

Stenographic Transcript  
Before the

Subcommittee on Strategic Forces

COMMITTEE ON  
ARMED SERVICES

## **UNITED STATES SENATE**

TO RECEIVE TESTIMONY ON THE DEPARTMENT OF DEFENSE  
MISSILE DEFENSE ACTIVITIES IN REVIEW OF THE DEFENSE  
AUTHORIZATION REQUEST FOR FISCAL YEAR 2025 AND THE  
FUTURE YEARS DEFENSE PROGRAM

Wednesday, May 8, 2024

Washington, D.C.

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1 TO RECEIVE TESTIMONY ON THE DEPARTMENT OF DEFENSE MISSILE  
2 DEFENSE ACTIVITIES IN REVIEW OF THE DEFENSE AUTHORIZATION  
3 REQUEST FOR FISCAL YEAR 2025 AND THE FUTURE YEARS DEFENSE  
4 PROGRAM

5  
6 Wednesday, May 8, 2024

7  
8 U.S. Senate  
9 Committee on Armed Services  
10 Subcommittee on Strategic  
11 Forces  
12 Washington, D.C.  
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14 The subcommittee met, pursuant to notice, at 4:53 p.m.  
15 in Room SR-222, Russell Senate Office Building, Hon. Angus  
16 King, chairman of the subcommittee, presiding.

17 Committee Members Present: King [presiding], Rosen,  
18 Fischer, Cotton, and Rounds.  
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1           OPENING STATEMENT OF HON. ANGUS KING, U.S. SENATOR  
2 FROM MAINE

3           Senator King: -- this hearing before the subcommittee.  
4 Thank you for your service.

5           The purpose of today's hearing is to examine the  
6 President's budget request for the Missile Agency and  
7 missile defense policies in preparation for the National  
8 Defense Authorization Act for fiscal year 2025. We are  
9 working on that now, and we are hoping the markup on that  
10 bill will be at the end of this month. So now is the time.

11          In today's open hearing I hope that we can address a  
12 number of issues. First and foremost is the defense against  
13 hypersonic missiles, which we seem woefully unprepared for.  
14 Woefully -- that is an understatement. Second is the  
15 requirement to protect Guam against any threats that China  
16 may pose, a daunting task that integrates missile defense  
17 from the Army, Navy, and the Missile Defense Agency.

18          The third issue is how today's threat landscape has  
19 changed the nature of integrated air and missile defense,  
20 given the conflicts in Ukraine and the Middle East. Ukraine  
21 faces all forms of air threats, from drones to hypersonic  
22 missiles. Likewise, the recent events in the Middle East  
23 and Iran's April 14th attack included over 300 drones,  
24 cruise, and ballistic missiles launched toward Israel. I  
25 realize much is classified, but it is important for the

1 public to understand how today's missile defense landscape  
2 has radically changed in the last 5 years.

3 The fiscal year 2025 President's budget request for  
4 Missile Defense Agency is \$10.4 billion, a decrease from  
5 2024 enacted budget of \$10.8 billion. I would like to know  
6 how the fiscal year 2025 budget request continues your  
7 effort for homeland and regional missile defense as well as  
8 defense against hypersonic weapons.

9 I understand that a mainstay of the AEGIS destroyer,  
10 the SM-3 IB missile, was zeroed out this year. I need to  
11 understand the impacts of such a decision and the basis  
12 thereof.

13 Again, I want to thank our witnesses for agreeing to  
14 appear today, and we will have rounds of 5-minute questions  
15 to the witnesses.

16 Senator Rounds, Senator Fisher is on her way. She will  
17 be here shortly. She gave me permission to start.

18 Senator Rounds: I have no doubt.

19 Senator King: Yeah, but you know that I would not have  
20 without that permission.

21 Senator Rounds: Of course.

22 Senator King: So, Mr. Hill, are you lead witness?

23 Mr. Hill: Certainly. Thank you, Chairman.

24 Senator King: Please proceed.

25

1           STATEMENT OF JOHN D. HILL, DEPUTY ASSISTANT SECRETARY  
2 OF DEFENSE FOR SPACE AND MISSILE DEFENSE, DEPARTMENT OF  
3 DEFENSE

4           Mr. Hill: Chairman King and Ranking Member Fischer and  
5 distinguished members of the subcommittee, on behalf of the  
6 office of the Secretary of Defense thank you for the  
7 opportunity to testify on the topic of the President's  
8 missile defense budget. You have my full written statement.  
9 I ask that it be included in the record. Thank you.

10           I want to begin by expressing my sincere gratitude to  
11 this committee for your bipartisan approach and steadfast  
12 support of the Department's missile defense plans, programs,  
13 and posture to fulfill the nation's missile defense needs.  
14 I also want to acknowledge and express my appreciation for  
15 the crucial role this committee played in passing the  
16 National Security Supplemental, including the \$60 billion  
17 for Ukraine.

18           Conflicts around the globe continue to demonstrate the  
19 centrality of missiles in modern warfare and global strategy  
20 and the indispensable role of integrated air and missile  
21 defenses in protecting military capabilities, civilian  
22 populations, and national sovereignty. Conflict in Ukraine  
23 and the Middle East likewise provide daily reminders of the  
24 indispensability of our alliances and the national security  
25 imperative of standing with our allies around the world.

1           To meet the challenges of missile defense, the  
2 President's fiscal year 2025 budget request includes \$28.4  
3 billion for missile defense and defeat. Key investments  
4 include \$2.5 billion to develop the next-generation  
5 Interceptor for ground-based, mid-course defense, and to  
6 extend the service life of the current Ground-Based  
7 Interceptors; \$1.9 billion for ballistic and hypersonic  
8 defense programs; \$4.7 billion for space-based missile  
9 warning systems; \$1.5 billion for the Army and Missile  
10 Defense Agency for the development and procurement of the  
11 Guam defense system.

12           These and other investments in missile defenses and  
13 advanced early warning systems will continue to expand  
14 decision space for our military and civilian leaders,  
15 preserve our forces' freedom of maneuver, and strengthen our  
16 integrated deterrence and overall defense posture.

17           Keeping pace against rapidly evolving threats requires  
18 continued improvement in our active missile defenses as well  
19 as pursuit of comprehensive missile defeat approaches to  
20 expand our response options. The Department is prioritizing  
21 efforts across the entire engagement space to improve the  
22 probability of a successful intercept and improve the  
23 efficiency with which we conduct missile engagements and  
24 defeat missile threats. To achieve these goals we are  
25 developing and fielding better sensors, on earth and in

1 space, that can provide higher fidelity warning, tracking,  
2 discrimination, and kill assessment data.

3 The Department is also putting a greater emphasis on  
4 non-kinetic missile defeat capabilities, including options  
5 in directed energy, electronic warfare, and cyber, which  
6 expand both right-of-launch and left-of-launch options  
7 against the evolving threats.

8 In closing, thank you again to the committee for your  
9 partnership and for your tireless dedication to the  
10 Department and our servicemembers. Additionally, I want to  
11 thank each of you for your service to your constituents and  
12 to the nation. I look forward to answering your questions.

13 [The prepared statement of Mr. Hill follows:]

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1           Senator King: Gentlemen, are you going to add to the  
2 testimony or simply take questions. General? I would love  
3 to hear from you.

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1           STATEMENT OF GENERAL GREGORY M. GUILLOT, USAF,  
2   COMMANDER, UNITED STATES NORTHERN COMMAND AND NORTH AMERICAN  
3   AEROSPACE DEFENSE COMMAND

4           General Guillot: Yes, sir. Chairman King and  
5   distinguished members of the subcommittee, it is a high  
6   honor to command and represent the women and men of the  
7   North American Aerospace Defense Command and United States  
8   Central Command, and I thank you for the opportunity to  
9   testify today.

10          I am pleased to appear alongside my friends, Lieutenant  
11   General Collins, Lieutenant General Gainey, and DASD Hill.  
12   NORAD and NORTHCOM work very closely with each of them as we  
13   depend on the robust capabilities they provide that enable  
14   and empower our missile defense and other critical homeland  
15   defense missions.

16          The United States and Canada face an extraordinarily  
17   complex strategic environment. Our competitors have fielded  
18   advanced ballistic and cruise missile systems designed to  
19   strike civilian and military infrastructure in North  
20   America, both above and below the nuclear threshold.

21          As an update to my previous testimony earlier this year  
22   before the Army Services Committee I am increasingly  
23   concerned by the expanded military cooperation and reported  
24   technology transfers between Russia, China, Iran, and North  
25   Korea. Further, Iran's direct attack against Israel on

1 April 13th marked a strategic shift and clearly illustrates  
2 the continued need for integrated air and missile defense  
3 systems to defeat threats, ranging from ballistic and cruise  
4 missiles to unmanned aerial systems. Layered domain  
5 awareness systems that detect threats from the seabed to  
6 space and defensive capabilities such as the next-generation  
7 Interceptor are critical to the homeland defense mission and  
8 remain key NORAD and NORTHCOM priorities.

9 In addition to the missile threats, adversaries' cyber  
10 capabilities and emerging technologies such as small  
11 unmanned aerial systems present significant risks to North  
12 America's critical infrastructure. NORTHCOM and CYBERCOM  
13 defend the networks daily from adversaries' cyberattacks,  
14 and incidents of small UAS operating inside the U.S. and  
15 Canada near civilian and military infrastructure are  
16 increasing and require timely and well-coordinated  
17 interagency response.

18 The United States, in concert with global network of  
19 like-minded allies and partners requires innovation and  
20 engagement across the entire spectrum of military,  
21 diplomacy, foreign aid, and strategic communication to  
22 counter our competitors' malign influence and increasing  
23 capability to threaten North America.

24 The active defense of North America requires NORAD and  
25 NORTHCOM to actively campaign in all domains and across all

1 avenues of approach. The success of our missions relies on  
2 detecting potential threats far from our shores and quickly  
3 sharing critical information between combatant commands,  
4 convention and special operations forces, the intelligence  
5 community, and the spectrum of interagency and international  
6 partners.

7 The importance of that information flow cannot be  
8 overstated, and I strongly support the Department's work to  
9 advance the combined Joint All-Domain Command and Control  
10 concept. The challenges facing our nation are real, but  
11 there should be no doubt about NORAD and NORTHCOM's resolve  
12 to deter aggression, and, if necessary, defeat threats to  
13 our nations and our citizens.

14 Again, thank you, sir, for the opportunity to appear  
15 this afternoon, and I look forward to your questions.

16 [The prepared statement of General Guillot follows:]

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1 Senator King: Thank you.

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1           STATEMENT OF LIEUTENANT GENERAL SEAN A. GAINNEY, USA,  
2           COMMANDING GENERAL, UNITED STATES ARMY SPACE AND MISSILE  
3           DEFENSE COMMAND

4           General Gainney: Chairman King, Ranking Member Fischer,  
5           and distinguished members of the subcommittee, I am honored  
6           to testify before you as the Commander of the U.S. Army  
7           Space and Missile Defense Command and Joint Force Functional  
8           Component Command for Integrated Missile Defense, JFCC IMD.  
9           In these roles I am representing an incredible organization  
10          of 2,300 soldiers and civilians, spanning 13 time zones and  
11          19 locations worldwide. This one team of professionals  
12          tirelessly provides base, high-altitude, and missile  
13          defense forces and advanced to Army and joint warfighters.  
14          I am honored to represent them, and I thank you for your  
15          unwavering support for this team and their families.

16          I also serve as the Senior Commander for both Fort  
17          Greely, Alaska, and U.S. Army Garrison-Kwajalein Atoll, two  
18          strategically important remote sites that are experiencing  
19          challenges with facilities that must be continued to be  
20          addressed as we move forward with more priority.

21          Additionally, I also serve as the Army's lead  
22          enterprise integrator for air and missile defense, while my  
23          role as JFCC IMD provides operational-level missile defense  
24          and expertise and integrates transregional missile defense  
25          functions across the joint and combined warfighting force.

1           As the Army's air and missile defense enterprise  
2 integrator, I will continue to use this role to highlight  
3 that the Army's air and missile defense remains the Army's  
4 most heavily deployed force with the highest demand signal  
5 amongst the combatant commands every year. This high  
6 optempo continues to provide a significant strain on our  
7 formations and families as we must continue to address their  
8 needs.

9           As you know, the urgency for multidomain transregional  
10 combat effects continues to increase exponentially. Our  
11 adversaries' air and missile-related threats have rapidly  
12 expanded in recent year in quantity, variety, and  
13 complexity. We see this today in Ukraine and looming on the  
14 horizon in the Pacific. It has never been more imperative  
15 that we and our allies and partners enhance our missile  
16 defense and space capabilities to impose costs on our  
17 adversaries, denying them the benefit of using these weapons  
18 and ensuring the safeguard of our nation.

19           As our adversaries increase their emphasis on space and  
20 missile capabilities, our U.S. Army must innovate and  
21 evolve. Understanding the challenges in today's threat  
22 environment, the Army released our Space Vision, supporting  
23 multidomain operations, specifying the Army's role in  
24 integrating space capabilities and to join and coalition  
25 operations while also interdicting the space capabilities of

1 our adversaries.

2 Therefore, we seize opportunities to integrate and  
3 exercise with other commands and coalition partners, remain  
4 fixed together working in dominance in science and  
5 technology development, and persisting in gathering soldier  
6 proficiency and groundbreaking technology.

7 It is also increasingly apparent that integrating our  
8 space operations and missile defense operations is critical  
9 to our national security. Our integration is essential to  
10 effectively contributing to the strategic deterrence and  
11 responding in crisis. Today we must integrate space and  
12 missile defense at every onset of prototyping, concept  
13 development, and application, as we do this all in concert  
14 with Army, joint, and coalition partners, one voice together  
15 around the globe.

16 Our allies and partners are critical for layered and  
17 tiered options to degrade, disrupt, and defeat adversaries,  
18 share burden, integrate technology, and protect our mutual  
19 homelands. But all of these operational considerations pale  
20 in comparison to the will, determination, and trust of the  
21 amazing men and women that operate and sustain these  
22 advanced systems. We ask a lot of our Army AMD and space  
23 formations, and the demand will only increase in the future.

24 Our planned force structure growth and modernization is  
25 critical in the coming years. Thank you for your efforts in

1 supporting them with timely budgets, caring for them and  
2 their families, and building trust with the American people,  
3 now and in the coming years. Caring for our soldiers and  
4 their families is paramount to win in any environment and  
5 globe. Thank you for supporting an incredible mission-ready  
6 team.

7 I look forward to addressing your questions. Thank  
8 you.

9 [The prepared statement of General Gainey follows:]

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1 Senator King: Thank you.

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1           STATEMENT OF LIEUTENANT GENERAL HEATH A. COLLINS,  
2           USAF, DIRECTOR, MISSILE DEFENSE AGENCY

3           General Collins: Thank you, Chairman King, Ranking  
4           Member Fischer, distinguished members of the subcommittee.  
5           I am honored for the opportunity today to join my colleagues  
6           on this panel and discuss the missile defense mission, and I  
7           appreciate your continued strong support of the missile  
8           defense mission over the years.

9           To start I would like to thank the men and women behind  
10          the development, delivery, and sustainment of the missile  
11          defense system that I represent today, our MDA family, and  
12          the operators of the system all are key partners in this no-  
13          fail mission.

14          We are requesting \$10.4 billion to develop and deploy  
15          homeland missile defenses and improve regional defenses  
16          against increasingly diverse and dangerous missile threats,  
17          a reality we all witnessed when Iranian and Houthi forces  
18          launched over 100 ballistic missiles in addition to cruise  
19          missiles and unmanned aerial vehicles against Israel last  
20          month.

21          Our prioritization of decisions will maximize missile  
22          defense system capability, capacity, and readiness. We  
23          continue to work closely with the combatant commanders and  
24          services to help prepare them for the fight of today and  
25          tomorrow. To defend our homeland from ballistic missile

1 attack, the ground-based mid-course defense system, or GMD,  
2 remains our nation's sole protection from limited attacks  
3 with the primary focus being the advancing North Korean  
4 threat. The ongoing Ground-Based Interceptor, or GBI,  
5 service life extension program will continue to improve GBI  
6 reliability and availability and will help mitigate risk  
7 until the next-gen Interceptor, or NGI, is fielded by the  
8 end of 2028.

9 After 20 years, GMD stands ready, as shown in December  
10 of 2023, when we successfully executed a GMD intercept  
11 flight test using the two 3-stage selectable Ground-Based  
12 Interceptor in 2-stage mode, demonstrating increased  
13 engagement battle space. We plan to deploy this capability  
14 to the entire fleet by the end of this year.

15 The NGI program remains on track, and as this  
16 subcommittee is aware, we recently selected Lockheed Martin  
17 to continue as the prime for NGI development, testing,  
18 production, and fielding.

19 Soon we plan to add the Long-Range Discrimination Radar  
20 to MDA's operational capability baseline, to enhance  
21 tracking, discrimination, and hit assessment against long-  
22 range missile threats. Today, LRDR is ready to support the  
23 space domain awareness mission.

