to make more progress on that, and he and  
5 our teammates. Senator Banks -- Senator Blumenthal, you  
6 are next.

7 Senator Blumenthal: Thank you, Mr. Chairman. Thank  
8 you both for your service. Both of you are in charge of  
9 some of the most advanced technology and scientific  
10 breakthroughs available to our military. Admiral Correll,  
11 you are a graduate of the Fletcher School of Law and  
12 Diplomacy, and both of you, I am sure, are familiar with  
13 the importance of alliances. How would you explain to the  
14 American people the importance of our alliances in the  
15 fields where you have authority?

16 General Whiting: Senator, thank you for the question.  
17 Certainly, from my perspective, our partnerships in space  
18 are one of our strengths, and it is something that Russia  
19 and China do not have. At U.S. Space Command I have the  
20 privilege to lead a named operation in space that includes  
21 six other countries -- it is Canada, the United Kingdom,  
22 Australia, New Zealand, France, and Germany -- where we  
23 operate together each and every day in space to maintain  
24 vigilance against threats and track debris, and to show our  
25 interoperability. And we are continuing to press forward



1 with that and strengthen those relationships.

2 Senator Blumenthal: Admiral?

3 Admiral Correll: I would echo the sentiment expressed  
4 by General Whiting. Those alliances and partnerships are  
5 incredibly important to the overall deterrence that we  
6 present against potential competitors or challengers. With  
7 respect to U.S. Strategic Command, we have four liaison  
8 officers in the headquarters, embedded in the headquarters,  
9 and that includes Japan, Republic of Korea, the U.K., of  
10 course, and Australia. And we are about to receive a fifth  
11 liaison officer embedded into our staff from France, and  
12 that reinforces the importance of those mil-to-mil  
13 relationships, and they enhance our capabilities and our  
14 deterrence overall.

15 Senator Blumenthal: There has been a fair amount of  
16 turbulence in our diplomatic relations with our allies. I  
17 think I am using a euphemism. I am hopeful that at your  
18 level of cooperation and partnership, the alliances  
19 continue to be strong and resilience, whatever the  
20 political turmoil at the surface underneath the potential  
21 contention. I am hopeful that that your work together with  
22 our allies continues to be strong. Am I wrong in that  
23 hope?

24 General Whiting: Senator, I have seen no impact on  
25 our ability to partner the way that my command needs to



1 partner and wants to partner, and I have not detected any  
2 reluctance on the part of our partners to continue to move  
3 forward with us.

4 Admiral Correll: And I have the same experience,  
5 Senator.

6 Senator Blumenthal: Well, my hope is that that  
7 turbulence is going to be passing, a phase that we will  
8 work through, and reestablish in public statements and  
9 rhetoric the appreciation for our partnership and alliances  
10 that you reflected in your testimony. Because at the  
11 working level, at the point where rubber meets the road, so  
12 to speak, although that is not exactly a good analogy for  
13 space, I am very hopeful that we can sustain and enhance  
14 those alliances, and that the American public appreciate  
15 how important they are.

16 Admiral, could you talk a little bit about the  
17 importance of the Columbia-class? I know you have spoken  
18 to Senator Kaine about the impact of delays. But maybe you  
19 can comment a little further on the importance of getting  
20 back on track.

21 Admiral Correll: Yes. The Department has appointed a  
22 direct report portfolio manager, Vice Admiral Gaucher, to  
23 focus on submarine construction, and he has a direct  
24 reporting relationship with Deputy Secretary Feinberg. And  
25 the intent there is to have an individual with the



1 experience that can manage that program and optimize the  
2 performance for delivery of Columbia and other submarine  
3 construction, Virginia-class as well. The importance to  
4 our deterrence capability, I cannot overstate that. All  
5 three legs are vitally important. They complement each  
6 other, and the sum of the parts are much greater than the  
7 whole for the SSBN. That assured second strike capability  
8 that is always at sea, always ready to respond, deters  
9 effectively, and I see that in the intel reporting record.

10 Senator Blumenthal: And I know that General Dynamics  
11 and Electric Boat are really doing very dedicated, valiant,  
12 monumental work in producing the Columbia, and I think we  
13 should appreciate their contributions to our nation's  
14 national security.

15 Admiral Correll: We have an incredible blue-collar  
16 workforce committed to that.

17 Senator Blumenthal: Best in the nation. Thank you.

18 Admiral Correll: Thank you.

19 Senator Blumenthal: Thank you, Mr. Chairman.

20 Senator Sheehy: [Presiding.] Senator Banks.

21 Senator Banks: Thank you, Mr. Chairman. General  
22 Whiting, you are tasked with the Trans Regional Missile  
23 Defense Mission, which relies on space-based sensors. How  
24 critical is this mission to homeland defense?

