## Stenographic Transcript Before the

## COMMITTEE ON ARMED SERVICES

## UNITED STATES SENATE

TO RECEIVE TESTIMONY ON THE POSTURE OF THE DEPARTMENT OF THE AIR FORCE IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2025 AND THE FUTURE YEARS

Tuesday, April 16, 2024

Washington, D.C.

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

Τ	TO RECEIVE TESTIMONY ON THE POSTURE OF THE DEPARTMENT OF
2	THE AIR FORCE IN REVIEW OF THE DEFENSE AUTHORIZATION
3	REQUEST FOR FISCAL YEAR 2025 AND THE FUTURE YEARS
4	
5	Tuesday, April 16, 2024
6	
7	U.S. Senate
8	Committee on Armed Services,
9	Washington, D.C.
10	
11	The committee met, pursuant to notice, at 9:00 a.m.,
12	in Room 216, Hart Senate Office Building, Hon. Jack Reed,
13	chairman of the committee, presiding.
14	Committee Members Present: Senators Reed [presiding],
15	Gillibrand, Blumenthal, Kaine, King, Warren, Peters,
16	Manchin, Rosen, Kelly, Fischer, Cotton, Rounds, Ernst,
17	Sullivan, Cramer, Scott, Tuberville, Mullin, Budd, and
18	Schmitt.
19	
20	
21	
22	
23	
24	
25	



1	OPENING STATEMENT OF HON. JACK REED, U.S. SENATOR
2	FROM RHODE ISLAND
3	Chairman Reed: Let me bring the hearing to order.
4	For my colleagues' awareness, we intend to conclude today's
5	hearing by 12:00 noon due to possible floor proceedings,
б	and also the possibility that any one of our colleagues may
7	object to proceeding past 12:00 noon.
8	So, this will require us ending the open session at
9	by 11:00 a.m. and then moving immediately to a closed
10	session at SVC-217. I ask that members strictly adhere to
11	the five minute timeline, and I will have my gavel to
12	remind people. In that spirit, I will submit my opening
13	statement for the record. Senator Fischer.
14	Senator Fischer: Thank you, Mr. Chairman. I would
15	submit my statement for the record as well.
16	Chairman Reed: Thank you very much, Senator Fischer.
17	Let me recognize Secretary Kendall. Mr. Secretary.
18	
19	
20	
21	
22	
23	
24	
25	



- 1 STATEMENT OF HON. FRANK KENDALL III, SECRETARY OF THE
- 2 AIR FORCE
- 3 Secretary Kendall: Thank you, Mr. Chairman. Chairman
- 4 Reed, Senator Fischer, members of the committee, General
- 5 Saltzman, General Allvin, and I thank you for the
- 6 opportunity to testify today on the Department of the Air
- 7 Force's Fiscal Year 2025 budget submission.
- 8 The Department of the Air Force budget request
- 9 supports the National Defense Strategy. We appreciate the
- 10 committee's support for the recently enacted Fiscal Year
- 11 2024 budget and your efforts to secure timely passage. As
- 12 you are aware, the six month delay has had a real impact.
- 13 That time cannot be recovered, but at least we can now
- 14 move forward with our urgent modernization priorities. As
- 15 I have testified before this committee repeatedly, time is
- 16 my greatest concern.
- We are in a race for military technological
- 18 superiority with a capable pacing challenge. Our cushion
- 19 is gone. We are out of time. As we have briefed the
- 20 committee on the classified level, the pacing threat moves
- 21 steadily forward. I appreciate the opportunity to have a
- 22 classified session today, Mr. Chairman, as well.
- 23 Continued failure to provide on time authorities or
- 24 appropriations will leave the Air Force and Space Force
- inadequately prepared. We know the committee recognizes



- 1 this, and we appreciate your strong bipartisan support.
- Our Fiscal Year 2025 budget request complies with the
- 3 Fiscal Responsibility Act. We are requesting \$217.5
- 4 billion for the Department of the Air Force, which includes
- 5 \$188 billion for the Air Force and \$29.4 billion for the
- 6 Space Force.
- 7 The Fiscal Year 2025 budget reflects an increase of
- 8 about 1.5 percent over the enacted Fiscal Year 2024 budget
- 9 and does not keep pace with inflation, or with the 7
- 10 percent publicly acknowledged growth of China's military
- 11 budget.
- To stay within the levels of the FRA, the Department
- of the Air Force had to adjust our previous plans. The '25
- 14 budget request seeks to preserve the momentum behind our
- modernization efforts, particularly the work on operational
- 16 imperatives that we initiated, and that this committee
- 17 supported in Fiscal Year 2024.
- In order to preserve modernization, we have marginally
- 19 reduced procurement and we have sustained our foundational
- 20 accounts at levels we deemed acceptable but no more.
- 21 Because the Space Force budget is dominated by research and
- development accounts, we have had to marginally reduce the
- 23 pace and scope of our Space Force modernization programs.
- Our first priority in the National Defense Strategy
- remains differential homeland, which the Department of the



- 1 Air Force primarily supports through investments in domain
- 2 awareness, air and space defense, early warning, and
- 3 cyberspace defense programs. Our second National Defense
- 4 Strategy priority is to deter strategic attack against the
- 5 United States, our allies, and our partners.
- The Department of the Air Force's '25 budget request
- 7 prioritizes nuclear modernization to maintain a safe,
- 8 secure, and effective nuclear deterrent. Notably, the
- 9 Sentinel ICBM program has experienced unacceptable cost and
- 10 schedule increases and is currently undergoing a Nunn-
- 11 McCurdy review.
- 12 The Department Air Force will work closely with the
- 13 committee as that review reaches its conclusions. The
- 14 third National Defense Strategy priority is to deter
- 15 aggression and be prepared to prevail in conflict when
- 16 necessary.
- The Department of the Air Force needs immediate and
- 18 significant capability and modernization to keep pace with
- 19 the growing military capabilities of the PRC. The
- 20 Department of the Air Force operational imperatives and the
- 21 closely related cross-cutting operational enablers continue
- to guide our modernization program.
- The Fiscal Year 2025 budget request includes \$6.1
- 24 billion for these efforts. Finally, the fourth National
- Defense Strategy priority is to build a resilient Joint



- 1 Force and enduring advantages.
- 2 This budget request invests to ensure that we can
- 3 recruit and retain the force we need, so that our Airmen
- 4 and Guardians, and their families, have the quality of life
- 5 they deserve and can serve to their full potential.
- As we have briefed the committee, the Department of
- 7 the Air Force is also currently undertaking a department
- 8 wide effort to re-optimize to meet the needs of great power
- 9 competition.
- The intent is to minimize both cost impacts and
- 11 personnel or unit movement. We will work closely with the
- 12 committee as we develop detailed plans. We do not
- 13 anticipate any significant impact on the Fiscal Year 2025
- 14 budget, and we have not requested funds for this purpose.
- The DAF also appreciates the committee's support for
- 16 the DOD Quick Start Initiative that was enacted last year.
- 17 The Department of the Air Force has obtained approval from
- 18 the Secretary of Defense for two programs that will be
- initiated under this new authority.
- They are, a more resilient national GPS position and
- 21 navigation and timing capability, and C-3 battle management
- 22 for moving target indication. Time matters, but so do
- resources. The United States is facing a competitor with
- 24 national purchasing power that exceeds our own, a challenge
- 25 we have never faced in modern times.



1	China is actively developing and expanding
2	capabilities to challenge strategic stability, attack our
3	critical space systems, and defeat our ability to project
4	power, especially airpower. Conflict is not inevitable,
5	but it could happen at any time.
6	General Allvin and I just returned from a trip to some
7	of our key bases in the Indo-Pacific. We should all be
8	very proud of our men and women serving in harm's way and
9	doing everything they can to deter and to be ready for a
LO	conflict unlike any we have seen before.
L1	The Department of Air Force's Fiscal Year 2025 budget
L2	request is focused on addressing these realities. We
L3	commit to working with the committee to secure timely
L 4	enactment of this budget request. Thank you. We look
L5	forward to your questions. Thank you, Mr. Chairman.
L6	[The prepared statement of Secretary Kendall follows:]
L7	
L8	
L9	
20	
21	
22	
23	
24	



25

```
1
          Chairman Reed: Thank you very much, Mr. Secretary.
 2
     General Allvin, please.
 3
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```



- 1 STATEMENT OF GENERAL DAVID W. ALLVIN, USAF, CHIEF OF
- 2 STAFF OF THE AIR FORCE
- General Allvin: Good morning, Chairman Reed, Senator
- 4 Fischer, and distinguished members of this committee.
- 5 Today, I am proud to represent the 677,000 total force
- 6 Airmen serving our nation. I want to thank you for your
- 7 unyielding support, not only for those Airmen, but for
- 8 their families as well. I would like to open by stating my
- 9 immense pride in the exemplary performance of our Airmen
- 10 this past weekend.
- 11 As part of a joint coalition effort, they successfully
- 12 thwarted the massive air attack by Iran on Israel's home
- soil. Their professionalism and skill turned a potentially
- 14 catastrophic event for Israel into a strategic defeat for
- 15 Iran and its proxies. As we look across the strategic
- landscape, we find ourselves in a time of significant
- 17 consequence.
- The simultaneous demands of strategic competition with
- 19 an aggressive and increasingly capable PRC, and persistent
- 20 acute threats from around the globe, require the Air Force
- 21 to maximize the readiness of today's forces, while adapting
- our structures and processes to offer the best opportunity
- 23 to prevail in an environment of enduring competition. Time
- 24 is not on our side.
- The Fiscal Year 2025 Air Force budget request reflects



- 1 difficult choices. We have made tradeoffs to keep the Air
- 2 Force's operational readiness today at the minimum
- 3 acceptable to meet the nation's demands, while seeking to
- 4 preserve the previous years' advances in modernization.
- 5 The Air Force budget request also invests in the Air
- 6 Force's most precious asset, its Airmen, to ensure they
- 7 remain the decisive advantage upon which the nation
- 8 defends. Strategic deterrence is a key priority in our
- 9 National Defense Strategy, and the United States Air Force
- 10 remains committed to the recapitalization of our nuclear
- 11 force.
- We are actively supporting the process triggered by
- the Nunn-McCurdy breach of the Sentinel program and will
- 14 continue to pursue the path of a safe, secure, reliable,
- and effective ground lake of the nuclear triad well into
- 16 the future.
- Our ability to support the National Defense Strategy
- 18 priority of deterring aggression and prevailing in conflict
- demands a modern Air Force that is connected to the Joint
- 20 Force and can close multiple kill chains in minimal time to
- 21 control the tempo of a complex fight with a competitor.
- To that end, the Fiscal Year 2025 budget proposes
- 23 continued investments in the F-35 and F-15EX, albeit with
- 24 fewer than preferred quantities dictated by the constraints
- of the Fiscal Responsibility Act.



- We remain committed to the Advanced Battle Management
- 2 System, C3 Battle Management, and to the NGAD family of
- 3 systems, particularly collaborative combat aircraft, which
- 4 will allow the Air Force to deliver the affordable mass
- 5 required to be effective against a very capable PRC.
- 6 We are also committed to building forward based
- 7 resiliency enough to enable continued sortie generation
- 8 even while under attack. To arrest the decline in our
- 9 readiness, we have proposed modest increase investment in
- 10 flying hours and the weapon system sustainment funding to
- 11 support them, while prioritizing investments in critical,
- 12 physical, and cyber infrastructure.
- Our Airmen are and will always be the deciding factor
- in any conflict our Air Force faces, and we are committed
- to their health, development, and quality of life. We have
- 16 made significant progress thanks to Congress's support to
- increase basic pay, adjust the basic allowance for housing
- 18 and subsistence, to account for macroeconomic factors.
- 19 There is still work to be done.
- During our recent trip to the Indo-Pacific, Secretary
- 21 Kendall and I saw dedicated Airmen eager to accomplish the
- 22 mission despite infrastructure degradation caused by
- 23 natural disaster and persistent environmental challenges,
- 24 as well as limited access to the health care enjoyed by
- 25 many CONUS spaces.



Τ	The job of your Air Force has not changed since its
2	inception, support and defend this nation through credible
3	deterrence and unmatched combat prowess. To preserve that
4	level of deterrence, we must maintain our readiness today,
5	modernize our forces for tomorrow, and provide the absolute
6	best support for our Airmen.
7	Success on any battlefield is a team effort. I want
8	to thank the members of Congress and this committee for
9	your past and continued support. Thank you, and I look
10	forward to your questions.
11	[The prepared statement of General Allvin follows:]
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	



25

```
1
          Chairman Reed: Thank you, General. General Saltzman,
 2
     please.
 3
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```



- 1 STATEMENT OF GENERAL B. CHANCE SALTZMAN, USSF, CHIEF
- 2 OF SPACE OPERATIONS
- 3 General Saltzman: Chairman Reed, Senator Fischer,
- 4 distinguished members of the committee, thank you for your
- 5 continued support and for the opportunity to testify on the
- 6 Space Force's posture for Fiscal Year 2025.
- 7 As the Space Force prepares to celebrate its fifth
- 8 birthday, we are wholly dedicated to the work of forging a
- 9 service purpose built for great power competition. Space
- 10 has never been more critical to the security of our nation,
- and the success or failure of the Joint Force depends
- 12 heavily upon the capabilities we present.
- 13 It is our responsibility to contest and control the
- domain, to defend U.S. space capabilities, and to protect
- 15 the Joint Force from space enabled attack. Gaining and
- 16 maintaining space superiority is the purpose for which the
- 17 Space Force was established. With about 3 percent of the
- 18 Department of Defense's budget, the Space Force offers a
- 19 tremendous value proposition to the nation.
- 20 Every dollar invested in space brings asymmetric
- 21 returns, but that means every dollar cut creates asymmetric
- 22 risk. Against a near peer adversary, space superiority is
- the linchpin. Without it, we cannot deter conflict.
- 24 Without it, we cannot provide vital effects. Without it,
- we cannot protect the Joint Force.



- 1 Until we have built the infrastructure to achieve
- 2 space superiority, the Space Force is a work in progress.
- 3 The Space Force's theory of success includes three parts,
- 4 avoiding operational surprise, denying the benefits of
- 5 attack in space, and conducting responsible counter space
- 6 activities.
- 7 The Space Force budget request is designed to support
- 8 the National Defense Strategy by building, training, and
- 9 equipping the forces the nation needs to perform each
- 10 activity, preserving freedom of action in space, while
- 11 deterring and denying adversarial objectives.
- 12 Avoiding operational surprise requires us to maintain
- 13 an accurate understanding of the space domain at all times.
- 14 8.3 percent of our budget is dedicated to the same.
- 15 Operating across disaggregated sensor frameworks, the Space
- 16 Force provides the maximum information possible to decision
- makers from the tactical to the strategic level.
- Denying the benefits of attack in space demands that
- 19 we make any attack against U.S. space capabilities
- 20 impractical and self-defeating. 43.4 percent of our budget
- 21 is devoted to this objective. Investing in resiliency for
- 22 missile warning and tracking, satellite communications, and
- 23 precision navigation and timing.
- 24 Hybrid architectures and proliferated constellations
- impose a heavy cost on aggression. Finally, responsible