24 For regional defense, MDA continues to design  
25 improvements to the Aegis ballistic missile defense

1 capability and procure the standard Missile 3 Block IIA  
2 missiles. We were very pleased with the performance of the  
3 Aegis weapon system and the system operators on board the  
4 USS Arleigh Burke and the USS Carney, and the role they  
5 played in intercepting the ballistic missiles fired against  
6 Israel last month.

7 In fiscal year 2025, we will also test and deliver SPY-  
8 1 radar upgrades and support the Navy in future space domain  
9 awareness demonstrations. We will continue U.S. Terminal  
10 High Altitude Area Defense, or THAAD, interceptor  
11 procurement, fielding and training support in collaboration  
12 with the U.S. Army to field the THAAD 4.0 capability to  
13 THAAD batteries by the end of 2025. THAAD 4.0 integrates  
14 Patriot capabilities with THAAD to increase Patriot defended  
15 area and engagement opportunities. We will also begin  
16 design work to improve the THAAD system to take on ever-  
17 advancing regional threats.

18 We will continue development of a 360-degree layered  
19 missile defense capability for Guam. MDA construction on  
20 the Joint Command Center, AN/TPY-6 radar site, and launcher  
21 site will begin in fiscal year 2025. By the end of this  
22 year we will execute a flight experiment against a medium-  
23 range ballistic missile target, using an SM-3 Block IIA  
24 interceptor, controlled by the initial Aegis Guam system,  
25 using the first TPY-6 transportable array unit.

1           Today our sea-based terminal defenses protect assets at  
2 sea and forces ashore from hypersonic threats. Working with  
3 the Navy, we anticipate delivering follow-on Increment 3  
4 capabilities in fiscal year 2025. The Glide Phase  
5 Interceptor program, or GPI, weapons system will enable a  
6 layered defense against hypersonic glide threats. By the  
7 end of fiscal year 2024, MDA will select a single GPI  
8 interceptor design to complete development. We will  
9 continue to develop and mature the GPI capability and  
10 support the planned cooperative development of the GPI with  
11 Japan.

12           We launched the Hypersonic and Ballistic Tracking Space  
13 Sensor, or HBTSS, prototype satellites in February of this  
14 year to demonstrate fire control solutions generated against  
15 hypersonic maneuvering threats from space. Following  
16 successful demonstration of HBTSS, the responsibility for  
17 fielding HBTSS like fire control capabilities will be taken  
18 on by the U.S. Space Force.

19           I am honored by this opportunity. I greatly appreciate  
20 everything this committee does for Missile Defense Agency  
21 and the missile defense mission, and I look forward to your  
22 questions.

23           [The prepared statement of General Collins follows:]

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Senator King: Senator Fischer.

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

3           Senator Fischer: Thank you, Mr. Chairman, and my  
4 apologies for being late to this hearing. I came from  
5 another meeting. Welcome to all of our witnesses. We  
6 appreciate you appearing before us today, and we look  
7 forward to hearing from each of you.

8           I am pleased to see progress being made on several  
9 programs over the last year, including continued development  
10 of the Missile Defense Agency's Hypersonic and Ballistic  
11 Tracking Space Sensor and the Next Generation Interceptor  
12 program.

13           However, I remain concerned that we are moving far too  
14 slowly on developing defenses against hypersonic weapons.  
15 In Section 1666 of last year's NDAA, this committee directed  
16 the Department to achieve initial operational capability for  
17 the Glide Phase Interceptor program not later than December  
18 31, 2029. Yet the Missile Defense Agency's budget request  
19 included no funding for accelerating the development of the  
20 Glide Phase Interceptor. Instead, it pushed it out even  
21 further, and that is far too late.

22           I am also deeply concerned about the slow speed at  
23 which the Department is addressing recovery efforts from the  
24 rogue wave that devastated facilities at the Reagan Test  
25 Site in the Marshall Islands. We cannot allow critical

1 testing capabilities for our nuclear deterrent and other  
2 long-range missile system to be undermined by a too-slow  
3 recovery.

4 I look forward to hearing more from our witnesses about  
5 these issues and about how the fiscal year 2025 request  
6 would impact their mission.

7 Thank you very much. Thank you, Mr. Chairman.

8 Senator King: You all know me as a mild-mannered,  
9 reasonable guy, but I am not going to be mild-mannered  
10 today. The truth is we have no defense for hypersonic  
11 missiles. Yes or no? Mr. Hill, any defense on hypersonic  
12 missile? You are the commander of an aircraft carrier in  
13 the Greenland Gap. If a hypersonic missile launched from  
14 Murmansk, 6,000 miles an hour, what do you do?

15 Mr. Hill: We have some systems that defend in the  
16 terminal stage but we need more. You are correct, Senator  
17 King and Senator Fischer, that our hypersonic defenses are  
18 inadequate, and we do need -- So SM-6 is in the Navy's  
19 terminal range. Patriot, I will let General Gainey speak to  
20 the specifics on that. Those are examples. But no argument  
21 -- we need focus on hypersonic defenses.

22 Senator King: So why are we talking about 2029 and  
23 even stretching that out. This is next year kind of stuff.  
24 I do not get it. I do not get your budget.

25 Mr. Hill: What we faced in this year, in the budget



1 this year, it was a very difficult year, particularly with  
2 Fiscal Responsibility Act caps that we had to work with,  
3 with the must-pay bills that had to go in for the personnel,  
4 the salaries, the health care, inflation costs. When you  
5 get down to the point of what was left for the discretionary  
6 types of things, where you can really control your choices,  
7 you are focusing on trades between readiness --

8 Senator King: That is your mission. Your mission is  
9 missile defense.

10 Mr. Hill: Yeah. The budget decisions at the aggregate  
11 level are made at a higher level, and so you are trading off  
12 between readiness or your future investments.

13 Senator King: Well, let me put the question in another  
14 way. Let's say what happened on April 14th happened over  
15 the Arctic Ocean, 300 missiles, drones, UAVs came across the  
16 Arctic Ocean toward Canada and North America. Could we do  
17 what Israel and we and other countries did? Could we knock  
18 down 99 percent of those missiles coming in, if that had  
19 happened in the northern part of the world?

20 Mr. Hill: If I may, that is in the realm of the  
21 responsibility of the Commander of NORTHCOM.

22 Senator King: Okay. So, could we have done what  
23 happened on April 14th?

24 General Guillot: No, Chairman.

25 Senator King: No. That is of concern. What is the

1 gap? Is the gap interceptors? Is the gap sensors? How  
2 come they could do it over there and we cannot do it here?

3 General Guillot: Part of the reason, Mr. Chairman, is  
4 because they have the [inaudible]. Up to the current time  
5 we have the capability in the services but they are not  
6 assigned to the NORTHCOM AOR.

7 Now also just the numbers of assets that we have in the  
8 region right now would not be sufficient to meet the attack  
9 of that size, that the Iranian forces --

10 Senator King: In fact, our capability in the region is  
11 aimed toward North Korea. Is that not correct?

12 General Guillot: That is correct.

13 Senator King: It is not designed to take on Russia or  
14 China, but that is where the threat is.

15 What is the cost of one GBI?

16 General Collins: So the GBI is approximately \$80  
17 million, \$85 million.

18 Senator King: One missile to intercept an incoming  
19 missile is \$80 million. Is that correct?

20 General Collins: Yes, sir. For an intercontinental  
21 ballistic missile class interceptor, yes, sir.

22 Senator King: Well, in the Red Sea the Houthis are  
23 sending \$20,000 drones, and we are shooting them down with  
24 missiles that cost 4.3. The math does not work on that,  
25 gentlemen. I mean, it just does not work. What are we

1 thinking?

2           Okay, here is what I am getting at. Your budget for  
3 directed energy is 1/1000ths of your total budget. It has  
4 gone down from \$140 million a year to \$15 million a year.  
5 What in the hell are you guys thinking? Directed energy is  
6 the answer. It costs 25 cents a shot, and the budget has  
7 gone down from \$140 million to \$15 million a year. That is  
8 scandal. We cannot possibly defend ourselves with \$80  
9 million missiles. There is not enough money in the whole  
10 world for that. Somebody give me an explanation of why, and  
11 I have got the data right here. In 2018, \$141.5 million for  
12 directed energy, fiscal year 2025, \$15.6.

13           Mr. Hill: Senator King, that is the portion of  
14 directed energy that is for the Missile Defense Agency.  
15 Across --

16           Senator King: Is that not your business, missile  
17 defense?

18           Mr. Hill: Yeah, but they have part of the missile  
19 defense piece. A lot of the air defense, a lot of what the  
20 directed energy supports, is actually done in the Army or in  
21 the Navy. There is a little over \$200 million in directed  
22 energy programs, but I take the point that that is --

23           Senator King: Well, that may not be enough. The  
24 budget for the entire Defense Department for directed energy  
25 is also down by something like two-thirds, and I do not get

1 it because we cannot go on hitting bullets with bullets,  
2 with very expensive bullets. And particularly we are  
3 talking about very expensive bullets hitting very cheap  
4 drones. Directed energy can do that. We know it can do  
5 that. And I do not understand. That directed energy budget  
6 should be going like this instead of like this.

7 Mr. Hill: Directed energy is a very important part.  
8 It has to be a very important part of missile defeat.

9 Senator King: Well, I agree with you. The budgets are  
10 policy, Mr. Secretary, and the policy is directed energy  
11 ain't very important. It goes from \$140 million to 15.  
12 That does not tell me the Department is valuing it very  
13 much.

14 So I will look forward to some further response,  
15 because right now we do not have much missile defense. That  
16 is the truth, whether it is to hypersonics, to drones. I  
17 would like you guys to go back and really rethink, what is  
18 your mission? If your mission is missile defense, we need  
19 to reorient what it is you do. And someday you will see me  
20 when I really mean it.

21 Vice Chair, go.

22 Senator Fischer: Yes, sir. Yes, sir.

23 Senator Rosen: He is fired up.

24 Senator Fischer: Yes, we all are. We all are.

25 First of all, I would like to thank our military men

1 who are here today. I thank you for the information you  
2 give us, not just at these open hearings but at our  
3 classified briefings, as well. You are open. You are  
4 honest about your needs. I will not put you on the spot  
5 here because you do serve the commander-in-chief. You serve  
6 the Secretary of Defense.

7 Mr. Hill, you are on the spot. I thank you for the  
8 work you do too, but when is this Administration going to  
9 listen to you, and to listen to the expert advice and  
10 information that our military gives them about what we need  
11 to defend the homeland? We hear from constituents who are  
12 angry because we are not protecting our southern border,  
13 that we have chaos at the border. We just heard we have  
14 chaos everywhere when it comes to the security of our  
15 homeland.

16 What is it going to take? And do not push it back,  
17 well, it is up to Congress to appropriate the money, it is  
18 up to Congress to set it, because you are giving us your  
19 budget here and now. You are the ones presenting the budget  
20 with the advice of the military here with you. It is very  
21 upsetting knowing what we need and not being able to discuss  
22 it, so I thank you for your openness in this hearing, and  
23 your answers in this hearing, but what we need to have, and  
24 I hope the American people are listening.

25 With that, General Collins, as I noted in my opening

1 statement this committee has been very clear in our  
2 direction to accelerate the development of the Glide-Phase  
3 Interceptor system, and if provided with additional  
4 resources, what steps would you be able to take to meet the  
5 congressionally mandated initial operational capability date  
6 of 2029?

7 General Collins: Thank you, Senator. Thank you, Vice  
8 Chairman. As we talked about just a second ago, the  
9 resource decisions may put us in a tough spot, in a tough  
10 decision on the GPI program.

11 Senator Fischer: Yes, but if you had what you needed,  
12 can you reach it?

13 General Collins: With the design of the system and the  
14 way the system is set up and the technology maturation that  
15 we have playing out over the next 4 or 5 years, 2029, with  
16 the existing GPI plan, will be a very hard date to meet as  
17 we move forward, very, very, very high risk program to do  
18 that.

19 But in that Section 1666, we were tasked to come up  
20 with options, and we are working with our industry partners,  
21 with our service partners, for options within the GPI  
22 program, and potentially outside the GPI program, to bring  
23 capability to bear against the hypersonic threat. We will  
24 incorporate that into that report and deliver that later  
25 this year, with option space and resource informed, ma'am.

1           Senator Fischer: Thank you. General Gainey, I am  
2 concerned that the Army is not appropriately prioritizing  
3 disaster recovery efforts for the Reagan Test Site. We know  
4 that it is the linchpin of the development and testing of  
5 every long-range missile system of the United States, and we  
6 cannot afford further delays.

7           So what can we expect to see, or when can we expect to  
8 see a disaster recovery plan from the SMDC?

9           General Gainey: Ma'am, thank you for that question,  
10 and thank you for highlighting Kwajalein Atoll, a strategic  
11 location to our nation, and specifically in the Pacific. We  
12 have a great team out at Kwajalein. Team Kwajalein is doing  
13 amazing things, tight community, expertise in engineering  
14 and in very important mission.

15           We have moved significantly forward with the recovery  
16 ops. The challenge is not so much the recovery ops right  
17 now, because we are able to continue testing, and we will be  
18 able to perform our strategic testing. I will personally be  
19 out there in June for one of our testing events that will  
20 occur. It is the long-term infrastructure challenges on  
21 Kwajalein that we have to address. The rogue wave just  
22 highlighted a significant issue that had been building up  
23 over years, and now we have to prioritize and address those  
24 infrastructure challenges as we move forward, so we can  
25 provide the community for our soldiers, civilians, engineers

1 that are out there doing a critical mission as we move  
2 forward.

3 Senator Fischer: Do you have a plan in place right now  
4 to be able to address that?

5 General Gainey: We have a plan, and we, in the Army,  
6 are looking at command and control options, restructure  
7 options to more efficiently be able to get after the  
8 challenges on Kwajalein. And also we are looking at how can  
9 we do more at Kwajalein leveraging INDOPACOM and USARPAC as  
10 part of that strategic location, to help us build on that  
11 infrastructure out there to do more for the Pacific than it  
12 is doing now. And that is how we are focusing, from an  
13 integrated approach.

14 Senator Fischer: Thank you.

15 Senator King: Before I call on Senator Rosen I just  
16 want to assure you, my comments were not in any way  
17 personal. You all are doing everything you can. But I  
18 think the agency needs to take a deep look at itself in  
19 light of what we have learned from Ukraine and from Israel  
20 and from developments in technology. Drones have become  
21 ubiquitous just in the last 3 or 4 years, and that is what I  
22 am hoping to get across in a somewhat intemperate way. But  
23 I wanted to make my point.

24 Senator Rosen.

25 Senator Rosen: Well, that is good because you actually



1 set me up for my next question, so thank you. You did not  
2 even know that, so thank you, Chairman and Ranking Member.  
3 And I really want to thank you for serving. I guess all  
4 times are challenging, but we are in an especially  
5 challenging time.

6 And I want to talk about some of the lessons that we  
7 have learned from Iran's attack on Israel. General Collins,  
8 the recent Iranian attack on Israel really did demonstrate  
9 how truly effective integrated air and missile defense  
10 systems can function to prevent a large-scale and layered  
11 attack. More than 300 missiles and drones we know launched  
12 against Israel, and an integrated system from numerous  
13 countries, including air partners in the region, were able  
14 to defeat the threat.

15 So I have kind of a multipart question. General, what  
16 lessons have we learned from the attack, and really, how  
17 complicated is it to establish a system that is able to foil  
18 the attack, how vulnerable is an integrated air and missile  
19 system to cyberattack, as we talk about being with multiple  
20 countries, and of course, are you budgeting for this in the  
21 future? Because as we said, the budget is the blueprint.  
22 We see what has happened.

23 And so how do we have to rethink that? I know I  
24 bundled a bunch there.

25 General Collins: Thank you, Senator, for that

1 question, and it is a really important question. Integrated  
2 air and missile defense, as we have seen in Ukraine, as we  
3 see in Israel, the adversaries are throwing integrated air  
4 and missile offenses at us. We really do need to make sure  
5 that we have integrated air and missile defenses in place to  
6 defeat those.

7 And it is a combination of a lot of different players.  
8 You know, the Missile Defense Agency's main threat space is  
9 ballistic and hypersonic missiles. The service picks up the  
10 integrated AMD for air and cruise missile threats. And then  
11 we do need to bring all of those together with our coalition  
12 partners to bring that together.

13 Senator Rosen: Right, because our DEFEND Act we passed  
14 a few years ago, my DEFEND Act, created this air and missile  
15 defense that clearly worked.

16 General Collins: Absolutely. Absolutely, and it  
17 worked very well. But it takes a long time to make it work  
18 right. And General Gainey, in his opening comments, made  
19 some assertions about how much training and exercising and  
20 work we have done across the services and with our  
21 international partners to be able to demonstrate what  
22 happened that night.

23 And it will take the architecture, the test and  
24 training, and the partnership to really bring true IMD to  
25 the forefront. It may have looked easy. It was not easy to

1 get there. It took a long time to get to what we  
2 demonstrated that night.