25 General Whiting: Senator, it is foundational to



1 homeland defense. It is all about detecting threats that  
2 are launched in other areas of responsibility outside of  
3 this hemisphere and continent and then being able to  
4 provide that warning to U.S. Northern Command, so that  
5 General Guillot, under his authorities, can employ national  
6 missile defenses, as he is able to do that it.

7 Senator Banks: It can only be accomplished in space.  
8 Is that right?

9 General Whiting: Correct, Senator, and it is one of  
10 the unique aspects that the U.S. military has, that any  
11 launch, anywhere around the world, we detect that in near-  
12 real time and provide that information to not only fielded  
13 forces but to other combatant commands and ultimately up to  
14 the President.

15 Senator Banks: Explain more why that is the case,  
16 that it can only be accomplished in space.

17 General Whiting: Um, Senator from space we have the  
18 unique vantage to be able to see the entire globe. And so  
19 we have satellites in geosynchronous orbits, satellites in  
20 highly elliptical orbits, and we can perform that  
21 detection. The Congress is investing in improved missile  
22 warning, missile track, missile defense capabilities that  
23 will allow us to improve our ability to have custody of  
24 those threats from launch all the way through to impact,  
25 which will continue to support our missile defenses.

1           Senator Banks: On that point, how urgent is it to  
2 deploy additional missile tracking space sensors with fire  
3 control capability to defeat hypersonic and advanced

4           General Whiting: Senator, your question highlights  
5 this advancement of modern threats that we see, like  
6 hypersonics, like aero maneuvering missiles, like  
7 fractional orbital bombardment systems. And for those we  
8 need these enhanced capabilities so that we can maintain  
9 custody of the threats to enable our missile defenses.

10          Senator Banks: As we work on the next NDAA, give us a  
11 time frame of how urgent is it.

12          General Whiting: The threats are present today, so we  
13 need these capabilities --

14          Senator Banks: You need more.

15          General Whiting: -- as soon as we can field the  
16 capabilities, yes, sir

17          Senator Banks: ASAP.

18          General Whiting: Yes, sir.

19          Senator Banks: The CCP fields several counter-space  
20 weapons that could potentially disrupt or destroy our  
21 satellites. If our space-based sensors were disrupted, how  
22 would that impact the Joint Force?

23          General Whiting: Senator, the entire Joint Force is  
24 sized with an assumption they will have access to space  
25 capabilities. It is not only the number of forces we have,



1 but it is the kind of capabilities. Precision guided  
2 weapons, for example, not only need the GPS signal to be  
3 able to be employed, but they need space-based  
4 contributions to the kill chain. How do you find, fix,  
5 track, and target the location that you are trying to  
6 impact? All of that is enabled from space, and without  
7 those capabilities, we could not fight the way the Joint  
8 Force is designed.

9 Senator Banks: And would more space sensors build an  
10 additional resilience to ensure you are able to accomplish  
11 your mission?

12 General Whiting: Yes. The number helps with  
13 resilience. Also, a distribution of those capabilities  
14 through multiple orbits also helps us with resilience.

15 Senator Banks: Admiral, you already talked a little  
16 bit about SLCM-N and its importance. Your predecessor  
17 testified to this Committee last year that SLCM-N would  
18 provide, quote, "an additional at-sea nuclear deterrent  
19 capability." Do you agree with that statement?

20 Admiral Correll: I do, and specifically, again,  
21 raising the threshold for a potential adversary  
22 contemplating use of a lower-yield theater nuclear weapon  
23 it is very helpful from a deterrence perspective to have a  
24 capability that is non-visible in terms of generation, that  
25 is, it has a non-ballistic trajectory, and is low-yield



1 overall.

2 Senator Banks: Can you explain the importance of  
3 having low yield, survivable, persistent nuclear  
4 capabilities like SLCM-N?

5 Admiral Correll: It complicates the potential  
6 adversary's decision-making. So Xi or Putin do not see a  
7 gap in the ability to use a theater nuclear weapon and put  
8 the position where they feel they are putting the U.S. in a  
9 position where we would have to escalate beyond a theater  
10 capability.

11 Senator Banks: That is very helpful explanation.  
12 China is rapidly expanding its nuclear capabilities. It  
13 now includes expanded stockpiles and dual capable systems.  
14 What evidence do you see that China is shifting toward a  
15 more aggressive nuclear doctrine?

16 Admiral Correll: China's nuclear doctrine continues  
17 to evolve, and it remains to be seen where it ultimately  
18 lands. What I would say is they are developing  
19 capabilities, both in terms of diversity and quantity, and  
20 various mechanisms of delivery of those capabilities, which  
21 includes a full range, including an emphasis on theater  
22 nuclear capabilities, that are inconsistent with their  
23 stated no-first-use policy.