- 1 counter space activities describes the mechanism by which
- 2 the Space Force contests and controls the space domain.
- 3 The Fiscal Year 2025 budget dedicates 24.7 percent of the
- 4 Space Force's budget to space superiority.
- Within the constraints of the FRA, Fiscal Year 2025
- 6 Space Force budget reflects hard choices to maintain legacy
- 7 space services and preserve current readiness, but it also
- 8 slows the fielding of a modernized force. Addressing these
- 9 challenges depends on Guardians that are trained and ready
- 10 to meet the high tech demands of space operations.
- 11 For that reason, I would like to personally thank the
- 12 committee for its support for the Space Force Personnel
- 13 Management Act. This will be a major force multiplier in
- 14 the Space Force's efforts to modernize the way we recruit,
- build, and retain talent. Thank you for the opportunity to
- 16 discuss the Space Force's Fiscal Year 2025 budget and
- posture.
- 18 Even in the face of accelerating threats, the Space
- 19 Force remains the preeminent military space organization in
- 20 the world. With the support of this committee, our
- 21 Guardians will preserve and expand our strategic advantage,
- 22 and we will step up to meet the challenge of our facing
- 23 threat.
- So as long as you continue to trust and invest in your
- 25 space service, the Space Force will respond with



```
1
    unparalleled value for the nation. I look forward to your
 2
    questions.
 3
          [The prepared statement of General Saltzman follows:]
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```



- 1 Chairman Reed: Thank you very much, General Saltzman.
- 2 Mr. Secretary, we have been endeavoring for the last
- 3 several years to replace the E-3, AWACS, aircraft, which
- 4 has certainly served well but is reaching its limits.
- 5 Could you fill us in on the progress towards getting the E-
- 6 7 in the air to replace the E-3?
- 7 Secretary Kendall: Yes, we are still moving ahead
- 8 with the E-7. It is funded in the '25 budget. We had a
- 9 slip production of one more aircraft a year to the right.
- The price that we got from the prime came in much
- 11 higher than we had anticipated, and we have been involved
- in negotiations to try to get it down. We have come much
- 13 closer, but we are not really at closure yet, so we have
- 14 some additional work to do there.
- So, I am anticipating -- I am maybe being optimistic
- 16 here, but hopefully that will get to an agreement very
- shortly and then be able to move on with the program. We
- are still committed to the program, but we have got to have
- 19 an affordable aircraft.
- 20 Chairman Reed: The Australians, among others, have
- 21 the E-7. Our version would be more sophisticated or quite
- 22 different?
- Secretary Kendall: It would be. It would have to
- include all of our communication systems and so on. So,
- 25 there are a number of modifications from the original E-7,



- which are several years old, that have to be made to meet
- our requirements. So that is part of the problem with the
- 3 cost.
- 4 Chairman Reed: Thank you. General Allvin, a
- 5 significant part of the lifecycle cost of an aircraft is
- 6 sustainment cost. And I think around here, we -- our first
- 7 reaction is the sticker shock. You mean, it costs x?
- But we don't realize how much it really cost to keep
- 9 flying. For example, the F-35 is, I think, about \$39,000
- 10 per hour for flying. Can you tell us what progress the Air
- 11 Force has made in reducing the lifecycle cost of the F-35
- 12 system in particular?
- General Allvin: Thank you, chairman. And of course,
- 14 the F-35 will be the backbone of our force into the future.
- 15 So, having it sustainable is certainly required for us to
- be able to afford it and all the other things.
- The Joint Program Office has been undertaking this,
- what they are referring to is a war in readiness, trying to
- understand each of the individual elements and segments
- 20 that are driving the cost up. And I think that program is
- 21 underway. We expect to see some results from that in the
- 22 very near future.
- The other thing is that when you purchase the new
- 24 weapon systems, you also have to purchase the contract
- logistics supply system as well, which adds a bit of an



- 1 additional cost to it. So, digging into that and
- 2 understanding how we might be able to transition to this
- 3 performance based logistics is another way into the future.
- 4 As you know, we have been working back and forth with
- 5 the prime on how to do that. We couldn't come to a
- 6 conclusion that was satisfactory for both sides to be able
- 7 to have all of the things that we needed, so we are going
- 8 to reenter that as well to ensure that in the future we can
- 9 have a performance based logistics system that will drive
- down the cost of sustainment as well.
- 11 Chairman Reed: And there has been a determination, I
- 12 presume, over time that contractor based sustainment is
- more efficient than uniform sustainment by military
- 14 personnel?
- General Allvin: That was certainly the premise when
- 16 they put it into the CLS. And so, now we are looking at
- adjusting that to the current environment, how we may be
- able to adapt to ensure that we can get some of the
- 19 efficiency and affordability, but also the operational
- 20 responsiveness that we need.
- 21 Chairman Reed: Thank you. General Saltzman, your
- 22 chief task is to provide the trained and equipped Space
- Force Guardians. And you can you sort of give us a sense
- of what are the obstacles you are facing in that?
- General Saltzman: Yes. Thank you, Senator. The



- 1 conditions have changed radically in space over the last
- 2 ten years or so. One of the analogies Secretary Kendall
- 3 and I use is it is akin to going from a merchant marine and
- 4 transforming into a U.S. Navy. That requires different
- 5 equipment, that requires different training.
- And so, what we are working on currently is advancing
- 7 the training of our Guardians. We have invested in Fiscal
- 8 Year 2025 about \$438 million to enhance the training
- 9 infrastructure. This includes new simulators, new ranges,
- 10 aggressor forces to simulate the threat, all to give them
- 11 realistic training for the competitive environment they are
- 12 going to face.
- But maybe more importantly, and certainly more in
- 14 terms of investments, is giving them the equipment they
- 15 need, resilient architectures that are going to be more
- 16 capable, more effective in the contested environment, and
- 17 looking for the counter space capabilities to deny an
- adversary the ability to use space enabled targeting
- 19 against our Joint Force.
- 20 Chairman Reed: Well, thank you very much. Gentlemen,
- 21 thank you for your testimony. Senator Fischer, please.
- 22 Senator Fischer: Thank you, Mr. Chairman. Welcome,
- 23 gentlemen. I share with many of my colleagues a deep
- 24 concern regarding the future of the United States Air
- Force. Its fighters, bombers, tankers, and cargo aircraft



- 1 are in constant rotation around the world, ready to combat
- 2 any threat.
- I understand that we must modernize our forces and
- 4 divest when it makes sense to do so. However, many of the
- 5 aircraft that the Air Force has requested to divest in this
- 6 year's budget, such as the F-15Es, are among the most
- 7 combat capable, with expensive upgrades and thousands of
- 8 flight hours remaining on the aircraft. In the event of
- 9 conflict, we need not only capability but also capacity.
- Not every place in which the Air Force is expected to
- operate is a high end threat environment. I am especially
- 12 concerned about the impact of these budget caps on the
- 13 Space Force, whose programs form the backbone of every
- other services combat capability.
- 15 Communications, command and control, and guidance for
- weapon systems all rely on space, and more vital mission
- sets are expected to move to space in the near term, though
- 18 not fast enough to justify such rapid divestment of
- 19 airborne programs.
- Yet, this budget request does not include the
- 21 resources necessary for the Space Force to grow its
- 22 capability at scale and at the speed of relevance. Indeed,
- your request for Space Force is \$600 million less than what
- 24 the department requested last year.
- General Saltzman, in your opening statement, you



- 1 stated, "the Space Force lacks similar trade off options,
- 2 forcing delays in needed systems, especially counter space
- 3 systems." I am concerned about the level of risk we are
- 4 accepting by delaying development of these systems.
- 5 If Congress were to provide additional funding for
- 6 development of these counter space systems, would you be
- 7 able to execute that funding?
- 8 General Saltzman: Yes, ma'am. We have a series of
- 9 programs that are still in R&D, but there is a good, solid
- 10 program that with additional resources, we would be able to
- 11 accelerate and deliver capability in this FYDP.
- 12 Senator Fischer: We have also heard a lot about what
- the Air Force is doing related to re-optimizing the great
- 14 power competition, General Saltzman. What does that look
- 15 for -- look like for the Space Force, please.
- General Saltzman: Thank you for that. We are very
- excited about the re-optimization. And like I started in
- 18 the previous question to Senator Reed, it is about
- 19 recognizing that the environment has shifted and that we
- 20 have to train differently.
- So, we have reestablished new advanced training
- 22 standards for our Guardians to be able to respond in this
- 23 contested environment. We have also created a new force
- 24 presentation model, which creates both the time and the
- 25 tools for our Guardians to be able to train against this



- 1 adversary.
- 2 Most importantly, probably most recognizable, you will
- 3 see the establishment of a space futures command. This is
- 4 in recognition that there is a great many efforts that are
- 5 going on in science and technology, in operational
- 6 concepts, new missions, and we wanted to make sure we could
- 7 get our arms around that as quickly as possible and really
- 8 focus delivery of the right kind of systems with the right
- 9 prioritization in time, so that we can continue to have an
- 10 enduring advantage over our threats as we go into the
- 11 future.
- 12 Senator Fischer: Thank you, sir. General Allvin or
- 13 Secretary Kendall, what are additional updates that you can
- share in this setting on new developments in the B-21
- 15 program?
- Secretary Kendall: The B-21 is moving forward. I am
- 17 always very careful about saying positive things about
- 18 programs in development. They all have risk. But at this
- 19 stage, the B-21 has been performing close to original
- 20 scheduling and costs, and delivering capability is in
- 21 testing. We just had the milestone CE approval to enter
- low rate production. So, the program is moving forward.
- 23 At this point in time at least, we are pretty happy with
- 24 the progress.
- Senator Fischer: Great. Thank you. General Allvin,



- 1 it is my understanding that one of the changes at the Air
- 2 Force Nuclear Weapons Center is establishing that two star
- 3 general as PEO for international ballistic missiles. What
- 4 benefits will this bring to the Air Force's capability to
- 5 help them execute that Sentinel program?
- 6 General Allvin: Thank you, Senator. And this is
- 7 really part and parcel to what things we were looking at
- 8 with the re-optimization, understanding -- keeping the main
- 9 thing, the main thing. Nuclear deterrence is the
- 10 cornerstone of our national defense.
- And so, the ability to oversee at the right level,
- 12 with the right authorities to do integration of the ICBM
- leg of the triad is very important. So, elevating that to
- the two star level gives more seniority and more authority
- to be able to integrate the nuclear material management and
- 16 all of the systems that will be able to support the ICBM.
- 17 Like we think that is going to be pivotal regardless
- of what comes out of the Nunn-McCurdy review. And going
- 19 forward, that ground leg of the triad, that
- 20 recapitalization is going to take years upon years, and so
- 21 we want to ensure we have the right level of leadership and
- oversight to see this massive program.
- 23 Senator Fischer: Correct. We need to make sure we
- 24 have what we need and continue to move forward on that
- 25 program. Thank you.



- 1 Chairman Reed: Thank you, Senator Fischer. Senator
- 2 Hirono, please.
- 3 Senator Hirono: Thank you, Mr. Chairman. Thank you
- 4 all for testifying today. This is for General Allvin. The
- 5 agile combat employment strategy requires the appropriate
- 6 posture and supporting infrastructure at locations
- 7 throughout the Pacific. For example, just last week, the
- 8 Air Force awarded a \$409 million contract to rebuild an
- 9 airfield used during World War II on the island of Tinian.
- General Allvin, does the Air Force have the
- 11 appropriate forward basing it needs to execute agile combat
- 12 employment? And are there plans for more reclamation
- 13 efforts at Pacific airfields similar to Tinian and the
- 14 runway upgrade of -- Air base, Basa Air Base in the island
- 15 of Luzon?
- General Allvin: Well, Senator, thank you for that
- 17 question. And Secretary Kendall and I were there for about
- 18 two weeks ago. We are on the island of Tinian, and
- 19 certainly it holds not only a historic place, but it also
- is going to be part of the future as far as our agile
- 21 combat employment scheme of maneuver.
- So direct answer to your question, Senator, is we are
- on the path. We have the wing commanders and the Commander
- of Pacific Air Force with a very strong understanding of
- what it takes to do our agile combat employment, and they



- 1 continue through their wing level exercises to sort of to
- 2 build that out, at least intellectually and conceptually.
- And as we continue to fight for the resources to do
- 4 that, we do have designs on several of these clusters,
- 5 these spoke bases to include Tinian, that the Secretary and
- 6 I were on. You mentioned a couple of the other ones but
- 7 building out not only the runway but the necessary, not
- 8 overly necessary, just what we need to operate those hub
- 9 and spoke locations.
- We have a ways to go in the funding, but we are
- 11 designing the requirements, prioritizing them, and we do
- 12 intend to exercise to ensure we have everything we need to
- execute that that scheme of maneuver that is going to be
- 14 required.
- 15 Senator Hirono: But as part of the -- or maybe a
- 16 major part of the reason that we need to have these
- 17 facilities in the Indo-Pacific is because of recognizing
- 18 that China is definitely having -- they are reaching out to
- 19 a number of these island nations to influence them. Is
- 20 that one of the reasons that we want to do this?
- General Allvin: Senator, that is correct. We want to
- 22 ensure that we have the agility and be able to complicate
- their targeting calculus to ensure survivability and
- 24 success in that theater.
- Senator Hirono: Thank you. I support your effort.



- 1 Secretary Kendall, last year's NDAA included a provision
- 2 directing the Secretary of Defense to conduct a feasibility
- 3 study regarding the advisability of transfer --
- 4 transferring all covered space functions of the National
- 5 Guard to the Space Force.
- 6 The results of this study have not been released, but
- 7 I am concerned that you are already pursuing, apparently,
- 8 or DOD is, a provision in this year's NDAA that would move
- 9 all space missions out of the National Guard.
- 10 So, how does this change -- by the way, I think it is
- important for us to actually have the results of this
- 12 analysis, and I would hope that the analysis is also
- including outreach and the input of these National Guard
- units that are performing some of the space functions that
- 15 I am sure you know, Mr. Secretary, there are about 1,000
- 16 National Guardsmen in states, not just Hawaii but there are
- about 100 in California, Colorado, Florida, New York, Ohio,
- 18 Alaska.
- So, while that study has not even been completed, I
- 20 hope that you have gotten -- reached out to these National
- 21 Guard units. Have you, in conducting this study that we do
- 22 not have the results of yet?
- 23 Secretary Kendall: The study is in final draft.
- 24 First of all, let me just say that we deeply value the
- units that are part of essentially our space capabilities.



- 1 We are looking at which ones will be covered under the act.
- 2 Consulting with General Saltzman, and we have looked
- 3 at the functions of those units to see if they fit into the
- 4 Air Force or Space Force architecture more appropriately.
- 5 Most of them do fit within the Space Force, or a couple
- 6 that I think may be more appropriate in the Air Force, but
- 7 they are all valued and they are all important.
- 8 We want to have them continue to serve. We are
- 9 looking at how to best make that happen. General Saltzman
- and I are both very strongly of the opinion that the right
- 11 way to do that, from the point of view of national
- 12 capability and for the ability to manage the Space Force,
- is to bring those units into the Space Force, ultimately
- 14 under the Space Force Personnel Management Act that was
- just passed by the Congress last year.
- The Space Force is incredibly small, and it was
- designed to be lean and mean I guess is a way to put it to
- 18 be very efficient in how it operated and to have as minimal
- 19 amount of bureaucracy associated with it.
- 20 And we are very grateful that this committee and your
- 21 colleagues on the other side of the Hill supported the
- 22 Space Force Personnel Management Act that allows the Space
- Force to have full time and part time people in it, and to
- 24 be very flexible in how it manages people. So, we want to
- 25 bring these hard units into that same structure. And that



- 1 is clearly, from the point of view of the Space Force, the
- 2 best solution.
- 3 Senator Hirono: Mr. Secretary, I am glad to hear
- 4 that. Although transferring these units into the Space
- 5 Force might mean transferring these part time people who
- 6 are located in all the States that I mentioned away from
- 7 their States and other functions, so I have a concern about
- 8 that.
- 9 And, you know, General Saltzman just testified today
- that it is very important in terms of the recruiting and
- 11 retention of the people who are going to be doing these
- 12 functions. So, I have concerns that -- of the movement. I
- do have other questions, Mr. Chairman, that I will submit
- 14 for the record. Thank you.
- 15 Chairman Reed: Thank you very much, Senator Hirono.
- 16 Senator Rounds, please.
- 17 Secretary Kendall: Mr. chairman, if could have one
- minute to respond to Senator Hirono.
- 19 Chairman Reed: Yes. The only one minute you will
- 20 get.
- 21 Secretary Kendall: Thank you. Thank you, Mr.
- 22 Chairman. There is no intention to move anyone. So, there
- is some concerns out there that I think are overblown.
- People will basically have stability if they
- 25 transition. We are doing this now with some of the



- 1 reserves. There are about a thousand people in the
- 2 reserves, essentially, that are going to be moving under
- 3 the Space Force Personnel Management Act.
- We are going to handle the Space Guard people the same
- 5 way, basically. So, they would have stability, and they
- 6 will be able to continue to serve in the way generally that
- 7 they currently would serve.
- 8 So, there should not be a lot of concern about
- 9 dramatic changes as far as any of them are concerned.
- 10 General Saltzman may want to add a quick word on it.
- 11 Chairman Reed: Thank you very much, Mr. Secretary.
- 12 That helps clarify the issue very much. Senator Rounds,
- 13 please.
- 14 Senator Rounds: Thank you, Mr. Chairman. Secretary
- 15 Kendall, General Allvin, General Saltzman, thank you for
- 16 your service, and thank you for being with us today to
- share your testimony. I would also like to take this
- opportunity to acknowledge the actions of the pilots and
- 19 aircrews of the 494th and the 335th Fighter Squadrons, who
- 20 performed so magnificently over the weekend.
- We are all proud and humbled by their clear
- 22 excellence. And to the entire Joint Force for the job,
- they did in responding very, very quickly. Secretary
- 24 Kendall, given the events over this past weekend, it seems
- 25 clear to me that there is no substitute for military



- 1 hardware and that divesting platforms in the short term to
- 2 pay for future capabilities is not necessarily the most
- 3 desirable option or choice.
- 4 Congress must fund the Department at levels
- 5 commensurate to the global threat environment. Broadly
- 6 speaking, in this open setting, where does your Fiscal Year
- 7 2025 budget assume the most risk?
- 8 Secretary Kendall: If I were to look over at the
- 9 Department of the Air Force's budget, I am most concerned
- 10 about the pace at which we are moving forward in space,
- 11 particularly counter space. I am not uncomfortable with
- 12 where the Air Force is in terms of force structure or
- 13 capabilities globally.
- We have a large Air Force, and it is very capable. It
- is not as large as it once was, but we have a lot of units,
- and the two you mentioned I think did a fantastic job, but
- we have a lot of other units who could do very similar
- 18 things if called upon to do that.
- Our average aircraft is about 30 years old, and we
- 20 need to move forward with the next generation of
- 21 capabilities as quickly as we can. On the Space Force
- side, though, as General Saltzman mentioned, we are going
- 23 from a country that had space capabilities designed to
- operate in space with impunity and very little in the way
- of counter space capabilities.



- So, we are moving from a merchant marine like
- 2 arrangement to a military naval force arrangement, which
- 3 means we have got to have resilient assets in space that
- 4 will survive and attack and provide the services that are
- 5 so important to the Joint Force. And we have got to
- 6 protect the Joint Force from similar systems that the other
- 7 side has that would threaten us and target us.
- 8 So, we need to do both of those things, and those are
- 9 transformational capabilities compared to what we currently
- 10 have in the Space Force for the most part. So, my greatest
- 11 concern, again, is time and moving forward as quickly as
- 12 possible with the kind of space capabilities we need,
- 13 particularly counter space.
- 14 Senator Rounds: And I guess just to follow up on
- that, and once again I suspect this is one that all of you
- 16 would probably participate in responding to, but ISR is
- 17 critical, and right now we have got platforms that do a
- 18 great job, but they are not necessarily space based.
- Space based is critical long term, but it would appear
- that right now, we are still building those ISR
- 21 capabilities for the Combatant Commander to have in order
- 22 to finish that kill web. General Allvin, would it be clear
- 23 -- would you, at least in your professional military
- opinion, would you share with this committee where we are
- 25 right now with regard to our ISR platforms that the



- 1 Combatant Commanders are requesting at this time?
- General Allvin: Absolutely, Senator. Of course, you
- 3 know, intelligence, surveillance, reconnaissance absolutely
- 4 critical to be able to close those kill chains and have the
- 5 situational awareness that Combatant Commanders need.
- I would say that where we are is we are in a
- 7 transition. I think there is a comfort with the level of
- 8 the capacity that airborne ISR has been able to provide.
- 9 And during our transition to space, air mix I think is,
- 10 from air --
- 11 Senator Rounds: General Allvin, I am going to I am
- 12 going to cut right to the chase on this. Fair to say we
- 13 are assuming risk in this transition?
- General Allvin: Senator, I would say we assume risk
- in any of the transitions. We are trying to manage that
- 16 risk to the platforms we have, retaining the platforms that
- we have through the RQ-4 through 2029 and those that we
- 18 have in the airborne layer until we get more resilience
- through the spaceborne layer, because that is where the
- 20 future is.
- 21 Senator Rounds: Thank you. General Allvin, also with
- regard to the family, the B-21 family. Right now, the
- 23 actual platform itself, we have ordered or were prepared to
- 24 purchase 100. Would you say that that is the minimum
- 25 number needed of the base platform?



- General Allvin: It certainly is the future of our
- 2 bomber force. Before -- 100 is the program of record. I
- 3 think we are not going to reach that number until probably
- 4 the mid 2030s and beyond.
- 5 And before we commit to that as being the platform
- 6 beyond that, I think there are other technological
- 7 advancements that we would see to be able to augment that
- 8 and have a better mix because, as you know, there, there
- 9 also -- there is a price to pay for them. They are going
- 10 to be very capable.
- 11 Senator Rounds: But the 100, sir, is the minimum?
- General Allvin: That is the program of record,
- 13 absolutely.
- 14 Senator Rounds: Thank you. Thank you, Mr. Chairman.
- 15 Chairman Reed: Thank you, Senator Rounds. Let me
- 16 recognize Senator King, please.
- 17 Senator King: Thank you, Mr. Chairman. Mr.
- 18 Secretary, you began your testimony talking about the Nunn-
- 19 McCurdy process and Sentinel. Very expensive program
- 20 designed years ago. Make the case for the ground based leg
- 21 of the triad.
- 22 Secretary Kendall: I should mention that I am recused
- on Sentinel itself, but I can definitely answer your
- 24 question about ground based leg. For as long as I have
- been in this business, about 50 years, the country has



- 1 relied upon the triad for nuclear strategic deterrence. It
- 2 presents an adversary with a very difficult problem if it
- 3 is contemplating an attack against the United States.
- 4 The ICBM leg in particularly, which is our largest and
- 5 most responsive leg of the triad, presents a dilemma
- 6 because if it is attacked, it basically can be very
- 7 responsive and respond immediately with a large scale
- 8 counterattack.
- 9 The submarine part of the fleet provides a more secure
- 10 reserve, if you will, that is smaller in size but more
- 11 survivable. And then, of course, the bomber leg provides
- 12 additional flexibility and the ability to present an
- 13 adversary with another way in which they can be attacked.
- 14 That triumvirate, that triad has been enormously
- 15 effective in preventing a nuclear war for more than half a
- 16 century -- almost approaching a century now. At one point,
- 17 I think you could have had a debate when the only nuclear
- 18 powers were Russia and the United States and our arsenals
- were declining, that we could have gone to some other
- arrangement.
- 21 But the thing that has happened in the last few years
- that really reinforces the need for the ICBM leg is China's
- breakout and their expansion of their nuclear force, which
- 24 is truly the progress --
- 25 Senator King: China is making huge investments in a



- 1 land based --
- 2 Secretary Kendall: China is making a large
- 3 investment, and they are going to an inventory within the
- 4 next few years that is comparable to that of the United
- 5 States and Russia.
- So, for the first time in our history, we are going to
- 7 live in a world in which there are three large scale
- 8 nuclear powers. That is a very dangerous world. And I
- 9 think reducing our capability, reducing our options in the
- 10 face of that would be a serious mistake.
- 11 Senator King: Of course, the fundamental of our
- 12 entire defense policy is deterrence.
- 13 Secretary Kendall: Exactly.
- 14 Senator King: And in order to maintain deterrence,
- 15 the ground leg is an important factor. Thank you. When we
- buy a major weapon systems, B-21, F-35, do we acquire the
- 17 IP?
- And what I am leading to here is the ability of our
- 19 military to 3D print parts so that we are not subject to a
- 20 long supply chain delays and also potentially additional
- 21 cost.
- Do we have the -- I believe that every hangar should
- 23 have a 3D printer and every Navy ship should have a 3D
- 24 printer so that we are not tied to that long tail of parts.
- 25 What is the status of our acquisition of the IP so that



- 1 that can be effectuated.
- 2 Secretary Kendall: Our history is mixed on IP
- 3 acquisition. The F-35 is a good example of a program where
- 4 we didn't do that. It was acquired initially under a
- 5 philosophy of total system procurement, which essentially
- 6 left in the hands of the prime contractor a lot of control
- 7 of the program.
- 8 Makes it very hard to upgrade. It makes it very hard
- 9 to make changes and do them in a cost effective way, and to
- 10 take advantage of competition. Our more modern programs
- 11 generally are built where we acquire the intellectual
- 12 property we need to control both upgrades and maintenance
- 13 so that we have a lot more flexibility in how we manage.
- 14 The B-21 is being done that way.
- The NGAD program is being done that way. It is one of
- the lessons we have learned very painfully over our history
- in acquisition. I am not sure that we always get it right
- 18 today, but my -- I am not doing acquisitions anymore. I am
- in a different role now.
- But my guidance, when I was doing that, was that when
- 21 we still have the benefits of competition, we need to get
- the intellectual property rights we are going to need for
- 23 the life of the program.
- 24 And if we can get reasonable prices for those rights
- 25 at that time, and then be in a position to manage the



- 1 program effectively going forward. That is the way we
- 2 should be doing this. I can't say that we do it in every
- 3 case.
- 4 Senator King: General Saltzman, we may need to talk
- 5 about this in a classified setting, but you used the term
- 6 denying the benefits of attacks in space. Secretary
- 7 Kendall used counter space. Clearly we are playing catch
- 8 up in this situation. And is there anything you can say in
- 9 the open setting to provide some reassurance that we are
- 10 not totally vulnerable in space right now?
- General Saltzman: Yes, Senator. Thank you for that.
- 12 The Fiscal Year 2025 budget, I think, continues to advance
- us on a pretty solid timeline for adding resilient
- 14 architectures to the critical missions like missile
- warning, satellite communications, data transport.
- And so, I am pretty comfortable with where we are
- headed in terms of denying the benefits of an attack on our
- 18 systems to some degree. The problem, again, as the
- 19 Secretary mentioned, was the fact that the PRC, in
- 20 particular, has built a very robust, space enabled
- 21 targeting system and have continued to do so at a very
- 22 rapid rate.
- 23 And so, scaling up to develop not just the type of
- 24 counter space capabilities that we need, but the quantity
- of those capabilities to hold those targets at risk is



- where we are falling behind in the timeline. And we are
- 2 not just moving as quickly as I think we should.
- 3 Senator King: Thank you. General Allvin, I am going
- 4 to submit this question for the record, but I would like
- 5 some thoughts from you about the Transition Assistance
- 6 Program and how it is being implemented in the Air Force.
- 7 I worry about the transition process from active duty
- 8 to veteran status. Very dangerous moment. And so, you
- 9 don't need to respond now, but I will look forward to your
- 10 response on that question. Thank you. Thank you, Mr.
- 11 Chairman.
- 12 Chairman Reed: Thank you, Senator King. Senator
- 13 Tuberville, please.
- 14 Senator Tuberville: Good morning, gentlemen. General
- 15 Saltzman, Fiscal Year -- the President's Fiscal Year 2025
- 16 budget contains a new program for space access, mobility,
- and logistics. It is only \$20 million. What is your plan
- 18 for this?
- 19 General Saltzman: Sir, that type of money is used to
- 20 study to figure out if there is military utility. And so,
- 21 for example, we are looking at a concept called dynamic
- 22 maneuvering, if we can have unlimited fuel in our
- 23 spacecraft because we have the ability to service them on
- orbit, then we can have more dynamic orbits which are
- 25 harder to target.



- 1 That is the concept, that is the idea, but we really
- 2 need to evaluate that to figure out if there is serious
- 3 military utility there before we invest heavily in a
- 4 program, and the \$20 million gets us along that line.
- 5 Senator Tuberville: Yes, \$20 million for five years,
- 6 that is not a lot of money. I mean, is that going to get
- 7 the job done?
- 8 General Saltzman: I believe we will have the answers
- 9 to our basic questions on military utility with that, and
- then we can make a determination whether we need more
- 11 funding.
- 12 Senator Tuberville: How is your recruiting and
- 13 retention?
- General Saltzman: We are doing great. We still get
- 15 thousands of applicants for hundreds of positions, and we
- are above 90 percent in terms of the people that we want to
- 17 retain.
- So, I am not, you know, convinced that is going
- 19 to last forever. And so, we are working hard to make sure
- 20 we provide our Guardians with high levels of challenges and
- 21 opportunities to enhance their own competencies, to make
- 22 sure we can retain that workforce.
- Senator Tuberville: Thank you. Secretary Kendall,
- recently, I guess you decided to cut in half to MH-139s,
- and we have got 1 or 2. I think we got eight total



- 1 eventually coming to Montgomery, in Maxville. What is your
- 2 plan on this?
- 3 Secretary Kendall: I Maxville has one already, and
- 4 another later this year, and then the full eight about a
- 5 year after that. We did cut the buyback. We cut it from
- 6 about 80 to about 40. And the reason for that was that the
- 7 threat change and the areas in which we expect to operate
- 8 have changed.
- 9 So, it is a fairly expensive special purpose
- 10 helicopter that isn't -- doesn't have that much utility in
- 11 some of the theaters where we would have to operate given
- 12 the threats are there. And there are a number of other
- assets and in many cases can be used for personnel
- 14 recovery.
- So, we basically downsized it to have what we think is
- 16 a reasonable force to meet our needs given the changes in
- 17 the threat. That has been the fundamental driver.
- 18 Senator Tuberville: Yes. I was at the Tyndall Air
- 19 Force Base recently. How is that coming? That was a
- 20 disaster, what happened to Tyndall, but we are rebuilding
- 21 it back. Is it coming along pretty good?
- Secretary Kendall: I would have to get your detailed
- answer for the record, but yes, is a basic answer to your
- 24 question. A lot has been put into Tyndall to restore it.
- 25 Senator Tuberville: Thank you. General Allvin, F-



- 1 35s. We are putting a lot of eggs in a basket on this.
- 2 Are we getting enough flying time knowing the cost of F-
- 3 35s, of operating and maintaining?
- 4 General Allvin: Well, Senator, we are certainly
- 5 trying to manage that to get as many as we can. You know,
- 6 we -- as the weapons system sustainment accounts and the
- 7 flying our program accounts are very much interrelated.
- And so, as we try and drive down the costs of what it
- 9 costs to sustain that, we can put more of that into flying
- 10 hours. No pilot thinks he or she ever has enough flying
- 11 hours, but we certainly are augmenting that with our
- 12 synthetic training.
- Our joint synthetic environment is also helping us
- understand the things that we don't necessarily want to do
- an open air because of security. I would say, though, that
- 16 every pilot wants to fly more, but we are trying to manage
- that well to keep that proficiency up, to keep up with the
- 18 pace and threat.
- 19 Senator Tuberville: We want to make sure our pilots
- 20 are safe, obviously. In the confrontations we have been
- 21 having lately, the F-35 have been used, that you know of?
- General Allvin: The F-35 has been a part of -- some
- of the recent ones, like over the weekend, it was not
- 24 required for that capability, and it actually wasn't in the
- 25 theater. But the assets that we had in the theater, they



- 1 come through request from the Combatant Commander, and we
- 2 provide the assets for which they request.