3 And as part of that architecting, as part of that  
4 development, as part of the testing to do that, cyber has to  
5 be at the ground floor of any of these concepts as we move  
6 forward. Within the missile defense system we have a  
7 comprehensive cyber test program from the element up through  
8 the system before we get to the field, as well as looking to  
9 do cyber defense while in the field. That has got to be  
10 foundational to everything we do in the future, because that  
11 will be absolutely critical. If the enemy gets inside IMD,  
12 then the IMD is unsuccessful.

13 I am trying to remember the last part of your question.

14 Senator Rosen: Are you forward thinking and forward  
15 budgeting? The budget is the blueprint, so we see what  
16 everyone is using, what the Chairman and Ranking Member have  
17 been talking about. How are you thinking about this for  
18 future budgets? What are you letting us know that we can  
19 put as a placeholder, develop? You name it. We have to  
20 take care of it.

21 General Collins: Yes, ma'am. I will answer one and  
22 then hand it to General Gainey. But one this is, at Missile  
23 Defense Agency we have the technical authority for IAMD, the  
24 technical design for the architecture, and we have spent a  
25 lot of time, over a decade, working on a future joint

1 tactical integrated fire control architecture with the  
2 services, and we are demonstrating the future capability of  
3 how --

4 Senator Rosen: The future is now, I am afraid.

5 General Collins: And we just recently, at Project  
6 Convergence, Capstone 4, with the Army, demonstrated where  
7 we connected many assets from all the services together  
8 through a demonstration of this joint tactical management  
9 capability. And we passed measurement-level data between an  
10 F-35 to a C-shooter. The C-shooter took a shot using F-35  
11 threat data.

12 Senator Rosen: That is great.

13 General Collins: So we are continuing to move that  
14 forward. That is an effort that is near and dear to me, to  
15 push this integrated forward.

16 I will hand it over to General Gainey with some  
17 thoughts.

18 General Gainey: Yes, ma'am, and thanks for your  
19 question. Thanks for the opportunity to be able to respond.  
20 From an Army perspective, I wear the Army hat but also  
21 wearing the Joint hat, IAMD, also.

22 But looking at the lessons learned I wanted to  
23 highlight earlier that we possess the capability to defeat a  
24 threat that we saw on April 14th. The work we have done  
25 with our partners and the work we have done from a joint

1 perspective has helped us, and that was put on showcase on  
2 the 14th.

3 The way the Army is moving forward, with our  
4 modernization, right now Patriot system is our cornerstone  
5 system. However, as we modernize with IBCS and we have  
6 asked for funding, we are getting funding to be able to do  
7 that, we are now going to move to more of a layered,  
8 tailored approach to the threat. So if we get a threat  
9 strike like we saw on the 14th, we will be tailored to be  
10 able to provide tactical ballistic capability or cruise  
11 missile capability or even drone capacity within that  
12 tailored force by the way we are budgeting, modernizing our  
13 capability moving forward.

14 So I am fully comfortable that the Army is taking those  
15 lessons learned and validates our path forward in  
16 modernization as an Army.

17 Senator Rosen: Thank you very much.

18 Senator King: Senator Rounds.

19 [Pause.]

20 Senator Rounds: There. That will work. Let me begin,  
21 and General Guillot, based on our approach right now we have  
22 moved back into a near-peer competitor mode where we have  
23 two near peers. If you have to lay out for the American  
24 people what you see as the greatest threats that you have to  
25 defend against right now, share with me the vectors that you

1 see these offensive weapons coming at us. What are the  
2 weapons that we are defending against today and that you are  
3 working on?

4 General Guillot: Senator, the range of weapons is  
5 greater than it has been at any time in the past, so  
6 starting with the North Korean threat and the  
7 intercontinental ballistic missiles is probably the longest-  
8 range threat that I look at each day. Next would be the  
9 cruise missile threats that are not only air-launched cruise  
10 missiles from Soviet bombers but also submarine-launched  
11 ballistic missiles that come from either coast, if the  
12 adversary submarines get close enough.

13 And the cyber threat. The cyber threat is the most  
14 present and persistent threat that we see. We see it on a  
15 daily basis, attacks from nation states and hacktivists  
16 trying to get into our systems, each day.

17 Senator Rounds: What about drones?

18 General Guillot: Drones are certainly an increasing  
19 threat. We see them, on average, reported that are detected  
20 in the NORTHCOM AOR is anywhere from two to five a week over  
21 installations, military installations. That is the only  
22 visibility I have; I know there are certainly more over  
23 other parts of critical infrastructure.

24 Senator Rounds: Fair to say that our defense of the  
25 North American continent really has been based upon having

1 the equipment to defend against the ICBM, number one, and to  
2 a lesser degree, the cruise missile, but until recently not  
3 a lot on drones because they are new, and not a lot with  
4 regard to cyber, except that which has moved through the  
5 system in the last 3, 4 years.

6 General Guillot: Senator, I think that is accurate.

7 Senator Rounds: If you take a look at the systems that  
8 we use to defend against them, these are very expensive  
9 weapons systems, are they not. The ICBM, the cruise  
10 missiles, and so forth are expensive. And really the  
11 equipment that we are using, our ability to shoot them down  
12 is with expensive systems, as the Chairman identified. But  
13 what we are really talking about here, with regard to ICBMs  
14 and cruise missions, we are probably going to spend an  
15 expensive piece of machinery to catch up with them and take  
16 them out.

17 But what we are seeing coming across in the Middle East  
18 right now, and in the Red Sea area, we are not really  
19 talking really about a lot of ICBMs, but we are talking  
20 about cruise missiles, and we are talking about a huge  
21 number of drones.

22 We are using weapons that were never made to take those  
23 out. Is that a fair statement?

24 General Guillot: Yes, it is, Senator. To characterize  
25 what you said, we are using expensive weapons on UAVs, and

1 to the cruise missiles. I think that directed energy, I  
2 think that laser, high-powered microwave capabilities,  
3 certainly for the UAVs, and even would have some capability  
4 against cruise missiles.

5 Senator Rounds: But the problem, as I understand it,  
6 is that we have not made that move yet. We have not moved  
7 -- and this is where I am going to move to what the threat  
8 is there over to General Collins here for just a second.  
9 The systems that you work on today are principally equipment  
10 that, as the Chairman has indicated, are going to be some  
11 very expensive responses to take out ICBMs and cruise  
12 missiles. Is that an accurate statement, sir?

13 General Collins: Sir, our systems are designed against  
14 ballistic missiles, against ICBMs, but also against medium-  
15 range and short-range ballistic missiles. So the Aegis  
16 standard missile fleet, THAAD, those are also designed for  
17 regional area defense against theater ballistic missile  
18 class weapons. We do not cover down on cruise missiles.

19 Senator Rounds: What is the least expensive missile  
20 defense system aboard an Aegis carrier, or a Patriot system,  
21 what is the least expensive actual targeting material we  
22 have got, per shot?

23 General Gainey: Senator, if you are talking Army air  
24 and missile defense systems right now, it is probably our  
25 Stinger. But -- and this is what I want to clarify here



1 -- the Joint Counter UAS Office is working the counter-UAS  
2 threat, and we have systems specifically developed for the  
3 counter-UAS, specifically the Coyote interceptor, which is a  
4 significantly cheaper interceptor than a Patriot or an SM-2  
5 type interceptor. And we are using that capability  
6 successfully in theater right now, and that is what we are  
7 using to address that threat. And that organization is  
8 continuing to develop technology, work with our industry  
9 partners. We have also been successful with directed  
10 energy, and we are also, in the Army, are fielding a platoon  
11 of high-powered microwave capability that will eventually be  
12 able to be deployed, which will continue to bring down the  
13 cost curve.

14 So the Army is really investing in directed energy,  
15 whether it is laser or high-powered microwave, and actually  
16 fielding it to the formation. So we have a directed energy,  
17 50-kilowatt Stryker fielded to 4-60th ADA in support of  
18 First Armored Division, and we are fielding a platoon of  
19 high-powered microwave to 151 ADA support in 1st MDTF.

20 So those systems are real and out information right  
21 now, and some of them deployed.

22 Senator Rounds: And just to follow up, because this is  
23 the part I think the Chairman was trying to make, is do you  
24 have enough in the budget right now to push those particular  
25 systems, and have they been budgeted for, or do you need

1 your budgets improved to take advantage of those weapons  
2 systems?

3 General Gainey: I would definitely say we need to have  
4 more, based off of the threat and the numbers of threats  
5 that we are seeing. We will definitely have to have more.

6 Senator Rounds: How many of those weapons systems do  
7 you have today?

8 General Gainey: Total numbers?

9 Senator Rounds: Yep.

10 General Gainey: I can give you that number outside of  
11 this forum.

12 Senator Rounds: Classified?

13 General Gainey: Yes. I can provide you those numbers.

14 Senator Rounds: It is still in the development field,  
15 though?

16 General Gainey: No. That capability, it is a  
17 prototype and it has not gone to a full-rate production  
18 program of record yet, but it is about to in the next two  
19 fiscal years. Because what the Army is doing, we are  
20 talking that capability and we are putting it inside of our  
21 divisions. So the first division set with the counter-UAS  
22 capability is being fielded now, first two divisions, and  
23 the third division will start fielding in fiscal year 2026,  
24 where we will actually have Coyote-based Strykers with that  
25 capability on Strykers.

1           So the Army is moving forward as a program of record  
2 with this capability. It is not there now, but we are  
3 moving forward with it.

4           Senator Rounds: One last question, just directed back  
5 to General Guillot. Are you incorporating those in the  
6 North American Defense Command today?

7           General Guillot: We have requested to, Senator.

8           Senator Rounds: What you say you have requested to,  
9 what is the holdup on it?

10          General Guillot: Well, let me be clear. We have not  
11 requested Coyotes because of the kinetic capability in the  
12 homeland, but we have requested non-kinetic capabilities and  
13 directed energy weapons for counter-UAS.

14          Senator Rounds: You have requested them.

15          General Guillot: That is right. So the first one,  
16 Senator, as General Gainey mentioned, were pushed over to  
17 the AOR, were the CENTCOM area of responsibility. So we are  
18 watching closely the effectiveness there, and then as they  
19 learn and this system is proven, that is what I would like  
20 to employ here.

21          Senator Rounds: Thank you. Thank you, Mr. Chairman,  
22 for your indulgence.

23          Senator King: Mr. Cotton. Senator Cotton.

24          Senator Cotton: You know, as I sit here and I listen  
25 to all this conversation about all the threats we face and

1 all the inadequacies against those threats -- it is great to  
2 hear all this talk of interceptors and directed energy  
3 systems -- I cannot help but think maybe the easiest way to  
4 defend against all these missiles and drones would be to  
5 just blow them up on the ground before they ever get off, in  
6 warehouses or their assembly lines. And I know none of you  
7 are in charge of these decisions. You all have in your  
8 title "missile defense" and "air defense" and "space  
9 defense," and all the rest.

10 But I think under President Biden, the Department of  
11 Defense may take its name a bit too literally, if you look  
12 at what is happening in Yemen, for instance. All we are  
13 doing is shooting down missiles and drones that are in the  
14 air, coming our sailors or on the launchpad, ready to  
15 launch. We are not actually trying to destroy all of their  
16 capabilities. I understand there are reasons for that, that  
17 we cannot necessarily find and fix them all right now, but  
18 that is a problem in its own right. So you might try to get  
19 on offense as a good defense, rather than just have our  
20 sailors as sitting ducks, like so many of our troops around  
21 the region are sitting ducks.

22 Speaking of sitting ducks, General Gainey, do you  
23 believe that the Army is providing adequate authority in a  
24 timely manner to unit to defend against drone attacks or  
25 surveillance?

1           General Gainey:  Senator, thank you for that question.  
2  In CENTCOM AOR, yes.  The great work --

3           Senator Cotton:  Worldwide.  Everywhere.

4           General Gainey:  -- the great work that has been done  
5  inside of CENTCOM has really set the stage to have globally  
6  relook the way we push authorities down, but that is  
7  obviously, Senator, as you know, because it is a conflict  
8  area, and missiles are being shot at our soldiers, so they  
9  have to have that authority delegated down.

10          Authorities in CONUS are a little bit more challenging,  
11  and --

12          Senator Cotton:  What about PACOM?

13          General Gainey:  That is within the air defense  
14  commander's purview on how he delegates his authorities down  
15  to the actual operator to be able to shoot his capability,  
16  and he retains that authority based off of the risk analysis  
17  that he is doing.

18          Senator Cotton:  What about --

19          General Gainey:  he has the ability to pass that  
20  authority all the way down to the operator level, but he  
21  chooses to withhold it now, which is in his authority.

22          Senator Cotton:  What about in Guam?

23          General Gainey:  Same thing, because the area air  
24  defense commander inside of INDOPACOM is the PACAF  
25  commander, he also decides the authorities that are

1 delegated to Guam, and he has the authority to delegate down  
2 further, if he chooses to.

3 Senator Cotton: It is my understanding that we have  
4 got quite a few drones flying over our installations on  
5 Guam, and there has been no genuine response. Is that the  
6 case?

7 General Gainey: I am not tracking no general response.  
8 It may be a challenge with where the capability is located  
9 on Guam, because most of the counter-UAS capability is  
10 localized, and I am not sure the situation of how it is --

11 Senator Cotton: Who would have the authority to engage  
12 drones over Guam?

13 General Gainey: It would be the local commander. We  
14 delegate the authority for drones to the local commander on  
15 that site, just because of the time and space you have to be  
16 able to delegate it. So any discussions on delegation of  
17 authorities down even further to the operator would reside  
18 on Guam.

19 Senator Cotton: Okay. While we are on the topic of  
20 Guam, General Gainey and maybe General Collins, as well, if  
21 you want to chime in, what is the status of the  
22 environmental impact statements for the 20 Guam defense  
23 system sites?

24 General Gainey: As far as the impacts I will pass that  
25 to the Missile Defense Agency, who is doing the impact

1 statements.

2 General Collins: Yes, sir. We are still in the middle  
3 of the environmental impact survey process. Our very first  
4 set of MILCON, military construction, money is in the fiscal  
5 year 2025, do right now that EIS schedule on critical path.  
6 But we are on track to be able to award those MILCON  
7 contracts on schedule at the beginning of 2025.

8 Senator Cotton: You said you are in process. When did  
9 that process begin?

10 General Collins: Well before me. Probably over a year  
11 and a half, two years ago, is when the process starts.

12 Senator Cotton: So 18 to 24 months ago, and it will  
13 not be finished for another 7 months, at least?

14 General Collins: Yes, sir.

15 Senator Cotton: That is bad for like a pipeline or a  
16 road, but that seems especially bad for air defense systems  
17 on one of our most critical forward deployed bases in PACOM.

18 That is all. Bad.

19 Senator King: You go ahead. We will have a second  
20 round. Yes, we will have a second round.

21 Gentlemen, here is my problem, and I realize this is  
22 not in your level. This is Secretary of Defense, President,  
23 but high level of essentially allocation of resources. My  
24 problem is that Defense Department generally, research and  
25 development and construction of directed energy has fallen

1 by 50 percent in the last 3 years, a little over \$1.6  
2 billion to a little under \$800 million. Each of the  
3 services, the Army in those 3 years, has fallen from \$750  
4 million to \$150 million. That is a pretty dramatic  
5 decrease.

6 My point is this is a major policy discussion, and we  
7 need to have it on our Committee, but I believe your agency  
8 has to have it as well. As I said before, what we have seen  
9 in the Middle East and what we have seen in Ukraine, it  
10 seems to me should cause some soul-searching within an  
11 agency whose name is "missile defense." Could we have done  
12 what the Israelis and we and the Arab countries did on April  
13 14th? And if the answer to that question is no, then we  
14 really have to go back and rethink.

15 And again, we are talking about \$80 million  
16 interceptors for ICBMs when, in fact, the more likely attack  
17 is going to come from air-launched cruise missiles, sea-  
18 launched missiles in the Arctic Ocean. You know, Sir Isaac  
19 Newton could tell you where an ICBM is going to go, but  
20 where a cruise missile, particularly a hypersonic cruise  
21 missile, is going to go is a very different problem that  
22 requires a very different solution, and economics also has  
23 to be part of it.

24 So I really believe that we need to have a Department-  
25 wide, and frankly on this committee we have to have a



1 discussion about where we are going, because budgets are  
2 policy. And we can talk about research and everything else,  
3 but if the budget has been cut in half, that tells me that  
4 this is not a priority for the Administration or for the  
5 Department of Defense.

6 So that is my comment. When a budget is cut in half  
7 that just tells me it is not very important.

8 Senator Fischer?

9 Senator Fischer: Thank you, Chairman. Mr. Hill, in  
10 the fiscal year 2025 budget request the Missile Defense  
11 Agency requested \$1.2 billion for the defense of Guam. How  
12 would these funds be used to build out Guam's integrated air  
13 and missile defense architecture?

14 Mr. Hill: So we have initially the missile defense  
15 funds complement, as well, with the Army program. The Army  
16 is fielding programs, and General Gainey can comment in more  
17 detail on that, on the missile defense part. In particular,  
18 there is focus on -- it is not the same, but using some of  
19 the launchers, the vertical launchers that of that type, and  
20 you also have radar systems.