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

25 Chairman Wicker: [Presiding.] Thank you, Senator.



1 And Senator Sheehy.

2 Senator Sheehy: General, what do you assess as our  
3 resilience against a Chinese first strike against our  
4 orbital infrastructure?

5 General Whiting: Senator, China has significantly  
6 increased the number of threats they can employ from both  
7 ground-based systems like direct-ascent ASAT weapons, as  
8 well as on-orbit, co-orbital ASAT capabilities. We  
9 continue to have the world's best space architecture, and  
10 we continue to develop and deploy capabilities that improve  
11 our resilience. But we must focus on those continued  
12 investments, and the programs that the Congress has funded  
13 must continue to deliver so that we can maintain our  
14 resilience relative to those growing threats.

15 Senator Sheehy: How old is our GPS hardware and  
16 infrastructure architecture design of our GPS systems?

17 General Whiting: Senator, we have a mix of satellites  
18 on orbit today that provide that operational constellation.  
19 Some of them are probably 20 years old. Some are recent  
20 launches. So those 20-year-old satellites were built for a  
21 different era where we did not face these kind of threats  
22 and, so we want to continue to see that capability  
23 modernized.

24 Senator Sheehy: And how new are some of the Chinese  
25 offensive systems designed to disrupt or destroy that



1 infrastructure?

2 General Whiting: There have been launches just within  
3 the last couple of months that are, you know, capable of  
4 impacting our space capabilities. So some of those Chinese  
5 threats are as up-to-date as they could possibly be,  
6 Senator.

7 Senator Sheehy: Right. So that is like, if you went  
8 down to the Apple Store and you walked in with a flip  
9 phone, or perhaps even one of those old briefcase phones  
10 that we grew up with, and traded that in for a for a iPhone  
11 17, we are dealing with, in some cases, that gap of  
12 technological capability.

13 General Whiting: I think you are right, Senator. In  
14 some cases, China has skipped a generation or two of legacy  
15 technology and gone right to using today's capabilities,  
16 and they are demonstrating they are developing some very  
17 capable systems.

18 Senator Sheehy: And do you think -- this is probably  
19 for both of you, but obviously, General, this is your  
20 domain primarily, but it would very quickly become the  
21 Admiral's domain as well -- the opening shots of a  
22 potential conflict, which we hope never happens, but should  
23 it happen with our peer adversary ---I do not use the word  
24 near-peer because I do not think they are near. I believe  
25 they are a peer -- do you think that the first shots would



1 start in space?

2 General Whiting: Senator, I do think it is likely  
3 that in a conflict the first shots would occur in cyber and  
4 in space. As you noted, that is not inevitable, that there  
5 will be a conflict. But we do expect that China would make  
6 an attempt to neutralize our space capabilities early in a  
7 conflict.

8 Senator Sheehy: Admiral, do you care to comment on  
9 that?

10 Admiral Correll: Senator, I agree with that  
11 assessment, and I would just say we would expect a global  
12 all-domain, you know, effort on the part of a peer  
13 adversary.

14 Senator Sheehy: Exactly. I mean, the next Pearl  
15 Harbor will not be around a small island with a few ships.  
16 It will be a global space infrastructure attack. I hope it  
17 does not happen but if I were them, that is how I would  
18 open it up so. Because as you stated, General, our entire  
19 force structure, from technology to force formations, is  
20 really predicated on uninterrupted access to our space  
21 infrastructure and architecture with a low-to-no latency,  
22 high bandwidth connection. And most of those connections  
23 are very vulnerable, both from a software, hardware, and  
24 just an EW perspective. So what I would ask from both of  
25 you being, being the primary uniformed voices around this



1 paradigm, is be very vocal that modernization is not going  
2 from a VHS tape to a DVD. It is making sure we are the  
3 most up-to-date, latest, 21st century streaming capability.  
4 And unfortunately, oftentimes modernization, by the time it  
5 goes through the program of record, the committees, the  
6 evaluations, the discussions, the bureaucracy, it is not  
7 modern anymore. It is just less old than the original  
8 model was.

9 This is a time where I think you have bipartisan  
10 commitment to force modernization, especially in this  
11 realm. And I would ask you to be as vocal as possible and  
12 aggressive as possible to make sure we are not going from a  
13 VHS tape to a DVD. We are coming to the absolute most  
14 front edge of capability so we are ready for that first  
15 strike. Thank you.

16 Chairman Wicker: Thank you, Senator Sheehy, for a  
17 very sobering but appropriate line of questioning.

18 This concludes the open portion of today's hearing.  
19 There are some matters that are classified that we need to  
20 take up in the Sensitive Compartmented Information  
21 Facility, and we will reconvene there in precisely 15  
22 minutes. With that, we are recessed thank you.

23 [Whereupon, at 11:26 a.m., the open hearing was  
24 adjourned.]