- And those were satisfactory in that permissive
- 4 environment. In the highly contested environment, the
- 5 contested environment, that is really where this fifth
- 6 generation capability of the F-35 provides today, but even
- 7 more so into tomorrow with the Tech Refresh 3 and Block 4
- 8 capability to upgrade capabilities.
- 9 Senator Tuberville: General, how is our recruiting in
- 10 the Air Force?
- General Allvin: Recruiting in the Air Force is doing
- 12 quite well. It is really improving. On the active duty
- side, we actually just recently increased our goal, and we
- 14 think we are going to make that increased goal.
- On the reserve side, they are going to be within 1
- 16 percent. They think they may actually make it as well.
- 17 The National Guard had a deeper deficit to recover from. I
- 18 think last year they were well below. They are going to be
- 19 within 5 percent. So, we are gaining on all fronts. We
- 20 are certainly not resting on our laurels.
- In the '25 budget, we asked for another \$50 million to
- 22 be able to distribute out to more recruiting centers to
- have more digitization of records and things so we can also
- 24 have the recruiters do more recruiting rather than just
- 25 admin work.



- So, we are not giving up that we have got it all
- linked right now, but we certainly are on the right path.
- 3 Senator Tuberville: We are increasing numbers?
- 4 General Allvin: Absolutely.
- 5 Senator Tuberville: Is that what you said?
- 6 General Allvin: Yes.
- 7 Senator Tuberville: What percentage, do you know?
- 8 General Allvin: Well, I would say right now we are --
- 9 Senator Tuberville: The goal.
- General Allvin: What percent of the goal? The active
- 11 duty Air Force right now is reaching 100 percent of its
- 12 goal -- 101 percent, quite frankly, which allows us to bank
- 13 a few. The reserves, 99 percent. And the Air National
- 14 Guard, about 95 percent.
- 15 Senator Tuberville: Thank you.
- 16 Chairman Reed: Thank you, Senator Tuberville.
- 17 Senator Peters, please.
- 18 Senator Peters: Thank you, Mr. Chairman. Gentlemen,
- 19 welcome. It is good to see all of you here today.
- 20 Secretary Kendall and General Allvin, as you know, this
- 21 past January, the Air Force announced that Selfridge Air
- 22 National Guard Base will be receiving 12 new KC-46
- 23 refueling tankers in 2029.
- And, I just want to say, I don't think I can emphasize
- 25 enough how grateful I am to the Air Force for making this



- 1 announcement. Certainly, a very big deal for our area, and
- 2 the community is very excited to receive these critical
- 3 refueling tankers that will continue to play really a
- 4 tremendous strategic role for us for decades to come.
- 5 At the same time, and I have talked to both of General
- 6 Allvin and Secretary Kendall, I also remain committed to
- 7 securing a future fighter replacement for the retiring A-
- 8 10s that are currently flying at Selfridge.
- 9 The Air Force basing announcement clearly stated at
- the time that the KC-46 decision does not preclude
- 11 Selfridge from "being considered for a future fighter
- 12 aircraft mission or other potential missions in the
- 13 future."
- And I would just like both of you, if you would, could
- reaffirm and commit on the record that Selfridge is still
- in consideration for a future fighter basing decision at
- 17 some point. Secretary Kendall.
- 18 Secretary Kendall: Senator, thank you. Selfridge
- would be in consideration for future fighter basing
- decision, potentially. But at the current time, we don't
- 21 have an option to do that. And the reason we made the
- 22 programmatic decision to put the KC-46 there was in part at
- 23 least because of the divestiture of the A-10.
- So, those two are linked together. Our general policy
- is to replace a flying mission that is divested with a like



- 1 flying mission where we can. If we can't do that, we try
- 2 to apply it with another flying mission. And then if we
- 3 can't do that, we try to replace it with an enduring
- 4 mission. In the case of Selfridge, the KC-46s are
- 5 basically to replace the combination of the KC-135s and the
- 6 A-10s.
- 7 And in the future we may be at a very different place.
- 8 General Allvin mentioned in his opening statement the CCAs
- 9 that we are acquiring. We don't know the final inventory
- 10 number there, but we expect it to be large, so there is a
- 11 possibility there.
- 12 And we are looking as we build our '26 budget at our
- overall fighter modernization plan overall. So, there is a
- 14 possibility in the future, but none that we can point to
- 15 right at this time.
- 16 Senator Peters: General Allvin, you want to add any
- 17 to that comment?
- General Allvin: I, just to answer the specific
- 19 question, it does not preclude, but the Secretary has
- 20 really laid out with respect to the basing decision and
- 21 criteria.
- 22 Senator Peters: Right. But it doesn't preclude
- future, as we continue to work. And General Allvin, and I
- 24 appreciate the time that we took yesterday, or last week
- 25 rather, to meet. And as part of that conversation, we



- 1 discussed the critical importance of the collaborative
- 2 combat aircraft, which Secretary Kendall just referred to.
- We also talked about a potential pilot program to
- 4 study drone operations in medium and high intensity
- 5 airspace, which right now is problematic with unmanned
- 6 aircraft. This pilot program would allow the Department of
- 7 Defense to experiment with existing unmanned systems like
- 8 the MQ-9 Reaper, to pave the way for the employment of
- 9 future platforms like CCA.
- So, my question for you, sir, is what benefits and
- 11 lessons learned would the Air Force -- would the Air Force
- 12 gain from this kind of pilot program? And would you
- 13 support a pilot program of that nature?
- General Allvin: Thank you, Senator. I certainly
- would. I think as we look forward to the arc of where the
- 16 contested environment in which we are going to need to
- 17 fight, that arc is one that requires us to really
- investigate all the options for how we maintain
- 19 survivability at the right risk, to be able to penetrate,
- to be able to survive and to be able to close these kill
- 21 chains.
- 22 And it has increasingly become apparent to me that
- there is ripe for study how we do it in the uncrewed area
- 24 where we are developing the autonomy as well. We have a
- 25 current program in parallel that we are looking at the



- 1 length of -- the portfolio to which you can put autonomy in
- these collaborative combat aircraft, as well as how we
- 3 utilize them and base them. So, we are trying to go as
- 4 fast as we can into the human, machine teaming play.
- 5 Senator Peters: Yes, if I can build on that. We
- 6 discussed last week the importance of the KC-46 refueling
- 7 tanker, as well as the need for some out-of-the-box
- 8 thinking when it comes to collaborative combat aircraft
- 9 employment.
- 10 As part of that discussion, you mentioned the
- 11 possibility, the possibility of employing KC-46s a command
- 12 and control node for future CCA aircraft. You know, I
- understand that those decisions are in the very early
- 14 stages, but what steps with the Air Force needed to explore
- this KC-46 and CCA command and control concept?
- General Allvin: Senator, I think the first step that
- we need to do is to get better situational awareness on the
- 18 KC-46s. And that is something that we are looking into
- 19 very strongly.
- 20 General Minihan has done some experiments out in the
- 21 Indo-Pacific showing that if you just have a C2 node, the
- 22 ability to communicate in ways that the tanker right now
- can't, that starts your ability to have a more resilient
- 24 command and control network.
- Now, whether that next step is to go from just being a



- 1 communications node relay to actually doing airborne battle
- 2 management is something that can be investigated. But the
- 3 first start is to ensure that you have the connectivity of
- 4 your mobility platforms in a way that you didn't before.
- 5 That opens up the opportunity to do more than just
- 6 being a comms relay, but maybe doing more command control.
- 7 Senator Peters: Right. Thank you. Appreciate it.
- 8 Chairman Reed: Thank you, Senator Peters. Senator
- 9 Schmitt, please.
- 10 Senator Schmitt: Thank you, Mr. Chairman. Secretary
- 11 Kendall, a sort of a follow up on Senator Peters' question.
- 12 Missouri is home to Whiteman Air Force Base, and the 442nd
- 13 Fighter Wing is there.
- And the A-10, you know, the Air Force is moving on
- 15 from the A-10, and that will be -- really come to fruition
- in four years. You know, it has some really experienced
- pilots and maintainers, and we are already starting to see
- 18 the retention issues because there hasn't been a follow on
- 19 mission.
- What can you tell me today about how you are
- 21 approaching that? Because there are some options, but
- there has really just not been a lot of movement.
- Secretary Kendall: I don't think we have an option
- 24 yet for the A-10 replacement.
- Senator Schmitt: Can I make a suggestion?



- 1 Secretary Kendall: Yes.
- 2 Senator Schmitt: The F-15EX would be a great option.
- 3 Secretary Kendall: We will take that under
- 4 consideration, Senator.
- 5 Senator Schmitt: Okay. Secondly, Rosecrans, which is
- 6 in Saint Joseph, Missouri, is home to the aging fleet of C-
- 7 130Hs. Interestingly -- and, you know, some have said that
- 8 the last round was pretty political based on where they
- 9 went. And I just want to make the point, Rosecrans trains
- 10 people from all around the world.
- 11 For example, the Indian Air Force comes in with their
- 12 C-130Js to be trained by the folks at Rosecrans who have Hs
- 13 from the 1980s. There have been eight, you know,
- 14 appropriate in this next round. So, I guess just for
- either one of you, where do you see this headed?
- General Allvin: Senator, those eight Hs that were
- appropriated, certainly they go through the basing process.
- 18 And the candidate bases, I understand that Rosecrans is
- 19 going to be considered as one of, I believe, four candidate
- 20 bases for those.
- Obviously, it meets the criteria. That is the first
- 22 part of the strategic basing process, and it does meet the
- criteria, obviously, because they are flying 130 -- but the
- 24 expectation is it will be under consideration. The
- 25 Director of our Air National Guard Bureau works closely



- 1 with the Secretary on making those decisions, but it should
- 2 be in the consideration.
- 3 Secretary Kendall: Let me just add that I delegated
- 4 the last C-130 trade basing decision to the head of the Air
- 5 National Guard, and I will probably do the same with this
- 6 one.
- 7 Senator Schmitt: Okay. Secretary. Kendall, I do
- 8 want to ask you, I sent a letter to Secretary Austin, you
- 9 know, asking for some accountability with these DEI
- 10 positions that have found their way throughout the Pentagon
- 11 and our Armed Services. Secretary Kendall, do you know how
- 12 many DEI positions exist in the Air Force -- full time
- 13 positions?
- 14 Secretary Kendall: It is a relatively small number,
- 15 Senator. We are in the process of complying with the law,
- and we will comply with it. I think the due date to have
- this done is about the middle of June, if I remember right.
- 18 So, we will get you the exact --
- 19 Senator Schmitt: Well, the answer is 70 -- 70. The
- Navy has 18. The Army has 19. Those are 18 and 19 too
- 21 many, as far as I am concerned. But 70, what do these
- 22 people do all day long? Like I am asking because what do
- these DEI coordinators do all day long, 70 of them, in the
- 24 Air Force?
- 25 Secretary Kendall: I think -- I thought the number



- 1 was higher than that, actually.
- 2 Senator Schmitt: Well, that is full time position, so
- 3 maybe -- I am actually very curious now what you are going
- 4 to -- what your report might show. But 70 full time
- 5 positions, what do they do?
- 6 Secretary Kendall: They oversee programs that are in
- 7 that area. They oversee our training in that area. They
- 8 are responsible for some of our data collection that will
- 9 be related to that. We did two disparity reports in the
- department that were started before I came in, and probably
- 11 shortly afterwards.
- 12 They are responsible for that. Those report showed
- 13 pretty significant disparities in results of things like
- 14 the criminal justice system, in promotions and command
- 15 selection rates, and then senior school selection. And
- those pointed us at actions we could take to try to address
- 17 some of those concerns.
- 18 Senator Schmitt: Okay. Well --
- Secretary Kendall: They had they have done, I think,
- 20 valuable work --
- 21 Senator Schmitt: Well, I look forward to your full
- 22 report. And I could make a suggestion how you could be a
- real leader for the country. You should fire them all,
- 24 every single one of them. It is so divisive.
- 25 And Senator Tuberville has talked about recruiting.



- 1 The elephant in the room is, the truth is that this is
- 2 dividing our folks in the military by race. It is taking
- 3 us backwards. It is cultural Marxism and somehow you are,
- 4 you know, you are here today defending this. So, you know,
- 5 I have got legislation to get rid of them all.
- 6 You could take a real leadership position by firing
- 7 everybody tomorrow. That would be great. I do have time
- 8 for one quick question. I know that we are moving a lot of
- 9 ISR capability to space, and I am generally supportive of
- 10 that.
- But are you guys concerned at all that we are maybe
- 12 moving too quickly away from some more traditional
- 13 capabilities?
- 14 Secretary Kendall: Just as a quick comment on -- I
- think we have a fundamental difference of opinion about
- 16 DEI.
- 17 Senator Schmitt: We do. We certainly do.
- 18 Secretary Kendall: Regarding ISR, we are moving, we
- 19 are transitioning into space because of the vulnerability
- of some of our airborne platforms. AWACS and JSTARS are
- 21 great examples of that.
- The same is true with some of our UAVs, unmanned
- 23 aerial vehicles that operate -- can operate in a contested
- 24 environment. We will always have a balance between
- 25 airborne capabilities and space based capabilities.



- 1 We want to confront our adversaries with a more
- 2 difficult problem than just having to deal with one of
- 3 those. But because of the range at which -- and the
- 4 sophistication of which our adversaries are reaching out to
- 5 engage some of those platforms, they are pushed back so far
- 6 that they can't be effective in many cases, or they have to
- 7 operate in a way which limits their effectiveness in order
- 8 to be survivable.
- 9 So, we are moving a lot of that capability in the
- space, and we are doing it with the resilient architectures
- 11 that General Saltzman talked about earlier.
- 12 Chairman Reed: Thank you, Schmitt. Senator Warren,
- 13 please.
- 14 Senator Warren: Thank you, Mr. Chairman. Our
- military is the best and the strongest in the world, so it
- is no surprise that foreign governments have been
- 17 recruiting both active duty and retired officers.
- The Washington Post found that hundreds of foreign
- 19 governments have hired hundreds of retired officers, from
- 20 Saudi Arabia, to Libya, to the United Arab Emirates.
- 21 General Allvin, is there a National Security risk when our
- trained military personnel work for foreign governments?
- General Allvin: Senator, there certainly is.
- 24 Senator Warren: So retired officers working for
- 25 foreign governments could endanger our military



- 1 competitiveness. That is why we require retired officers
- who want to work for foreign governments to receive
- 3 approval from their military service and from the Secretary
- 4 of State.
- Now, we tightened up that process last year in the
- 6 National Defense Authorization Act, but there are still
- 7 some loopholes in this space. For example, active duty
- 8 service members are allowed to start negotiating employment
- 9 with foreign governments before they leave the military.
- General Allvin, could allowing active duty Airmen to
- 11 negotiate work on behalf of another government while still
- wearing their U.S. uniform pose risks to our National
- 13 Security?
- General Allvin: Well, Senator, there is -- while they
- are still in uniform, they are still subject to the
- 16 policies, the restrictions, and the UCMJ --
- 17 Senator Warren: I understand that, but they are also
- 18 permitted to negotiate with foreign governments for their
- 19 future employment. And what I am asking is, does that
- 20 potentially pose a conflict of interest that threatens our
- 21 security, at least potentially?
- General Allvin: I say potentially, could, yes.
- Senator Warren: All right, I agree. You know, we
- 24 need to strengthen our rules so that active duty personnel
- aren't selling their services to foreign governments while



- 1 they are still in uniform.
- There is another loophole that we need to close. Last
- year, the Air Force issued a memo raising concerns about
- 4 China's recruitment of both current and recently retired
- 5 Air Force personnel like pilots, maintainers, and other
- 6 technical experts that have a lot of insight into U.S. air
- 7 tactics.
- Now, in many cases, these individuals are hired by
- 9 private entities and actually may not know that they are
- 10 signing up to work for a foreign government, and our laws
- 11 requiring retired personnel to get approval before working
- 12 for a foreign government are much less clear if the
- officers are hired by a private company that is doing work
- 14 for that foreign government.
- General Allvin, from your perspective, are we in a
- better position to protect classified information and U.S.
- 17 National Security when we know if a retired officer is
- working for a contractor that works for a foreign
- 19 government?
- General Allvin: Senator, we are. And I think, as you
- 21 know, my predecessor, now Chairman Brown, put out that
- NOTAM really to raise awareness, and also to serve as a
- 23 deterrent. Both of those I think are having good effect.
- 24 The -- our AFOSI is getting good reports back, but it
- is not only about educating those within the force, but



- 1 also the mandatory now as you transition out -- also that
- we are making sure we do that as well.
- 3 Senator Warren: Yes. And I appreciate that and treat
- 4 this as awareness is raised on this. You know, these
- 5 arrangements can pose serious conflicts of interest. And
- 6 in fact, the Air Force rejected two retired generals'
- 7 requests to work for an Azerbaijani cargo carrier because
- 8 it would raise concerns about potential conflicts given
- 9 previous contracts the Air Force had awarded to the
- 10 airline.
- 11 So last year I secured a position -- a provision in
- 12 the Senate version of the National Defense Authorization
- 13 Act to require work on behalf of foreign governments, even
- indirectly through a private company, to be approved by the
- 15 U.S government.
- I think it is foolish not to use our National Security
- expertise to help retired service members identify if their
- 18 potential employer is asking them, potentially, to break
- 19 the law here. So, I look forward to working with my
- 20 colleagues and the Air Force to close any additional
- 21 loopholes that allow foreign governments to target and
- 22 exploit our service members.
- Thank you all. And thank you in particular, General
- 24 Allvin, for your work in this area.
- Chairman Reed: Thank you, Senator Warren. Senator



- 1 Ernst, please.
- Senator Ernst: Thank you, Mr. Chair. And thank you,
- 3 gentlemen, very much for your service to our nation and to
- 4 your teams as well. We appreciate you being here today.
- 5 And first, Secretary Kendall, we know the Iowa
- 6 National Guard is really important to me, and so I am going
- 7 to address to you some of the questions coming from our
- 8 great Iowa Air Guard.
- 9 Secretary Kendall, when the National Guard's 185th Air
- 10 Refueling Wing in Sioux City, Iowa, converted from its F-16
- 11 fighters to the KC-135 tankers way back in 2003, the United
- 12 States Air Force said that they would upgrade the airfield
- 13 at the Iowa National Guard facility.
- Now the 185th Air Refueling Wing might, nothing
- 15 confirmed, but might lose its mission because the runway,
- which has not yet been upgraded, here we are 20 plus years
- 17 later, is insufficient for the KC-46s, which will
- 18 eventually replace the 135s.
- So, Secretary Kendall, why do you feel that it has
- 20 taken so long to begin the airfield expansion? And do I
- 21 have your commitment to work with the National Guard to
- 22 assess the runway upgrade situation of the airfield at the
- 23 Iowa National Guard facility in Sioux City?
- Secretary Kendall: Thank you, Senator. So, we have
- 25 started the architectural and engineering activities



- 1 associated with three projects at the airfield, and I think
- 2 the Congress has been notified of that. So, we are moving
- 3 forward with those upgrades.
- 4 There is a runway repair project at \$45 million,
- 5 runway extension at \$47 million, and an aircraft parking
- 6 apron at \$45 million. They are not all the way through the
- 7 process yet. This is the earlier phases, but the process
- 8 has begun, and we will work with you on that.
- 9 Senator Ernst: Okay. Can you outline maybe the
- 10 timeframe that we might see some of that work done? Walk
- 11 me through that assessment and when we could actually see
- 12 work begin --
- Secretary Kendall: I will get you the details for the
- 14 record, but essentially we have to get to a 35 design,
- 15 percent design maturity before we put a MILCON project
- 16 down. So, we are in the earlier stages of that process,
- and I will get you the dates as to when different phases of
- 18 it might be completed.
- 19 Senator Ernst: Okay. Thank you so much, Secretary.
- 20 And I do understand the importance of transitioning to a
- 21 more capable aircraft like the 46. Do we also have your
- 22 commitment that any change to the 185th Air Refueling
- Wings' mission set will be on pause until a full and proper
- 24 MILCON assessment is completed?
- Secretary Kendall: I am not aware of any changes that



- 1 would be -- would occur in the interim. I will double
- 2 check that and get back to you on that, but I am not aware
- of any.
- 4 Senator Ernst: Thank you, Secretary. It is just
- 5 important that I get that on the record. So, again, we
- 6 have got such a great unit. The 185th has been so engaged
- 7 around the globe, we want to make sure that they are taken
- 8 care of.
- 9 So, Secretary Kendall, as we are now in an era of
- 10 great powered competition, the urgency of modernizing and
- 11 recapitalizing our air refueling and strategic airlift
- 12 capabilities is absolutely paramount.
- And if you could walk us through how you are ensuring
- our transition from the older KC-135s to the newer 46s is
- 15 conducted without compromising mission readiness.
- Secretary Kendall: Essentially, as we retire 135s, we
- are replacing them with 46s on a one for one basis,
- 18 generally speaking. It is not always exactly the case. We
- 19 are trying to make sure we have a smooth transition so that
- we don't have a gap in capability for the tanker fleet, and
- we are required to maintain the general fleet at a certain
- level. So, we have to stay within those statutory
- 23 constraints.
- Senator Ernst: Okay. Thank you. And General Allvin,
- 25 SOF continues to play a vital role in strategic



- 1 competition, particularly in irregular warfare. So, what
- 2 is your view on the role of the Air Force Special Warfare
- 3 and AFSOC in great power competition and future conflicts?
- 4 General Allvin: Yes, thank you for that, Senator. I
- 5 think they are doing a tremendous job in really adapting.
- 6 That is one of the things Special Operations has always
- 7 done. They have really adapted to the missions that have
- 8 been laid out in front of them. But in their transition
- 9 really also to great power competition, they have adjusted
- 10 some of their AFSCs to be more relevant.
- 11 And so, the -- what was the Special Operations Weather
- 12 Team, now they are more special reconnaissance. And they
- are part of this newly formed Special Tactics Team, which
- includes the combat control teams, the pararescue, the
- 15 tactical air control party, and now the strategic
- 16 reconnaissance.
- 17 They are really forming -- sort of the way they did
- when they used to be in the old great power competition,
- understanding how to operate ahead of main force elements,
- in this case in a more electromagnetic spectrum contested
- 21 environment.
- They are really doing some pathfinding work in helping
- 23 to find those -- take their niche capabilities and do
- things at speed and agility that maybe the standard,
- 25 conventional forces couldn't do. I think I am really



- 1 impressed with how they are moving along.
- Senator Ernst: Yes. Thank you. And General, and I
- 3 was excited to learn from you about the Air Force special
- 4 reconnaissance, Airmen and Airwomen, and we appreciate
- 5 their service. It is a great opportunity for them and for
- 6 us. Thank you, Mr. Chair.
- 7 Chairman Reed: Thank you, Senator Ernst. Senator
- 8 Kelly, please.
- 9 Senator Kelly: Thank you, Mr. Chairman. And
- 10 Secretary Kendall, General Allvin, General Saltzman, thank
- 11 you for being here today. Secretary Kendall and General
- 12 Allvin, I want to thank you for your continued
- 13 collaboration as we secure a long term future for Davis-
- 14 Monthan Air Force Base in Tucson.
- During last year's hearing, I asked you about the
- 16 stand up of the new power projection wing at DM, and I
- would like to follow up on that today, and also follow up
- on Senator Ernst's discussion with you, General Allvin.
- In the last year, we brought new search and rescue and
- 20 advanced electronic platforms to DM, and I would like to
- 21 hear any updates on the power projection wing that you can
- 22 provide. So, General Allvin, starting with you, you have
- just embarked on this ambitious plan to reoptimize the Air
- 24 Force for great power competition.
- A key component of this is the creation of deployable



- 1 combat wings. The power projection wings provides just
- 2 such a force for Air Force Special Ops command. Can you
- 3 talk about the wing's overall importance in the Air Force's
- 4 strategy?
- 5 General Allvin: Yes, thank you for that, Senator. In
- 6 some ways, some of the things that the Special Operations
- 7 community have been doing have been a little bit of
- 8 pathfinders with our deployable combat wings, reorienting
- 9 to where you have the ability to train with support teams
- in garrison in the way you expect to deploy with that unit
- 11 together.
- 12 Training together, doing individual training, then
- 13 consolidated training, certification training, all those
- things are paving the way. With this power projection wing
- 15 at Davis-Monthan, it is oriented towards the Indo-Pacific.
- So not only in its structure is it designed to be able
- to address the pacing challenge, but in its orientation as
- well. And I think there will be lessons that we learn in
- 19 the structure and the make up of those sort of wings that
- will apply to the larger Air Force.
- 21 Senator Kelly: Right. Thank you. And Secretary
- 22 Kendall, your new strategic strategy here is ambitious and
- 23 I support your efforts. But there are a lot of moving
- 24 parts here and still a lot to be done to get all the units
- in place at Davis-Monthan.



- 1 Can you provide assurances that you will still be able
- 2 to manage all of these movements and stick with the
- 3 timeline to stand up the power projection wing?
- 4 Senator Kelly: Senator, we got to do everything we
- 5 can to make that happen. Right now, we are on track. The
- 6 site activation task force -- I was out there in February,
- 7 as I think you know, and the EIS is on track for completion
- 8 in 25, through quarter 25.
- 9 Those are kind of the governing events. So, I think
- we are moving forward on schedule, but we will continue to
- 11 monitor that and make sure that we do.
- 12 Senator Kelly: So, you are not anticipating any new
- 13 delays?
- 14 Secretary Kendall: Not at this time.
- Senator Kelly: And do I have your continued
- 16 commitment here to ensure full transparency on this
- 17 process?
- Secretary Kendall: Absolutely, Senator. I will work
- 19 closely with you on it.
- 20 Senator Kelly: And if any issues come up, would you
- 21 please bring them to my attention as soon as you possibly
- 22 can?
- 23 Secretary Kendall: Yes, I will.
- Senator Kelly: Thank you. And on electronic warfare,
- 25 Secretary Kendall, it is -- EW is a cornerstone of any



- 1 modern conflict, and it is only going to increase in
- 2 importance as we prepare for great power competition.
- 3 The Air Force and DOD need to continue to focus on
- 4 electronic warfare, because achieving EW superiority is
- 5 going to be the key to getting air superiority. I am
- 6 encouraged by systems like the new Compass Call airplane
- 7 that is being deployed at Davis-Monthan. But also, the new
- 8 F-15 EW systems.
- 9 But I am also concerned that our training ranges
- aren't able to replicate the threat sufficiently. And if
- 11 we want to succeed in the Indo-Pacific, we need to ensure
- 12 that our military is prepared for operations that are
- 13 realistic because of the training being realistic. The
- emitters available for training, and our ranges, aren't
- quite realistic enough to fool a fifth generation aircraft.
- 16 This is -- so it is no way to train for pacing
- 17 challenges. In my view, the exercises and the training we
- do should be the hardest thing we do here, so that when it
- is time to fight, we are more than ready to go. And it is
- 20 imperative that DOD expand its training ranges to provide
- 21 more realistic training.
- Achieving that level of readiness is going to require
- 23 coordination across the branches. That is why I have
- 24 advocated for DOD to assess the capacity for testing and
- training of EW operations and identify areas where multiple



- 1 ranges can be used to simulate the Pacific Deterrence
- 2 Initiative.
- For example, at the Fort Huachuca's Electronic Proving
- 4 Ground with its restricted airspace, favorable terrain,
- 5 access to frequencies and spectrum, and bands of spectrum,
- 6 and the authorities required to conduct EW training, it
- 7 offers great potential for advanced and dynamic electronic
- 8 warfare testing, experimentation, and training.
- 9 So, Secretary Kendall, how important is it to find
- opportunities for realistic EW training, and how can the
- 11 Air Force benefit from EW testing and training in an
- 12 environment like Fort Huachuca?
- 13 Secretary Kendall: It is critical, Senator. I
- 14 haven't looked at Fort Huachuca specifically. General
- 15 Allvin may have some information on that, but for Nellis
- and for JPARC in Alaska, and for the exercises, I think you
- are aware of that we really see -- down in the Pacific.
- 18 Having ability to emulate both the threat and the
- 19 space and time constraints that are applicable against the
- 20 pacing challenge are really important to us. So, if
- 21 Huachuca offers some additional opportunities there, we
- would be happy to pursue those.
- 23 Senator Kelly: Yes --
- 24 Secretary Kendall: I am not familiar exactly with
- 25 what we are doing there.



- 1 Senator Kelly: What it offers is it has got
- 2 geography. It is a bowl. You can emit at orders of
- 3 magnitude, I think a couple orders of magnitude power
- 4 compared to what you can emit on the Barry Goldwater range.
- 5 So, it offers -- you know, F-35s can detect the sensor at a
- 6 much greater range, more realistic training. Thank you.
- 7 Chairman Reed: Thank you, Senator Kelly.
- 8 Secretary Kendall: We will take a look at it.
- 9 Chairman Reed: Let me recognize now, Senator Budd.
- 10 Senator Budd: Thank you, Mr. Chairman. And good
- 11 morning, gentlemen. Secretary Kendall, we have spoken at
- 12 length regarding the Air Force budget, my concerns with the
- 13 Air Force plan divestment of fighter aircraft, including
- 14 the F-15 Strike Eagles from Seymour Johnson, my State of
- 15 North Carolina.
- So, I am deeply concerned about what a growing fighter
- capacity gap could mean for the fight in the Indo-Pacific.
- 18 But also, as was made clear over this past weekend, our
- 19 fighter aircraft are also playing major roles in other
- 20 regions, including U.S. Central Command every single day.
- 21 So, I would like to turn to you, General Allvin, for just a
- 22 moment. And again, thank you for being here.
- The committee heard from the Commander of INDOPACOM
- this year, and just recently in fact, that there is a role
- 25 for Strike Eagles in scenarios in the Indo-Pacific. And



- 1 the head of NORTHCOM also told this committee the F-15E is
- 2 in many ways unmatched air to ground, and in many ways, it
- 3 is unmatched air to air.
- 4 It also has a phenomenal radar that can pick out low
- 5 and slow moving, and it has got a great radar cross-
- 6 section, which is useful for drones and other threats like
- 7 cruise missiles. It was the 335th Squadron at North
- 8 Carolina's Seymour Johnson Air Force Base to prove that out
- 9 on Sunday when they helped shoot down dozens of drones
- 10 fired at Israel from Iran.
- 11 The Supreme Allied Commander of Europe told the House
- 12 Armed Services Committee last week that Strike Eagles and,
- 13 I quote, "figure heavily in his plans at EUCOM." He also
- said it would be very important not to have a gap between
- the retirement of one aircraft and the arrival of the next.
- Most recently, the Chairman of the Joint Chiefs agreed
- 17 with these assessments of the F-15E and asserted that it is
- indeed a very capable aircraft. General Allvin, do you
- 19 agree with these officers' assessments of the capability
- 20 and importance of the Strike Eagles in scenarios across the
- 21 Combatant Commands, yes or no, sir?
- General Allvin: I absolutely do agree with those
- 23 assessments. I would offer that those assessments are part
- of -- first of all, I want to echo what you said about what
- 25 happened over the weekend. Brilliant cruise skill and



- 1 courage. That skill and courage in those aircraft also had
- 2 a connection with a command and control system.
- 3 Brilliant stuff done in the AOC, an air battle
- 4 management system. And all of those systems are what made
- 5 it successful. And so, the platform is very capable, but
- 6 it has to have the systems around it in order to be
- 7 effective and combat effective. And so going into the
- 8 future, we would imagine that that platform is going to
- 9 have to fire weapons longer range.
- 10 That range has to have target custody for that
- 11 munition to be able to track the target all the way. It
- 12 needs to be able to be -- to defend itself in that theater.
- 13 It needs to be able to have a base from which it can move
- 14 around.
- 15 All those things are what is going to make it
- 16 successful against a pacing challenge. So that capability
- in and of itself is very impressive. But when you are in a
- 18 fiscally constrained environment, we try and manage how
- many of those.
- 20 And those with respect to other platforms, what is the
- 21 mix of the entire system beyond just the weapon and the
- 22 aircraft to make it effective against -- in the highly
- contested environment against the PRC? But it is a highly
- 24 capable aircraft.
- Senator Budd: Thank you, General. And I will just



- 1 note that many of those, including those at Seymour
- Johnson, have been upgraded or soon to be upgraded, or can
- 3 be upgraded to be useful into the 2030s or 2040s.
- 4 Secretary Kendall, turning to you, sir, where is the
- 5 fighter roadmap required by the NDAA. We have heard,
- 6 Secretary, that it is sitting with you.
- 7 Secretary Kendall: It is in final review. Should be
- 8 over here shortly, Senator.
- 9 Senator Budd: We look forward to receiving that
- 10 report. When should we expect the Congressionally required
- 11 report on divestment of F-15 aircraft? And will it be
- 12 compliant with Section 131 of last year's NDAA?
- 13 Secretary Kendall: Right now, our plans are to take
- out additional F-15s in the out years, but of course we
- will be complying with the current law and our '25 budget
- 16 is consistent with that.
- 17 Senator Budd: Hopefully in compliance with 131 of
- 18 last year's NDAA. Thank you. Mr. Chairman, I hope the