21 I probably should refer to General Collins for more  
22 specifics on that program, though.

23 Senator Fischer: So are you coordinating not just with  
24 the Army but with other partners, as well?

25 Mr. Hill: The overall coordination for Guam, the

1 acquisition, is actually an Army office that Congress wanted  
2 us to designate. We did. We designated the Army to lead  
3 that rather than leading it from within an OSD office. And,  
4 of course, that office is coordinating what Missile Defense  
5 Agency is doing and what Army, as well as what Navy is  
6 doing.

7 Senator Fischer: Okay. Thank you.

8 Senator King: Senator Rosen.

9 Senator Rosen: Thank you. Well, I had some questions  
10 on Guam, too, so I am just going to kind of make a comment  
11 because we know the Chinese military has been so provocative  
12 in their plans to attack Guam, they have gone as far as  
13 releasing that commercial in September of 2020, of their air  
14 force using their H-6 bomber to attack the island and the  
15 U.S. forces.

16 So along with everyone else, I just want to make sure  
17 we are taking the adequate measures to deter our adversaries  
18 like China to secure Guam against these similar  
19 vulnerabilities that we have seen in the past, particularly  
20 as we even go back to 1941, with Pearl Harbor. So how are  
21 you positioning things?

22 Mr. Hill: Senator Rosen, sometimes Chinese messaging  
23 is not very subtle, is it?

24 Senator Rosen: No, it is not.

25 Mr. Hill: What we did in the missile defense review in

1 2022, was made a very clear statement that we wanted people  
2 to understand, yeah, we can see China. You understand Guam  
3 is a very strategically important piece of the region. In  
4 the missile defense review we made a clear statement; it is  
5 also part of the homeland of the United States.

6 Senator Rosen: That is right.

7 Mr. Hill: Those are American citizens on Guam. They  
8 have been since 1950. So want you to understand that you  
9 are not just talking about any rock out in the Pacific.  
10 That is the United States. So that is part of the  
11 deterrence message with respect to China.

12 We have also always had the challenge that it has been  
13 within range of North Korean missiles, and that is why you  
14 have batteries there today. But as you are looking at that  
15 future larger question of the Indo-Pacific, if we are  
16 deterring war in the Indo-Pacific over time, this is where  
17 you are also trying to say the ability to project power from  
18 Guam is part of integrated deterrence, and you will need to  
19 assure that power projection from Guam because you have  
20 missile defense to defend our projection as a part of the  
21 overall architecture that is meant to deter really at the  
22 conventional level.

23 Senator Rosen: Thank you, and that brings me to my  
24 last question, which is implementing the National Security  
25 Supplemental because, well, there is the Indo-Pacific and

1 certainly there is Israel. So I am going to just really  
2 focus on Israel right now. We have \$4 billion for Iron  
3 Dome, David's Sling, \$1.2 billion for Iron Beam, which is  
4 Israel's directed energy missile defense system.

5 General Collins, how are we working to get the funds  
6 from the supplemental out the door and spent, with  
7 interceptors ready to be sent over to Israel so that they  
8 can defend themselves, and could you update us on  
9 implementation, General?

10 General Collins: Yes, Senator. Great question, and  
11 something that we have done a lot of homework ahead of time  
12 as the supplemental went through the process. We are going  
13 to follow the same process we followed a couple of years  
14 back when there was the billion-dollar Iron Dome  
15 supplemental in 2022, through a process called exchange of  
16 letters. And those letters are drafted. Those are now with  
17 the supplemental approval. Now we are taking those through  
18 final approval through all the government agencies that need  
19 to approve it. And I do not have a timeline exactly yet of  
20 when that is expected to happen, but those are in work. And  
21 we have had, from all the different agencies, State,  
22 Department of Defense, everybody, they have all been in and  
23 very cooperative, making sure we can get through this.

24 Senator Rosen: We will look forward to seeing that.  
25 Thank you.

1           Senator King: Final question. Why do we not have Iron  
2 Dome? We helped pay for it. We helped design it. Why do  
3 we not have an Iron Dome system throughout the country? It  
4 does not seem to be terribly expensive. It is proven to be  
5 fabulously effective. Why is that not part of our arsenal?

6           General Collins: Sir, I think I will start just once  
7 before I hand over to General Gainey, sir. In our  
8 cooperative agreements with Israel we did not pay for the  
9 co-development of Iron Dome. We co-produced Iron Dome. So  
10 we were actually not part of the design phase for Iron Dome.  
11 We were for David's Sling and Arrow weapon system as we go  
12 forward. I just wanted to clarify on the background there.

13           General Gainey, as far as utility?

14           General Gainey: Yes. Senator, thanks for that  
15 question. Actually, we did have Iron Dome for a period of  
16 time before we provided it back to Israel on loan for the  
17 recent conflict. So it was in one of our formations, 151  
18 ADA, who actually trained with it, deployed it, and  
19 exercised it.

20           Senator King: But can it be reproduced?

21           General Gainey: It probably can, but we, in the Army,  
22 our strategy is not so much a system. As I highlighted, the  
23 integrated battle command system, which is a C-2 system that  
24 integrates several launchers with several sensors to provide  
25 the optimal solutions --

1           Senator King: Is the system you are describing as  
2 effective as Iron Dome?

3           General Gainey: It tested out just as effective. So  
4 as we implement it and field it in our formations we will  
5 field just launchers and not a complete system, which will  
6 provide the same capability because it will leverage the  
7 sensors that are already in those formations to provide a  
8 tailorable integrated solution for our Army.

9           Senator King: Well, I want to thank you again. Today  
10 we have talked about a number of issues. I hope to  
11 reconvene this hearing in a classified setting, maybe  
12 several months from now, because I would like to discuss  
13 hypersonic defense. Because to talk about missile defense  
14 without realistically talking about hypersonic defense is  
15 not taking cognizance of the world that we live in.

16           But again I want to thank you all very much. It has  
17 been very informative. And thank you for the work that you  
18 are doing on behalf of our country.

19           The hearing is adjourned.

20           [Whereupon, at 5:56 p.m., the subcommittee was  
21 adjourned.]

22

23

24

25

**WORD INDEX**

&lt; \$ &gt;

**\$1.2** 48:11 51:3**\$1.5** 5:9**\$1.6** 47:1**\$1.9** 5:7**\$10.4** 3:4 17:14**\$10.8** 3:5**\$140** 26:4, 7  
27:11**\$141.5** 26:11**\$15** 26:4, 7**\$15.6** 26:12**\$150** 47:4**\$2.5** 5:4**\$20,000** 25:23**\$200** 26:21**\$28.4** 5:2**\$4** 51:2**\$4.7** 5:8**\$60** 4:16**\$750** 47:3**\$80** 25:16, 19  
26:8 47:15**\$800** 47:2**\$85** 25:17

&lt; 1 &gt;

**1** 19:8**1/1000ths** 26:3**100** 17:18**13** 12:10**13th** 9:1**14th** 2:23 24:14,  
23 35:24 36:2, 9  
47:13**15** 27:11**151** 40:19 52:17**1666** 22:15

29:19

**18** 46:12**19** 12:11**1941** 49:20**1950** 50:8**1st** 40:19

&lt; 2 &gt;

**2,300** 12:10**20** 18:9 45:22**2018** 26:11**2020** 49:13**2022** 50:1 51:15**2023** 18:10**2024** 1:6 3:5

20:7

**2025** 1:3 2:83:3, 6 5:2 19:7,  
13, 21 20:4 23:5  
26:12 46:5, 7

48:10

**2026** 41:23**2028** 18:8**2029** 22:18  
23:22 29:6, 15**24** 46:12**25** 26:6**2-stage** 18:12

&lt; 3 &gt;

**3** 19:1 20:3  
31:21 38:5 47:1,  
3**300** 2:23 24:15  
32:11**31** 22:18**360-degree** 19:18**3-stage** 18:11

&lt; 4 &gt;

**4** 29:15 31:21

35:6 38:5

**4.0** 19:12, 13**4.3** 25:24**4:53** 1:14**4-60th** 40:17

&lt; 5 &gt;

**5** 3:2 29:15**5:56** 53:20**50** 47:1**50-kilowatt** 40:17**5-minute** 3:14

&lt; 6 &gt;

**6,000** 23:14

&lt; 7 &gt;

**7** 46:13

&lt; 8 &gt;

**8** 1:6

&lt; 9 &gt;

**99** 24:18

&lt; A &gt;

**ability** 38:11  
44:19 50:17**able** 28:21 29:4  
30:17, 18 31:4, 7

32:13, 17 33:21

35:19 36:6, 10

40:12 44:15

45:16 46:6

**aboard** 39:20**Absolutely** 33:16

34:11

**accelerate** 29:2**accelerating**  
22:19**accurate** 38:6

39:12

**achieve** 5:24

22:16

**acknowledge**

4:14

**acquisition** 49:1**Act** 2:8 24:2

33:13, 14

**active** 5:18 9:24**actively** 9:25**ACTIVITIES** 1:2**actual** 39:21

44:15

**ADA** 40:17, 19

52:18

**add** 7:1 18:19**addition** 9:9

17:18

**additional** 29:3**Additionally**

6:10 12:21

**address** 2:11

13:7 30:21, 23

31:4 40:7

**addressed** 12:20**addressing** 15:7  
22:23**adequate** 43:23

49:17

**adjourned** 53:19,  
21**Administration**

28:8 48:4

**advance** 10:9**advanced** 5:13

8:18 12:13

14:22

**advancing** 18:3

19:17

**advantage** 41:1

**adversaries** 9:9,  
*13 13:11, 17, 19*  
 14:1, 17 33:3  
 49:17  
**adversary** 37:12  
**advice** 28:9, 20  
**AEGIS** 3:9  
 18:25 19:3, 24  
 39:15, 20  
**aerial** 9:4, 11  
 17:19  
**AEROSPACE**  
 8:3, 7  
**afford** 30:6  
**afraid** 35:4  
**afternoon** 10:15  
**agencies** 51:18,  
 21  
**Agency** 2:6, 17  
 3:4 5:10 17:2  
 20:20 26:14  
 31:18 34:23  
 45:25 47:7, 11  
 48:11 49:5  
**Agency's** 22:10,  
 18 33:8  
**aggregate** 24:10  
**aggression** 10:12  
**ago** 29:8 33:14  
 46:11, 12  
**agree** 27:9  
**agreeing** 3:13  
**agreements** 52:8  
**ahead** 46:19  
 51:11  
**aid** 9:21  
**aimed** 25:11  
**ain't** 27:11  
**air** 2:19, 21  
 4:20 9:2 12:22  
 13:1, 3, 11 26:19

32:9, 13, 18 33:2,  
 3, 5, 10, 14 39:23  
 43:8, 14 44:13,  
 23 46:16 48:12  
 49:13  
**aircraft** 23:12  
**air-launched**  
 37:9 47:17  
**Alaska** 12:17  
**All-Domain** 10:9  
**alliances** 4:24  
**allies** 4:25 9:19  
 13:15 14:16  
**allocation** 46:23  
**allow** 22:25  
**alongside** 8:10  
**Altitude** 19:10  
**amazing** 14:21  
 30:13  
**AMD** 14:22  
 33:10  
**America** 8:20  
 9:23, 24 24:16  
**AMERICAN** 8:2,  
 7 15:2 28:24  
 36:23 37:25  
 42:6 50:7  
**America's** 9:12  
**AN/TPY-6** 19:20  
**analysis** 44:16  
**angry** 28:12  
**Angus** 1:15 2:1  
**answer** 26:6  
 34:21 47:13  
**answering** 6:12  
**answers** 28:23  
**anticipate** 20:3  
**AOR** 25:6  
 37:20 42:17  
 44:2

**apologies** 22:4  
**apparent** 14:7  
**appear** 3:14  
 8:10 10:14  
**appearing** 22:6  
**application** 14:13  
**appreciate** 17:7  
 20:19 22:6  
**appreciation** 4:14  
**approach** 4:11  
 10:1 31:13 36:8,  
 21  
**approaches** 5:19  
**appropriate**  
 28:17  
**appropriately**  
 30:2  
**approval** 51:17,  
 18  
**approve** 51:19  
**approximately**  
 25:16  
**April** 2:23 9:1  
 24:14, 23 35:24  
 47:12  
**Arab** 47:12  
**architecting** 34:3  
**architecture**  
 33:23 34:24  
 35:1 48:13  
 50:21  
**Arctic** 24:15, 16  
 47:18  
**Area** 19:10, 15  
 38:18 39:17  
 42:17 44:8, 23  
**argument** 23:20  
**Arleigh** 19:4  
**Armed** 1:9  
**Armored** 40:18

**Army** 2:17 5:9  
 8:22 12:2, 6, 13,  
 17 13:20, 22  
 14:14, 22 19:12  
 26:20 30:2 31:5  
 35:6, 20 36:3, 14,  
 16 39:23 40:10,  
 14 41:19 42:1  
 43:23 47:3  
 48:15, 24 49:1, 2,  
 5 52:21 53:8  
**Army's** 12:21  
 13:1, 3, 23  
**array** 19:25  
**Arrow** 52:11  
**arsenal** 52:5  
**ashore** 20:2  
**asked** 36:6  
**assembly** 43:6  
**assertions** 33:19  
**assessment** 6:2  
 18:21  
**assets** 20:1 25:7  
 35:7  
**assigned** 25:6  
**ASSISTANT** 4:1  
**assure** 31:16  
 50:19  
**Atoll** 12:17  
 30:10  
**attack** 2:23  
 8:25 18:1 25:8  
 32:7, 8, 11, 16, 18  
 47:16 49:12, 14  
**attacks** 18:2  
 37:15 43:24  
**authorities** 44:6,  
 10, 14, 25 45:17  
**authority** 34:23  
 43:23 44:9, 16,



20, 21 45:1, 11, 14  
**AUTHORIZATION** 1:2 2:8  
**availability** 18:6  
**avenues** 10:1  
**average** 37:19  
**award** 46:6  
**aware** 18:16  
**awareness** 9:5  
 18:23 19:9

< B >

**back** 27:17  
 28:16 36:22  
 42:4 47:14  
 49:20 51:14  
 52:16  
**background**  
 52:12  
**bad** 46:15, 16, 18  
**ballistic** 2:24  
 5:7 8:18 9:3  
 17:18, 25 18:25  
 19:5, 23 20:12  
 22:10 25:21  
 33:9 36:10 37:7,  
 11 39:14, 15, 17  
**base** 12:12  
**based** 36:21  
 37:25 41:4  
 44:16  
**baseline** 18:20  
**bases** 46:17  
**basis** 3:11 37:15  
**batteries** 19:13  
 50:14  
**battle** 18:13  
 52:23  
**Beam** 51:3

**bear** 29:23  
**beginning** 46:7  
**behalf** 4:5 53:18  
**believe** 43:23  
 47:7, 24  
**benefit** 13:17  
**better** 5:25  
**Biden** 43:10  
**bill** 2:10  
**billion** 3:4, 5  
 4:16 5:3, 4, 7, 8,  
 9 17:14 47:2  
 48:11 51:2, 3  
**billion-dollar**  
 51:14  
**bills** 24:3  
**bipartisan** 4:11  
**bit** 43:11 44:10  
**Block** 19:1, 23  
**blow** 43:5  
**blueprint** 32:21  
 34:15  
**board** 19:3  
**bomber** 49:14  
**bombers** 37:10  
**border** 28:12, 13  
**briefings** 28:3  
**bring** 29:22  
 33:11, 12, 24  
 40:12  
**brings** 50:23  
**budget** 2:6 3:3,  
 5, 6 4:8 5:2  
 22:18 23:24, 25  
 24:10 26:2, 3, 6,  
 24 27:5 28:19  
 32:21 34:15  
 40:24 48:3, 6, 10  
**budgeted** 40:25  
**budgeting** 32:20  
 34:15 36:12

**budgets** 15:1  
 27:9 34:18 41:1  
 48:1  
**build** 31:10  
 48:12  
**Building** 1:15  
 15:2 30:22  
**bullets** 27:1, 2, 3  
**bunch** 32:24  
**bundled** 32:24  
**burden** 14:18  
**Burke** 19:4  
**business** 26:16

< C >

**C-2** 52:23  
**call** 31:15  
**called** 51:15  
**campaign** 9:25  
**Canada** 8:16  
 9:15 24:16  
**capabilities** 4:21  
 6:4 8:13 9:6, 10  
 13:16, 20, 24, 25  
 19:14 20:4, 17  
 23:1 39:2 42:12  
 43:16  
**capability** 9:23  
 17:22 18:13, 20  
 19:1, 12, 19 20:9  
 22:16 25:5, 10  
 29:5, 23 35:2, 9,  
 23 36:10, 11, 13  
 39:3 40:5, 11  
 41:16, 20, 22, 25  
 42:2, 11 44:15  
 45:8, 9 53:6  
**capacity** 17:22  
 36:11  
**caps** 24:2

**Capstone** 35:6  
**care** 24:4 34:20  
**caring** 15:1, 3  
**Carney** 19:4  
**carrier** 23:12  
 39:20  
**case** 45:6  
**catch** 38:15  
**cause** 47:10  
**CENTCOM**  
 42:17 44:2, 5  
**Center** 19:20  
**Central** 8:8  
**centrality** 4:19  
**cents** 26:6  
**Certainly** 3:23  
 37:18, 22 39:3  
 51:1  
**Chair** 27:21  
**chairman** 1:16  
 3:23 4:4 8:4  
 12:4 17:3 22:3  
 23:7 24:24 25:3  
 29:8 32:2 34:16  
 38:12 39:10  
 40:23 42:21  
 48:9  
**challenge** 30:16  
 45:8 50:12  
**challenges** 5:1  
 10:10 12:19  
 13:21 30:20, 24  
 31:8  
**challenging** 32:4,  
 5 44:10  
**changed** 2:19  
 3:2  
**chaos** 28:13, 14  
**characterize**  
 38:24

<b>charge</b> 43:7	<b>Collins</b> 8:11	<b>commands</b> 10:3	14:13
<b>cheap</b> 27:3	17:1, 3 20:23	13:5 14:3	<b>conduct</b> 5:23
<b>cheaper</b> 40:4	25:16, 20 28:25	<b>comment</b> 48:6,	<b>Conflict</b> 4:22
<b>chime</b> 45:21	29:7, 13 32:7, 25	16 49:10	44:7 52:17
<b>China</b> 2:15 8:24	33:16 34:21	<b>comments</b> 31:16	<b>conflicts</b> 2:20
25:14 49:18	35:5, 13 39:8, 13	33:18	4:18
50:2, 11	45:20 46:2, 10,	<b>commercial</b>	<b>Congress</b> 28:17,
<b>Chinese</b> 49:11, 22	14 48:21 51:5,	49:13	18 49:1
<b>choices</b> 24:6	10 52:6	<b>Committee</b> 1:9,	<b>congressionally</b>
<b>chooses</b> 44:21	<b>combat</b> 13:10	17 4:11, 15 6:8	29:5
45:2	<b>combatant</b> 10:3	8:22 20:20	<b>connected</b> 35:7
<b>citizens</b> 10:13	13:5 17:23	22:15 29:1 47:7,	<b>considerations</b>
50:7	<b>combination</b> 33:7	25	14:19
<b>civilian</b> 4:21	<b>combined</b> 10:9	<b>communication</b>	<b>constituents</b> 6:11
5:14 8:19 9:15	12:25	9:21	28:11
<b>civilians</b> 12:10	<b>come</b> 25:2	<b>community</b> 10:5	<b>construction</b>
30:25	29:19 37:11	30:13, 25	19:19 46:4, 25
<b>clarify</b> 39:25	47:17	<b>comparison</b>	<b>continent</b> 37:25
52:12	<b>comes</b> 28:14	14:20	<b>continue</b> 4:18
<b>class</b> 25:21	<b>comfortable</b>	<b>competitor</b> 36:22	5:13 13:2, 7
39:18	36:14	<b>competitors</b> 8:17	17:23 18:5, 17
<b>classified</b> 2:25	<b>coming</b> 14:25	9:22	19:9, 18 20:9
28:3 41:12	15:3 24:18 37:1	<b>complement</b>	30:17 40:12
53:11	38:17 43:14	48:15	<b>continued</b> 5:18
<b>clear</b> 29:1 42:10	<b>COMMAND</b> 8:2,	<b>complete</b> 20:8	9:2 12:19 17:7
50:1, 4	3, 6, 7, 8 10:9	53:5	22:9
<b>clearly</b> 9:1	12:3, 7, 8 19:20	<b>complex</b> 8:17	<b>continues</b> 3:6
33:15	31:6 42:6 52:23	<b>complexity</b> 13:13	13:6, 10 18:24
<b>close</b> 37:12	<b>COMMANDER</b>	<b>complicated</b>	<b>continuing</b> 35:13
<b>closely</b> 8:12	8:2 12:6, 16	32:17	40:8
17:23 42:18	23:12 24:21	<b>Component</b> 12:8	<b>contracts</b> 46:7
<b>closing</b> 6:8	44:24, 25 45:13,	<b>comprehensive</b>	<b>contributing</b>
<b>coalition</b> 13:24	14	5:19 34:7	14:10
14:3, 14 33:11	<b>commander-in-</b>	<b>concept</b> 10:10	<b>Control</b> 10:9
<b>coast</b> 37:11	<b>chief</b> 28:5	14:12	20:14, 17 24:6
<b>co-development</b>	<b>commanders</b>	<b>concepts</b> 34:5	31:6 35:1
52:9	17:23	<b>concern</b> 24:25	<b>controlled</b> 19:24
<b>cognizance</b> 53:15	<b>commander's</b>	<b>concerned</b> 8:23	<b>CONUS</b> 44:10
<b>collaboration</b>	44:14	22:13, 22 30:2	<b>convention</b> 10:4
19:11	<b>COMMANDING</b>	<b>concert</b> 9:18	<b>conventional</b>
<b>colleagues</b> 17:5	12:2		50:22

**Convergence**

35:6

**conversation**

42:25

**cooperation** 8:23**cooperative**

20:10 51:23

52:8

**coordinating**

48:23 49:4

**coordination**

48:25

**co-produced** 52:9**cornerstone** 36:4**correct** 23:16

25:11, 12, 19

**cost** 25:15, 24

40:13

**costs** 13:16 24:4

26:6

**Cotton** 1:18

42:23, 24 44:3,

12, 18, 22 45:3,

11, 19 46:8, 12,

15

**counter** 9:22

40:1

**counter-UAS**

40:1, 3 41:21

42:13 45:9

**countries** 24:17

32:13, 20 47:12

**country** 52:3

53:18

**couple** 51:13**course** 3:21

32:20 49:4

**cover** 39:18**Coyote** 40:3**Coyote-based**

41:24

**Coyotes** 42:11**created** 33:14**crisis** 14:11**critical** 8:14 9:7,

12 10:3 14:8, 16,

25 22:25 31:1

34:11 37:23

46:5, 17

**crucial** 4:15**cruise** 2:24 8:18

9:3 17:18 33:10

36:10 37:9 38:2,

9, 14, 20 39:1, 4,

11, 18 47:17, 20

**C-shooter** 35:10**current** 5:6 25:4**curve** 40:13**cut** 48:3, 6**cyber** 6:5 9:9

34:4, 7, 9 37:13

38:4

**cyberattack**

32:19

**cyberattacks**

9:13

**CYBERCOM**

9:12

## &lt; D &gt;

**D.C** 1:12**daily** 4:23 9:13

37:15

**dangerous** 17:16**DASD** 8:11**data** 6:2 26:11

35:9, 11

**date** 29:5, 16**daunting** 2:16**David's** 51:3

52:11

**day** 37:8, 16**dear** 35:14**DEB** 22:1**decade** 34:25**December** 18:9

22:17

**decides** 44:25**decision** 3:11

5:14 29:10

**decisions** 17:21

24:10 29:9 43:7

**decrease** 3:4

47:5

**dedication** 6:9**deep** 31:18**deeply** 22:22**defeat** 5:3, 19, 24

6:4 9:3 10:12

14:17 27:8

32:14 33:6

35:23

**defend** 9:13

17:25 23:15

26:8 28:11

33:13, 14 36:25

38:1, 8 43:4, 24

50:20 51:8

**defended** 19:14**defending** 37:2**DEFENSE** 1:1, 2,

3 2:7, 8, 12, 16,

17, 19 3:1, 4, 7, 8

4:2, 3, 6, 8, 12, 13

5:1, 3, 5, 8, 10, 11,

16 8:3, 7, 14, 15

9:2, 7, 24 12:3, 7,

8, 13, 22, 23, 24

13:1, 3, 16 14:8,

12 17:2, 6, 8, 11,

22 18:1, 24, 25

19:10, 19 20:6,

20, 21 22:10, 18

23:10, 11 24:9

26:14, 17, 19, 24

27:15, 18 28:6

32:9 33:2, 8, 15

34:6, 9, 23 37:24

39:17, 20, 24

42:6 43:8, 9, 11,

19 44:13, 24

45:22, 25 46:16,

22, 24 47:11

48:5, 10, 11, 13,

14, 17 49:4, 25

50:4, 20 51:4, 22

53:13, 14

**defenses** 4:21

5:12, 18 17:15

20:1 22:14

23:17, 21 33:5

**defensive** 9:6**definitely** 41:3, 5**degrade** 14:17**degree** 38:2**delays** 30:6**delegate** 45:1, 14,

16

**delegated** 44:9

45:1

**delegates** 44:14**delegation** 45:16**deliver** 19:7

29:24

**delivering** 20:3**delivery** 17:10**demand** 13:4

14:23

**demonstrate**

4:18 20:14 32:8

33:21

<b>demonstrated</b> 34:2 35:6	<b>deter</b> 10:12 49:17 50:21	<b>discrimination</b> 6:2 18:19, 21	<b>ducks</b> 43:20, 21, 22
<b>demonstrating</b> 18:12 35:2	<b>determination</b> 14:20	<b>discuss</b> 17:6 28:21 53:12	< E >
<b>demonstration</b> 20:16 35:8	<b>deterrence</b> 5:16 14:10 50:11, 18	<b>discussion</b> 47:6 48:1	<b>earlier</b> 8:21 35:23
<b>demonstrations</b> 19:9	<b>deterrent</b> 23:1	<b>discussions</b> 45:16	<b>early</b> 5:13
<b>denying</b> 13:17	<b>deterring</b> 50:16	<b>disrupt</b> 14:17	<b>earth</b> 5:25
<b>DEPARTMENT</b>	<b>devastated</b> 22:24	<b>distinguished</b> 4:5 8:5 12:5 17:4	<b>easiest</b> 43:3
1:1 4:2 5:20	<b>develop</b> 5:4 17:14 20:9	<b>diverse</b> 17:16	<b>East</b> 2:20, 22 4:23 38:17 47:9
6:3, 10 22:16, 23	34:19 40:8	<b>Division</b> 40:18	<b>easy</b> 33:25
26:24 27:12	<b>developed</b> 40:2	41:21, 23	<b>economics</b> 47:22
43:10 46:24	<b>developing</b> 5:25 22:14	<b>divisions</b> 41:21, 22	<b>effective</b> 32:9 52:5 53:2, 3
47:24 48:5	<b>development</b> 5:10 14:5, 13	<b>doing</b> 30:12 31:1, 12, 17	<b>effectively</b> 14:10
51:22	17:10 18:17	41:19 43:13	<b>effectiveness</b> 42:18
<b>Department's</b>	19:18 20:8, 10	44:17 45:25	<b>effects</b> 13:10
4:12 10:8	22:9, 19 29:2	49:5, 6 53:18	<b>efficiency</b> 5:23
<b>depend</b> 8:13	30:4 34:4 41:14	<b>domain</b> 9:4 18:23 19:8	<b>efficiently</b> 31:7
<b>deploy</b> 17:14 18:13	<b>developments</b> 31:20	<b>domains</b> 9:25	<b>effort</b> 3:7 35:14
<b>deployed</b> 13:4 40:12, 21 46:17	<b>different</b> 33:7 47:21, 22 51:21	<b>Dome</b> 51:3, 14 52:2, 3, 9, 10, 15 53:2	<b>efforts</b> 5:21 14:25 22:23 30:3
52:18	<b>difficult</b> 24:1	<b>dominance</b> 14:4	<b>EIS</b> 46:5
<b>DEPUTY</b> 4:1	<b>diplomacy</b> 9:21	<b>door</b> 51:6	<b>either</b> 37:11
<b>describing</b> 53:1	<b>direct</b> 8:25	<b>doubt</b> 3:18 10:11	<b>electronic</b> 6:5
<b>design</b> 18:24 19:16 20:8	<b>directed</b> 6:5 22:15 26:3, 5, 12, 14, 20, 21, 24	<b>drafted</b> 51:16	<b>element</b> 34:7
29:13 34:24	27:4, 5, 7, 10	<b>dramatic</b> 47:4	<b>emerging</b> 9:10
52:2, 10	39:1 40:9, 14, 16	<b>drone</b> 36:11 43:24	<b>emphasis</b> 6:3 13:19
<b>designate</b> 49:2	42:4, 13 43:2	<b>drones</b> 2:21, 23 24:15 25:23	<b>employ</b> 42:20
<b>designated</b> 49:2	46:25 51:4	27:4, 16 31:20	<b>empower</b> 8:14
<b>designed</b> 8:18 25:13 39:13, 16	<b>direction</b> 29:2	32:11 37:17, 18	<b>enable</b> 8:13 20:5
<b>destroy</b> 43:15	<b>DIRECTOR</b> 17:2	38:3, 21 43:4, 13	<b>enacted</b> 3:5
<b>destroyer</b> 3:9	<b>disaster</b> 30:3, 8	45:4, 12, 14	<b>enemy</b> 34:11
<b>detail</b> 48:17	<b>discretionary</b> 24:5		<b>energy</b> 6:5 26:3, 5, 12, 14, 20, 22, 24 27:4, 5, 7, 10 39:1 40:10, 14,
<b>detect</b> 9:5			
<b>detected</b> 37:19			
<b>detecting</b> 10:2			

16 42:13 43:2  
 46:25 51:4  
**engage** 45:11  
**engagement** 5:21  
 9:20 18:13  
 19:15  
**engagements**  
 5:23  
**engineering**  
 30:13  
**engineers** 30:25  
**enhance** 13:15  
 18:20  
**ensuring** 13:18  
**enterprise** 12:22  
 13:1  
**entire** 5:21 9:20  
 18:14 26:24  
**environment**  
 8:17 13:22 15:4  
**environmental**  
 45:22 46:3  
**equipment** 38:1,  
 11 39:9  
**especially** 32:4  
 46:16  
**essential** 14:9  
**essentially** 46:23  
**establish** 32:17  
**events** 2:22  
 30:19  
**eventually** 40:11  
**everybody** 51:22  
**evolve** 13:21  
**evolving** 5:17  
 6:7  
**exactly** 51:19  
**examine** 2:5  
**examples** 23:20  
**exchange** 51:15

**execute** 19:22  
**executed** 18:10  
**exercise** 14:3  
**exercised** 52:19  
**exercising** 33:19  
**existing** 29:16  
**expand** 5:13, 20  
 6:6  
**expanded** 8:23  
 13:12  
**expect** 30:7  
**expected** 51:20  
**expensive** 27:2, 3  
 38:8, 10, 12, 15,  
 25 39:11, 19, 21  
 52:4  
**experiencing**  
 12:18  
**experiment** 19:22  
**expert** 28:9  
**expertise** 12:24  
 30:13  
**explanation**  
 26:10  
**exponentially**  
 13:10  
**express** 4:14  
**expressing** 4:10  
**extend** 5:6  
**extension** 18:5  
**extraordinarily**  
 8:16  
 < F >  
**F-35** 35:10  
**fabulously** 52:5  
**face** 8:16 42:25  
**faced** 23:25  
**faces** 2:21  
**facilities** 12:19

22:24  
**facing** 10:10  
**fact** 25:10 47:16  
**fail** 17:13  
**Fair** 37:24 38:23  
**fallen** 46:25  
 47:3  
**families** 12:15  
 13:7 15:2, 4  
**family** 17:11  
**far** 10:2 22:13,  
 21 45:24 49:12  
 52:13  
**February** 20:13  
**fidelity** 6:1  
**field** 19:12 34:8,  
 9 41:14 53:4, 5  
**fielded** 8:17  
 18:7 40:17  
 41:22  
**fielding** 5:25  
 18:18 19:11  
 20:17 40:10, 16,  
 18 41:23 48:16  
**fight** 17:24  
**final** 51:18 52:1  
**find** 43:17  
**finished** 46:13  
**fire** 20:14, 17  
 35:1  
**fired** 19:5 27:23  
**First** 2:12 19:25  
 27:25 40:18  
 41:21, 22 42:15  
 46:3  
**FISCAL** 1:3  
 2:8 3:3, 6 5:2  
 19:7, 21 20:4, 7  
 23:5 24:2 26:12  
 41:19, 23 46:4  
 48:10

**Fischer** 1:18  
 4:4 12:4 17:4  
 21:1 22:1, 3  
 23:17 27:22, 24  
 29:11 30:1 31:3,  
 14 48:8, 9, 23  
 49:7  
**Fisher** 3:16  
**five** 37:20  
**fix** 43:17  
**fixed** 14:4  
**fleet** 18:14 39:16  
**flight** 18:11  
 19:22  
**floor** 34:5  
**flow** 10:7  
**flying** 45:4  
**focus** 18:3  
 23:21 48:18  
 51:2  
**focusing** 24:7  
 31:12  
**foil** 32:17  
**follow** 40:22  
 51:13  
**followed** 51:13  
**Following** 20:15  
**follow-on** 20:3  
**follows** 6:13  
 10:16 15:9  
 20:23  
**Force** 12:7, 25  
 13:4 14:24  
 20:18 36:12  
 49:14  
**Forces** 1:11  
 5:15 10:4 12:13  
 17:17 20:2 25:9  
 49:15  
**forefront** 33:25