- 19 committee takes note of the testimony it has received this
- year and seriously considers prohibiting divestment of the
- 21 F-15 Strike Eagles, particularly 26 F-15 Strike Eagles next
- 22 year. Thank you, sir.
- 23 Thank you very much, Senator Budd. Senator Rosen, please.
- Senator Rosen: Thank you, Chairman Reed, for holding
- 25 this important hearing. I would also like to thank



- 1 Secretary Kendall, General Allvin, and General Saltzman,
- 2 for testifying today, and of course, for your service to
- 3 our country.
- 4 So, Secretary Kendall, I really -- I know we have had
- 5 so many meetings, but I really appreciated our phone call
- 6 last week, and I just want to take a moment to emphasize
- 7 the importance of the Nevada Air National Guard and their
- 8 mission, which they do so well.
- 9 Not only does 152nd Airlift Wing in Reno provide rapid
- 10 global mobility and are currently preparing for deployment,
- 11 but they are also -- they also protect the homeland by
- 12 fighting those horrific wildland fires in Nevada and
- throughout the West with legacy C-130Hs.
- 14 This mission is extremely dangerous as they fly heavy,
- 15 low, and slow over these fires in challenging mountainous
- 16 terrain. Upgrading to the C-130Js would provide increased
- power and cargo capacity for fire retardant, which would
- 18 result in increased flight safety, and of course,
- 19 firefighting capability.
- So, Mr. Secretary, now that the Fiscal Year 2024
- 21 Defense Appropriations Act has provided funding to procure
- eight additional C-130Js, funding that I fought to secure,
- 23 can I have your commitment to seriously consider Reno when
- 24 making a basing decision due to their obvious operational
- 25 need?



- 1 Secretary Kendall: Yes, Senator, I think we are
- 2 proceeding with that basing selection. And I believe Reno
- 3 is one of the units being considered.
- 4 Senator Rosen: Thank you. And can I have your
- 5 commitment that the Air Force will strongly consider
- 6 location and the mission served in particular regions of
- 7 the country when making their basing decisions to ensure
- 8 that the Air National Guard is best equipped to respond to
- 9 these emergencies?
- 10 Secretary Kendall: I think we have a list of basing
- 11 considerations that will be consistent with what we have
- 12 done in the past.
- 13 Senator Rosen: Thank you. I am going to move on now
- 14 to housing and our dorm shortages, because at Nellis and
- 15 Creech, we have -- actually, Senator Kelly was talking a
- 16 little bit about Nellis over there.
- But in Nevada, home to Nellis and Creech Air Force
- 18 bases, I have observed firsthand the unique challenges that
- each base faces, particularly when it comes to affordable
- 20 housing and dorm availability for our Airmen and our
- 21 Guardians.
- Given the widespread and distinct nature of these
- 23 shortages across the Department and the Air Force, a one
- 24 size fits all solution is really insufficient to address
- 25 the issues. So, Secretary Kendall, what additional



- 1 authorities, if any, could be granted to Service
- 2 Secretaries to address the current housing and dormitory
- 3 shortages, thereby improving really the welfare and
- 4 readiness of our personnel across the force?
- 5 Secretary Kendall: We are looking at some innovative
- 6 ways to do that through public, private partnerships in
- 7 various forms. The Navy has a project in San Diego, I
- 8 think, which is an example of how to do that. I am not
- 9 aware of additional authorities we need at this time, but
- if there are any, then I will get back to you with that.
- 11 Senator Rosen: Thank you. Appreciate that. I am
- 12 going to stay on you and stay on Creech Air Force Base a
- 13 little bit. We love Creech, and with the experimental
- 14 operations unit considering Creech Air Force Base as the
- 15 eventual deployment of the collaborative combat aircraft
- 16 -- I am going to say CCA.
- 17 That is a little bit easier. We must address the
- 18 complexities of the new systems' basing. Decisions about
- where to house these systems needs considerations beyond,
- 20 again, conventional requirements such as employment
- 21 options, infrastructure adaptations, airspace control, and
- of course, electromagnetic spectrum availability.
- So, given the challenges posed by these new systems,
- 24 could you elaborate on the variables that the Air Force
- 25 might -- that you might be considering in the CCA basing



- 1 decision? And specifically, what unique characteristics
- 2 and complications might we anticipate?
- 3 Secretary Kendall: Senator, that work is going on now
- 4 to decide what the considerations will be. We are a little
- 5 bit early in the process. Creech is, I think, a very
- 6 reasonable candidate, however.
- 7 Senator Rosen: Thank you. Thank you. Well, I am
- 8 going to move on. We are going to keep on Creech in
- 9 particular, but Nellis as well, to General Allvin. You
- 10 know the sacrifices, each one of you really know the
- 11 sacrifices and challenges that Airmen and their families
- 12 make during their permanent change of station.
- And one of the difficulties that is really challenging
- 14 for us is finding and accessing childcare at each new
- location. And so, you know, childcare remains one of the
- 16 most needed services for our military members, but it is
- 17 still in such short supply, it is too expensive and
- 18 difficult.
- 19 So currently, General, in your role as Chief of Staff
- of the Air Force, what can you do to help increase access
- 21 to affordable childcare that is flexible, particularly
- 22 Creech, they go to 24 -- well, all of them, they go 24/7,
- 365. We need some help out there.
- General Allvin: Well, thank you, Senator. And I
- 25 couldn't agree with you more. A lot of times we put things



- 1 into a band called quality of life, but it is actually a
- 2 readiness issue as well, to make sure that our Airmen can
- 3 focus on the mission at hand, understanding that they know
- 4 that their families and children are well cared for.
- 5 Specifically, I think we -- what I can do as Chief of
- 6 Staff is continue to advocate for the programs at the
- 7 Department of Air Force is really already undertaking with
- 8 respect to going above and beyond staffing those child
- 9 development centers that we actually have. We have
- increased the staffing through the incentivization of 100
- 11 percent reduction -- free for the first child, 25 percent
- off for the other children, for those are working on staff
- 13 there.
- 14 That has actually increased our staffing from 61 -- 63
- percent to 81 percent. So that is helping staff the
- 16 existing one. But to your point, Senator, specifically in
- some of these nontraditional areas where you have not
- 18 normal business hours, this requirement, the increase in
- the family childcare centers, the ones that can be done at
- 20 home, are those that are actually certified to do such.
- We have increased funding and incentives for that,
- 22 about 21 percent from where it was in Fiscal Year 2023.
- 23 So, we continue to do that. And in other areas for
- 24 facility restoration and modernization, we have put a lot
- of money into that as well.



- 1 And on the MILCON side, overall, sometimes we just
- 2 need more facilities. On the MILCON side, we have had 35
- 3 MILCON projects under consideration. Already 11 of them
- 4 are at appropriation and design -- or and delivery. The
- 5 other 24 in design.
- 6 Senator Rosen: Well, thank you. I look forward to
- 7 continuing to work with you on all of that. Thank you.
- 8 Chairman Reed: Thank you, Senator Rosen. Senator
- 9 Cramer, please.
- 10 Senator Cramer: Thank you, Mr. Chairman. Thank you,
- 11 gentlemen, for your service and for being here. And I look
- 12 forward to the next session as well, the classified
- 13 section.
- No hearing with the Air Force would be complete
- without me sort of jumping on board with some of my other
- 16 friends who have asked about ISR. Secretary Kendall, I am
- 17 going to go more at it from the re-optimization plans that
- were released in February, and my office has sent an RFI
- asking about how the new Air Force structure might affect
- 20 the 319 Reconnaissance Wing in Grand Forks, specifically.
- I mean, this is a very high demand air force base with
- 22 very few people and assets. At least how do -- I guess to
- 23 put it pointedly, how do these low density, high demand
- units like the Global Hawk Wing in Grand Forks, or other
- 25 ISR units, for that matter, on the Air Force fit into the



- 1 plan for re-optimization.
- 2 And I just add, you know, I mean, I read all 12 pages
- on the airplane this morning. There is not a mention of
- 4 ISR. There is lots of mentions, you know, 16 of China RPC,
- 5 8 -- anyway, no ISR in 12 pages. So, how does Grand Forks
- 6 fit into re-optimization?
- 7 Secretary Kendall: It doesn't directly. The re-
- 8 optimization of great power competition is largely about
- 9 focusing our readiness units on readiness, creating units
- who are focused on the future, and sustaining advantage
- 11 over time.
- Developing our people. Some of the things we are
- 13 going to do in terms of their skill sets and so on, their
- 14 readiness for that kind of conflict. And also, some
- 15 changes in the Secretariat. So, specific units are not
- 16 directly addressed.
- 17 As we form units of action that are either deployable
- or fight in place or are supporting, there may be some
- 19 changes on the margin as a result of that. That is work
- that is going to take place over some time. There is no
- 21 direct correlation between what we are doing under re-
- 22 optimizing and specific units.
- 23 Senator Cramer: Okay --
- 24 Secretary Kendall: Yes, we do have plans --
- Senator Cramer: I understand but maybe not specific



- 1 units, but ISR at large is not even mentioned as a
- 2 priority, where it used to be always mentioned as a
- 3 priority.
- 4 Secretary Kendall: ISR is a very high priority under
- our operational imperatives and under cross-cutting
- 6 operational enablers. So, it is a very big part of our
- 7 modernization program, which is separate from the re-
- 8 optimization.
- 9 As we talked about earlier, we are moving a lot of our
- 10 ISR capacity into space because our airborne platforms,
- 11 many of them are too vulnerable to attack. They are not
- 12 survivable enough. We want to keep a balance. We want to
- 13 keep some airborne platforms and some space base
- 14 capabilities as well. We have requirements to have ISR for
- 15 less contested environments, more benign environments, as
- 16 well as highly contested environments.
- So, we are trying to have a balanced mix of
- 18 capabilities and sustain that while we move forward. Some
- of our legacy capabilities, if you will, are less valuable
- 20 to us against the pacing challenge. We are just not
- 21 effective against a pacing challenge --
- 22 Senator Cramer: You know, I get all -- I understand
- 23 all that. Modernization is important everywhere and in
- every mission, and space is obviously critical to it.
- Obviously, I am -- I have a bias for space.



- But I also have talked to enough people both in space
- and especially COCOMS, especially recently, especially very
- 3 recently, who are frightened to death about the gap
- 4 between, their ability to find a target, identify a target,
- 5 hit a target, today, or over the course of the next few
- 6 years, and the day that space is not so vulnerable that it
- 7 can stand alone.
- 8 General Allvin, did you want to speak to that? And
- 9 then I do have a question about --
- General Allvin: Yes. The only thing I will add to
- 11 what the Secretary said is specifically within reference to
- 12 a great power competition. We are aligning our wings in
- order to be able to deploy how we expect to fight.
- So, there will be three different types of wings. One
- will be deployable combat wings, one will be in place
- 16 combat wings, think missile wings, but the other are combat
- generation wings. And these are very, very important, and
- this is where the 319th falls in.
- 19 It needs to be able to generate the combat power that
- 20 can fall into a wing, because you are not going to deploy
- 21 the entire wing at once. That wouldn't be it. That would
- be, for some of the other types of wings.
- So, while ISR may not be mentioned specifically,
- 24 neither is probably air mobility, or neither is maybe air
- 25 refueling, those are the parts -- they are called the



- 1 combat generation wings because they will feed into the
- larger deployable construct, but we wouldn't expect the
- 3 entire 319 to take -- to be able to go and deploy the
- 4 entire wing because it is such a HTLD asset, right. It
- 5 needs to be able to be distributed all across.
- 6 So that is why it is part of these combat generation
- 7 wings. And I am ready to talk at length, and I am going to
- 8 go with my time.
- 9 Senator Cramer: Yes. And as am I. So, real quickly
- then speaking of modernization, and I will just cut to it.
- 11 I mean, we picked up some rumors in the last couple of days
- that the commercial engine replacement program might be in
- 13 some doubt.
- Of course -- that would be the reengineer of things
- like the B-52, which has only been around about 60 years,
- and we expect to be around another 30 or so. Just to just
- 17 confirm for me that that is just a vicious lie that
- 18 somebody is spreading, then I will be happy.
- 19 Secretary Kendall: No, the commercial -- the
- 20 reengineering of the B-52 is proceeding, if that is what
- 21 you are asking about, Senator.
- Senator Cramer: That is what I am asking, thank you.
- 23 Secretary Kendall: It is proceeding --
- Senator Cramer: Appreciate it. Thank you, Mr.
- 25 Chairman.



- 1 Senator Cramer: Thank you, Senator Cramer. Senator
- 2 Cotton, please.
- 3 Senator Cotton: Secretary Kendall, General Allvin,
- 4 thank you for appearance today. I want to add my
- 5 congratulations to the brave men and women of the force who
- 6 were involved in the defense of Israel over the weekend, to
- 7 include two former Senator Cotton defense fellows, Budd and
- 8 Raldy. I am told I am not supposed to say anything more
- 9 than that, but I am glad to see that their skills have not
- 10 atrophy while they were desk molesters up here for me.
- Now, it is very important that we not just have our
- own capabilities, but that we train our foreign partners
- and capabilities. We can't be everywhere all the time at
- 14 once.
- So, I want to respond to Senator Warren's questions,
- 16 General Allvin, about retired flag officer supporting
- 17 foreign militaries. I have a slightly different
- 18 perspective.
- I think it is a great thing when America's retired
- 20 generals and admirals go overseas, take the skills and the
- 21 knowledge they have learned, and help train foreign
- 22 military partners to be more proficient, to be more
- respectful of the laws of war, to be more professional in
- 24 their own services.
- So far from taking steps to restrain retired flag



- 1 officers serving under contractual relationships with
- 2 nations like Saudi Arabia, the United Arab Emirates, or
- 3 emerging nations in Eastern Europe who are recent NATO
- 4 members, I think we should encourage it. General Allvin, I
- 5 don't know what you plan to do in retirement.
- 6 Maybe you plan to just go fishing all the time, but if
- 7 you want to do that, I think that would be a great thing
- 8 for you to do. And this committee carefully considered
- 9 that matter last year in our markup. And those markups
- 10 aren't public. You don't know what happened.
- But this was a serious debate then. And Senator
- 12 Warren called one of these measures a loophole. It is not
- 13 a loophole. It is specifically how we wrote it, because we
- 14 think it is a good thing for our retired flag officers to
- be advising partner nations whose militaries may not yet be
- 16 as skillful or as professional as ours, but whose
- militaries we should want to be as skillful or professional
- 18 as ours.
- So, General Allvin, can I get your commitment that we
- will continue to ensure retired flag officers can, in fact,
- 21 work with partner and allied nations?
- General Allvin: Yes, Senator. I certainly don't want
- 23 to weigh into the -- how the legislative process works, but
- 24 I think that those two positions are not necessarily
- 25 mutually exclusive, which is why we have the approval



- 1 process.
- There are only certain nations against which you are
- 3 disapproved, and those -- we understand which those are.
- 4 But there is still, that stopgap requires the approval of
- 5 the Secretary and Secretary of State in order to do that.
- 6 So, I believe that stopgap helps to mitigate your
- 7 position, from Senator Warren.
- 8 Senator Cotton: Secretary Kendall, you look like you
- 9 had something you wanted to add on this topic.
- 10 Secretary Kendall: I just want to say, I think we are
- 11 talking about apples and oranges here. I think Senator
- 12 Warren is concerned about, very understandably, pilots who
- were hired by China, for example, indirectly through --
- 14 Senator Cotton: Let me stop you there because we are
- 15 not talking about apples and oranges. She raised two
- 16 different topics.
- I do want to say I am concerned about the second topic
- 18 she raised, which is the practice of not just American, but
- 19 Western trained pilots, mechanics, maintainers, and others
- 20 going to work, often indirectly, through private military
- 21 contractors for, say, China and South Africa, let's say.
- 22 And that is something we definitely need to crack down on
- and something that we took steps with.
- Senator Kelly and I have worked on this challenge as
- well. We need to make sure that all those pilots and those



- 1 maintainers and mechanics that we have trained are not
- 2 using their skills that the taxpayers paid for to
- 3 indirectly or directly help our adversary.
- 4 So, I am glad to hear that you are counseling all
- 5 those people as they leave the service to be aware of their
- 6 obligations. I mean, I frankly think should be strictly
- 7 prohibited if not made a crime to work for a foreign
- 8 military like China's.
- 9 The contrast to her first point, which is, again,
- 10 military officers, usually flag officers, sometimes field
- 11 grades, going to work for friendly nations like Saudi
- 12 Arabia or Jordan or the United Arab Emirates, some fruits
- of which we saw over the weekend.
- So, I just want to say, it is good when they go to
- work for pro-American countries. It is bad when they go to
- 16 work for anti-American countries. It is pretty simple. I
- don't see what the complication is here.
- Secretary Kendall: We don't have any disagreement
- 19 with that, Senator.
- Senator Cotton: Thank you. One final point, since we
- 21 are talking about making sure that foreign partners have
- strong capabilities, so we don't have to carry the load
- everywhere. Secretary Kendall, General Allvin, you know
- that a top priority for Senator Boozeman, for me is,
- 25 foreign military sales training mission at Ebbing Air



- 1 National Guard base in Fort Smith, Arkansas.
- We know that they are still working out a few things
- 3 in terms of the construction in the airspace. Secretary
- 4 Kendall, you have committed me in the past on several
- 5 occasions you are going to make sure that this stays on
- 6 time and that we have the sound of freedom return to the
- 7 river valley later this fall.
- 8 Can I get your commitment again, given whatever the
- 9 latest developments on your end, that that is still going
- to happen on time this fall?
- 11 Secretary Kendall: Before I give you a commitment
- 12 about on time, let me go double check and see exactly where
- 13 we are. I know we are moving forward on this, and I
- 14 haven't had any reports that we are just slipping schedule
- 15 but let me --
- Senator Cotton: I haven't either, but you never know
- when you are dealing with the real world of building this
- thing or moving that thing. I just don't want to have
- 19 -- not dealing with the real world, but the bureaucratic
- world of red tape. So, I just want to make sure that you
- 21 have got a sword over the Gordian knot. You are ready to
- 22 cut if you have to.
- Secretary Kendall: We will do whatever we can to stay
- on schedule, absolutely.
- Chairman Reed: Thank you, Senator Cotton. Senator



- 1 Mullin, please.
- Senator Mullin: Thank you, Mr. Chairman. And thank
- you, General Saltzman, Secretary Kendall, and General
- 4 Allvin, for being here.
- 5 And for everybody that is your support staff that we
- 6 know does the heavy lifting behind you, thank you for
- 7 sitting through this hearing. I obviously showed up late,
- 8 so I am back to clean up here.
- 9 Secretary Kendall, I just want to tell you thank you
- 10 for your attention to the cadet that you and I visited
- 11 about. It seems like it is working out. I know that seems
- 12 like a small thing for what you deal with, but it is
- important, and I appreciate you taking the time to visit
- 14 with me about it.
- Secretary Kendall: That is good to hear, Senator.
- 16 Thank you. I am glad it is working out.
- 17 Senator Mullin: I hope one day you get a meeting, and
- 18 you understand why I want to do everything I can. Great,
- 19 great young man. And, like I said, you guys, your
- 20 attention really pushed things.
- 21 Secretary Kendall: He has been through quite an
- ordeal, and he is doing really well. It is encouraging to
- 23 see. Amazing story.
- Senator Mullin: Really, it is. Secretary Kendall, I
- want to stay with you for just a second. Listen, I know



- 1 you are up against a budget, and ideally, everybody at the
- 2 table right now, you guys would like to have as many
- 3 airframes as you possibly can in the air. Because of
- 4 budget overruns with the E-7s -- you know, we are divesting
- 5 to invest. I think that is the term you guys are using.
- 6 Is that correct, General Allvin?
- 7 General Allvin: I would say to modernize.
- 8 Senator Mullin: Divest, invest, modernize. But we
- 9 are going from -- I mean, just what is on you all's docket
- 10 right now. You are going from 250 airframes to 91
- 11 airframes. We know during time of war, attrition plays a
- 12 huge role.
- We have got our new planes that are coming out that
- is, you know, double the cost at \$2.5 billion per plane
- 15 that is going to be in the air. And we are talking about
- 16 the maintenance of the E-3s, which is why we are bringing
- 17 them out of the sky.
- If I understand correctly, the chairman and I, we were
- 19 at Tinker Air Force Base this last Saturday and Friday
- 20 both, and they brought up the concerns about being to
- 21 continue their mission. They say, you know, we will do
- what is handled to us, but just to keep their mission
- 23 capabilities right now, it takes 16 planes in the sky.
- 24 And to secure the current mission, there is going to
- 25 be a lag between the delivery of the E-3s and the E-7s. We



- 1 are not even talking about the fighting jets right now, but
- 2 just in that frame alone, what are we -- is it just about
- 3 the money, or we are divesting ourselves of so many
- 4 airframes and going to so few, and it seems like we are in
- 5 a -- pretty interesting times right now, and I am really
- 6 concerned, and I am not trying to just get on to you and
- 7 tell you how to do you all's jobs. I am saying, what do we
- 8 -- what do you need from us? Mathematically looking at
- 9 this, it doesn't make any sense.
- General Allvin: So, Senator, I think specifically
- 11 with the E-3, they are starting to divest themselves. This
- is one of those where just in order to keep them flying is
- 13 a challenge. And we also -- the capabilities that we are
- 14 anticipating in the future -- this is the constant that we
- 15 have, trying to understand how do we maintain the readiness
- 16 for today and still not leave my successors or my
- successor's successor in this seat saying, why don't you
- 18 have an Air Force that can compete with, you know, where
- 19 China is right now?
- And so, we are trying to skate to where the puck is
- 21 going to be with China. At the same time, preserve the
- readiness. And so, this is some of the challenge that we
- 23 have. And so that managing this readiness is never easy,
- 24 but I will tell you that, at some point the statement of,
- you know, quantity has a quality on its own, it is only



- 1 good if that quantity can survive. It is only good if that
- 2 quantity can be effective.
- Now, we saw over the weekend it can be effective
- 4 against one type of adversary, in one type of environment,
- 5 in one area. But in order to meet what our National
- 6 Defense Strategy wants us to do in the highly contested
- 7 environment against a pure adversary, some of those
- 8 capabilities, it really is just you have more quantities
- 9 that might be left in the bottom of the Pacific Ocean.
- We need to ensure that those crews can survive. They
- 11 can execute their mission. So that is where this tension
- between retaining enough for today and preserving enough
- 13 for the pacing threat.
- 14 Senator Mullin: And I totally understand that. And
- when you start talking about, you know, what is going down
- 16 to E-3s -- they referred to us as the motors, which I know
- frames, airframes can be upgraded with new motors put on
- 18 the side of them constantly. Is it even a possibility?
- 19 You don't have to answer that. I am just trying to
- think outside the box. But still yet, when we start
- 21 talking about just sheer numbers, we start looking at what
- our adversaries are doing, they are coming out with planes
- with a lot less technology on them, but the sheer numbers
- 24 can overwhelm what we have.
- 25 And when we are dropping this many airframes, we are



- 1 not going to have the numbers. And I don't care -- it is
- like a drone swarm. I don't care what you have in defense,
- 3 eventually they are going to start poking through because
- 4 ours do end in the bottom of the Pacific, and we cannot
- 5 replace a \$2.5 billion plane fast enough.
- 6 Secretary Kendall: Senator, the problem we have is
- 7 that these aircraft -- E-3 is a really good example. I was
- 8 on one at Nellis a couple of years ago, and it was built in
- 9 1972.
- 10 Senator Mullin: Sure.
- 11 Secretary Kendall: The radar on it is an obsolete
- 12 radar, basically. And our crews are working very, very
- 13 hard to try to keep these airplanes operational, and it is
- 14 a really uphill fight.
- So, by retiring some of the E-3s, we are able to free
- 16 up some parts to at least keep some of the remaining
- 17 aircraft more operational. But they are not effective
- 18 against the pacing threat, and they are going to die very
- 19 quickly. They just don't have the resilience or the
- 20 capability to survive.
- So, we have really got to get to the next generation.
- 22 So, keeping airplanes around that are going to be
- ineffective and are essentially very vulnerable to attack
- in the early stages of the conflict, this is not putting us
- in a better position.



- 1 Senator Mullin: But -- and Chairman, I will wrap up
- 2 right here, excuse me. But the gap between the delivery of
- 3 the new plane and the old plane is what has me concerned.
- 4 We are divesting faster than we are getting them in, and
- 5 the cost runs continue to go mind blowing over cost. I
- 6 mean, double.
- 7 At some point, the math actually doesn't add up
- 8 either. But how are we going to keep the mission
- 9 capability there all the way through the transition? I
- mean, we haven't got to the Air Guard that we are going to
- 11 be losing and not be able to control our homeland by
- 12 divesting of them too.
- But there is a real concern there. And I know that is
- 14 a lot more to unpack than we have time here, but I don't
- want to be part of the problem and I don't want to try
- telling you how to do your job. I want to work with you to
- make sure that we can stay mission capable.
- 18 So, I look forward to working with everybody here.
- 19 Thank you again for your time. Really appreciate the work.
- 20 Secretary Kendall: Thank you, sir.
- 21 Chairman Reed: Thank you, Senator Mullin. Senator
- 22 Sullivan, please.
- Senator Sullivan: Thank you, Mr. Chairman.
- 24 Gentlemen, thank you for your testimony today. Mr.
- 25 Secretary, I want to compliment you. You have been one of



- 1 the voices. It's, put it pretty bluntly about the
- 2 challenges with China, and we need to be ready actually for
- a war with China, if they choose to do so.
- So, I appreciate your, your directness on that. Let
- 5 me ask, so, you know, this is a tough question for all of
- 6 you generals, tough question for you. The President talks
- 7 a big game on the challenges, and then four years in a row,
- 8 he puts forward inflation adjusted cuts to the Department
- 9 of Defense -- four years in a row. That is the Biden
- 10 legacy. Now, he always expects us to boost it up.
- 11 The left wing of his party doesn't like defense
- 12 spending. So, they, you know, double digit increases in
- every other Federal agency. I think this year, \$7.5
- 14 trillion. But once again, the Biden Administration, the
- 15 Commander In Chief says, nope, you guys get a cut.
- 16 Shrinking the Army, shrinking the Navy, shrinking the
- 17 Marine Corps.
- This budget right now does that. I don't think it
- 19 shrinks the Air Force. But do you think inflation adjusted
- 20 cuts to the Department of Defense is what Xi Jinping and
- 21 Putin should be seeing? I mean, is that how you prepare
- 22 for war or enhance deterrence, by cutting you guys?
- Secretary Kendall: Senator, we have been very pleased
- 24 to have significant increases in the Air Force budget,
- Department of the Air Force budget, in '23 and '24 in



- 1 particular. The two year budget deal that we have, you
- 2 know, does limit -- the Fiscal Responsibility Act in '25.
- 3 Senator Sullivan: General, I am in -- look, these are
- 4 hard questions for you guys, I know, because I know our
- 5 military leaders. You go in there. You fight for a bigger
- 6 budget. OMB, the President, they tell you, sorry, I am
- 7 going to increase Department of Interior by 25 percent.
- 8 You guys get a cut. But in terms of our adversaries.
- 9 China is building out a huge military. They keep saying 7
- 10 percent increases.
- We all know that is not true. I was in a classified
- 12 hearing. I am going to just mention it because the DNI and
- the DIA head, the Lieutenant General, won't get back to me.
- 14 They actually said in that hearing -- it was a classified
- 15 hearing.
- I am just going to publicly say that it was about \$700
- billion that China puts towards its military, all in. It
- is a pretty big number. I think the American people should
- 19 know that which is why I am saying it right now.
- But what do you think in terms of our adversaries when
- 21 they see defense cuts. What do you think that does for
- 22 deterrence?
- Secretary Kendall: We are continuing to move forward,
- 24 Senator, with our modernization program. Not quite at the
- 25 rate that we would like to have this year because of the



- 1 Fiscal Responsibility Act, but we are moving forward.
- We are trying to manage the risk across time with the
- 3 current force, the more immediate force, and the future
- 4 force, but I think we are at acceptable risk with the
- 5 budget that we are presenting to the Congress.
- 6 Senator Sullivan: Let me turn to one of my favorite
- 7 topics. Billy Mitchell, the father of the U.S. Air Force,
- 8 called Alaska the most strategic place in the world. I
- 9 appreciate the Air Force's focus on that, on our State and
- 10 how important it is. There has been a significant build up
- 11 in Alaska.
- We have over 105th Gen fighters located in Alaska now.
- 13 The Air Force's Fiscal Year 2025 budget requests \$250
- 14 million for the Joint Integrated Test and Training Center
- 15 at JBER. This represents a significant new training
- 16 capability in how it will enable the Air Force to plug in
- to live fire exercises at JPARC, probably the most advanced
- training range in the world, to give pilots across the U.S.
- 19 military an unrivaled training venue.
- 20 Can you just talk a little bit about why that JITTC is
- 21 so important? And -- that is to you, General, as well.
- General Allvin: You know, Senator, I will start by
- 23 saying it is -- like many of our fifth generation capable
- 24 testing training centers, it is providing the opportunity
- to test advancements in a synthetic environment in ways you



- 1 couldn't actually do in a physical environment.
- 2 But with this increase, we are able to look at the
- 3 models for how we believe that the threat is going to act.
- 4 We take these models, we can validate them in the JPARC,
- 5 which is why the integration of these two, between the live
- 6 environment and the synthetic environment, it allows you to
- 7 test some hypotheses and maybe in a place where you
- 8 wouldn't want -- the adversary to see you in open air.
- 9 Senator Sullivan: So that is a top priority in our
- 10 preparation for a China conflict?
- General Allvin: Absolutely. And when you can
- 12 replicate those through the JPARC modernization that we are
- doing with those emitters, then you can have a better
- 14 chance of looking at those models, validating those, and
- maybe tweaking them back in. And between the two, the
- 16 synthetic and the live, you get better than either of them
- individually when you can connect them.
- 18 Senator Sullivan: Let me ask one final question. My
- 19 time is up, but Mr. Chairman, if I may. We have been back
- and forth, this committee, me, the Air Force, on tankers
- 21 and the strategic importance of having them located not
- just in one place in the lower 48.
- I was a little bit disappointed that after many years,
- 24 I go back and forth with Air Force leadership, the final
- decision was, well, we are going to put all our tankers in



- 1 the lower 48 at certain bases.
- I can't remember which ones, but it seems to be more
- 3 of a budget driven idea than a strategic driven idea. Mr.
- 4 Secretary, you and I, and the previous Chief of Staff of
- 5 the Air Force, who is now the Chairman of the Joint Chiefs,
- 6 got to a resolution on that where we said, well, we are
- 7 going to be bringing more KC-135 tankers to Eielson.
- 8 How are we doing on that? And I want to make sure in
- 9 this hearing you are still committed to that. It seems
- 10 like that timeline has kind of moved to the right. And it
- is really important not just for Alaska, but for the
- 12 strategic ability to move aircraft anywhere in the world,
- 13 but particularly to the INDOPACOM theater, if there is a
- 14 conflict.
- Secretary Kendall: Sir, you know, that capability is
- important to us, but as you are aware and we have
- discussed, we have an issue with housing at Eielson that we
- 18 are trying to address, and we are concerned about the
- 19 quality of life of our people that we have to assign there.
- 20 So, that is an issue that we are working as we try to move
- 21 forward on the tankers, I think.
- Senator Sullivan: But you are still committed to move
- 23 those tankers there, as you and I --
- Secretary Kendall: We have to address -- the
- 25 situation for our people as part of that process.



- 1 Senator Sullivan: Are you walking this commitment
- 2 back to me, Mr. Secretary?
- 3 Secretary Kendall: I don't think so, Senator.
- 4 Senator Sullivan: Okay. You have committed to this
- 5 to me like several times. So, this is a little concerning.
- 6 We are going to work on the housing issue, but can I just
- 7 get a commitment again? I got it from the -- heck, he is
- 8 the Chairman of the Joint Chiefs now, to be four KC-135s at
- 9 Eielson.
- 10 Secretary Kendall: We haven't changed our plans as
- 11 far as I know. Do you have anything to add to that? I
- 12 think we are still in the same place, but we do need to
- 13 address this issue.
- 14 Senator Sullivan: General.
- General Allvin: That is still on our plan, Senator.
- 16 But as we were just at Eielson as well, we know we do need
- to ensure that we don't have the aircrew and the support
- 18 going up there, as it is an austere location, because we
- 19 know the quality of life, we need to be able to retain
- 20 those families up there as well.
- So, the plan is, as it is written, hasn't changed, but
- the determination of how and when we can get housing and
- quality of life is going to be dispositive on how fast the
- 24 pacing can go up --
- Senator Sullivan: Thank you. Thank you, Mr.