**foreign** 9:21  
**foremost** 2:12  
**formation** 40:16  
**formations** 13:7  
 14:23 52:17  
 53:4, 7  
**forms** 2:21  
**Fort** 12:16  
**forth** 38:10  
**forum** 41:11  
**forward** 6:12  
 10:15 12:20  
 15:7 20:21 22:7  
 23:4 27:14  
 29:17 30:15, 24  
 31:2 34:6, 14  
 35:14, 15 36:3,  
 13, 15 42:1, 3  
 46:17 51:24  
 52:12  
**foundational**  
 34:10  
**frankly** 47:25  
**freedom** 5:15  
**friends** 8:10  
**fulfill** 4:13  
**full** 4:8  
**full-rate** 41:17  
**fully** 36:14  
**function** 32:10  
**Functional** 12:7  
**functions** 12:25  
**funding** 22:19  
 36:6  
**funds** 48:12, 15  
 51:5  
**Further** 8:25  
 22:21 27:14  
 30:6 45:2, 17  
**FUTURE** 1:3  
 14:23 19:8

24:12 32:21  
 34:10, 18, 25  
 35:2, 4 50:15  
  
 < G >  
**Gainey** 8:11  
 12:1, 4 15:9  
 23:19 30:1, 9  
 31:5 33:18  
 34:22 35:16, 18  
 39:23 41:3, 8, 10,  
 13, 16 42:16  
 43:22 44:1, 4, 13,  
 19, 23 45:7, 13,  
 20, 24 48:16  
 52:7, 13, 14, 21  
 53:3  
**Gap** 23:13 25:1  
**Garrison-**  
**Kwajalein** 12:17  
**gathering** 14:5  
**GBI** 18:4, 5  
 25:15, 16  
**General** 7:2 8:1,  
 4, 11 10:16 12:1,  
 2, 4 15:9 17:1, 3  
 20:23 23:19  
 24:24 25:3, 12,  
 16, 20 28:25  
 29:7, 13 30:1, 9  
 31:5 32:7, 15, 25  
 33:16, 18 34:21,  
 22 35:5, 13, 16,  
 18 36:21 37:4,  
 18 38:6, 24 39:8,  
 13, 23 41:3, 8, 10,  
 13, 16 42:5, 7, 10,  
 15, 16 43:22  
 44:1, 4, 13, 19, 23  
 45:7, 13, 20, 24  
 46:2, 10, 14

48:16, 21 51:5, 9,  
 10 52:6, 7, 13, 14,  
 21 53:3  
**generally** 46:24  
**generated** 20:14  
**Generation** 22:11  
**Gentlemen** 7:1  
 25:25 46:21  
**genuine** 45:5  
**getting** 26:2  
 36:6  
**give** 26:10 28:2  
 41:10  
**given** 2:20  
**gives** 28:10  
**giving** 28:18  
**Glide** 20:4, 6  
 22:17, 20  
**Glide-Phase** 29:2  
**global** 4:19 9:18  
**globally** 44:5  
**globe** 4:18  
 14:15 15:5  
**GMD** 18:1, 9, 10  
**go** 24:3 27:1, 17,  
 21 46:19 47:14,  
 19, 21 49:20  
 52:11  
**goals** 5:24  
**goes** 27:11  
**going** 7:1 23:9  
 27:6 28:8, 16  
 36:7 38:14 39:7,  
 10 47:17, 19, 21  
 48:1 49:10 51:1,  
 12  
**good** 31:25  
 43:19  
**government**  
 51:18

**GPI** 20:5, 7, 9,  
 10 29:10, 16, 21,  
 22  
**gratitude** 4:10  
**great** 30:12  
 35:12 43:1 44:2,  
 4 51:10  
**greater** 6:3 37:5  
**greatest** 36:24  
**greatly** 20:19  
**Greely** 12:17  
**Greenland** 23:13  
**GREGORY** 8:1  
**ground** 34:5  
 43:5  
**ground-based**  
 5:5, 6 18:1, 4, 11  
**groundbreaking**  
 14:6  
**growth** 14:24  
**Guam** 2:15  
 5:11 19:19, 24  
 44:22 45:1, 5, 9,  
 12, 18, 20, 22  
 48:11, 25 49:10,  
 12, 18 50:2, 7, 18,  
 19  
**Guam's** 48:12  
**guess** 32:3  
**GUILLOT** 8:1,  
 4 10:16 24:24  
 25:3, 12 36:21  
 37:4, 18 38:6, 24  
 42:5, 7, 10, 15  
**guy** 23:9  
**guys** 26:5 27:17  
  
 < H >  
**H-6** 49:14  
**hacktivists** 37:15

**half** 46:11 48:3, 6  
**hand** 34:22  
 35:16 52:7  
**happen** 51:20  
**happened** 24:14, 19, 23 32:22  
 33:22  
**happening** 43:12  
**Harbor** 49:20  
**hard** 29:16  
**hat** 35:20, 21  
**HBTSS** 20:13, 16, 17  
**health** 24:4  
**hear** 7:3 28:11  
 43:2  
**heard** 28:13  
**hearing** 2:3, 5, 11 22:4, 7 23:4  
 28:22, 23 53:11, 19  
**hearings** 28:2  
**HEATH** 17:1  
**heavily** 13:4  
**hell** 26:5  
**help** 17:24 18:6  
 31:10 43:3  
**helped** 36:1 52:2  
**high** 8:5 13:5  
 19:10 29:17  
 46:23  
**high-altitude**  
 12:12  
**higher** 6:1 24:11  
**highest** 13:4  
**highlight** 13:2  
 35:23  
**highlighted**  
 30:22 52:22

**highlighting**  
 30:10  
**high-powered**  
 39:2 40:11, 15, 19  
**Hill** 3:22, 23 4:1, 4 6:13 8:11  
 23:11, 15, 25  
 24:10, 20 26:13, 18 27:7 28:7  
 48:9, 14, 25  
 49:22, 25 50:7  
**hit** 18:21  
**hitting** 27:1, 3  
**holdup** 42:9  
**homeland** 3:7  
 8:14 9:7 17:15, 25 28:11, 15  
 42:12 50:5  
**homelands** 14:19  
**homework** 51:11  
**Hon** 1:15 2:1  
 22:1  
**honest** 28:4  
**honor** 8:6  
**honored** 12:5, 14  
 17:5 20:19  
**hope** 2:11 28:24  
 53:10  
**hoping** 2:9  
 31:22  
**horizon** 13:14  
**hour** 23:14  
**Houthi** 17:17  
**Houthis** 25:22  
**huge** 38:20  
**hypersonic** 2:13, 21 3:8 5:7 20:2, 6, 12, 15 22:10, 14 23:10, 11, 13, 17, 21 29:23

33:9 47:20  
 53:13, 14  
**hypersonics**  
 27:16  
 < I >  
**IAMD** 34:23  
 35:21  
**IB** 3:10  
**IBCS** 36:5  
**ICBM** 38:1, 9  
 47:19  
**ICBMs** 38:13, 19  
 39:11, 14 47:16  
**identified** 38:12  
**IIA** 19:1, 23  
**illustrates** 9:1  
**IMD** 12:8, 23  
 33:24 34:11, 12  
**impact** 23:6  
 45:22, 25 46:3  
**impacts** 3:11  
 45:24  
**imperative** 4:25  
 13:14  
**implement** 53:4  
**implementation**  
 51:9  
**implementing**  
 50:24  
**importance** 10:7  
**important** 2:25  
 12:18 27:7, 8, 11  
 30:14 33:1 48:7  
 50:3  
**impose** 13:16  
**improve** 5:21, 22  
 17:15 18:5  
 19:16  
**improved** 41:1

**improvement**  
 5:18  
**improvements**  
 18:25  
**inadequacies**  
 43:1  
**inadequate** 23:18  
**inaudible** 25:4  
**incidents** 9:14  
**include** 5:4  
**included** 2:23  
 4:9 22:19  
**includes** 5:2  
**including** 4:16  
 6:4 22:9 32:13  
**incoming** 25:18  
**incorporate**  
 29:24  
**incorporating**  
 42:5  
**increase** 13:10, 19 14:23 19:14  
**increased** 18:12  
**increasing** 9:16, 22 37:18  
**increasingly**  
 8:22 14:7 17:16  
**incredible** 12:9  
 15:5  
**Increment** 20:3  
**indicated** 39:10  
**indispensability**  
 4:24  
**indispensable**  
 4:20  
**Indo-Pacific**  
 50:15, 16, 25  
**INDOPACOM**  
 31:9 44:24  
**indulgence** 42:22

<b>industry</b> 29:20 40:8	13:2	32:7, 8, 12 33:3 51:1, 2, 7 52:8, 16	46:19 49:8 52:1, 20 53:1, 9
<b>inflation</b> 24:4	<b>intelligence</b> 10:4	<b>Israelis</b> 47:12	<b>knock</b> 24:17
<b>influence</b> 9:22	<b>intemperate</b> 31:22	<b>Israel's</b> 51:4	<b>know</b> 3:5, 19 13:9 23:8 27:4 30:3 32:2, 11, 23 33:8 34:18 37:22 42:24 43:6 44:7 47:18 49:11
<b>information</b> 10:3, 7 28:1, 10 40:20	<b>interagency</b> 9:17 10:5	<b>issue</b> 2:18 30:22	<b>knowing</b> 28:21
<b>informative</b> 53:17	<b>intercept</b> 5:22 18:10 25:18	<b>issues</b> 2:12 23:5 53:10	<b>Korea</b> 8:25 25:11
<b>informed</b> 29:25	<b>intercepting</b> 19:5	<b>its</b> 43:11, 18	<b>Korean</b> 18:3 37:6 50:13
<b>infrastructure</b> 8:19 9:12, 15 30:20, 24 31:11 37:23	<b>Interceptor</b> 5:5 9:7 18:4, 7, 12 19:10, 24 20:5, 8 22:11, 17, 20 25:21 29:3 40:3, 4, 5	< J >	<b>Kwajalein</b> 30:10, 12, 21 31:8, 9
<b>initial</b> 19:24 22:16 29:5	<b>Interceptors</b> 5:7 25:1 43:2 47:16 51:7	<b>Japan</b> 20:11	< L >
<b>initially</b> 48:14	<b>intercontinental</b> 25:20 37:7	<b>JFCC</b> 12:23	<b>landscape</b> 2:18 3:1
<b>innovate</b> 13:20	<b>interdicting</b> 13:25	<b>JFFC</b> 12:8	<b>larger</b> 50:15
<b>innovation</b> 9:19	<b>international</b> 10:5 33:21	<b>JOHN</b> 4:1	<b>large-scale</b> 32:10
<b>inside</b> 9:14 34:11 41:20 44:5, 24	<b>investing</b> 40:14	<b>join</b> 13:24 17:5	<b>laser</b> 39:2 40:15
<b>installations</b> 37:21 45:4	<b>investments</b> 5:3, 12 24:12	<b>Joint</b> 10:9 12:7, 13, 25 14:14 19:20 34:25 35:8, 21, 25 40:1	<b>late</b> 22:4, 21
<b>instance</b> 43:12	<b>Iran</b> 8:24	<b>June</b> 30:19	<b>launch</b> 43:15
<b>integrate</b> 14:2, 11, 18	<b>Iranian</b> 17:17 25:9 32:8	< K >	<b>launched</b> 2:24 17:18 20:12 23:13 32:11 47:18
<b>integrated</b> 2:19 4:20 5:16 9:2 12:8 31:13 32:9, 12, 18 33:1, 3, 5, 10 35:1, 15 48:12 50:18 52:23 53:8	<b>Iran's</b> 2:23 8:25 32:7	<b>Keeping</b> 5:17	<b>launcher</b> 19:20
<b>integrates</b> 2:16 12:24 19:13 52:24	<b>Iron</b> 51:2, 3, 14 52:1, 3, 9, 10, 15 53:2	<b>Key</b> 5:3 9:8 17:12	<b>launchers</b> 48:19 52:24 53:5
<b>integrating</b> 13:24 14:7	<b>Isaac</b> 47:18	<b>kill</b> 6:2	<b>launchpad</b> 43:14
<b>integration</b> 14:9	<b>island</b> 49:14	<b>kind</b> 23:23 32:15 49:10	<b>lay</b> 36:23
<b>integrator</b> 12:22	<b>Islands</b> 22:25	<b>kinetic</b> 42:11	<b>Layered</b> 9:4 14:16 19:18 20:6 32:10 36:7
	<b>Israel</b> 2:24 8:25 17:19 19:6 24:17 31:19	<b>King</b> 1:16, 17 2:1, 3 3:19, 22, 24 4:4 7:1 8:4 11:1 12:4 16:1 17:3 21:1 23:8, 17, 22 24:8, 13, 22, 25 25:10, 13, 18, 22 26:13, 16, 23 27:9 31:15 36:18 42:23	<b>lead</b> 3:22 12:21 49:2



<b>leaders</b> 5:14	<b>locations</b> 12:11	20:15	<b>mid-course</b> 5:5
<b>leading</b> 49:3	<b>Lockheed</b> 18:16	<b>manner</b> 43:24	18:1
<b>learn</b> 42:19	<b>long</b> 18:21	<b>marked</b> 9:1	<b>Middle</b> 2:20, 22
<b>learned</b> 31:19	33:17 34:1	<b>markup</b> 2:9	4:23 38:17 46:2
32:7, 16 35:22	<b>longest</b> 37:7	<b>Marshall</b> 22:25	47:9
36:15	<b>Long-Range</b>	<b>Martin</b> 18:16	<b>MILCON</b> 46:4, 6
<b>left</b> 24:5	18:19 23:2 30:5	<b>material</b> 39:21	<b>mild-mannered</b>
<b>left-of-launch</b> 6:6	<b>long-term</b> 30:20	<b>math</b> 25:24	23:8, 9
<b>lesser</b> 38:2	<b>look</b> 6:12 10:15	<b>maturation</b> 29:14	<b>miles</b> 23:14
<b>lessons</b> 32:6, 16	15:7 20:21 22:6	<b>mature</b> 20:9	<b>military</b> 4:21
35:22 36:15	23:4 27:14	<b>maximize</b> 17:21	5:14 8:19, 23
<b>letters</b> 51:16	31:18 37:8 38:7	<b>MDA</b> 17:11	9:15, 20 27:25
<b>letting</b> 34:18	43:11 51:24	18:24 19:19	28:10, 20 37:21
<b>level</b> 24:11	<b>looked</b> 33:25	20:7	46:4 49:11
44:20 46:22, 23	<b>looking</b> 31:6, 8	<b>MDA's</b> 18:20	<b>million</b> 25:17, 19
50:22	34:8 35:22	<b>MDTF</b> 40:19	26:4, 7, 9, 11, 21
<b>leverage</b> 53:6	50:14	<b>mean</b> 25:25	27:11 47:2, 4, 15
<b>leveraging</b> 31:9	<b>looming</b> 13:13	27:20	<b>MISSILE</b> 1:1
<b>Lieutenant</b> 8:10,	<b>lot</b> 14:22 26:19	<b>meant</b> 50:21	2:6, 7, 16, 17, 19
11 12:1 17:1	33:7 34:25 38:3,	<b>measurement-</b>	3:1, 4, 7, 10 4:2,
<b>life</b> 5:6 18:5	19 51:11	<b>level</b> 35:9	8, 12, 13, 20 5:1,
<b>light</b> 31:19	<b>love</b> 7:2	<b>measures</b> 49:17	3, 8, 9, 12, 18, 19,
<b>like-minded</b> 9:19	<b>LRDR</b> 18:22	<b>medium</b> 19:22	23, 24 6:4 8:14,
<b>Likewise</b> 2:22		39:14	18 9:2, 9 12:2, 7,
4:23	< M >	<b>meet</b> 5:1 25:8	8, 12, 22, 23, 24
<b>limited</b> 18:2	<b>ma'am</b> 29:25	29:4, 16	13:1, 3, 15, 20
<b>linchpin</b> 30:4	30:9 34:21	<b>meeting</b> 22:5	14:8, 12 17:2, 6,
<b>lines</b> 43:6	35:18	<b>Member</b> 4:4	7, 10, 15, 16, 21,
<b>listen</b> 28:9 42:24	<b>machinery</b> 38:15	12:4 17:4 32:2	25 18:22, 25
<b>listening</b> 28:24	<b>main</b> 33:8	34:16	19:1, 19, 23
<b>literally</b> 43:11	<b>MAINE</b> 2:2	<b>Members</b> 1:17	20:20, 21 22:10,
<b>little</b> 26:21	<b>mainstay</b> 3:9	4:5 8:5 12:5	18 23:2, 12, 13
44:10 47:1, 2	<b>major</b> 47:6	17:4	24:9 25:18, 19,
<b>live</b> 53:15	<b>making</b> 51:23	<b>men</b> 8:6 14:21	21 26:14, 16, 18
<b>loan</b> 52:16	<b>maligned</b> 9:22	17:9 27:25	27:8, 15, 18 30:5
<b>local</b> 45:13, 14	<b>management</b>	<b>mentioned</b> 42:16	32:9, 18 33:2, 4,
<b>localized</b> 45:10	35:8	<b>message</b> 50:11	5, 8, 10, 14 34:6,
<b>located</b> 45:8	<b>mandated</b> 29:5	<b>messaging</b> 49:22	22 36:11 37:9
<b>location</b> 30:11	<b>maneuver</b> 5:15	<b>met</b> 1:14	38:2 39:16, 17,
31:10	<b>maneuvering</b>	<b>microwave</b> 39:2	19, 24 43:8
		40:11, 15, 19	45:25 47:11, 20,

<p>21 48:10, 13, 14, 17 49:4, 25 50:4, 20 51:4 53:13 <b>missile-related</b> 13:11 <b>missiles</b> 2:13, 22, 24 4:19 9:4 17:18, 19 19:2, 5 23:11 24:15, 18 25:24 26:9 32:11 33:9 37:7, 10, 11 38:10, 20 39:1, 4, 12, 14, 15, 18 43:4, 13 44:8 47:17, 18 50:13 <b>mission</b> 9:7 17:6, 8, 13 18:23 20:21 23:6 24:8 27:18 30:14 31:1 <b>mission-ready</b> 15:5 <b>missions</b> 8:15 10:1 38:14 <b>mitigate</b> 18:6 <b>mode</b> 18:12 36:22 <b>modern</b> 4:19 <b>modernization</b> 14:24 36:4, 16 <b>modernize</b> 36:5 <b>modernizing</b> 36:12 <b>money</b> 26:9 28:17 46:4 <b>month</b> 2:10 17:20 19:6 <b>months</b> 46:12, 13 53:12 <b>move</b> 12:20 29:17 30:24</p>	<p>31:1 34:5 35:13 36:7 39:6, 7 <b>moved</b> 30:15 36:22 38:4 39:6 <b>moving</b> 22:13 36:3, 13 42:1, 3 <b>multidomain</b> 13:9, 23 <b>multipart</b> 32:15 <b>multiple</b> 32:19 <b>Murmansk</b> 23:14 <b>must-pay</b> 24:3 <b>mutual</b> 14:18  &lt; N &gt; <b>name</b> 34:19 43:11 47:11 <b>nation</b> 6:12 10:10 13:18 30:11 37:15 <b>National</b> 2:7 4:16, 22, 24 14:9 50:24 <b>nations</b> 10:13 <b>nation's</b> 4:13 18:2 <b>nature</b> 2:19 <b>Navy</b> 2:17 19:8 20:3 26:21 49:5 <b>Navy's</b> 23:18 <b>NDAA</b> 22:15 <b>near</b> 9:15 35:14 36:23 <b>near-peer</b> 36:22 <b>NEBRASKA</b> 22:2 <b>necessarily</b> 43:17 <b>necessary</b> 10:12 <b>need</b> 3:10 9:2 23:16, 18, 21 27:18 28:10, 21,</p>	<p>23 33:4, 11 40:25 41:3 47:7, 24 50:18 51:18 <b>needed</b> 29:11 <b>needs</b> 4:13 13:8 28:4 31:18 <b>network</b> 9:18 <b>networks</b> 9:13 <b>never</b> 13:14 38:22 <b>new</b> 38:3 <b>Newton</b> 47:19 <b>next-gen</b> 18:7 <b>next-generation</b> 5:4 9:6 <b>NGI</b> 18:7, 15, 17 <b>night</b> 33:22 34:2 <b>non-kinetic</b> 6:4 42:12 <b>NORAD</b> 8:12 9:8, 24 10:11 <b>NORTH</b> 8:2, 7, 19, 24 9:11, 23, 24 18:3 24:16 25:11 37:6, 25 42:6 50:13 <b>NORTHCOM</b> 8:12 9:8, 12, 25 24:21 25:6 37:20 <b>NORTHCOM's</b> 10:11 <b>NORTHERN</b> 8:2 24:19 <b>noted</b> 28:25 <b>notice</b> 1:14 <b>nuclear</b> 8:20 23:1 <b>number</b> 2:12 38:1, 21 41:10 53:10</p>	<p><b>numbers</b> 25:7 41:4, 8, 13 <b>numerous</b> 32:12  &lt; O &gt; <b>obviously</b> 44:7 <b>occur</b> 30:20 <b>Ocean</b> 24:15, 16 47:18 <b>offense</b> 43:19 <b>offenses</b> 33:4 <b>offensive</b> 37:1 <b>Office</b> 1:15 4:6 40:1 49:1, 3, 4 <b>Okay</b> 24:22 26:2 45:19 49:7 <b>once</b> 52:6 <b>ones</b> 28:19 <b>ongoing</b> 18:4 <b>onset</b> 14:12 <b>open</b> 2:11 28:2, 3 <b>OPENING</b> 2:1 28:25 33:18 <b>openness</b> 28:22 <b>operate</b> 14:21 <b>operating</b> 9:14 <b>operational</b> 14:19 18:20 22:16 29:5 <b>operational-level</b> 12:23 <b>operations</b> 10:4 13:23, 25 14:8 <b>operator</b> 44:15, 20 45:17 <b>operators</b> 17:12 19:3 <b>opportunities</b> 14:2 19:15</p>
---	--	--	--

**opportunity** 4:7  
8:8 10:14 17:5  
20:19 35:19  
**ops** 30:16  
**optempo** 13:6  
**optimal** 52:25  
**option** 29:25  
**options** 5:20 6:4,  
6 14:17 29:20,  
21 31:6, 7  
**organization**  
12:9 40:7  
**OSD** 49:3  
**outside** 29:22  
41:10  
**overall** 5:16  
48:25 50:21  
**overstated** 10:8

< P >  
**p.m** 1:14 53:20  
**PACAF** 44:24  
**pace** 5:17  
**Pacific** 13:14  
30:11 31:11  
50:9  
**PACOM** 44:12  
46:17  
**pale** 14:19  
**panel** 17:6  
**paramount** 15:4  
**part** 24:19 25:3  
26:18 27:7, 8  
31:10 34:3, 4, 13  
40:23 47:23  
48:17 50:5, 10,  
18, 20 52:5, 10  
**particular** 40:24  
48:17

**particularly** 24:1  
27:2 47:20  
49:19  
**partners** 9:19  
10:6 13:15 14:3,  
14, 16 17:12  
29:20, 21 32:13  
33:12, 21 35:25  
40:9 48:24  
**partnership** 6:9  
33:24  
**parts** 37:23  
**pass** 44:19 45:24  
**passed** 33:13  
35:9  
**passing** 4:15  
**path** 36:15 46:5  
**Patriot** 19:14  
23:19 36:4  
39:20 40:4  
**Pause** 36:19  
**pay** 52:2, 8  
**Pearl** 49:20  
**peers** 36:23  
**people** 15:2  
28:24 36:24  
50:1  
**percent** 24:18  
47:1  
**perform** 30:18  
**performance**  
19:2  
**period** 52:15  
**permission** 3:17,  
20  
**persistent** 37:14  
**persisting** 14:5  
**personal** 31:17  
**personally** 30:18  
**personnel** 24:3

**perspective**  
35:20 36:1  
**Phase** 20:4  
22:17, 20 52:10  
**picks** 33:9  
**piece** 26:19  
38:15 50:3  
**pipeline** 46:15  
**place** 31:3 33:5  
**placeholder**  
34:19  
**plan** 18:13, 19  
29:16 30:8 31:3,  
5  
**planned** 14:24  
20:10  
**plans** 4:12 49:12  
**platoon** 40:10, 18  
**played** 4:15 19:5  
**players** 33:7  
**playing** 29:15  
**Please** 3:24  
**pleased** 8:10  
19:2 22:8  
**point** 24:5  
26:22 31:23  
47:6  
**policies** 2:7  
**policy** 27:10  
47:6 48:2  
**populations** 4:22  
**portion** 26:13  
**pose** 2:16  
**positioning** 49:21  
**possess** 35:23  
**possibly** 26:8  
**posture** 4:13  
5:16  
**potential** 10:2  
**potentially** 29:22

**power** 50:17, 19  
**preparation** 2:7  
**prepare** 17:24  
**prepared** 6:13  
10:16 15:9  
20:23  
**Present** 1:17  
9:11 37:14  
**presenting** 28:19  
**preserve** 5:15  
**President** 43:10  
46:22  
**President's** 2:6  
3:3 4:7 5:2  
**presiding** 1:16,  
17  
**pretty** 47:4  
**prevent** 32:10  
**previous** 8:21  
**primary** 18:3  
**prime** 18:17  
**principally** 39:9  
**priorities** 9:8  
**prioritization**  
17:21  
**prioritize** 30:23  
**prioritizing** 5:20  
30:2  
**priority** 12:20  
48:4  
**probability** 5:22  
**probably** 37:7  
38:14 39:24  
46:10 48:21  
52:21  
**problem** 39:5  
43:18 46:21, 24  
47:21  
**proceed** 3:24

**process** 46:3, 8, 9, 11 51:12, 13, 15  
**procure** 19:1  
**procurement** 5:10 19:11  
**production** 18:18 41:17  
**professionals** 12:11  
**proficiency** 14:6  
**PROGRAM** 1:4 18:5, 15 20:5 22:12, 17 29:10, 17, 22 34:7 41:18 42:1 48:15, 22  
**programs** 4:12 5:8 22:9 26:22 48:16  
**progress** 22:8  
**Project** 35:5 50:17  
**projection** 50:19, 20  
**protect** 2:15 14:18 20:1  
**protecting** 4:21 28:12  
**protection** 18:2  
**prototype** 20:13 41:17  
**prototyping** 14:12  
**proven** 42:19 52:4  
**provide** 4:23 6:1 8:13 13:6 30:25 36:10 41:13 52:24 53:6, 7

**provided** 29:3 52:16  
**providers** 12:12  
**provides** 12:23  
**providing** 43:23  
**provocative** 49:11  
**public** 3:1  
**purpose** 2:5  
**pursuant** 1:14  
**pursuit** 5:19  
**purview** 44:14  
**push** 28:16 35:15 40:24 44:6  
**pushed** 22:20 42:16  
**put** 24:13 28:4 29:9 34:19 36:1  
**putting** 6:3 41:20  
**< Q >**  
**quantity** 13:12  
**question** 24:13 30:9 32:1, 15 33:1 34:13 35:19 42:4 44:1 47:13 50:15, 24 51:10 52:1, 15  
**questions** 3:14 6:12 7:2 10:15 15:7 20:22 49:9  
**quickly** 10:2  
**quite** 45:4  
**< R >**  
**Radar** 18:19 19:8, 20 48:20  
**radically** 3:2

**range** 18:22 19:23 23:19 37:4, 8 39:15 50:13  
**ranging** 9:3  
**Ranking** 4:4 12:4 17:3 32:2 34:16  
**rapidly** 5:17 13:11  
**reach** 29:12  
**readiness** 17:22 24:7, 12  
**ready** 18:9, 22 43:14 51:7  
**Reagan** 22:24 30:3  
**real** 10:10 40:20  
**realistically** 53:14  
**reality** 17:17  
**realize** 2:25 46:21  
**really** 24:6 27:17, 20 32:3, 8, 16 33:1, 4, 24 37:25 38:10, 13, 18, 19 40:14 44:5 47:14, 24 50:21 51:1  
**realm** 24:20  
**reason** 25:3  
**reasonable** 23:9  
**reasons** 43:16  
**RECEIVE** 1:1  
**reconvene** 53:11  
**record** 4:9 41:18 42:1  
**recovery** 22:23 23:3 30:3, 8, 15,

16  
**Red** 25:22 38:18  
**refer** 48:21  
**regard** 38:4, 13  
**region** 25:8, 10 32:13 43:21 50:3  
**regional** 3:7 17:15 18:24 19:17 39:17  
**released** 13:22  
**releasing** 49:13  
**reliability** 18:6  
**relies** 10:1  
**relook** 44:6  
**remain** 9:8 14:3 22:13  
**remains** 13:3 18:2, 15  
**remember** 34:13  
**reminders** 4:23  
**remote** 12:18  
**reorient** 27:19  
**report** 29:24  
**reported** 8:23 37:19  
**represent** 8:6 12:14 17:11  
**representing** 12:9  
**reproduced** 52:20  
**REQUEST** 1:3 2:6 3:3, 6 5:2 22:18 23:5 48:10  
**requested** 42:7, 8, 11, 12, 14 48:11  
**requesting** 17:14  
**require** 9:16  
**requirement** 2:15

<b>requires</b> 5:17 9:19, 24 47:22	<b>robust</b> 8:13	<b>Second</b> 2:14 29:8 39:8 46:19, 20	7, 24 39:5, 19, 23 40:22 41:6, 9, 12, 14 42:4, 7, 8, 14, 16, 21, 23, 24 44:1, 3, 7, 12, 18, 22 45:3, 11, 19 46:8, 12, 15, 19 48:8, 9, 23 49:7, 8, 9, 22, 24 50:6, 23 51:10, 24 52:1, 14, 20 53:1, 9
<b>research</b> 46:24 48:2	<b>rock</b> 50:9	<b>SECRETARY</b> 4:1, 6 27:10 28:6 46:22	<b>7, 24</b> 39:5, 19, 23 40:22 41:6, 9, 12, 14 42:4, 7, 8, 14, 16, 21, 23, 24 44:1, 3, 7, 12, 18, 22 45:3, 11, 19 46:8, 12, 15, 19 48:8, 9, 23 49:7, 8, 9, 22, 24 50:6, 23 51:10, 24 52:1, 14, 20 53:1, 9
<b>reside</b> 45:17	<b>rogue</b> 22:24 30:21	<b>Section</b> 22:15 29:19	<b>SECRETARY</b> 4:1, 6 27:10 28:6 46:22
<b>resolve</b> 10:11	<b>role</b> 4:15, 20 12:23 13:2, 23 19:4	<b>secure</b> 49:18	<b>Section</b> 22:15 29:19
<b>resource</b> 29:9, 25	<b>roles</b> 12:9	<b>Security</b> 4:16, 24 14:9 28:14 50:24	<b>see</b> 13:13 22:8 27:19 30:7, 8 32:22 33:3 34:15 36:24 37:1, 14, 19 50:2
<b>resources</b> 29:4 46:23	<b>Room</b> 1:15	<b>seeing</b> 38:17 41:5 51:24	<b>Senior</b> 12:16
<b>respect</b> 50:11	<b>Rosen</b> 1:17 27:23 31:15, 24, 25 33:13 34:14 35:4, 12 36:17 49:8, 9, 22, 24 50:6, 23 51:24	<b>seen</b> 33:2 47:8, 9 49:19	<b>Sensor</b> 20:13 22:11
<b>respond</b> 35:19	<b>round</b> 46:20	<b>seize</b> 14:2	<b>sensors</b> 5:25 25:1 52:24 53:7
<b>responding</b> 14:11	<b>Rounds</b> 1:18 3:14, 16, 18, 21 36:18, 20 37:17, 24 38:7 39:5, 19 40:22 41:6, 9, 12, 14 42:4, 8, 14, 21	<b>select</b> 20:7	<b>sent</b> 51:7
<b>response</b> 5:20 9:17 27:14 45:5, 7	<b>Russell</b> 1:15	<b>selectable</b> 18:11	<b>September</b> 49:13
<b>responses</b> 39:11	<b>Russia</b> 8:24 25:13	<b>selected</b> 18:16	<b>serve</b> 12:16, 21 28:5
<b>responsibility</b> 20:16 24:2, 21 42:17	< S >	<b>Senate</b> 1:8, 15	<b>service</b> 2:4 5:6 6:11 18:5 29:21 33:9
<b>rest</b> 43:9	<b>safeguard</b> 13:18	<b>SENATOR</b> 2:1, 3 3:16, 18, 19, 21, 22, 24 7:1 11:1 16:1 21:1 22:1, 3 23:8, 16, 17, 22 24:8, 13, 22, 25 25:10, 13, 18, 22 26:13, 16, 23 27:9, 22, 23, 24 29:7, 11 30:1 31:3, 14, 15, 24, 25 32:25 33:13 34:14 35:4, 12 36:17, 18, 20 37:4, 17, 24 38:6,	<b>servicemembers</b> 6:10
<b>restructure</b> 31:6	<b>sailors</b> 43:14, 20	<b>seen</b> 33:2 47:8, 9 49:19	<b>Services</b> 1:9 8:22 17:24 25:5 33:20 35:2, 7 47:3
<b>retains</b> 44:16	<b>salaries</b> 24:4	<b>seize</b> 14:2	<b>service</b> 2:4 5:6 6:11 18:5 29:21 33:9
<b>rethink</b> 27:17 32:23 47:14	<b>satellites</b> 20:13	<b>select</b> 20:7	<b>servicemembers</b> 6:10
<b>REVIEW</b> 1:2 49:25 50:4	<b>saw</b> 35:24 36:9	<b>selectable</b> 18:11	<b>Services</b> 1:9 8:22 17:24 25:5 33:20 35:2, 7 47:3
<b>right</b> 25:8 26:11 27:15 30:16 31:3 33:13, 18 36:4, 21, 25 38:18 39:24 40:6, 20, 24 42:15 43:17, 18 46:5 50:6 51:2	<b>scandal</b> 26:8	<b>selected</b> 18:16	<b>servicemembers</b> 6:10
<b>right-of-launch</b> 6:6	<b>schedule</b> 46:5, 7	<b>Senate</b> 1:8, 15	<b>Services</b> 1:9 8:22 17:24 25:5 33:20 35:2, 7 47:3
<b>risk</b> 18:6 29:17 44:16	<b>science</b> 14:4	<b>SENATOR</b> 2:1, 3 3:16, 18, 19, 21, 22, 24 7:1 11:1 16:1 21:1 22:1, 3 23:8, 16, 17, 22 24:8, 13, 22, 25 25:10, 13, 18, 22 26:13, 16, 23 27:9, 22, 23, 24 29:7, 11 30:1 31:3, 14, 15, 24, 25 32:25 33:13 34:14 35:4, 12 36:17, 18, 20 37:4, 17, 24 38:6,	<b>setting</b> 32:3
<b>risks</b> 9:11	<b>sea</b> 20:2 25:22 38:18 47:17	<b>seen</b> 33:2 47:8, 9 49:19	<b>set</b> 28:18 29:14 32:1 41:21 44:5 46:4
<b>road</b> 46:16	<b>sea-based</b> 20:1	<b>seize</b> 14:2	<b>setting</b> 53:11
	<b>seabed</b> 9:5	<b>select</b> 20:7	<b>share</b> 14:18 36:25
	<b>SEAN</b> 12:1	<b>selectable</b> 18:11	<b>sharing</b> 10:3
		<b>selected</b> 18:16	<b>shift</b> 9:1