```
1
    Chairman.
 2
         Chairman Reed: Gentlemen, I thank you for your
    testimony. At this point, we will recess the open portion
 3
 4
    of the hearing and reconvene SVC-217. Let's try to be
 5
    there in about -- between 11:05 a.m. and 11:10 a.m., which
 6
    would allow for a moment to recollect and refresh. With
    that, I will adjourn the open portion.
7
          [Whereupon, at 10:52 a.m., the hearing was adjourned.]
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
```



WORD INDEX
<\$>
<b>\$188</b> 4:5
<b>\$2.5</b> 88: <i>14</i> 91: <i>5</i>
<b>\$20</b> 40:17 41:4,
5
<b>\$217.5</b> 4: <i>3</i>
<b>\$250</b> 95:13
<b>\$29.4</b> 4:5
<b>\$39,000</b> 19:9
<b>\$409</b> 26:8
<b>\$438</b> 21:8
<b>\$45</b> 60:4, 6
<b>\$47</b> 60: <i>5</i>
<b>\$50</b> 44:21
<b>\$6.1</b> 5:23
<b>\$600</b> 22: <i>23</i>

**\$7.5** 93:*13* 

**\$700** 94:16

<1> **1** 41:25 44:15 **1,000** 28:*15* **1.5** 4:8 **10:52** 99:8 **100** 28:*17* 34:*24* 35:2, 11 45:11 76:10 **101** 45:*12* **105th** 95:12 **10s** 46:8 **11** 77:*3* **11:00** 2:9 **11:05** 99:5 **11:10** 99:5 **12** 45:22 78:2, 5 **12:00** 2:5, 7 **130** 51:23 **130Hs** 51:7

<b>135s</b> 59:18
61: <i>16</i>
<b>152nd</b> 72:9
<b>16</b> 1:5 78:4
88:23
<b>18</b> 52:20
<b>185th</b> 59:9, 14
60:22 61:6
<b>19</b> 52:20
<b>1972</b> 91:9
<b>1980s</b> 51: <i>13</i>
< 2 >
<b>2</b> 41:25
<b>20</b> 59:16
<b>2003</b> 59: <i>11</i>

**2023** 76:22 **2024** 1:5 3:11 4:8, 17 72:20 **2025** 1:3 3:7 4:2, 7 5:23 6:13 7:11 9:25 10:22 14:6 16:3, 5, 16 21:8 32:7 39:12 40:15 95:13 **2029** 34:17 45:23 **2030s** 35:4 71:3 **2040s** 71:3 **21** 76:22 **216** 1:*12* **23** 93:25 **24** 75:22 77:5 93:25 **24.7** 16:*3* **24/7** 75:22

**25** 4:*13* 5:*6* 

71:15 76:11

94:2, 7

18:8 44:2*1* 65:8

**250** 88:10 **26** 47:12 71:21 <3> **3** 14:*17* 44:*7* **30** 32:19 81:16 **319** 77:20 81:3 **319th** 80:18 **335th** 31:19 69:7 **35** 60:*14* 77:2 **35s** 43:1, 3 **365** 75:23 **3D** 37:19, 23 <4> **4** 44:7 **40** 42:6 **43.4** 15:20 **442nd** 50:*12* **46** 60:21 **46s** 61:*14*, *17* **48** 96:22 97:*1* **494th** 31:*19* < 5 > **5** 44:19 **50** 35:25 < 6 > **60** 81:*15* **61** 76:*14* **63** 76:14 **677,000** 9:5 <7> **7** 4:9 18:6 94:9

**70** 52:19, 21, 23 53:4

< 8 > **8** 78:*5* **8.3** 15:*14* **80** 42:6 **81** 76:15 <9> **9:00** 1:11

**90** 41:*16* **91** 88:10 **95** 45:*14* **99** 45:*13* < A >

**a.m** 1:11 2:9 99:5, 8 **A-10** 46:23 50:14, 15, 24 **A-10s** 47:6 ability 7:3 10:17 21:18 25:11 29:12 36:12 37:18 40:23 49:22, 23 64:9 67:18 80:4 97:12 **able** 18:*17* 19:16 20:2, 6, 18

23:7, 10, 22, 25

25:15, 16 27:22 31:6 34:4, 8 35:7 44:22 48:19, 20 64:16 65:1 66:10 70:11, 12, 13 80:13, 19 81:3, 5 91:15 92:11 96:2 98:19 absolute 12:5 Absolutely 34:2, 3 35:13 45:4



**131** 71:*12*, *17* 

61:12 65:18
69:22 86:24
96:11
accelerate 23:11
accelerating
16: <i>18</i>
acceptable 4:20
10:3 95:4
accepting 23:4
access 11:24
40:16 67:5
75:20
accessing 75:14
accomplish 11:21
<b>account</b> 11:18
accountability
52:9
accounts 4:20,
22 43:6, 7
accurate 15:13
achieve 15:1
achieving 66:4,
22
acknowledge
31: <i>18</i>
acknowledged
4:10
acquire 37:16 38:11
acquired 38:4 acquiring 47:9
acquiring 47.9
37:25 38:3, 17
acquisitions
38: <i>18</i>
<b>Act</b> 4:3 10:25
16:13 29:1, 14,
22 31:3 56:6
58:13 72:21
94:2 95:1 96:3

action 15:10 78:17
actions 31:18
53:16
activation 65:6
active 40:7
44:12 45:10
55:17 56:7, 10,
24
actively 7:1
10:12
activities 15:6
16: <i>1</i> 59:25
activity 15:10
actual 34:23
<b>acute</b> 9:20
<b>adapt</b> 20:18
adaptations
74:21
adapted 62:7
adapting 9:21
62:5
add 31:10 47:16
52:3 78:2 80:10
82:4 84:9 92:7
98:11
<b>adding</b> 39:13
additional 18:14
20:1 23:5, 10
24:13 36:12
37:20 58:20
67:21 71:14
72:22 73:25
74:9
address 53:16
59:7 64:17
73:24 74:2, 17
97:18, 24 98:13
addressed 78:16
addressing 7:12

16:8
adds 19:25
adhere 2:10
adjourn 99:7
adjourned 99:8
<b>adjust</b> 4:13
11: <i>17</i>
adjusted 62:9
93:8, 19
adjusting 20:17
<b>admin</b> 44:25
Administration
93:14
admirals 82:20
<b>advance</b> 39:12
Advanced 11:1
23:21 63:20
67:7 95: <i>17</i>
advancements
35:7 95:25
advances 10:4
advancing 21:6
advantage 10:7
16:21 24:10
38:10 78:10
advantages 6:1
adversarial 15:11
adversaries 55:1,
4 90:22 94:8, 20
adversary 14:22
21:18 24:1 36:2,
<i>13</i> 85:3 90:4, 7
96:8
advisability 28:3
advising 83:15
advocate 76:6
advocated 66:24
aerial 54:23
<b>affect</b> 77:19
<b>afford</b> 19:16

affordability 20:19 affordable 11:4 18:19 73:19 75:21 **AFOSI** 57:24 **Africa** 84:21 **AFSCs** 62:10 **AFSOC** 62:*3* **agency** 93:13 aggression 5:15 10:18 15:25 aggressive 9:19 aggressor 21:10 agile 26:5, 11, 20, 25 **agility** 27:22 62:24 **aging** 51:6 ago 26:18 35:20 91:8 **agree** 56:23 69:19, 22 75:25 **agreed** 69:16 agreement 18:16 **ahead** 18:7 62:19 **AIR** 1:2 3:2, 6, 8, 24 4:4, 5, 13 5:1, 2, 6, 12, 17, 20 6:7, 17 7:11 9:2, 12, 20, 25 10:1, 5, 9, 19 11:4, 14 12:1 18:6 19:10 21:24 22:5, 10 23:13 25:1, 4 26:8, 10, 14, 24 29:4, 6 32:9, 12, 14 34:9, 10 40:6 42:18 43:15

44:10, 11 45:11, 13, 21, 25 46:9 48:11 49:14 50:12, 14 51:11, 25 52:4, 12, 24 57:3, 5, 6 58:6, 9, 20 59:8, 9, 12, 14 60:22 61:11 62:2, 15 63:3, 14, 23 64:2, 3, 20 66:3, 5 67:11 68:12, 13 69:2, 3, 8 70:3 72:7 73:5, 8, 17, 23 74:12, 14, 24 75:20 76:7 77:14, 19, 21, 25 80:24 85:25 88:3, 15, 19 89:18 92:10 93:19, 24, 25 95:7, 9, 13, 16 96:8, 20, 24 97:5 airborne 22:19 34:8, 18 50:1 54:20, 25 79:10, 13 aircraft 11:3 18:3, 9, 19 19:5 21:25 22:5, 8 32:19 46:12 48:2, 6 49:2, 8, 12 60:5, 21 66:15 68:13, 19 69:15, 18 70:1, 22, 24 71:11 74:15 91:7, 17 97:12 **aircrew** 98:17 aircrews 31:19

airfield 26:9 59:12, 20, 22 60:*1* airfields 26:13 airframes 88:3, 10, 11 89:4 90:17, 25 **airlift** 61:11 72:9 **airline** 58:10 **Airmen** 6:3 9:6, 7, 9 10:6 11:13, 21 12:6 56:10 63:4 73:20 75:11 76:2 airplane 66:6 78:3 airplanes 91:13, 22 airpower 7:4 airspace 48:5 67:4 74:21 86:3 Airwomen 63:4 akin 21:3 **Alaska** 28:18 67:16 95:8, 11, 12 97:11 **albeit** 10:23 **aligning** 80:12 **Allied** 69:11 83:21 allies 5:5 **allow** 11:4 48:6 58:21 99:6 allowance 11:17 allowed 56:8 **allowing** 56:10 allows 29:22 45:12 96:6 **all's** 88:9 89:7

**Allvin** 3:5 7:6 8:2 9:1, 3 12:11 19:4, 13 20:15 24:12, 25 25:6 26:4, 10, 16 27:21 31:15 33:22 34:2, 11, 14, 21 35:1, 12 40:3 42:25 43:4, 22 44:11 45:4, 6, 8, 10, 20 46:6 47:8, 16, 18, 23 48:14 49:16 51:16 55:21, 23 56:10, 14, 22 57:15, 20 58:24 61:24 62:4 63:10, 12, 18, 22 64:5 67:15 68:21 69:18, 22 72:1 75:9, 24 80:8, 10 82:3, 16 83:4, 19, 22 85:23 87:4 88:6, 7 89:10 95:22 96:11 98:15 **Amazing** 87:23 ambitious 63:23 64:22 American 84:18 94:18 **America's** 82:*19* **amount** 29:19 analogies 21:2 analysis 28:12 announced 45:21 announcement 46:1, 9 **answer** 26:22 35:23 42:23

47:18 52:19 90:19 answers 41:8 anti-American 85:16 anticipate 6:13 75:2 anticipated 18:11 anticipating 18:15 65:12 89:14 **anymore** 38:18 **anyway** 78:5 **AOC** 70:3 apparent 48:22 apparently 28:7 **appear** 33:19 appearance 82:4 **apples** 84:11, 15 applicable 67:19 applicants 41:15 **apply** 47:2 64:20 appreciate 3:9, 21 4:1 47:24 50:7 58:3 59:4 63:4 74:11 81:24 87:13 92:19 93:4 95:9 appreciated 72:5 appreciates 6:15 approaching 36:16 50:21 appropriate 26:5, 11 29:6 51:14 appropriated 51:17 appropriately 29:4 appropriation 77:4

appropriations
3:24 72:21
approval 6:17
24:2 <i>1</i> 56: <i>3</i>
57:11 83:25
84:4
<b>approved</b> 58: <i>14</i>
<b>April</b> 1:5
<b>apron</b> 60:6
<b>Arab</b> 55:20
83:2 85:12
<b>Arabia</b> 55:20
83:2 85:12
arc 48:15, 17
architectural
59:25
architecture 29:4
architectures
15:2 <i>4</i> 21: <i>15</i>
39:14 55:10
<b>area</b> 46: <i>1</i> 48:23
53:7 58:24 90:5
areas 42:7
66:25 76:17, 23
Arkansas 86:1
Armed 1:8
52:11 69:12
arms 24:7
<b>Army</b> 52:20
93: <i>16</i>
arrangement
33:2 36:20
arrangements
58: <i>5</i>
arrest 11:8
<b>arrival</b> 69:15
arsenals 36:18
<b>asked</b> 44:21
63:15 77:16

asking 52:9, 22
56:19 58:18
77:19 81:21, 22
asserted 69:17
assess 59:22
66:24
assessment
60:11, 24
assessments
69:17, 19, 23
asset 10:6 81:4
assets 33:3
42:13 43:25
44:2 77:22
assign 97:19
Assistance 40:5
associated 29:19
60: <i>1</i>
assume 32:7
34: <i>14</i>
assuming 34:13
assurances 65:1
asymmetric
14:20, 2 <i>1</i>
<b>atrophy</b> 82:10
attack 5:4 7:2
9:12 11:8 14:15
15: <i>5</i> , <i>18</i> , <i>19</i> 33: <i>4</i>
36: <i>3</i> 39: <i>17</i>
79:11 91:23
<b>attacked</b> 36:6, 13
attacks 39:6
attention 65:21
87:10, 20
attrition 88:11
augment 35:7
augmenting
43:11
<b>austere</b> 98:18
Austin 52:8

Australians
18:20
authorities 3:23
25:12 67:6 74:1
9
authority 6:19
25:14
<b>AUTHORIZATI</b>
<b>ON</b> 1:2 56:6
58:12
autonomy 48:24
49:1
availability
73:20 74:22
available 66:14
average 32:19
avoiding 15:4, 12
AWACS 18:3
54:20
awarded 26:8
58:9
aware 3:12
60:25 61:2
67:17 74:9 85:5
97:16
awareness 2:4
5:2 34:5 49:17
57:22 58:4
Azerbaijani 58:7
< B >
<b>B-21</b> 24:14, 16,
19 34:22 37:16
38:14
<b>B-52</b> 81: <i>15</i> , <i>20</i>
back 20:4 42:21
55:5 57:24
59:11 61:2
74:10 87:8
94:13 96:15, 19,
24 98:2

**backbone** 19:*14* 22:13 backwards 54:3 **bad** 85:15 **balance** 54:24 79:12 **balanced** 79:17 ballistic 25:3 **band** 76:1 **bands** 67:5 bank 45:12 **Barry** 68:4 **Basa** 26:14 base 26:14 34:25 42:19 45:22 49:3 50:12 63:14 69:8 70:13 73:19 74:12, 14 77:21 79:13 86:1 88:19 **based** 11:6 20:3, 9, 12 33:18, 19 35:20, 24 37:1 51:8 54:25 bases 7:7 27:5 51:18, 20 73:18 97:1 **basic** 11:17 41:9 42:23 basically 30:24 31:5 36:6 42:15 47:5 91:12 **basing** 26:11 46:9, 16, 19 47:20 51:17, 22 52:4 72:24 73:2, 7, 10 74:18, 25 **basis** 61:17 **basket** 43:1



<b>battle</b> 6:21 11:1,
2 50:1 70:3
battlefield 12:7
<b>began</b> 35:18
<b>begun</b> 60:8
<b>behalf</b> 56:11
58: <i>13</i>
believe 37:22
41:8 51:19 73:2
84:6 96:3
<b>benefit</b> 67:11
<b>benefits</b> 15:4, 18
25:4 38:21 39:6
17 48:10
<b>benign</b> 79:15
<b>best</b> 9:22 12:6
29:9 30:2 55: <i>15</i>
73:8
better 35:8
49:17 57:16
91:25 96:13, 16
<b>beyond</b> 35:4, 6
70:21 74:19
76:8
<b>bias</b> 79:25
<b>Biden</b> 93:9, 14
<b>big</b> 46: <i>1</i> 79: <i>6</i>
93:7 94:18
<b>bigger</b> 94:5
<b>billion</b> 4:4, 5
5:24 88:14 91:5
94: <i>17</i>
<b>Billy</b> 95:7
bipartisan 4:1
<b>birthday</b> 14:8
<b>bit</b> 19:25 64:7
73:16 74:13, 17
75:5 95:20
96: <i>23</i>
<b>Block</b> 44:7

blowing 92:5
Blumenthal 1:15
bluntly 93:1
board 77:15
<b>bomber</b> 35:2
36: <i>11</i>
<b>bombers</b> 21:25
boost 93:10
Boozeman 85:24
<b>bottom</b> 90:9
91:4
bowl 68:2
box 90:20
<b>branches</b> 66:23
brave 82:5
breach 10:13
break 58:18
breakout 36:23
<b>briefed</b> 3:19 6:6
Brilliant 69:25
70:3
<b>bring</b> 2:3 25:4
29:13, 25 65:21
bringing 88:16
97:7
<b>brings</b> 14:20
<b>Broadly</b> 32:5
<b>brought</b> 63:19
88:20
<b>Brown</b> 57:21
<b>Budd</b> 1:17 68:9,
10 70:25 71:9,
17, 23 82:7
<b>budget</b> 3:7, 8, 11
4:2, 7, 8, 11, 14,
21 5:6, 23 6:2,
14 7:11, 14 9:25
10:5, 22 14:18
15:7, 14, 20 16:3,
4, 6, 16 18:8
22:6, <i>12</i> , 20 32:7,
22.0, 12, 20 32.7,

0 20 12 40 16
9 39:12 40:16
44:21 47:12
68: <i>12</i> 71: <i>15</i>
88:1, 4 93:18, 24,
<i>25</i> 94: <i>1</i> , <i>6</i> 95: <i>5</i> ,
13 97:3
<b>build</b> 5:25
16: <i>15</i> 27:2
47:12 49:5
95: <i>10</i>
<b>Building</b> 1:12
11:6 15:8 27:7
33:20 86:17
94:9
<b>built</b> 14:9 15: <i>1</i>
38:11 39:20
91:8
<b>Bureau</b> 51:25
bureaucracy
29:19
bureaucratic
86: <i>19</i>
business 35:25
76:18
buy 37:16
buyback 42:5
~
< C >
<b>C-130</b> 52:4
<b>C-130Hs</b> 72: <i>13</i>
<b>C-130Js</b> 51: <i>12</i>
72:16, 22
<b>C2</b> 49:21
<b>C3</b> 11:2
C-3 6:21
cadet 87:10
calculus 27:23
California 28:17
Call 66:6 72:5
<b>called</b> 32:18
40: <i>21</i> 76: <i>1</i>

80:25 83:12 95:8 candidate 51:18, 19 75:6 capabilities 5:19 7:2 14:12, 14 15:19 21:17 28:25 32:2, 13, 21, 23, 25 33:9, 12, 21 39:24, 25 44:8 54:13, 25 61:12 62:23 79:14, 18, 19 82:12, 13 85:22 88:23 89:13 90:8 capability 5:18 6:21 22:9, 14, 22 23:11 24:20 25:4 29:12 37:9 43:24 44:6, 8 54:9 55:9 61:20 69:19 70:16 72:19 91:20 92:9 95:16 97:15 capable 3:18 9:19 11:5 21:16 22:7 32:14 35:10 60:21 69:18 70:5, 24 92:17 95:23 capacity 22:9 34:8 66:24 68:17 72:17 79:10 caps 22:12 care 11:24 61:8 91:1, 2 **cared** 76:4

**careful** 24:17 carefully 83:8 cargo 21:25 58:7 72:17 **Carolina** 68:15 Carolina's 69:8 carrier 58:7 carry 85:22 case 35:20 39:3 47:4 61:18 62:20 cases 42:13 55:6 57:8 catastrophic 9:14 **catch** 39:7 **caused** 11:22 **CCA** 48:9 49:12, 15 74:16, 25 **CCAs** 47:8 **CE** 24:21 celebrate 14:7 Center 25:2 95:14 **centers** 44:22 76:9, 19 95:24 **Central** 68:20 **century** 36:16 **certain** 61:21 84:2 97:1 certainly 18:4 19:15 20:15 21:13 26:19 35:1 43:4, 11 44:20 45:2 46:1 48:14 51:17 54:17 55:23 83:22 certification 64:13

certified 76:20 **chain** 37:20 **chains** 10:20 34:4 48:21 **Chair** 59:2 63:6 **chairman** 1:*13* 2:3, 14, 16 3:3, 22 7:15 8:1 9:3 13:1 14:3 18:1, 20 19:4, 13 20:11, 21 21:20, 22 26:1, 3 30:13, 15, 17, 19, 22 31:11, 14 35:14, 15, 17 40:11, 12 45:16, 18 50:8, 10 55:12, 14 57:21 58:25 63:7, 9 68:7, 9, 10 69:16 71:18, 24 77:8, 10 81:25 86:25 87:2 88:18 92:1, 21, 23 96:19 97:5 98:8 99:1, 2 challenge 3:18 6:24 7:2 16:22 64:17 67:20 70:16 79:20, 21 84:24 89:13, 22 challenges 11:23 16:9 41:20 66:17 73:18 74:23 75:11 93:2, 7 challenging 72:15 75:13 **CHANCE** 14:*1* 

**change** 28:10 42:7 60:22 75:12 changed 12:1 21:1 42:8 98:10, 21 changes 25:1 31:9 38:9 42:16 60:25 78:15, 19 characteristics 75:1 **chase** 34:12 **check** 61:2 86:12 **CHIEF** 9:1 14:1 20:22 75:19 76:5 93:15 97:4 **Chiefs** 69:16 97:5 98:8 **child** 76:8, 11 childcare 75:14, 15, 21 76:19 **children** 76:4, 12 **China** 7:1 27:18 36:25 37:2 78:4 84:13, 21 89:19, 21 93:2, 3 94:9, 17 96:10 China's 4:10 36:22 57:4 85:8 **choice** 32:*3* **choices** 10:*1* 16:6 **choose** 93:3 City 59:10, 23 **clarify** 31:12 classified 3:20, 22 39:5 57:16 77:12 94:11, 14 **clean** 87:8

clear 31:21, 25 33:22 57:12 68:18 clearly 30:1 39:7 46:9 **close** 10:20 24:19 34:4 48:20 57:2 58:20 closed 2:9 closely 5:12, 21 6:11 51:25 65:19 **closer** 18:13 **closure** 18:*13* CLS 20:16 clusters 27:4 coalition 9:11 **COCOMS** 80:2 collaboration 63:13 collaborative 11:3 48:1 49:2. 8 74:15 colleagues 2:4, 6 21:23 29:21 58:20 collection 53:8 **Colorado** 28:17 **combat** 11:3 12:3 22:1, 7, 14 26:5, 11, 21, 25 48:2 49:2, 8 62:14 64:1, 8 70:7 74:15 80:15, 16, 19 81:1,6 **Combatant** 33:21 34:1, 5 44:1 69:21 combination 47:5

96:14

**come** 18:*12* 20:5 44:1 46:4 50:15 65:20 comes 25:18 49:8 51:11 73:19 **comfort** 34:7 comfortable 39:16 coming 42:1, 19, 21 59:7 88:13 90:22 **command** 22:15 24:3 49:11, 15, 24 50:6 53:14 64:2 68:20 70:2 Commander 26:23 33:21 44:1 68:23 69:11 93:15 commanders 26:23 34:1, 5 Commands 69:21 commensurate 32:5 **comment** 47:17 54:14 commercial 81:12, 19 **commit** 7:13 35:5 46:15 commitment 59:21 60:22 65:16 72:23 73:5 83:19 86:8, 11 98:1, 7 committed 10:10 11:1, 6, 14 18:18 46:6 86:4 97:9, 22 98:4

Committee 1:8, 11, 13, 14 3:4, 15, 20, 25 4:16 5:13 6:6, 12 7:13 9:4 12:8 14:4 16:12, 20 29:20 33:24 68:23 69:1, 12 71:19 83:8 96:20 committee's 3:10 6:15 **comms** 50:6 communicate 49:22 communication 18:24 communications 15:22 22:15 39:15 50:1 community 46:2 64:7 **company** 57:13 58:14 comparable 37:4 compared 33:9 68:4 Compass 66:6 **compete** 89:18 competencies 41:21 competition 6:9 9:18, 23 14:9 23:14 38:10, 21 61:10 62:1, 3, 9, 18 63:24 66:2 78:8 80:12 competitive 21:11 competitiveness

competitor 6:23 10:21 **complete** 77:14 completed 28:19 60:18, 24 completion 65:7 **complex** 10:21 complexities 74:18 compliance 71:17 **compliant** 71:*12* complicate 27:22 complication 85:17 complications 75:2 complies 4:2 compliment 92:25 **comply** 52:16 complying 52:15 71:15 component 63:25 compromising 61:15 **concept** 40:21 41:1 49:15 concepts 24:6 conceptually 27:2 concern 3:16 21:24 30:7 31:8 33:11 92:13 concerned 22:12 23:3 28:7 31:9 32:9 52:21 54:11 66:9 68:16 84:12, 17 89:6 92:3 97:18 concerning 98:5 **concerns** 30:12, 23 53:17 57:3

58:8 68:12 88:20 conclude 2:4 conclusion 20:6 conclusions 5:13 conditions 21:1 conduct 28:2 67:6 **conducted** 61:*15* conducting 15:5 28:21 **confirm** 81:*17* **confirmed** 59:15 conflict 5:15 7:4, 10 10:18 11:14 14:23 22:9 56:20 66:1 78:14 91:24 96:10 97:14 **conflicts** 58:5, 8 62:3 confront 55:1 confrontations 43:20 congratulations 82:5 Congress 12:8 23:5 29:15 32:4 60:2 95:5 Congressionally 71:10 Congress's 11:16 **connect** 96:17 connected 10:19 connection 70:2 connectivity 50:3 consequence 9:17 consider 72:23 73:5

56:1

consideration
46:16, 19 51:4,
24 52:2 77:3
considerations
73:11 74:19
75:4
considered 46:11
51:19 73:3 83:8
considering
74: <i>14</i> , <i>25</i>
considers 71:20
consistent 71:16
73:11
consolidated
64:13
constant 22:1
89:14
constantly 90:18
constellations
15:24
constrained
70:18
constraints
10:24 16:5
61:23 67:19
construct 81:2
construction 86:3
Consulting 29:2
contains 40:16
contemplating
36:3
contest 14:13
contested 21:16
23:23 44:4, 5
48:16 54:23
62:20 70:23
79:15, 16 90:6
contests 16:2
continue 5:21
10: <i>14</i> 16: <i>24</i>
24:9 25:24 27:1,

<i>3</i> 29:8 31:6
46:3 47:23
65:10 66:3 76:6,
23 83:20 88:21
92:5
Continued 3:23
10:23 11:7 12:9
14:5 39:2 <i>1</i>
63:12 65:15
continues 39:12
61:25
continuing 77:7
94:23
contract 19:24
26:8
contractor 20:12
38:6 57:18
contractors 84:21
contracts 58:9
contractual 83:1
contrast 85:9
<b>control</b> 10:21
14:13 22:15
38:6, 12 49:12,
<i>15</i> , <i>24</i> 50: <i>6</i>
62:14, 15 70:2
74:21 92:11
controls 16:2
<b>CONUS</b> 11:25
conventional
62:25 74:20
conversation
47:25
converted 59:10
convinced 41:18
coordination
66:23
coordinators
52:23
cornerstone

25:10 65:25 **Corps** 93:17 **Correct** 25:23 27:21 88:6 correctly 88:18 correlation 78:21 cost 5:9 6:10 15:25 19:3, 5, 6, 8, 11, 20 20:1, 10 37:21 38:9 43:2 88:14 92:5 **costs** 19:7 24:20 43:8, 9 **Cotton** 1:16 82:2, 3, 7 84:8, 14 85:20 86:16, 25 counseling 85:4 counter 15:5 16:*1* 21:*17* 23:2, 6 32:11, 25 33:13 39:7, 24 counterattack 36:8 countries 85:15, 16 **country** 32:23 35:25 53:23 72:3 73:7 **couple** 27:6 29:5 68:3 81:11 91:8 **courage** 70:*1* **course** 19:*13* 34:2 36:11 37:11 71:14 72:2, 18 74:22 80:5 81:14 covered 28:4 29:1 crack 84:22

**Cramer** 1:*17* 77:9, 10 78:23, 25 79:22 81:9, 22, 24 82:1 **created** 23:23 **creates** 14:21 23:24 creating 78:9 creation 63:25 credible 12:2 Creech 73:15, 17 74:12, 13, 14 75:5, 8, 22 crews 90:10 91:12 **crime** 85:7 **criminal** 53:14 **criteria** 47:21 51:21, 23 critical 7:3 11:11 14:10 33:17, 19 34:4 39:14 46:2 48:1 67:13 79:24 **cross** 69:5 cross-cutting 5:21 79:5 **cruise** 69:7, 25 cultural 54:3 curious 53:3 current 16:7 20:17 46:20 48:25 57:4 71:15 74:2 88:24 95:3 currently 5:10 6:7 21:6 31:7 33:9 46:8 72:10 75:19 **cushion** 3:18 **custody** 70:10

cut 14:21 34:12 41:24 42:5 81:10 86:22 93:15 94:8 cuts 93:8, 20 94:21 cutting 93:22 cyber 11:12 cyberspace 5:3

< D > **D.C** 1:9 **DAF** 6:15 dangerous 37:8 40:8 72:14 data 39:15 53:8 date 52:16 dates 60:17 **DAVID** 9:1 **Davis** 63:13 **Davis-Monthan** 64:15, 25 66:7 day 52:22, 23 68:20 80:6 87:17 days 81:11 **deal** 46:1 55:2 87:12 94:1 dealing 86:17, 19 **death** 80:3 **debate** 36:17 83:11 decades 46:4 decide 75:4 **decided** 41:24 **deciding** 11:*13* **decision** 15:16 46:10, 16, 20, 22 47:20 52:4 72:24 75:1

decisions 49:13 52:1 73:7 74:18 decisive 10:7 decline 11:8 declining 36:19 dedicated 11:21 14:8 15:14 dedicates 16:3 **deemed** 4:20 **deep** 21:23 **deeper** 44:17 **deeply** 28:24 68:16 **defeat** 7:3 9:14 **defend** 12:2 14:14 70:12 defending 54:4 **defends** 10:8 **DEFENSE** 1:2 3:9 4:24 5:2, 3, *14*, *25* 6:*18* 10:*9*, 17 15:8 25:10 28:2 37:12 48:7 56:6 58:12 72:21 82:6, 7 90:6 91:2 93:9, 11, 20 94:21 **Defense's** 14:18 **deficit** 44:17 definitely 27:18 35:23 84:22 degradation 11:22 **degree** 39:18 **DEI** 52:9, 12, 23 54:16 **delay** 3:12 delaying 23:4 delays 23:2

37:20 65:13

delegated 52:3

deliver 11:4 23:11 delivering 24:20 delivery 24:8 77:4 88:25 92:2 demand 77:21, 23 demands 9:18 10:3, 19 15:18 16:10 **density** 77:23 **denv** 21:17 denying 15:4, 11, 18 39:6, 17 **DEPARTMENT** 1:1 3:6, 8 4:4, 12, 25 5:6, 12, 17, 20 6:6, 7, 17 7:11 14:18 22:24 32:4, 9 48:6 53:10 73:23 76:7 93:8, 20, 25 94:7 **depends** 14:11 16:9 **deploy** 64:10 80:13, 20 81:3 deployable 63:25 64:8 78:17 80:15 81:2 deployed 66:7 deployment 72:10 74:15 describes 16:1 deserve 6:5 design 60:14, 15 77:4, 5 designed 15:7 29:17 32:23 35:20 64:16

designing 27:11 designs 27:4 desirable 32:3 desk 82:10 despite 11:22 detailed 6:12 42:22 **details** 60:13 **detect** 68:5 deter 5:4, 14 7:9 14:23 determination 20:11 41:10 98:22 deterrence 10:8 12:3, 4 25:9 36:1 37:12, 14 67:1 93:22 94:22 deterrent 5:8 57:23 deterring 10:18 15:11 develop 6:12 39:23 developing 7:1 48:24 78:12 development 4:22 11:15 23:4, 6 24:18 76:9 developments 24:14 86:9 **devoted** 15:21 **DIA** 94:13 **dictated** 10:24 **die** 91:18 **Diego** 74:7 difference 54:15 different 18:22 21:4, 5 38:19 47:7 60:17

96:25

80:14 82:17 84:16 differential 4:25 differently 23:20 difficult 10:1 36:2 55:2 75:18 difficulties 75:13 **digging** 20:1 digit 93:12 digitization 44:23 **dilemma** 36:5 **direct** 26:22 78:21 directing 28:2 directly 78:7, 16 85:3 directness 93:4 **Director** 51:25 disaggregated 15:15 disagreement 85:18 disappointed 96:23 disapproved 84:3 disaster 11:23 42:20 **discuss** 16:16 discussed 48:1 49:6 97:17 discussion 49:10 63:18 disparities 53:13 disparity 53:9 dispositive 98:23 **distinct** 73:22 distinguished 9:4 14:4 distribute 44:22 distributed 81:5

divest 22:4, 5 88:8 89:11 divested 46:25 divesting 32:1 88:4 89:3 92:4, 12 divestiture 46:23 divestment 22:18 68:13 71:11, 20 dividing 54:2 divisive 53:24 **DM** 63:16, 20 **DNI** 94:12 **docket** 88:9 **DOD** 6:16 28:8 66:3, 20, 24 doing 7:9 23:13 30:11, 25 38:18, 20 39:2 41:14 44:11 50:1, 6 55:10 57:13 62:5, 22 64:7, 12 67:25 78:21 87:22 90:22 96:13 97:8 dollar 14:20, 21 domain 5:1 14:14 15:13 16:2 dominated 4:21 **dorm** 73:14, 20 dormitory 74:2 **double** 61:*1* 86:12 88:14 92:6 93:12 **doubt** 81:13 downsized 42:15 **dozens** 69:9 **draft** 28:23

dramatic 31:9 drive 20:9 43:8 **driven** 97:*3* **driver** 42:17 **driving** 19:20 **drone** 48:4 91:2 **drones** 69:6, 9 **dropping** 90:25 due 2:5 52:16 72:24 **duty** 40:7 44:12 45:11 55:17 56:7, 10, 24 dvnamic 40:21, 24 67:7 <E> **E-3** 18:3, 6 89:11 91:7 **E-3s** 88:16, 25 90:16 91:15 **E-7** 18:8, 21, 25 **E-7s** 88:4, 25 eager 11:21 Eagles 68:14, 25 69:12, 20 71:21 **earlier** 55:11 60:7, 16 79:9 early 5:2 49:13 75:5 91:24 easier 74:17 **Eastern** 83:*3* 

easier 74:17
Eastern 83:3
easy 89:23
Ebbing 85:25
echo 69:24
educating 57:25
effect 57:23
effective 5:8
10:15 11:5

21:16 36:15

38:9 55:6 70:7,

22 79:21 90:2, 3 91:17 effectively 39:1 effectiveness 55:7 effects 14:24 effectuated 38:1 efficiency 20:19 **efficient** 20:13 29:18 **effort** 6:8 9:11 12:7 27:25 efforts 3:11 4:15 5:24 16:14 24:4 26:13 64:23 **eggs** 43:1 **Eielson** 97:7, 17 98:9, 16 eight 41:25 42:4 51:13, 16 72:22 **EIS** 65:7 **either** 51:15 78:17 86:16 92:8 96:16 elaborate 74:24 electromagnetic 62:20 74:22 electronic 63:20 65:24 66:4 67:3, 7 elements 19:19 62:19 elephant 54:1 elevating 25:13 **embarked** 63:23 emergencies 73:9 emerging 83:3 Emirates 55:20 83:2 85:12 emit 68:2, 4

<b>emitters</b> 66: <i>14</i>
96:13
<b>emphasize</b> 45:24 72:6
employer 58:18
employing 49:11
employment
26:5, 12, 21, 25
48:8 49:9 56:8,
19 74:20
<b>emulate</b> 67: <i>18</i>
enable 11:7
95:16
<b>enabled</b> 14: <i>15</i>
21:18 39:20
enablers 5:21
79:6
enacted 3:10
4:8 6:16
enactment 7:14
encourage 83:4
encouraged 66:6
encouraging
87:22
endanger 55:25
endeavoring 18:2
<b>enduring</b> 6:1
9:23 24:10 47:3
engage 55:5
engaged 61:6
engine 81:12
engineering
59:25
enhance 21:8
41:21 93:22
enjoyed 11:24
enormously 36:14
ensure 6:2 10:6
20:8, 18 25:21
27:12, 22, 23
21.12, 22, 23

50:3 65:16
66:11 73:7
83:20 90:10
98:17
ensuring 61:13
enter 24:21
<b>entire</b> 31:22
37:12 70:21
80:21 81:3, 4
entities 57:9
environment
9:23 20:17
21:11, 16 22:11
23:19, 23 32:5
43:13 44:4, 5
48:16 54:24
62:21 67:12
70:18, 23 90:4, 7
95:25 96:1, <i>6</i>
environmental
11:23
environments
79:15, 16
equipment 21:5,
14
equipped 20:22
73:8
equipping 15:9
<b>era</b> 61:9
Ernst 1:16 59:1,
2 60:9, 19 61:4,
24 63:2, 7
Ernst's 63:18
especially 7:4
22:11 23:2 80:2
essentially 28:25
31:2 38:5 60: <i>14</i> 61: <i>16</i> 91: <i>23</i>
established 14: <i>17</i>
establishing 25:2
establishing 23.2

4 - 1-12 -1 4
establishment
24:3
<b>EUCOM</b> 69:13
<b>Europe</b> 69:11
83:3
evaluate 41:2
event 9:14 22:8
events 31:24
65:9
eventual 74:15
eventually 42:1
59:18 91:3
everybody 54:7
87:5 88:1 92:18
EW 65:25 66:4,
8, 25 67:6, 10, 11
exact 52:18
<b>Exactly</b> 37:13
61:18 67:24
86:12
example 19:9
26:7 38: <i>3</i> 40: <i>21</i>
51:11 56:7 67:3
74:8 84: <i>13</i> 91:7
examples 54:21
exceeds 6:24
excellence 31:22
excited 23:17
46:2 63:3
exclusive 83:25
excuse 92:2
execute 23:7
25:5 26:11
27:13 90:11
exemplary 9:9
exercise 27:12
exercises 27:1
66:17 67:16
95:17

existing 48:7 76:16 **expand** 16:21 66:20 expanding 7:1 expansion 36:23 59:20 **expect** 19:21 42:7 47:10 64:10 71:10 80:13 81:2, 16 expectation 51:24 **expected** 22:10, 17 **expects** 93:10 expensive 22:7 35:19 42:9 75:17 experienced 5:9 50:16 experiment 48:7 experimental 74:13 experimentation 67:8 **experiments** 49:20 expertise 58:17 experts 57:6 **exploit** 58:22 **explore** 49:*14* extension 60:5 **extremely** 72:14 < F >

<F>F-15 66:8 68:14 71:11, 21 F-15E 69:1, 17 F-15Es 22:6 F-15EX 10:23



51:2 <b>F-15s</b> 71:14 <b>F-16</b> 59:10 <b>F-35</b> 10:23 19:9, 11, 14 37:16 38:3 43:21, 22 44:6
<b>F-35s</b> 68:5
<b>face</b> 16:18
21:12 37:10
<b>faced</b> 6:25
<b>faces</b> 11:14
73:19
facilities 27:17
77:2
<b>facility</b> 59:13, 23
76:24
facing 6:23
16:22 20:24
fact 39:19 58:6
68:24 83:20
<b>factor</b> 11:13
37:15
<b>factors</b> 11:18
failure 3:23
14:11
Fair 34:12
<b>fairly</b> 42:9
<b>fall</b> 80:20 86:7,
10 folling 40:1
<b>falling</b> 40: <i>1</i> <b>falls</b> 80: <i>18</i>
familiar 67:24
<b>families</b> 6:4 9:8
75:11 76:4
98:20
<b>family</b> 11:2
34:22 76:19
<b>fantastic</b> 32:16

<b>far</b> 26:20 31:9
52:21 55:5
82:25 98:11
fast 22:18 49:4
91:5 98:23
<b>faster</b> 92:4
father 95:7
favorable 67:4
favorite 95:6
feasibility 28:2
February 65:6
77:18
<b>Federal</b> 93: <i>13</i>
<b>feed</b> 81:1
<b>feel</b> 59:19
fellows 82:7
<b>fewer</b> 10:24
<b>field</b> 85:10
fielding 16:8
<b>fifth</b> 14:7 44:5
66:15 95:23
<b>fight</b> 10:21 27:3
48:17 66:19
68:17 78:18
80:13 91:14
94:5
<b>Fighter</b> 31:19
46:7, 11, 16, 19
47:13 50:13
68: <i>13</i> , <i>16</i> , <i>19</i>
71:5
<b>fighters</b> 21:25
59:11 95:12
<b>fighting</b> 72:12
89: <i>1</i>
figure 40:20
41:2 69: <i>13</i>
fill 18:5
<b>final</b> 28:23 47:9
71:7 85:20

96:18, 24

Finally 5:24
15:25
<b>find</b> 9:16 62:23
67:9 80: <i>4</i>
<b>finding</b> 75:14
<b>finish</b> 33:22
<b>fire</b> 53:23 70:9
72:17 95:17
<b>fired</b> 69:10
firefighting 72:19
fires 72:12, 15
<b>firing</b> 54:6
<b>first</b> 4:24 19:6
28:24 37:6
49:16 50:3
51:21 59:5
69:24 76:11
85:9
firsthand 73:18
FISCAL 1:3
3:7, 10 4:2, 3, 7,
8, 17 5:23 6:13
7:11 9:25 10:22,
25 14:6 16:3, 5,
<i>16</i> 21:7 32:6
39:12 40:15
72:20 76:22
94:2 95:1, 13
<b>fiscally</b> 70:18
<b>Fischer</b> 1:16
2:13, 14, 16 3:4
9: <i>4</i> 14: <i>3</i> 21:2 <i>1</i> ,
22 23:12 24:12,
<i>25</i> 25:23 26:1
<b>fishing</b> 83:6
<b>fit</b> 29:3, 5 77:25
78:6
<b>fits</b> 73:24
<b>five</b> 2:11 41:5
<b>flag</b> 82:16, 25
83:14, 20 85:10

**fleet** 36:9 51:6 61:20, 21 flexibility 36:12 38:13 **flexible** 29:24 75:21 **flight** 22:8 72:18 **floor** 2:5 **Florida** 28:*17* **fly** 43:16 72:14 **flying** 11:10 19:9, 10 43:2, 7, 9, 10 46:8, 25 47:1, 2 51:23 89:12 **focus** 24:8 66:3 76:3 95:9 focused 7:12 78:10 focusing 78:9 **folks** 51:12 54:2 **follow** 33:14 50:11, 18 63:17 **follows** 7:16 12:11 17:3 **fool** 66:15 **foolish** 58:16 **FORCE** 1:2 3:2. 8, 24 4:4, 5, 6, 13, 21, 23 5:1, 12, 17, 20 6:1, 3, 7, 17 9:2, 5, 20, 25 10:5, 9, 11, 19, 20 11:4, 14 12:1 14:7, 11, 15, 17, 18, 25 15:2, 7, 16 16:2, 6, 8, 12, 13, 19, 25 19:11, 14 20:23 21:19, 25 22:5, 10, 13, 21, 23 23:1, 13, 15,

23 25:2 26:8, 10,
24 28:5 29:4, 5,
6, 12, 13, 14, 16,
22, 23 30:1, 5
31:3, 22 32:12,
14, 21 33:2, 5, 6,
10 35:2 36:23
40:6 42:16, 19
44:10, 11 45:11,
21, 25 46:9
48:11 49:14
50:12, 14 51:11
52:12, 24 57:3, 5,
25 58:6, 9, 20
59:12 62:2, 19
63:3, 14, 24 64:2,
20 65:6 66:3
67:11 68:12, 13
69:8 73:5, 17, 23
74:4, 12, 14, 24
75:20 76:7
77:14, 19, 21, 25
82:5 88:19
89:18 93:19, 24,
<i>25</i> 95: <i>3</i> , <i>4</i> , <i>7</i> , <i>16</i>
96:20, 24 97:5
<b>forces</b> 9:21 12:5
15:9 21:10 22:3
62:25
Force's 3:7 5:6
7:11 10:2, 6
14: <i>6</i> 15: <i>3</i> 16: <i>4</i> ,
<i>14</i> , <i>16</i> 25:4 32:9
64: <i>3</i> 95: <i>9</i> , <i>13</i>
forcing 23:2
<b>foreign</b> 55:16, 18,
22, 25 56:2, 9, 18,
25 57:10, 12, 14,
<i>18</i> 58: <i>13</i> , <i>21</i>
82:12, 17, 21

85:7, 21, 25
<b>forever</b> 41:19
forging 14:8
<b>forging</b> 14:8 <b>Forks</b> 77:20, 24
78:5
form 22:13
78: <i>17</i>
formed 62:13
former 82:7
<b>forming</b> 62:17
<b>forms</b> 74:7
Fort 67:3, 12, 14
86: <i>1</i>
<b>forth</b> 20:4
96:20, 24
<b>forward</b> 3:14, 21
7:15 11:6 12:10
17: <i>1</i> 24: <i>16</i> , 22
25:19, 24 26:11
32:10, 20 33:11
39: <i>1</i> 40:9 48: <i>15</i>
53:21 58:19
60:3 65:10 71:9
77:6, 12 79:18
86:13 92:18
93:8 94:23 95:1
97:21
fought 72:22
<b>found</b> 52:10
55:18
foundational
4:19
<b>four</b> 50:16
51:19 93:7, 9
98:8
<b>fourth</b> 5:24
<b>FRA</b> 4:12 16:5
frame 89:2
frames 90:17
frameworks

15: <i>15</i>
<b>FRANK</b> 3:1
<b>frankly</b> 45:12
85:6
free 76:11 91:15
<b>freedom</b> 15:10
86:6
frequencies 67:5
<b>Friday</b> 88:19
friendly 85:11
<b>friends</b> 77:16
frightened 80:3
<b>front</b> 62:8
<b>fronts</b> 44:19
<b>fruition</b> 50:15
<b>fruits</b> 85:12
<b>fuel</b> 40:22
<b>full</b> 6:5 29:23
42:4 52:12 53:2,
4, 21 60:23
65:16
functions 28:4,
<i>14</i> 29: <i>3</i> 30: <i>7</i> , <i>12</i>
<b>fund</b> 32:4
fundamental
37:11 42:17
54:15
<b>funded</b> 18:8
<b>funding</b> 11:10
<b>funding</b> 11:10 23:5, 7 27:10
41:11 72:21, 22
76:2 <i>1</i>
<b>funds</b> 6:14
<b>FUTURE</b> 1: <i>3</i>
10:16 19:14, 22
20:3, 8 21:24
24:11 26:20
32:2 34:20 35:1
46:7, 11, 13, 16,
19 47:7, 14, 23
48:9 49:12

63:13 70:8 78:10 89:14 95:3 futures 24:3 **FYDP** 23:11 <G> gain 48:12 **Gaining** 14:15 44:19 **game** 93:7 gap 61:20 68:17 69:14 80:3 92:2 **garrison** 64:10 **gavel** 2:11 Gen 95:12 **General** 3:4, 5 7:6 8:2 9:1, 3 12:11 13:1 14:1, *3* 17:*3* 18:*1* 19:4, 13 20:15, 21, 25 22:25 23:8, 14, 16 24:12, 25 25:3, 6 26:4, 10, 16 27:21 29:2, 9 30:9 31:10, 15 32:22 33:22 34:2, 11, 14, 21 35:1, 12 39:4, 11 40:3, 14, 19 41:8, 14 42:25 43:4, 22 44:9, 11 45:4, 6, 8, 10, 20 46:5, 24 47:8, 16, 18, 23 48:14 49:16, 20 51:16 55:11, 21, 23 56:10, 14, 22 57:15, 20 58:23 61:21, 24

56:19 62:3

62:4 63:2, 10, 11, 18, 22 64:5 67:14 68:21 69:18, 22 70:25 72:1 75:9, 19, 24 80:8, 10 82:3, 16 83:4, 19, 22 85:23 87:3 88:6, 7 89:10 94:3, 13 95:21, 22 96:11 98:14, 15 generally 31:6 38:11 54:9 61:18 generals 58:6 82:20 93:6 generate 80:19 generation 11:7 32:20 44:6 66:15 80:17 81:1, 6 91:21 95:23 Gentlemen 21:20, 23 40:14 45:18 59:3 68:11 77:11 92:24 99:2 geography 68:2 getting 18:5 43:2 57:24 66:5 92:4 Gillibrand 1:15 **give** 20:23 21:10 86:11 95:18 **given** 31:24 42:11, 16 58:8 73:22 74:23 86:8 gives 25:14

**giving** 21:14 45:1 **glad** 30:3 82:9 85:4 87:16 **global** 32:5 72:10 77:24 **globally** 32:13 **globe** 9:20 61:7 **go** 24:10 27:10 49:3, 25 51:17 66:19 75:22 77:17 81:3, 8 82:20 83:6 85:14, 15 86:12 92:5 94:5 96:24 98:24 goal 44:13, 14 45:9, 10, 12 going 20:7 21:3, 12, 15 24:5 25:17, 18, 20 26:20 27:13 30:11 31:2, 4 32:22 34:11, 12 35:3, 9 37:3, 6 38:22 39:1 40:3 41:6, 18 44:14, 15, 18 48:16 51:19 53:3 59:6 66:1, 5, 22 70:7, 8, 15 73:13 74:12, 16 75:3, 8 76:8 77:17 78:13, 20 80:20 81:7 84:20 85:11 86:5, 9 88:9, 10, 15, 24 89:4, 21 90:15 91:1, 3, 18, 22 92:8, 10 94:7, 12,

*16* 96:*3*, *25* 97:*7* 98:6, 18, 23 Goldwater 68:4 **Good** 9:3 23:9 38:3 40:14 42:21 45:19 57:23, 24 68:10 83:14 85:14 87:15 90:1 91:7 **Gordian** 86:21 **gotten** 28:20 governing 65:9 government 56:11 57:10, 12, 14, 19 58:15 governments 55:16, 19, 22, 25 56:2, 9, 18, 25 58:13, 21 **GPS** 6:20 **grades** 85:11 **Grand** 77:20, 24 78:5 granted 74:1 grateful 29:20 45:25 **great** 6:8 14:9 23:13 24:4, 25 33:18 41:14 51:2 54:7, 21 59:8 61:6, 10 62:3, 9, 18 63:5, 24 66:2 67:7 69:5 78:8 80:12 82:19 83:7 87:18, 19 greater 68:6 greatest 3:16 33:10

**ground** 10:15 25:19 35:20, 24 37:15 67:4 69:2 **grow** 22:21 growing 5:19 68:16 **growth** 4:10 Guard 28:5, 9, 13, 21 31:4 44:17 45:14, 22 51:25 52:5 59:6, 8, 13, 21, 23 72:7 73:8 86:1 92:10 Guardians 6:4 16:9, 21 20:23 21:7 23:22, 25 41:20 73:21 **Guard's** 59:9 Guardsmen 28:16 guess 29:17 33:14 41:24 51:14 77:22 **guidance** 22:15 38:20 **guide** 5:22 guys 54:11 87:19 88:2, 5 93:15, 22 94:4, 8 < H > **half** 36:15 41:24 **hand** 76:*3* **handle** 31:4 handled 88:22 **hands** 38:6 **hangar** 37:22 happen 7:5 29:9 65:5 86:10

happened 36:21
42:20 69:25
83:10
<b>happy</b> 24:23
67:22 81:18
<b>hard</b> 16:6 29:25
38:8 41:19
91: <i>13</i> 94: <i>4</i>
<b>harder</b> 40:25
hardest 66:18
hardware 32:1
<b>harm's</b> 7:8
<b>Hart</b> 1:12
<b>Hawaii</b> 28:16
Hawk 77:24
<b>head</b> 52:4 69:1
94:13
<b>headed</b> 39:17
51:15
<b>health</b> 11:15, 24
<b>hear</b> 30:3 63:21
85:4 87:15
<b>heard</b> 23:12
68:23 71:5
<b>hearing</b> 2:3, 5
63:15 71:25
77:14 87:7
94:12, 14, 15
97:9 99:4, 8
<b>heavily</b> 14:12
41:3 69:13
<b>heavy</b> 15:25
72:14 87:6
heck 98:7
helicopter 42:10
help 25:5 58:17
75:20, 23 82:21
85:3
helped 69:9
<b>helping</b> 43: <i>13</i>

62:22 76:15 **helps** 31:12 84:6 **high** 16:10 22:11 41:20 48:4 77:21, 23 79:4 **higher** 18:11 53:1 **highly** 44:4 70:22, 23 79:16 90:6 Hill 29:21 hired 55:19 57:8, 13 84:13 **Hirono** 26:2, 3 27:15, 25 30:3, 15, 18 **historic** 26:19 history 37:6 38:2, 16 **hit** 80:5 **hold** 39:25 **holding** 71:24 **holds** 26:19 home 9:12 50:12 51:6 73:17 76:20 homeland 4:25 72:11 92:11 **Hon** 1:12 2:1 3:1 hope 28:12, 20 71:18 87:17 **hopefully** 18:*16* 71:17 **horrific** 72:12 **hour** 19:10 hours 11:10 22:8 43:10, 11 76:18

**House** 69:11 74:19 **housing** 11:*17* 73:14, 20 74:2 97:17 98:6, 22 **Hs** 51:12, 16 **HTLD** 81:4 **Huachuca** 67:12, 14, 21 Huachuca's 67:3 **hub** 27:8 huge 36:25 88:12 94:9 human 49:4 **humbled** 31:21 **hundreds** 41:*15* 55:18, 19 **Hybrid** 15:24 hypotheses 96:7 < I > **ICBM** 5:9 25:12, 16 36:4, 22 idea 41:1 97:3 ideally 88:1 **identify** 58:17 66:25 80:4 **II** 26:9 **III** 3:1 imagine 70:8 immediate 5:17 95:3 immediately 2:9 36:7 immense 9:9 **impact** 3:12 6:13 22:12 **impacts** 6:10 imperative 66:20

imperatives 4:16 5:20 79:5 implemented 40:6 importance 48:1 49:6 60:20 64:3 66:2 69:20 72:7 96:21 **important** 25:13 28:11 29:7 30:10 33:5 37:15 59:6 61:5 67:9, 20 69:14 71:25 79:23 80:17 82:11 87:13 95:10, 21 97:11, 16 importantly 21:13 24:2 **impose** 15:25 impractical 15:20 impressed 63:1 impressive 70:17 improving 44:12 74:3 **impunity** 32:24 inadequately 3:25 incentives 76:21 incentivization 76:10 inception 12:2 **include** 18:24 22:20 27:5 82:7 included 28:1 includes 4:4 5:23 15:3 21:9 62:14 **including** 28:*13* 68:13, 20 71:1

increase 4:7
11:9, <i>17</i> 66: <i>1</i>
75:20 76:18
94:7 96:2
increased 44:13,
,
14 72:16, 18
76:10, 14, 21
increases 5:10
93:12, 24 94:10
increasing 45:3
increasingly
9:19 48:22
incredibly 29:16
Indian 51:11
indication 6:22
indirectly 58:14
84:13, 20 85:3
individual 19: <i>19</i>
64:12
individually
96:17
individuals 57:8
Indo-Pacific 7:7
11:20 27:17
49:21 64:15
66:11 68:17, 25
INDOPACOM
68:23 97:13
ineffective 91:23
inevitable 7:4
inflation 4:9
93:8, 19
influence 27:19
information
15:16 57:16
67:15
infrastructure
11:12, 22 15:1
21:9 26:6 74:21
initially 38:4

initiated 4:16 6:19 Initiative 6:16 67:2 innovative 74:5 **input** 28:13 insight 57:6 insufficient 59:17 73:24 integrate 25:15 Integrated 95:14 integration 25:12 96:5 intellectual 38:11, 22 intellectually 27:2 intelligence 34:3 intend 2:4 27:12 intensity 48:4 **intent** 6:10 intention 30:22 interest 56:20 58:5 interesting 89:5 **Interestingly** 51:7 **interim** 61:*1* Interior 94:7 international 25:3 interrelated 43:7 inventory 37:3 47:9 **invest** 16:24 41:3 88:5, 8 invested 14:20 21:7 investigate 48:18 investigated 50:2

Investing 15:21

investment 11:9 37:3 investments 5:1 10:23 11:11 21:14 36:25 invests 6:2 10:5 **involved** 18:*11* 82:6 **Iowa** 59:5, 8, 10, 13, 23 **IP** 37:17, 25 38:2 **Iran** 9:12, 15 69:10 irregular 62:1 ISLAND 2:2 26:9, 14, 18 27:19 **ISR** 33:16, 20, 25 34:8 54:9, 18 77:16, 25 78:4, 5 79:1, 4, 10, 14 80:23 **Israel** 9:14 69:10 82:6 **Israel's** 9:12 issue 31:12 76:2 97:17, 20 98:6, 13 **issued** 57:*3* **issues** 50:18 65:20 73:25 its 5:13 9:15 10:6 12:1 14:7 16:12 18:4 21:25 22:21 45:11 59:10, 15 64:16, 17 66:20 67:4 89:25 94:17

< J > **Jack** 1:12 2:1 **January** 45:21 **JBER** 95:15 iets 89:1 **Jinping** 93:20 **JITTC** 95:20 **job** 12:*1* 31:22 32:16 33:18 41:7 62:5 92:16 **iobs** 89:7 **Johnson** 68:14 69:8 71:2 **Joint** 5:25 9:11 10:19 14:11, 15, *25* 19:*17* 21:*19* 31:22 33:5, 6 43:13 69:16 95:14 97:5 98:8 **Jordan** 85:12 **Joseph** 51:6 **JPARC** 67:16 95:17 96:4, 12 **JSTARS** 54:20 **jumping** 77:15 **June** 52:17 **iustice** 53:14 **justify** 22:18

< K >
Kaine 1:15
KC-135 59:11
97:7
KC-135s 47:5
61:14 98:8
KC-46 45:22
46:10, 22 49:6,
15
KC-46s 47:4
49:11, 18 59:17



keep 4:9 5:18
10:1 19:8 43:17
75:8 79:12, 13
88:22 89:12
91:13, 16 92:8
94:9
keeping 25:8
91:22
<b>Kelly</b> 1:16 63:8,
9 64:21 65:4, 12,
<i>15</i> , <i>20</i> , <i>24</i> 67:23
68:1, 7 73:15
84:24
Kendall 2:17
3:1, 3 7:16
11:2 <i>1</i> 18:7, 23
21:2 24:13, 16
26:17 28:1, 23
30:17, 21 31:15,
24 32:8 35:22
37:2, 13 38:2
39:7 41:23 42:3,
22 45:20 46:6,
<i>17</i> , <i>18</i> 48:2
50:11, 23 51:1, 3
52:3, 7, 11, 14, 25
53:6, 19 54:14,
18 59:5, 9, 19, 24
60:13, 25 61:9,
16 63:10, 11
64:22 65:14, 18,
23, 25 67:9, 13,
24 68:8, 11 71:4,
7, 13 72:1, 4
73:1, 10, 25 74:5
75:3 77:16 78:7,
24 79:4 81:19,
23 82:3 84:8, 10
85:18, 23 86:4,
11, 23 87:3, 9, 15,
21, 24 91:6, 11

92:20 93:23
94:23 97:15, 24
98:3, 10
<b>key</b> 7:7 10:8
63:25 66:5
<b>kill</b> 10:20 33:22
34:4 48:20
<b>kind</b> 24:8 33:12
48:12 65:9
78:14 97:10
<b>King</b> 1:15 35:16,
<i>17</i> 36:25 37: <i>11</i> ,
<i>14</i> 39:4 40:3, <i>12</i>
<b>knot</b> 86:21
know 3:25 20:4
28:15 30:9 34:3
35:8 41:18 43:5,
21 45:7, 20 47:9
49:12 50:14, 16
51:7, 13 52:9, 11
54:4, 8 56:23
57:9, 17, 21 58:4
59:5 65:7 68:5
72:4 75:10, 15
76: <i>3</i> 78:2, <i>4</i>
79:22 83:5, 10
85:23 86:2, 13,
16 87:6, 11, 25
88:4, 11, 14, 21
89:18, 25 90:15,
<i>16</i> 92: <i>13</i> 93: <i>5</i> ,
12 94:2, 4, 11, 19
95:22 97:15
98:11, 16, 19
knowing 43:2
knowledge 82:21
~ T >
<l></l>
lacks 23:1

lag 88:25