<p><b>shoot</b> 38:11 44:15</p> <p><b>shooting</b> 25:23 43:13</p> <p><b>shores</b> 10:2</p> <p><b>shortly</b> 3:17</p> <p><b>short-range</b> 39:15</p> <p><b>shot</b> 26:6 35:10 39:22 44:8</p> <p><b>showcase</b> 36:1</p> <p><b>shown</b> 18:9</p> <p><b>signal</b> 13:4</p> <p><b>significant</b> 9:11 13:6 30:22</p> <p><b>significantly</b> 30:15 40:4</p> <p><b>similar</b> 49:18</p> <p><b>simply</b> 7:2</p> <p><b>sin</b> 4:22</p> <p><b>sincere</b> 4:10</p> <p><b>single</b> 20:7</p> <p><b>sir</b> 8:4 10:14 25:20, 21 27:22 39:12, 13 46:2, 14 47:18 52:6, 7</p> <p><b>sit</b> 42:24</p> <p><b>site</b> 19:20, 21 22:25 30:3 45:15</p> <p><b>sites</b> 12:18 45:23</p> <p><b>sitting</b> 43:20, 21, 22</p> <p><b>situation</b> 45:10</p> <p><b>size</b> 25:9</p> <p><b>Sling</b> 51:3 52:11</p> <p><b>slow</b> 22:22</p> <p><b>slowly</b> 22:14</p> <p><b>SM-2</b> 40:4</p> <p><b>SM-3</b> 3:10 19:23</p>	<p><b>SM-6</b> 23:18</p> <p><b>small</b> 9:10, 14</p> <p><b>SMDC</b> 30:8</p> <p><b>soldier</b> 14:5</p> <p><b>soldiers</b> 12:10 15:3 30:25 44:8</p> <p><b>sole</b> 18:2</p> <p><b>solution</b> 47:22 53:8</p> <p><b>solutions</b> 20:14 52:25</p> <p><b>Somebody</b> 26:10</p> <p><b>someday</b> 27:19</p> <p><b>somewhat</b> 31:22</p> <p><b>Soon</b> 18:19</p> <p><b>soul-searching</b> 47:10</p> <p><b>southern</b> 28:12</p> <p><b>sovereignty</b> 4:22</p> <p><b>Soviet</b> 37:10</p> <p><b>SPACE</b> 4:2 5:14, 21 6:1 9:6 12:2, 7 13:16, 19, 22, 24, 25 14:8, 11, 22 18:13, 23 19:8 20:12, 15, 18 22:11 29:25 33:8 43:8 45:15</p> <p><b>space-based</b> 5:8</p> <p><b>spanning</b> 12:10</p> <p><b>speak</b> 23:19</p> <p><b>Speaking</b> 43:22</p> <p><b>special</b> 10:4</p> <p><b>specifically</b> 30:11 40:2, 3</p> <p><b>specifics</b> 23:20 48:22</p> <p><b>specifying</b> 13:23</p> <p><b>spectrum</b> 9:20 10:5</p>	<p><b>speed</b> 22:22</p> <p><b>spend</b> 38:14</p> <p><b>spent</b> 34:24 51:6</p> <p><b>spot</b> 28:4, 7 29:9</p> <p><b>SPY</b> 19:7</p> <p><b>SR-222</b> 1:15</p> <p><b>stage</b> 23:16 44:5</p> <p><b>standard</b> 19:1 39:16</p> <p><b>standing</b> 4:25</p> <p><b>stands</b> 18:9</p> <p><b>start</b> 3:17 17:9 41:23 52:6</p> <p><b>starting</b> 37:6</p> <p><b>starts</b> 46:11</p> <p><b>State</b> 51:21</p> <p><b>STATEMENT</b> 2:1 4:1, 8 6:13 8:1 10:16 12:1 15:9 17:1 20:23 22:1 29:1 38:23 39:12 50:1, 4</p> <p><b>statements</b> 45:22 46:1</p> <p><b>STATES</b> 8:2, 7, 16 9:18 12:2 30:5 37:15 50:5, 10</p> <p><b>status</b> 45:21</p> <p><b>steadfast</b> 4:11</p> <p><b>steps</b> 29:4</p> <p><b>Stinger</b> 39:25</p> <p><b>strain</b> 13:6</p> <p><b>Strategic</b> 1:10 8:17 9:1, 21 14:10 30:10, 18 31:10</p> <p><b>strategically</b> 12:18 50:3</p> <p><b>strategy</b> 4:19</p>	<p>52:22</p> <p><b>strengthen</b> 5:15</p> <p><b>stretching</b> 23:23</p> <p><b>strike</b> 8:19 36:9</p> <p><b>strong</b> 17:7</p> <p><b>strongly</b> 10:8</p> <p><b>structure</b> 14:24</p> <p><b>Stryker</b> 40:17</p> <p><b>Strykers</b> 41:24, 25</p> <p><b>stuff</b> 23:23</p> <p><b>Subcommittee</b> 1:10, 14, 16 2:3 4:5 8:5 12:5 17:4 18:16 53:20</p> <p><b>submarine-</b> <b>launched</b> 37:10</p> <p><b>submarines</b> 37:12</p> <p><b>subtle</b> 49:23</p> <p><b>success</b> 10:1</p> <p><b>successful</b> 5:22 20:16 40:9</p> <p><b>successfully</b> 18:10 40:6</p> <p><b>sufficient</b> 25:8</p> <p><b>Supplemental</b> 4:16 50:25 51:6, 12, 15, 17</p> <p><b>support</b> 4:12 10:8 12:15 17:7 18:22 19:8, 11 20:10 40:17, 19</p> <p><b>supporting</b> 13:22 15:1, 5</p> <p><b>supports</b> 26:20</p> <p><b>sure</b> 33:4 45:10 49:16 51:23</p> <p><b>surveillance</b></p>
---	---	---	--

43:25  
**survey** 46:3  
**sustain** 14:21  
**sustainment**  
 17:10  
**system** 5:11  
 17:11, 12, 22  
 18:1 19:3, 16, 24  
 20:5 23:2 29:3,  
 13, 14 30:5  
 32:12, 17, 19  
 34:6, 8 36:4, 5  
 38:5 39:20  
 42:19 45:23  
 51:4 52:3, 11, 22,  
 23 53:1, 5  
**systems** 5:9, 13  
 8:18 9:3, 4, 5, 11  
 14:22 23:15  
 32:10 37:16  
 38:7, 9, 12 39:9,  
 13, 24 40:2, 20,  
 25 41:2, 6 43:3  
 46:16 48:20

< T >

**tactical** 35:1, 8  
 36:10  
**tailorable** 53:8  
**tailored** 36:8, 9,  
 12  
**take** 7:2 19:16  
 25:13 26:22  
 28:16 29:4  
 31:18 33:23  
 34:20 38:7, 15,  
 22 39:11 41:1  
 43:11  
**taken** 20:17  
**takes** 33:17

**talk** 32:6, 19  
 43:2 48:2 53:13  
**talked** 29:8  
 53:10  
**talking** 23:22  
 27:3 34:17  
 38:13, 19, 20  
 39:23 41:20  
 47:15 50:9  
 53:14  
**target** 19:23  
**targeting** 39:21  
**task** 2:16  
**tasked** 29:19  
**team** 12:11, 15  
 15:6 30:12  
**technical** 34:23,  
 24  
**technologies** 9:10  
**technology** 8:24  
 14:5, 6, 18 29:14  
 31:20 40:8  
**tell** 27:12 47:19  
**tells** 48:3, 7  
**Terminal** 19:9  
 20:1 23:16, 19  
**terribly** 52:4  
**test** 18:11 19:7  
 22:24 30:3  
 33:23 34:7  
**tested** 53:3  
**testify** 4:7 8:9  
 12:6  
**TESTIMONY**  
 1:1 7:2 8:21  
**testing** 18:17  
 23:1 30:4, 17, 18,  
 19 34:4  
**THAAD** 19:10,  
 12, 13, 14, 16  
 39:16

**Thank** 2:4 3:13,  
 23 4:6, 9 6:8, 11  
 8:8 10:14 11:1  
 12:14 14:25  
 15:5, 7 16:1  
 17:3, 9 22:3  
 23:7 27:25 28:1,  
 7, 22 29:7 30:1,  
 9, 10 31:14 32:1,  
 2, 3, 25 36:17  
 42:21 44:1 48:9  
 49:7, 9 50:23  
 51:25 53:9, 16,  
 17  
**thanks** 35:18, 19  
 52:14  
**theater** 39:17  
 40:6  
**thereof** 3:12  
**thing** 44:23  
**things** 24:6  
 30:13 49:21  
**think** 31:18  
 38:6 39:1, 2  
 40:23 43:3, 10  
 52:6  
**thinking** 26:1, 5  
 34:14, 17  
**third** 2:18 41:23  
**thoughts** 35:17  
**threat** 2:18  
 13:21 18:4  
 25:14 29:23  
 32:14 33:8  
 35:11, 24 36:8  
 37:6, 8, 13, 14, 19  
 39:7 40:2, 7  
 41:4  
**threaten** 9:23  
**threats** 2:15, 21  
 5:17, 24 6:7 9:3,

5, 9 10:2, 12  
 13:11 17:16  
 18:22 19:17  
 20:2, 6, 15 33:10  
 36:24 37:9 41:4  
 42:25 43:1  
**threshold** 8:20  
**throwing** 33:3  
**tiered** 14:17  
**tight** 30:13  
**time** 2:10 12:10  
 25:4 32:5 33:17  
 34:1, 25 37:5  
 45:15 50:16  
 51:11 52:16  
**timeline** 51:19  
**timely** 9:16  
 15:1 43:24  
**times** 32:4  
**tireless** 6:9  
**tirelessly** 12:12  
**title** 43:8  
**today** 3:14 8:9  
 13:13 14:11  
 17:5, 11, 24  
 18:22 20:1 22:6  
 23:10 28:1 37:2  
 39:9 41:7 42:6  
 50:14 53:9  
**today's** 2:5, 11,  
 18 3:1 13:21  
**tomorrow** 17:25  
**too-slow** 23:2  
**topic** 4:7 45:19  
**total** 26:3 41:8  
**tough** 29:9  
**TPY-6** 19:25  
**track** 18:15 46:6  
**tracking** 6:1  
 18:21 20:12

22:11 45:7  
**trades** 24:7  
**trading** 24:11  
**trained** 52:18  
**training** 19:11  
 33:19, 24  
**transfers** 8:24  
**transportable**  
 19:25  
**transregional**  
 12:24 13:9  
**troops** 43:20  
**true** 33:24  
**truly** 32:9  
**trust** 14:20 15:2  
**truth** 23:10  
 27:16  
**try** 43:18  
**trying** 34:13  
 37:16 40:23  
 43:15 50:17  
**two** 12:17 18:11  
 36:23 37:20  
 41:18, 22 46:11  
**two-thirds** 26:25  
**type** 40:5 48:19  
**types** 24:6

## &lt; U &gt;

**U.S** 1:8 2:1  
 9:14 12:6, 17  
 13:20 19:9, 12  
 20:18 22:1  
 49:15  
**UAS** 9:14 40:1  
**UAVs** 24:15  
 38:25 39:3  
**ubiquitous** 31:21  
**Ukraine** 2:20  
 4:17, 22 13:13

31:19 33:2 47:9  
**undermined** 23:2  
**understand** 3:1,  
 9, 11 27:5 39:5  
 43:16 50:2, 8  
**Understanding**  
 13:21 45:3  
**understatement**  
 2:14  
**unit** 19:25 43:24  
**UNITED** 8:2, 7,  
 16 9:18 12:2  
 30:5 50:5, 10  
**unmanned** 9:4,  
 11 17:19  
**unprepared** 2:13  
**unsuccessful**  
 34:12  
**unwavering**  
 12:15  
**update** 8:21  
 51:8  
**upgrades** 19:8  
**upsetting** 28:21  
**urgency** 13:9  
**USA** 12:1  
**USAF** 8:1 17:2  
**USARPAC** 31:9  
**use** 13:2 38:8  
**USS** 19:4  
**utility** 52:13

## &lt; V &gt;

**validates** 36:15  
**valuing** 27:12  
**variety** 13:12  
**vectors** 36:25  
**vehicles** 17:19  
**vertical** 48:19  
**Vice** 27:21 29:7

**visibility** 37:22  
**Vision** 13:22  
**voice** 14:14  
**vulnerabilities**  
 49:19  
**vulnerable** 32:18

## &lt; W &gt;

**want** 3:13 4:10,  
 14 6:10 31:16  
 32:3, 6 39:25  
 45:21 49:16  
 50:8 53:9, 16  
**wanted** 31:23  
 35:22 49:1 50:1  
 52:12  
**war** 50:16  
**warehouses** 43:6  
**warfare** 4:19  
 6:5  
**warfighters**  
 12:13  
**warfighting**  
 12:25  
**warning** 5:9, 13  
 6:1  
**Washington** 1:12  
**watching** 42:18  
**wave** 22:24  
 30:21  
**way** 3:16 24:14  
 29:14 31:16, 22  
 36:3, 12 43:3  
 44:6, 20  
**weapon** 19:3  
 52:11  
**weapons** 3:8  
 13:17 20:5  
 22:14 37:1, 2, 4  
 38:9, 22, 25

39:18 41:1, 6  
 42:13  
**wear** 35:20  
**wearing** 35:21  
**Wednesday** 1:6  
**week** 37:20  
**Welcome** 22:5  
**well** 3:7 5:18  
 24:13 25:22  
 26:23 27:9 28:3,  
 17 31:25 33:17  
 34:8 42:10  
 45:20 46:10  
 47:8 48:15, 24  
 49:5, 9 50:25  
 53:9  
**well-coordinated**  
 9:16  
**went** 51:12  
**wide** 47:25  
**win** 15:4  
**withhold** 44:21  
**witness** 3:22  
**witnessed** 17:17  
**witnesses** 3:13,  
 15 22:5 23:4  
**woefully** 2:13, 14  
**women** 8:6  
 14:21 17:9  
**work** 8:12 10:8  
 17:23 19:16  
 24:2 25:24, 25  
 28:8 33:17, 20  
 35:24, 25 36:20  
 39:9 40:8 44:2,  
 4 51:20 53:17  
**worked** 33:15, 17  
**working** 2:9  
 14:4 20:2 29:20  
 34:25 37:3 40:1  
 51:5



**world** 4:25  
 24:19 26:10  
 53:15  
**worldwide** 12:11  
 44:3  
**written** 4:8

< Y >

**Yeah** 3:19  
 24:10 26:18  
 50:2  
**YEAR** 1:3 2:8  
 3:3, 6, 10 5:2  
 8:21 13:5, 12  
 18:14 19:7, 21,  
 22 20:4, 7, 14  
 22:9 23:5, 23, 25  
 24:1 26:4, 7, 12  
 29:25 41:23  
 46:5, 10 48:10  
**YEARS** 1:3 3:2  
 14:25 15:3 17:8  
 18:9 29:15  
 30:23 31:21  
 33:14 38:5  
 41:19 46:11  
 47:1, 3 51:13  
**year's** 22:15  
**Yemen** 43:12  
**Yep** 41:9

< Z >

**zeroed** 3:10  
**zones** 12:10