**laid** 47:20 62:8 **lake** 10:15 **land** 37:1 landscape 9:16 large 32:14, 15 36:7 37:2, 7 47:10 79:1 largely 78:8 larger 64:20 81:2 largest 36:4 late 87:7 **lately** 43:21 **latest** 86:9 **laurels** 44:20 **law** 52:15 58:19 71:15 laws 57:10 82:23 layer 34:18, 19 **leader** 53:23 leaders 94:5 leadership 25:21 54:6 96:24 **leading** 37:18 lean 29:17 **learn** 63:3 64:18 **learned** 38:16 48:11 82:21 **leave** 3:24 56:9 85:5 89:16 **left** 38:6 90:9 93:11 leg 25:13, 19 35:20, 24 36:4, 5, 11, 22 37:15 legacy 16:6 72:13 79:19 93:10 legislation 54:5 legislative 83:23

**length** 49:1 68:12 81:7 **lessons** 38:16 48:11 64:18 **letter** 52:8 **level** 3:20 12:4 15:17 23:3 25:11, 14, 21 27:1 34:7 61:22 66:22 levels 4:12, 20 32:4 41:20 **Libya** 55:20 **lie** 81:*17* Lieutenant 94:13 **life** 6:4 11:15 38:23 76:1 97:19 98:19, 23 **lifecycle** 19:5, 11 **lifting** 87:6 **limit** 94:2 **limited** 11:24 **limits** 18:4 55:7 **linchpin** 14:23 line 41:4 **linked** 45:2 46:24 list 73:10 **Listen** 87:25 little 32:24 64:7 73:16 74:13, 17 75:4 95:20 96:23 98:5 live 37:7 95:17 96:5, 16 **load** 85:22 located 30:6 95:12 96:21 location 73:6 75:15 98:18

locations 26:6
27:9
logistics 19:25
20:3, 9 40:17
long 16:24
33:19 35:24
37:20, 24 52:22,
23 59:20 63:13
longer 70:9
look 7:14 9:15
12:9 17:1 23:14,
15 32:8 40:9
48:15 53:21
58:19 68:8 71:9
77:6, 11 84:8
92:18 94:3 96:2
looked 29:2
67:14
<b>looking</b> 20:16
21:17 25:7 29:1,
9 40:21 47:12
48:25 49:18
74:5 89:8 90:21
96: <i>14</i>
loophole 57:2
83:12, 13
loopholes 56:7
58:21
lose 59:15
<b>losing</b> 92:11
lot 23:12 31:8
32:15, 17 38:6,
13 41:6 42:24
43:1 50:22 54:8
55:9 57:6 64:23,
24 75:25 76:24
79:9 90:23
92:14
lots 78:4
love 74:13

<b>low</b> 24:22 69:4 72:15 77:23
<b>lower</b> 96:22
97: <i>1</i>
<b>Luzon</b> 26:15
< M >
ma'am 23:8
machine 49:4
macroeconomic
11:18
magnificently
31:20
magnitude 68:3
main 25:8, 9
62:19
maintain 5:7
12:4 15:12 16:6 37:14 48:18
61:21 89:15
maintainers
50:17 57:5
84:19 85:1
maintaining
14:16 43:3
maintenance
38:12 88:16
<b>major</b> 16: <i>13</i>
27:16 37:16
68:19
makers 15:17
making 36:25
37:2 45:25 52:1 58:2 72:24 73:7
85:21
man 87:19
manage 29:12
34: <i>15</i> 38: <i>13</i> , 25
43:5, 16 65:2
70:18 95:2

management
6:21 11:1, 2
16:13 25:15
29:14, 22 31:3
50:2 70:4
manages 29:24
managing 89:23
<b>Manchin</b> 1:16
mandatory 58:1
maneuver 26:21
27:13
maneuvering
40:22
margin 78:19
marginally 4:18, 22
marine 21:3
33:1 93:17
markup 83:9
markups 83:9
Marxism 54:3
mass 11:4
massive 9:12
25:22
material 25:15
math 92:7
<b>Mathematically</b>
89:8
matter 77:25
83:9
matters 6:22
maturity 60:15
maximize 9:21
maximum 15:16
Maxville 42:1, 3
<b>McCurdy</b> 5:11
35:19
mean 19:7
29:17 30:5 41:6
68: <i>17</i> 77: <i>21</i> 78:2 81:11 85:6
- /A'/ XI'II X'''

88:9 92:6, 10 93:21 means 14:21 33:3 measures 83:12 mechanics 84:19 85:1 mechanism 16:1 **medium** 48:4 meet 6:8 10:3 16:10, 22 19:1 42:16 47:25 51:22 90:5 **meeting** 87:17 meetings 72:5 meets 51:21 **Members** 1:14 2:10 3:4 9:4 12:8 14:4 56:8 58:17, 22 75:16 83:4 **memo** 57:3 men 7:8 82:5 **mention** 35:22 78:3 94:12 mentioned 27:6 30:6 32:16, 22 39:19 47:8 49:10 79:1, 2 80:23 mentions 78:4 merchant 21:3 33:1 met 1:11 **MH-139s** 41:24 mid 35:4 **middle** 52:17 MILCON 60:15, 24 77:1, 2, 3 milestone 24:21

militaries 82:17 83:15, 17 military 3:17 4:10 5:19 16:19 20:13 31:25 33:2, 23 37:19 40:20 41:3, 9 54:2 55:15, 22, 25 56:3, 9 66:12 75:16 82:22 84:20 85:8, 10, 25 94:5, 9, 17 95:19 million 21:8 22:23 26:8 40:17 41:4, 5 44:21 60:4, 5, 6 95:14 mind 92:5 **Minihan** 49:20 **minimal** 10:20 29:18 **minimize** 6:10 **minimum** 10:2 34:24 35:11 **minute** 2:11 30:18, 19 missile 15:22 39:14 80:16 missiles 25:3 69:7 **mission** 11:22 22:16 46:12, 25 47:1, 2, 4 50:19 59:15 60:23 61:15 72:8, 14 73:6 76:3 79:24 85:25 88:21, 22, 24 90:11 92:8, 17

missions 24:6 28:9 39:14 46:12 62:7 **Missouri** 50:12 51:6 **mistake** 37:10 Mitchell 95:7 mitigate 84:6 mix 34:9 35:8 70:21 79:17 **mixed** 38:2 **mobility** 40:16 50:4 72:10 80:24 model 23:24 models 96:3, 4, 14 **modern** 6:25 10:19 38:10 66:1 modernization 3:14 4:15, 18, 23 5:7, 18, 22 10:4 47:13 76:24 79:7, 23 81:10 94:24 96:12 modernize 12:5 16:14 22:3 88:7, 8 **modernized** 16:8 modernizing 61:10 modest 11:9 modifications 18:25 molesters 82:10 **moment** 40:8 68:22 72:6 99:6 momentum 4:14 money 40:19

41:6 76:25 89:3 **monitor** 65:11 **Montgomery** 42:1 month 3:12 **Monthan** 63:14 morning 9:3 40:14 68:11 78:3 motors 90:16, 17 mountainous 72:15 move 3:14 18:17 22:17 25:24 28:8 30:22 32:20 70:13 73:13 75:8 79:18 94:23 97:12, 20, 22 moved 97:10 movement 6:11 30:12 50:22 movements 65:2 moves 3:20 moving 2:9 6:22 18:7 24:16, 22 31:2 32:10 33:1, 11 40:2 50:14 54:8, 12, 18 55:9 60:2 63:1 64:23 65:10 69:5 79:9 86:13, 18 95:1 **MO-9** 48:8 **Mullin** 1:17 87:1, 2, 17, 24 88:8 90:14 91:10 92:1, 21 **multiple** 10:20

66:25
multiplier 16:13
munition 70:11
mutually 83:25

< N >
nation 9:6 10:7
12:2 14:10, 19

**nation** 9:6 10:7 12:2 14:10, 19 15:9 17:1 59:3 National 3:9 4:24 5:3, 14, 24 6:20, 24 10:9, 17 15:8 25:10 28:4, 9, 13, 16, 20 29:11 44:17 45:13, 22 51:25 52:5 55:21 56:6, 12 57:17 58:12, 16 59:6, 9, 13, 21, 23 72:7 73:8 86:1 90:5 **nations** 27:19 83:2, 3, 15, 21 84:2 85:11 **nation's** 10:*3* **NATO** 83:3 **natural** 11:23 nature 48:13 73:22 **naval** 33:2 navigation 6:21 15:23 Navy 21:4 37:23 52:20 74:7 93:16 **NDAA** 28:1, 8 71:5, 12, 18 near 14:22 19:22 22:17



necessarily 32:2 33:18 43:14
83:24
necessary 5:16
22:21 27:7, 8
need 6:3 20:20
21:15 22:9
25:23, 24 27:8,
12, 16 32:20
33:8, 12 34:5
36:22 38:12, 21,
22 39:4, 24 40:9
41:2, 10 48:16
49: <i>7</i> , <i>17</i> 56:2 <i>4</i>
57:2 66:3, 11
72:25 74:9
75:23 77:2
84:22, 25 89:8
90:10 93:2
98:12, 16, 19
needed 20:7
23:2 34:25
49:14 75:16
needs 5:17 6:8
15:9 26:11
42:16 70:12, 13
74:19 80:19
81:5
negotiate 56:11,
18
negotiating 56:8
negotiations
18: <i>12</i>
neither 80:24
<b>Nellis</b> 67:15
73:14, 16, 17
75:9 91:8
network 49:24
<b>Nevada</b> 72:7, 12
73:17
· · · · · · · · · · · · · · · · · · ·

<b>never</b> 6:25
14:10 86:16
89:23
new 6:19 19:23
21:9 23:21, 23
24:6, 14 28:17
40:16 45:22
63:16, 19 64:22
65:12 66:6, 7
74:18, 23 75:14
77:19 88:13
90:17 92:3
95: <i>15</i>
newer 61:14
<b>newly</b> 62:13
<b>NGAD</b> 11:2
38:15
niche 62:23
<b>node</b> 49:12, 21
50:1
nontraditional
76: <i>17</i>
<b>noon</b> 2:5, 7
<b>nope</b> 93:15
<b>normal</b> 76:18
<b>North</b> 68:15
69:7
NORTHCOM
69: <i>1</i>
Notably 5:8
<b>NOTAM</b> 57:22
<b>note</b> 71:1, 19
<b>notice</b> 1:11
<b>notified</b> 60:2
<b>nuclear</b> 5:7, 8
10:10, 15 25:2, 9,
15 36:1, 15, 17,
23 37:8
number 18:25
27:19 34:25

35:3 42:12

47:10 52:14, 25
94:18
numbers 45:3
90:21, 23 91:1
Nunn 5:10
35:18
Nunn-McCurdy
10:13 25:18
<0>
object 2:7
<b>objective</b> 15:21
objectives 15:11
<b>obligations</b> 85:6
<b>observed</b> 73:18
<b>obsolete</b> 91: <i>11</i>
obstacles 20:24
obtained 6:17
<b>obvious</b> 72:24
obviously 43:20
51:21, 23 79:24,
25 87:7
occasions 86:5
<b>occur</b> 61: <i>1</i>
<b>Ocean</b> 90:9
<b>offer</b> 9:22 69:23
<b>offers</b> 14:18
67:7, 21 68:1, 5
<b>Office</b> 1:12
19: <i>17 77:18</i>
<b>officer</b> 57:17
82:16
<b>officers</b> 55:17,
<i>19, 24</i> 56: <i>1</i>
57: <i>13</i> 69: <i>19</i>
83:1, 14, 20
85:10
<b>Ohio</b> 28:17
<b>Okay</b> 51:5 52:7
53:18 60:9, 19

61:24 78:23 98:4 **old** 19:1 32:19 62:18 92:3 **older** 61:14 **OMB** 94:6 once 32:15 33:15 80:21 82:14 93:14 ones 27:6 29:1 43:23 76:19 97:2 open 2:8 9:8 32:6 39:9 43:15 96:8 99:3, 7 OPENING 2:1, 12 22:25 47:8 **opens** 50:5 **operate** 22:11 27:8 32:24 42:7, 11 54:23 55:7 62:19 **operated** 29:18 **Operating** 15:*15* 43:3 operational 4:15 5:20, 21 10:2 15:4, 12 20:19 24:5 72:24 79:5, 6 91:13, 17 **OPERATIONS** 14:2 16:10 48:4 62:6, 11 64:6 66:12, 25 74:14 **opinion** 29:10 33:24 54:15 opportunities 41:21 67:10, 21 opportunity 3:6, 21 9:22 14:5

16:15 31:18 50:5 63:5 95:24 **Ops** 64:2 optimistic 18:15 optimization 78:8 79:8 optimizing 78:22 **option** 32:*3* 46:21 50:23 51:2 options 23:1 37:9 48:18 50:21 74:21 oranges 84:11, 15 **orbit** 40:24 orbits 40:24 **ordeal** 87:22 order 2:3 4:18 33:21 37:14 55:7 70:6 80:13 84:5 89:12 90:5 **ordered** 34:23 **orders** 68:2, 3 organization 16:19 orientation 64:17 **oriented** 64:15 **original** 18:25 24:19 **outline** 60:9 out-of-the-box 49:7 outreach 28:13 **outside** 90:20 **overall** 47:13 64:3 77:1 overblown 30:23 **overly** 27:8 overruns 88:4 overseas 82:20

oversee 25:11 53:6, 7 oversight 25:22 overwhelm 90:24 < P > pace 4:9, 23 5:18 32:10 43:18 **Pacific** 26:7, 13, 24 67:1, 17 90:9 91:4 pacing 3:18, 20 64:17 66:16 67:20 70:16 79:20, 21 90:13 91:18 98:24 pages 78:2, 5 **paid** 85:2 painfully 38:16 **parallel** 48:25 paramount 61:12 pararescue 62:14 parcel 25:7 parking 60:5 part 9:11 19:2, 5 25:7 26:20 27:15, 16 28:25 29:23 30:5 33:10 36:9 43:22 46:22 47:25 49:10 51:22 62:13 69:23 79:6 81:6 92:15 97:25 participate 33:16 particular 19:12 39:20 58:23 73:6 75:9 94:1 particularly 4:15 11:3 32:11

33:13 36:4 62:1 71:21 73:19 75:21 97:13 partner 83:15, 21 partners 5:5 82:12, 22 85:21 partnerships 74:6 **parts** 15:3 37:19, 24 64:24 80:25 91:16 party 62:15 93:11 passage 3:11 **passed** 29:15 **path** 10:14 26:23 45:2 pathfinders 64:8 pathfinding 62:22 **pause** 60:23 **pave** 48:8 **paving** 64:14 pay 11:17 32:2 35:9 peer 14:22 penetrate 48:19 Pentagon 52:10 **PEO** 25:3 **people** 2:12 29:23, 24 30:5, 11, 24 31:1, 4 41:16 51:10 52:22 77:22 78:12 80:1 85:5 94:18 97:19, 25 **percent** 4:8, 10 14:17 15:14, 20 16:3 41:16 44:16, 19 45:10, 11, 12, 13, 14

60:15 76:11, 15, 22 94:7, 10 percentage 45:7 perform 15:9 performance 9:9 20:3. 9 performed 31:20 performing 24:19 28:14 permanent 75:12 permissive 44:3 permitted 56:18 persistent 9:19 11:23 personally 16:11 personnel 6:11 16:12 20:14 29:14, 22 31:3 42:13 55:22 56:24 57:5, 11 74:4 perspective 57:15 82:18 **Peters** 1:15 45:17, 18 47:16, 22 49:5 50:7, 8, 11 phases 60:7, 17 phenomenal 69:4 philosophy 38:5 **phone** 72:5 physical 11:12 96:1 pick 69:4 **picked** 81:11 pilot 43:10, 16 48:3, 6, 12, 13 **pilots** 31:18 43:19 50:17 57:5 84:12, 19,

25 95:18
<b>pivotal</b> 25:17
place 22:10
26: <i>19</i> 47: <i>7</i>
64:25 78:18, 20
80:15 95:8 96:7,
22 98:12
<b>plan</b> 40: <i>17</i> 42: <i>2</i>
47:13 63:23
68:13 78:1 83:5,
6 98:15, 21
<b>plane</b> 88:14
91:5 92:3
<b>planes</b> 88: <i>13</i> , <i>23</i>
90:22
<b>plans</b> 4:13 6:12
26:12 69:13
71:13 77:17
78:24 98: <i>10</i>
platform 34:23,
25 35:5 70:5, 8
platforms 32:1
33:17, 25 34:16
48:9 50:4 54:20
55:5 63:20
70:20 79:10, 13
<b>play</b> 46: <i>3</i> 49: <i>4</i>
61:25
playing 39:7
68:19
<b>plays</b> 88:11
<b>please</b> 8:2 13:2
21:21 23:15
26:2 30:16
31: <i>13</i> 35: <i>16</i>
40:13 45:17
50:9 55:13 59:1
63:8 65:21
71:23 77:9 82:2
87:1 92:22

<b>pleased</b> 93:23
<b>plug</b> 95:16
plus 59:16
<b>point</b> 24:23
29:11 30:1
36:16 46:17
47: <i>14</i> 51:9
76:16 85:9, 20
89:24 92:7 99:3
<b>pointed</b> 53:16
pointedly 77:23
<b>poking</b> 91:3
policies 56:16
<b>policy</b> 37:12
46:24
political 51:8
portfolio 49:1
<b>portion</b> 99:3, 7
<b>pose</b> 56:12, 20
58:5
<b>posed</b> 74:23
position 6:20
38:25 53:2 54:6
57:16 58:11
84:7 91:25
positions 41:15
52:10, 12, 13
53:5 83:24
<b>positive</b> 24: <i>17</i>
possibility 2:6
47: <i>11</i> , <i>14</i> 49: <i>11</i>
90:18
possible 2:5
15: <i>16</i> 24: <i>7</i>
33:12
<b>possibly</b> 65:21
88: <i>3</i>
<b>Post</b> 55:18
<b>POSTURE</b> 1: <i>1</i>
14:6 16:17 26:6

potential 6:5 46:12 48:3 58:8,
18 67:7 <b>potentially</b> 9:13 37:20 46:20
56:20, 21, 22 58:18 power 6:8, 24
7:4 14:9 23:14 62:3, 9, 18 63:16,
21, 24 64:1, 14 65:3 66:2 68:3 72:17 78:8
80:12, 19
powered 61:10
<b>powers</b> 36:18 37:8
<b>practice</b> 84:18 <b>PRC</b> 5:19 9:19 11:5 39:19 70:23
precious 10:6
precision 15:23
preclude 46:10
47:19, 22
predecessor
57:21
preeminent 16:19
preferred 10:24
<b>premise</b> 20: <i>15</i>
preparation
96:10
<b>prepare</b> 66:2 93:21
prepared 3:25
5:15 7:16 12:11
17:3 34:23
66:12
prepares 14:7

**Present** 1:14 14:12 36:12 presentation 23:24 presenting 95:5 **presents** 36:2, 5 preserve 4:14, *18* 10:*4* 12:*3* 16:7, 21 89:21 preserving 15:10 90:12 President 93:6 94:6 President's 40:15 presiding 1:13, 14 **presume** 20:*12* **pretty** 24:23 39:13, 16 42:21 51:8 53:13 85:16 89:5 93:1 94:18 **prevail** 5:15 9:23 prevailing 10:18 preventing 36:15 previous 4:13 10:4 23:18 58:9 97:4 **price** 18:10 35:9 **prices** 38:24 **pride** 9:9 primarily 5:1 **prime** 18:*10* 20:5 38:6 **print** 37:19 **printer** 37:23, 24 priorities 3:14 prioritization 24:9 prioritizes 5:7

prioritizing
11:11 27:11
priority 4:24
5:4, 14, 25 10:8,
18 79:2, 3, 4
85:24 96:9
<b>private</b> 57:9, 13
58:14 74:6
84:20
pro-American
85: <i>15</i>
probably 24:2
33:16 35:3 52:5
53:10 80:24
95:17
problem 19:2
36:2 39:18 55:2
91:6 92:15
problematic 48:5
proceeding 2:7
73:2 81:20, 23
proceedings 2:5
<b>process</b> 10:12
35:19 40:7
51:17, 22 52:15
56:5 60:7, 16
65:17 75:5
83:23 84:1
97:25
processes 9:22
<b>procure</b> 72:21
procurement
4:19 38:5
<b>production</b> 18:9
24:22
professional
33:23 82:23
83:16, 17
professionalism
9:13

proficiency 43:17 proficient 82:22 program 5:9, 22 10:13 18:17, 18 19:17, 20 23:10 24:15, 22 25:5, 22, 25 35:2, 12, 19 38:3, 7, 15, 23 39:1 40:6, 16 41:4 43:7 48:3, 6, 12, 13, 25 79:7 81:12 94:24 programmatic 46:22 programs 4:23 5:3 6:18 22:13, 19 23:9 24:18 38:10 53:6 76:6 progress 11:16 15:2 18:5 19:10 24:24 36:24 prohibited 85:7 prohibiting 71:20 **project** 7:3 60:4, *15* 74:7 projection 63:16, 21 64:1, 14 65:3 projects 60:1 77:3 proliferated 15:24 promotions 53:14 **proper** 60:23 **property** 38:12, 22 proposed 11:9 proposes 10:22 proposition 14:19 **protect** 14:14, 25 33:6 57:16 72:11

**proud** 7:8 9:5 31:21 **prove** 69:8 provide 3:23 12:5 14:24 20:22 23:5 33:4 34:8 39:9 41:20 44:2 63:22 65:1 66:20 72:9, 16 **provided** 72:21 **provides** 15:16 36:9, 11 44:6 64:1 providing 95:24 **Proving** 67:*3* **provision** 28:1, 8 58:11 prowess 12:3 **proxies** 9:15 public 74:6 83:10 publicly 4:10 94:16 **puck** 89:20 purchase 19:23, 24 34:24 purchasing 6:24 **pure** 90:7 **purpose** 6:14 14:9, 16 42:9 pursuant 1:11 **pursue** 10:14 67:22 pursuing 28:7 **pushed** 55:5 87:20 **put** 20:16 29:17 42:24 43:9 46:22 49:1 57:21 60:15 75:25 76:24

77:23 90:17 93:1 96:25 **Putin** 93:21 **puts** 93:8 94:17 **putting** 43:1 91:24 < Q > quality 6:4 11:15 76:1 89:25 97:19 98:19, 23 quantities 10:24 90:8 **quantity** 39:24 89:25 90:1, 2 quarter 65:8 question 23:18 26:17, 22 35:24 40:4, 10 42:24 47:19 48:10 50:11 54:8 80:9 93:5, 6 96:18 questions 7:15 12:10 17:2 30:13 41:9 59:7 82:15 94:4 **Ouick** 6:16 31:10 54:8, 14 quickly 24:7 31:23 32:21 33:11 40:2 54:12 81:9 91:19 **quite** 18:21 44:12 45:12 66:15 87:21

94:24

**quote** 69:13

< R > **R&D** 23:9 race 3:17 54:2 radar 69:4, 5 91:11, 12 radically 21:1 raise 57:22 58:8 raised 58:4 84:15, 18 raising 57:3 **Raldy** 82:8 range 55:3 68:4, 6 70:9, 10 95:18 ranges 21:9 66:9, 14, 20 67:1 **rapid** 22:18 39:22 72:9 rate 24:22 39:22 94:25 rates 53:15 **reach** 35:3 reached 28:20 reaches 5:13 reaching 18:4 27:18 45:11 55:4 reaction 19:7 **read** 78:2 readiness 9:21 10:2 11:9 12:4 16:7 19:18 61:15 66:22 74:4 76:2 78:9, 14 89:15, 22, 23 **readv** 7:9 16:9 22:1 66:19 81:7 86:21 93:2 **reaffirm** 46:15 real 3:12 53:23 54:6 81:9 86:17, 19 92:13

realistic 21:11 66:13, 15, 21 67:10 68:6 realities 7:12 realize 19:8 **really** 18:13 19:8 24:7 25:7 36:22 41:1 44:5, 12 46:3 47:20 48:17 50:15, 16, 22 57:22 59:6 62:5, 7, 9, 17, 22, 25 67:17, 20 72:4, 5 73:24 74:3 75:10, 13 76:7 87:20, 22, 24 89:5 90:8 91:7, 14, 21 92:19 97:11 **Reaper** 48:8 **reason** 16:11 27:16 42:6 46:21 reasonable 38:24 42:16 75:6 **reasons** 27:20 reassurance 39:9 **rebuild** 26:8 rebuilding 42:20 recapitalization 10:10 25:20 recapitalizing 61:11 **RECEIVE** 1:1 46:2 56:2 **received** 71:19 receiving 45:22 71:9 recess 99:3 reclamation

26:12 recognition 24:4 recognizable 24:2 recognize 2:17 35:16 68:9 recognizes 3:25 recognizing 23:19 27:17 recollect 99:6 reconnaissance 34:3 62:12, 16 63:4 77:20 reconvene 99:4 record 2:13, 15 30:14 35:2, 12 40:4 42:23 46:15 60:14 61:5 **records** 44:23 **recover** 44:17 recovered 3:13 **recovery** 42:14 recruit 6:3 16:14 recruiters 44:24 recruiting 30:10 41:12 44:9, 11, 22, 24 53:25 55:17 recruitment 57:4 recused 35:22 **red** 86:20 reduce 4:22 reduced 4:19 **reducing** 19:*11* 37:9 reduction 76:11 **Reed** 1:12, 14 2:1, 3, 16 3:4 8:1 9:3 13:1 14:3 18:1, 20

19:4 20:11, 21 21:20 23:18 26:1 30:15, 19 31:11 35:15 40:12 45:16 50:8 55:12 58:25 63:7 68:7, 9 71:24 77:8 86:25 92:21 99:2 reengineer 81:14 reengineering 81:20 reenter 20:8 reestablished 23:21 reference 80:11 referred 48:2 90:16 **referring** 19:*18* **reflects** 4:7 9:25 16:6 Refresh 44:7 99:6 refueling 45:23 46:3 49:6 59:10, 14 60:22 61:11 80:25 **regard** 33:25 34:22 regarding 21:24 28:3 54:18 68:12 regardless 25:17 **regions** 68:20 73:6 reinforces 36:22 rejected 58:6 related 5:21 23:13 53:9

relationships
83:1
relatively 52:14
<b>relay</b> 50:1, 6
released 28:6
77:18
relevance 22:22
relevant 62:10
<b>reliable</b> 10: <i>14</i>
<b>relied</b> 36:1
rely 22:16
remain 10:7
11:1 46:6
remaining 22:8
91: <i>16</i>
remains 4:25
10:10 16:19
75:15
remember 52:17
97:2
remind 2:12
<b>Reno</b> 72:9, 23
73:2
re-optimization
23:17 25:8
77:17 78:1, 6
reoptimize 63:23
re-optimize 6:8
re-optimizing
23: <i>13</i>
reorienting 64:8
repair 60:4
repeatedly 3:15
replace 18:3, 6
46:25 47:3, 5
59:18 91:5
replacement
46:7 50:24
81:12
replacing 61:17
Teplacing 01.17

<b>replicate</b> 66: <i>10</i> 96: <i>12</i>
report 53:4, 12,
22 71: <i>10</i> , <i>11</i>
reports 53:9
57:24 86:14
represent 9:5
represents 95:15
REQUEST 1:3
3:8 4:2, <i>14</i> 5:6,
23 6:2 7:12, 14
9:25 10:5 15:7
22:20, 23 44:1, 2
requested 6:14
22:5, 24
,
<b>requesting</b> 4: <i>3</i> 34: <i>1</i>
requests 58:7 95:13
require 2:8
9:20 56:1 58:13
66:22
required 11:5
19: <i>15</i> 27: <i>14</i> 43:24 61:2 <i>1</i>
67:6 71:5, 10
requirement
76:18
requirements
19:2 27:11
74:20 79:14
requires 15:12
21:4, 5 26:5
48:17 84:4
requiring 57:11
rescue 63:19
research 4:21
reserve 36:10
44:15
reserves 31:1, 2
45: <i>13</i>

resilience 34:18
91: <i>19</i>
resiliency 11:7
15:2 <i>1</i>
resilient 5:25
6:20 21:15 33:3
39: <i>13</i> 49: <i>23</i>
55:10 <b>resolution</b> 97:6
resources 6:23
22:21 23:10
27:3
respect 47:20
70:20 76:8
respectful 82:23
<b>respond</b> 16:25
23:22 30:18
36:7 40:9 73:8
82:15
responding
31:23 33:16
response 40:10
Responsibility
4:3 10:25 14:13
94:2 95:1
responsible 15:5,
25 53:8, <i>12</i>
responsive 36:5,
7
responsiveness
20:20
resting 44:20
restoration 76:24
restore 42:24
restrain 82:25
restricted 67:4
restrictions 56:16
<b>result</b> 72:18
78:19

**results** 19:21 28:6, 11, 22 53:13 **retain** 6:3 16:15 41:17, 22 98:19 retaining 34:16 90:12 retardant 72:17 retention 30:11 41:13 50:18 **retire** 61:16 retired 55:17, 19, 24 56:1 57:4, 11, 17 58:6, 17 82:16, 19, 25 83:14, 20 retirement 69:15 83:5 retiring 46:7 91:15 **return** 86:6 returned 7:6 returns 14:21 **REVIEW** 1:2 5:11, 13 25:18 71:7 **RFI** 77:18 **RHODE** 2:2 **rid** 54:5 **right** 18:9 24:8 25:11, 12, 21 29:10 33:17, 20, 25 34:12, 22 38:17 39:10 45:2, 8, 11 47:15, 22 48:5, 19 49:22 50:7 52:17 56:23 64:21 65:5 71:13 81:4 88:2, 10, 23 89:1, 5, 19

92:2 93:18
94:19 97:10
rights 38:22, 24
ripe 48:23
risk 14:22 23:3
24:18 32:7
34:13, 14, 16
39:25 48:19
55:2 <i>1</i> 95:2, <i>4</i>
risks 56:12
<b>river</b> 86:7
roadmap 71:5
<b>robust</b> 39:20
<b>role</b> 38:19 46:4
61:25 62:2
68:24 75:19
88:12
<b>roles</b> 68:19
<b>Room</b> 1:12 54:1
Rosecrans 51:5,
9, 12, 18
<b>Rosen</b> 1:16
71:23, 24 73:4,
13 74:11 75:7
77:6, 8
rotation 22:1
round 51:8, 14
<b>Rounds</b> 1:16
30:16 31:12, 14
33:14 34:11, 21
35:11, 14, 15
row 93:7, 9
<b>RPC</b> 78:4
<b>RQ-4</b> 34:17
rules 56:24
rumors 81:11
runs 92:5
runway 26:14
27:7 59:15, 22
60:4, 5

<b>Russia</b> 36:18 37:5
< <b>S</b> >
sacrifices 75:10,
11
<b>safe</b> 5:7 10:14
43:20
<b>safety</b> 72:18
<b>Saint</b> 51:6
sales 85:25
Saltzman 3:5
13: <i>1</i> 14: <i>1</i> , <i>3</i>
17: <i>3</i> 18: <i>1</i> 20:2 <i>1</i> ,
25 22:25 23:8,
<i>14</i> , <i>16</i> 29:2, 9
30:9 31:10, 15
32:22 39:4, 11
40:15, 19 41:8,
14 55:11 63:10
72:1 87:3
San 74:7
satellite 15:22
39:15
satisfactory 20:6
44:3
Saturday 88:19
<b>Saudi</b> 55:20
83:2 85:11
saw 11:21 85:13
90:3
<b>saying</b> 24:17
89:7, 17 94:9, 19
95:23
says 93:15
scale 22:22 36:7
37:7
<b>scaling</b> 39:23
scenarios 68:25
69:20

schedule 5:10 65:10 86:14, 24 scheduling 24:20 scheme 26:21 27:13 **Schmitt** 1:18 50:9, 10, 25 51:2, 5 52:7, 19 53:2, 18, 21 54:17 55:12 **school** 53:*15* science 24:5 **scope** 4:23 **Scott** 1:17 **search** 63:19 seat 89:17 second 5:3 84:17 87:25 Secondly 51:5 Secretariat 78:15 Secretaries 74:2 Secretary 2:17 3:1, 3 6:18 7:16 8:1 11:20 18:2, 7, 23 21:2 24:13, 16 26:17 27:5 28:1, 2, 15, 23 30:3, 17, 21 31:11, 14, 23 32:8 35:18, 22 37:2, 13 38:2 39:6, 19 41:23 42:3, 22 45:20 46:6, 17, 18 47:19 48:2 50:10, 23 51:1, 3 52:1, 3, 7, 8, 11, 14, 25 53:6, 19 54:14, 18 56:3 59:5, 9, 19, 24 60:13, 19, 25

61:4, 9, 16 63:10, 11 64:21 65:14, 18, 23, 25 67:9, 13, 24 68:8, 11 71:4, 6, 7, 13 72:1, 4, 20 73:1, *10, 25* 74:5 75:3 77:16 78:7, 24 79:4 80:11 81:19, 23 82:3 84:5, 8, 10 85:18, 23 86:3, 11, 23 87:3, 9, 15, 21, 24 91:6, 11 92:20, 25 93:23 94:23 97:4, 15, 24 98:2, 3, 10 section 69:6 71:12 77:13 **secure** 3:11 5:8 7:13 10:14 36:9 63:13 72:22 88:24 **secured** 58:11 securing 46:7 security 14:10 43:15 55:21 56:13, 21 57:17 58:16 see 19:21 24:3 25:22 29:3 35:7 45:19 50:17 51:15 60:10, 11 67:17 82:9 85:17 86:12 87:23 94:21 96:8 **seeing** 93:21 seeking 10:3 seeks 4:14

seen 7:10 **segments** 19:19 selection 53:15 73:2 self-defeating 15:20 Selfridge 45:21 46:8, 11, 15, 18 47:4 **selling** 56:25 **Senate** 1:7, 12 58:12 **SENATOR** 2:1, 13, 14, 16 3:4 9:3 14:3 20:25 21:21, 22 23:12, 18 24:12, 25 25:6, 23 26:1, 3, 16, 22 27:15, 21, 25 30:3, 15, 16, 18 31:12, 14 33:14 34:2, 11, 14, 21 35:11, 14, *15*, *16*, *17* 36:25 37:11, 14 39:4, 11 40:3, 12, 14 41:5, 12, 23 42:18, 25 43:4, 19 44:9 45:3, 5, 7, 9, 15, 16, 17, 18 46:18 47:16, 22 48:14 49:5, 16 50:7, 8, 10, 11, 25 51:2, 4, 5, 16 52:7, 15, 19 53:2, 18, 21, 25 54:17 55:12, 14, 23, 24 56:14, 17, 23 57:20 58:3, 25 59:2, 24 60:9, 19 61:4, 24 62:4

63:2, 7, 9, 18 64:5, 21 65:4, 12, 15, 18, 20, 24 67:13, 23 68:1, 7, 9, 10 70:25 71:8, 9, 17, 23, 24 73:1, 4, 13, 15 74:11 75:3, 7, 24 76:16 77:6, 8, 10 78:23, 25 79:22 81:9, 21, 22, 24 82:1, 3, 7, 15 83:11, 22 84:7, 8, 11, 14, 24 85:19, 20, 24 86:16, 25 87:2, 15, 17, 24 88:8 89:10 90:14 91:6, 10 92:1, 21, 23 93:23 94:3, 24 95:6, 22 96:9, 18 97:22 98:1, 3, 4, 14, 15, 25 Senators 1:14 **senior** 53:15 seniority 25:14 **sense** 20:23 22:4 89:9 **sensor** 15:15 68:5 sent 52:8 77:18 **Sentinel** 5:9 10:13 25:5 35:19, 23 separate 79:7 series 23:8 **serious** 37:10 41:2 58:5 83:11 seriously 71:20 72:23 **serve** 6:5 29:8

31:6, 7 57:22 served 18:4 73:6 service 14:9 16:25 31:16 40:23 56:3, 8 58:17, 22 59:3 63:5 72:2 74:1 77:11 85:5 Services 1:8 16:7 22:14 33:4 52:11 56:25 69:12 75:16 82:24 **serving** 7:8 9:6 83:1 session 2:8, 10 3:22 77:12 **set** 60:23 sets 22:17 78:13 **setting** 24:14 32:6 39:5, 9 **Seymour** 68:14 69:8 71:*1* **share** 21:23 24:14 31:17 33:24 sheer 90:21, 23 **shifted** 23:19 **ship** 37:23 **shock** 19:7 **shoot** 69:9 **short** 32:1 75:17 shortages 73:14, 23 74:3 **shortly** 18:17 53:11 71:8 **show** 53:4 **showed** 53:12 87:7 **showing** 49:21

**Shrinking** 93:*16* **shrinks** 93:19 side 9:24 29:21 32:22 33:7 44:13, 15 77:1, 2 90:18 sides 20:6 significant 5:18 6:13 9:16 11:16 19:5 53:13 93:24 95:10, 15 **signing** 57:10 similar 23:1 26:13 32:17 33:6 simple 85:16 **simulate** 21:*10* 67:1 simulators 21:9 simultaneous 9:18 single 53:24 68:20 Sioux 59:10, 23 sir 24:12 35:11 40:19 48:10 69:21 71:4, 22 92:20 97:15 site 65:6 **sitting** 71:6 87:7 situation 39:8 59:22 97:25 situational 34:5 49:17 six 3:12 size 36:10 73:24 **skate** 89:20 **skill** 9:13 69:25 70:1 78:13 **skillful** 83:16, 17

skills 82:9, 20 85:2 sky 88:17, 23 **slightly** 82:17 **slip** 18:9 **slipping** 86:14 **slow** 69:5 72:15 **slows** 16:8 **small** 29:16 52:14 87:12 **smaller** 36:10 **Smith** 86:*1* **smooth** 61:19 **SOF** 61:25 **soil** 9:13 **solid** 23:9 39:13 solution 30:2 73:24 **somebody** 81:*18* **soon** 65:21 71:2 sophisticated 18:21 sophistication 55:4 **sorry** 94:6 **sort** 20:23 27:1 50:11 62:17 64:19 77:15 sortie 11:7 **sound** 86:6 **South** 84:21 **Space** 3:24 4:6, 21, 23 5:2 7:3 14:2, 6, 7, 9, 14, 15, 16, 17, 18, 20, 22 15:2, 3, 5, 7, 10, 13, 15, 18, 19 16:1, 2, 4, 6, 7, 10, 12, 14, 16, 18, 19, *25* 20:22 21:*1*, 17, 18 22:13, 16,

17, 21, 23 23:1, 2, 6, 15 24:3 28:4, 5, 9, 14, 25 29:4, 5, 12, 13, 14, 16, 22 30:1, 4 31:3, 4 32:10, 11, 21, 23, 24, 25 33:3, 10, 12, 13, 18, 19 34:9 39:6, 7, 10, 20, 24 40:16 54:9, 19, 25 55:10 56:7 67:19 79:10, 13, 24, 25 80:1, 6 spaceborne 34:19 spacecraft 40:23 **spaces** 11:25 **speak** 80:8 speaking 32:6 61:18 81:10 special 42:9 62:2, 6, 11, 12, 13 63:3 64:2, 6 **specific** 47:18 78:15, 22, 25 specifically 67:14 75:1 76:5, *16* 77:20 80:11, 23 83:13 89:10 **spectrum** 62:20 67:5 74:22 **speed** 22:22 62:24 **spending** 93:*12* **spirit** 2:12 **spoke** 27:5, 9 **spoken** 68:11 spreading 81:18 Squadron 69:7 Squadrons 31:19

stability 7:2 30:24 31:5 **STAFF** 9:2 75:19 76:6, 12, 15 87:5 97:4 **staffing** 76:8, 10, 14 stage 24:19 stages 49:14 60:16 91:24 **stand** 63:16 65:3 80:7 standard 62:24 standards 23:22 star 25:2, 14 **Start** 6:16 50:3 56:8 90:15, 20, 21 91:3 95:22 **started** 23:17 53:10 59:25 **starting** 50:17 63:22 89:11 starts 49:23 **State** 56:4 68:*14* 84:*5* 95:*9* **stated** 23:*1* 46:9 **STATEMENT** 2:1, 13, 15 3:1 7:16 9:1 12:11 14:1 17:3 22:25 47:8 89:24 **States** 5:5 6:23 10:9 21:24 28:16 30:6, 7 36:3, 18 37:5 59:12 stating 9:8 **station** 75:12 **status** 37:25 40:8 statutory 61:22

stay 4:12 61:22 74:12 86:23 87:25 92:17 stavs 86:5 steadily 3:21 **step** 16:22 49:16, 25 steps 49:14 82:25 84:23 **stick** 65:2 sticker 19:7 stop 84:14 **stopgap** 84:4, 6 **story** 87:23 strategic 5:4 7:2 9:14, 15, 18 10:8 15:17 16:2*1* 36:*1* 46:*4* 51:22 61:11, 25 62:15 64:22 95:8 96:21 97:3, 12 Strategy 3:9 4:24 5:4, 14, 25 10:9, 17 15:8 26:5 64:4, 22 90:6 strengthen 56:24 strictly 2:10 85:6 Strike 68:14, 25 69:12, 20 71:21 strong 4:1 26:24 85:22 strongest 55:15 strongly 29:10 49:19 73:5 structure 29:25 32:12 64:16, 19 77:19 structures 9:22

study 28:3, 6, 19, 21, 23 40:20 48:4, 23 **stuff** 70:*3* **subject** 37:19 56:15 submarine 36:9 submission 3:7 **submit** 2:12, 15 30:13 40:4 subsistence 11:18 substitute 31:25 **succeed** 66:11 Success 12:7 14:11 15:3 27:24 successful 70:5, 16 successfully 9:11 successor 89:17 successors 89:16 successor's 89:17 sufficiently 66:10 suggestion 50:25 53:22 **Sullivan** 1:*17* 92:22, 23 94:3 95:6 96:9, 18 97:22 98:1, 4, 14, 25 **Sunday** 69:9 superiority 3:18 14:16, 22 15:2 16:4 66:4, 5 **supply** 19:25 37:20 75:17 **support** 3:10 4:1 6:15 9:7 10:17 11:11, 16 12:2, 6, 9 14:5 15:7 16:12, 20

25:16 27:25 48:13 64:9, 23 87:5 98:17 supported 4:17 29:21 supporting 10:12 26:6 78:18 82:16 supportive 54:9 **supports** 3:9 5:1 supposed 82:8 **Supreme** 69:11 sure 24:6 25:23 28:15 38:17 41:19, 22 43:19 58:2 61:7, 19 65:11 76:2 84:25 85:21 86:5, 20 91:10 92:17 97:8 surprise 15:4, 12 55:16 surveillance 34:3 survivability 27:23 48:19 survivable 36:11 55:8 79:12 survive 33:4 48:20 90:1, 10 91:20 **suspect** 33:15 sustain 43:9 79:18 sustainable 19:15 sustained 4:19 sustaining 78:10 sustainment 11:10 19:6 20:10, 12, 13 43:6

**SVC-217** 2:10 99:4 **swarm** 91:2 **sword** 86:21 synthetic 43:12, 13 95:25 96:6, 16 **System** 11:2, 10 19:12, 25 20:9 38:5 39:21 43:6 53:14 70:2, 4, 21 systems 7:3 11:3 18:24 19:24 22:16 23:2, 3, 4, 6 24:8 25:16 33:6 37:16 39:18 48:7 66:6, 8 70:4, 6 74:18, 19, 23 < T > table 88:2 **tactical** 15:17 62:15 tactics 57:7 62:13 tail 37:24 take 25:20 31:17 38:10 51:3 53:16 54:6 62:23 68:8 71:13 72:6 78:20 81:3 82:20 96:4

talk 39:4 64:3 81:7 95:20 **talked** 46:5 48:3 53:25 55:11 79:9 80:1 **talking** 35:18 73:15 84:11, 15 85:21 88:15 89:1 90:15, 21 talks 93:6 tanker 49:7, 22 61:20 **tankers** 21:25 45:23 46:3 59:11 96:20, 25 97:7, 21, 23 tape 86:20 target 6:22 33:7 40:25 58:21 70:10, 11 80:4, 5 targeting 21:18 27:23 39:21 **targets** 39:25 task 20:22 65:6 taxpayers 85:2 team 12:7 62:12, 13 teaming 49:4 teams 59:4 62:14 64:9 **tech** 16:10 44:7 technical 57:6 technological 3:17 35:6 technology 24:5 90:23 tell 19:10 50:20 87:9 89:7, 24 94:6 **telling** 92:16

taken 59:20

takes 26:25

71:19 88:23

talent 16:15

61:7

<b>tempo</b> 10:21
ten 21:2
<b>tension</b> 90:11
term 22:17 32:1
33:19 39:5
63:13 88:5
terms 21:14
30:10 32:12
39:17 41:16
78:13 86:3 94:8
$\begin{vmatrix} 70.12 & 00.2 \\ 20 \end{vmatrix}$
terrain 67:4
72:16
<b>Test</b> 95:14, 25
96:7
testified 3:15
30:9
testify 3:6 14:5
_
<b>testifying</b> 26: <i>4</i> 72:2
TESTIMONY
1:1 21:21 31:17
35:18 71:19
92:24 99:3
testing 24:21
66:24 67:8, 11
95:24
th 77:19
<b>Thank</b> 2:14, 16
3:3, 5 7:14, 15
8:1 9:6 12:8, 9
13: <i>1</i> 14: <i>4</i> 16: <i>11</i>
15 18:1 19:4, 13
20:21, 25 21:20,
21, 22 23:16
24:12, 25 25:6,
25 26:1, 3, 16
27:25 30:14, 15,
21 31:11, 14, 15,
16 34:21 35:14,
15, 17 37:15
- ,

39:11 40:3, 10, 12 41:23 42:25 45:15, 16, 18 46:18 48:14 50:7, 8, 10 55:12, 14 58:23, 25 59:2, 24 60:19 61:4, 24 62:4 63:2, 6, 7, 9, 10, 12 64:5, 21 65:24 68:6, 7, 10, 22 70:25 71:18, 22, 23, 24, 25 73:4, 13 74:11 75:7, 24 77:6, 7, 8, 10 81:22, 24 82:1, 4 85:20 86:25 87:2, 6, 9, 16 92:19, 20, 21,
23, 24 98:25
99:2
thanks 11:16
theater 27:24
43:25 70:12
97:13
theaters 42:11
<b>theory</b> 15: <i>3</i>
<b>thing</b> 19:23
25:9 36:21
66:18 80:10
82:19 83:7, 14
86:18 87:12
<b>things</b> 19:16
20:7 24:17 25:7
32:18 33:8
43:14 44:23
53:13 62:6, 24
64:6, 14 70:15
75:25 78:12
81:14 86:2
87:20
· · · · ·

think	19:6, 9,	20
	28:10	
	30:23	
	34:7, 9	
	36:17	
	39: <i>12</i> 40	<b>1.2</b>
	42:15	J.Z
	16, 18	
44.14, 45:24		
	50:23	
49.10	30:23 25 52:1	0
52.10,	25 53:1 57:20 3	9
	57:20, 2	
	60:1 6	
	:18 65:7	
	68:3 7:	<i>5:1</i> ,
	:8 75:5	
76:5		1 /
	83:4, 7,	14,
24 84		<b>.</b>
	88:5 89:	
	93:13, 1	
	:18, 20, 2	
	97:21 9	8: <i>3</i> ,
12		
thinkir	<b>ng</b> 49:8	
	43:10	
third		
_	it 52:25	
though	nts 40:5	
thousa	<b>nd</b> 31: <i>1</i>	
thousa	nds 22:	7
41:15		
threat	3:20	
16:23	21:10	
22:2, 1	11 32:5	
42:7, 1	17 43:18	}
	67:18	
	91: <i>18</i>	
96: <i>3</i>		
threate	en 33:7	
	ens 56:2	0

threats 9:20
16:18 24:10
42:12 69:6
three 15:3 37:7
60:1 80:14
thwarted 9:12
tied 37:24
tightened 56:5
time 3:13, 15, 19,
23 6:22 7:5
9:16, 23 10:20
20:12 23:24
24:9, 23 29:23
30:5 33:11 34:1
37:6 38:25 43:2
46:5, 10, 20
47:15, 24 52:12
53:2, 4 54:7
65:14 66:19
67:19 74:9
78: <i>11</i> , <i>20</i> 81: <i>8</i>
82:13 83:6 86:6,
10, 12 87:13
88:11 89:21
92:14, 19 95:2
96:19
timeframe 60:10
timeline 2:11
39: <i>13</i> 40: <i>1</i> 65: <i>3</i>
97:10
timely 3:11 7:13
times 6:25
15:13 75:25
89:5 98:5
timing 6:21
15:23
<b>Tinian</b> 26:9, 13,
18 27:5
Tinker 88:19
today 3:6, 22
9:5 10:2 12:4

26:4 30:9 31:16 38:18 44:6 45:19 50:20 54:4 59:4 63:11, 17 72:2 80:5 82:4 89:16 90:12 92:24 today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17, 20, 21, 25 67:6, 8,	
38:18 44:6 45:19 50:20 54:4 59:4 63:11, 17 72:2 80:5 82:4 89:16 90:12 92:24 today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 tracking 15:22 trade 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	26.4 30.9 31.16
45:19 50:20 54:4 59:4 63:11, 17 72:2 80:5 82:4 89:16 90:12 92:24 today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
54:4 59:4 63:11, 17 72:2 80:5 82:4 89:16 90:12 92:24 today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
17 72:2 80:5 82:4 89:16 90:12 92:24 today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	l .
82:4 89:16 90:12 92:24 today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
today's 2:4 9:21 told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
told 69:1, 11 82:8 tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
tomorrow 12:5 44:7 54:7 tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	_
tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
tools 23:25 top 85:24 96:9 topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	tomorrow 12:5
topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	tools 23:25
topic 84:9, 17 topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
topics 84:16 95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
95:7 total 9:5 38:5 41:25 totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	topics 84:16
totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	
totally 39:10 90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	total 9:5 38:5
90:14 tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	41:25
tough 93:5, 6 track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	<b>totally</b> 39:10
track 65:5, 7 70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	90:14
70:11 tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	tough 93:5, 6
tracking 15:22 trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	track 65:5, 7
trade 23:1 52:4 tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	70:11
tradeoffs 10:1 traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	tracking 15:22
traditional 54:12 train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	trade 23:1 52:4
train 23:20, 25 64:9 66:16 82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	tradeoffs 10:1
64:9 66:16 82:12, 21 <b>trained</b> 16:9 20:22 51:12 55:22 84:19 85:1 <b>training</b> 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	traditional 54:12
82:12, 21 trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	train 23:20, 25
trained 16:9 20:22 51:12 55:22 84:19 85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	64:9 66:16
20:22 51:12 55:22 84:19 85:1 <b>training</b> 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	82:12, 21
55:22 84:19 85:1 <b>training</b> 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	trained 16:9
85:1 training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	20:22 51:12
training 15:8 21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	55:22 84:19
21:5, 7, 8, 11 23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	85:1
23:21 43:12 53:7 64:12, 13 66:9, 13, 14, 17,	_
53:7 64:12, 13 66:9, 13, 14, 17,	21:5, 7, 8, 11
66:9, 13, 14, 17,	23:21 43:12
	53:7 64:12, 13
20, 21, 25 67:6, 8,	l .
	20, 21, 25 67:6, 8,

10, 11 68:6
85:25 95: <i>14</i> , <i>15</i> ,
18, 19, 24
<b>trains</b> 51:9
transfer 28:3
transferring
28:4 30:4, 5
transformational
33:9
transforming
21:4
transition 20:2
30:25 34:7, 9, 13
40:5, 7 58:1
61:14, 19 62:8
92:9
transitioning
54:19 60:20
transitions 34:15
transparency
65:16
<b>transport</b> 39: <i>15</i>
<b>treat</b> 58: <i>3</i>
tremendous
14:19 46:4 62:5
<b>triad</b> 10:15
25:13, 19 35:21
36:1, 5, 14
triggered 10:12
<b>trillion</b> 93:14
<b>trip</b> 7:6 11:20
triumvirate
36:14
true 54:22 94:11
truly 36:24
trust 16:24
truth 54:1
try 18:12 43:8
47:1, 3 53:16
70:18 91:13

92:15 97:20
99:4
<b>trying</b> 19:18
34:15 43:5, 16
49:3 61:19
79:17 89:6, 15,
20 90:19 95:2
97:18
Tuberville 1:17
40:13, 14 41:5,
12, 23 42:18, 25
43:19 44:9 45:3,
5, 7, 9, 15, 16
53:25
<b>Tucson</b> 63:14
Tuesday 1:5
turn 68:21 95:6
<b>turned</b> 9:13
turning 71:4
tweaking 96:15
two 6:18 25:2,
14 26:18 32:16
46:24 53:9 58:6
10.27 23.7 20.0
82:7 83:24
82:7 83:24 84:15 94:1 96:5,
82:7 83:24 84:15 94:1 96:5, 15
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18,
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22 < U >
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22 < U > U.S 1:7 2:1
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22 < U > U.S 1:7 2:1 14:14 15:19
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22 < U > U.S 1:7 2:1 14:14 15:19 21:4 56:12 57:6,
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22 < <b>U</b> > <b>U.S</b> 1:7 2:1 14:14 15:19 21:4 56:12 57:6, 16 58:15 68:20
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22 < <b>U</b> > <b>U.S</b> 1:7 2:1 14:14 15:19 21:4 56:12 57:6, 16 58:15 68:20 95:7, 18
82:7 83:24 84:15 94:1 96:5, 15 <b>Tyndall</b> 42:18, 20, 24 <b>type</b> 39:23 40:19 90:4 <b>types</b> 80:14, 22 < <b>U</b> > <b>U.S</b> 1:7 2:1 14:14 15:19 21:4 56:12 57:6, 16 58:15 68:20

ultimately 29:13
unacceptable 5:9
uncomfortable
32:11
uncrewed 48:23
undergoing 5:10
understand
19:19 22:3
43:14 49:13
51:18 56:17
60:20 78:25
79:22 84:3
87:18 88:18
89:15 90:14
understandably
84:12
understanding
15:13 20:2 25:1,
8 26:24 62:19
76: <i>3</i>
undertaking 6:7
19: <i>17</i> 76:7
<b>underway</b> 19:21
<b>uniform</b> 20:13
56:12, 15 57:1
<b>unique</b> 73:18
<i>75:1</i>
<b>unit</b> 6:11 61:6
64: <i>10</i> 74: <i>14</i>
<b>United</b> 5:5 6:23
10:9 21:24 36:3,
<i>18</i> 37:4 55:20
59:11 83:2
85:12
units 28:14, 21,
25 29:3, 13, 25
30:4 32:15, 17
64:24 73:3
77:24, 25 78:9,
<i>15</i> , <i>17</i> , <i>22 79</i> : <i>1</i>
unlimited 40:22

unmanned 48:5, 7 54:22 unmatched 12:3 69:2, 3 **unpack** 92:14 unparalleled 17:1 unrivaled 95:19 unyielding 9:7 **updates** 24:13 63:21 **upgrade** 26:14 38:8 44:8 59:12, 22 upgraded 59:16 71:2, 3 90:17 upgrades 22:7 38:12 60:3 Upgrading 72:16 **uphill** 91:14 **urgency** 61:10 **urgent** 3:14 **USAF** 9:1 use 21:3, 18 58:16 **useful** 69:6 71:3 **USSF** 14:1 usually 85:10 **utility** 40:20 41:3, 9 42:10 **utilize** 49:*3* 

<br/>
validate 96:4<br/>
validating 96:14<br/>
valley 86:7<br/>
valuable 53:20<br/>
79:19<br/>
value 14:19<br/>
17:1 28:24<br/>
valued 29:7

variables 74:24 various 74:7 vehicles 54:23 venue 95:19 **version** 18:21 58:12 veteran 40:8 **vicious** 81:*17* view 29:11 30:1 62:2 66:17 **visit** 87:13 **visited** 87:10 vital 14:24 22:16 61:25 **voices** 93:1 vulnerability 54:19 vulnerable 39:10 79:11 80:6 91:23

< W > **Walk** 60:10 61:13 **walking** 98:*1* want 9:6 12:7 25:21 27:20, 21 29:8, 24 31:10 41:16 43:14, 19 45:24 47:16 51:9 52:8 55:1 56:2 61:7 63:12 66:11 69:24 72:6 79:12 80:8 82:4, 15 83:7, 17, 22 84:10, 17 85:14 86:18, 20 87:9, 18, 25 92:15, 16, 25 96:8 97:8

wanted 24:6 84:9 wants 43:16 90:6 war 19:18 26:9 36:15 82:23 88:11 93:3, 22 warfare 62:1, 2 65:24 66:4 67:8 warning 5:2 15:22 39:15 **Warren** 1:15 55:12, 14, 24 56:17, 23 58:3, 25 83:12 84:7, 12 **Warren's** 82:*15* **Washington** 1:9 55:18 way 7:8 16:14 20:3 28:10 29:11, 17 31:5, 6 32:24 36:13 38:9, 14, 15 39:1 48:8 50:4 52:10 55:7 59:11 60:6 62:17 64:10, 14 66:16 70:11 92:9 ways 27:10 49:22 64:6 69:2 74:6 95:25 **weapon** 11:10 19:24 22:16 37:16 70:21 Weapons 25:2 43:6 70:9 **wearing** 56:12 **Weather** 62:11

week 26:7 47:24 49:6 69:12 72:6 weekend 9:10 31:20, 24 43:23 68:18 69:25 82:6 85:13 90:3 weeks 26:18 weigh 83:23 Welcome 21:22 45:19 welfare 74:3 well 2:15 3:22 9:8 10:15 11:24 18:4 19:25 20:8, 10 21:20 26:16 43:4, 17 44:12, 16, 18 45:8 48:24 49:2, 7 52:19 53:2, 18, 21 56:14 58:2 59:4 64:18 72:8 75:7, 9, 22, 24 76:2, 4, 25 77:6, 12 79:14, 16 84:25 87:22 95:21 96:25 97:6 98:16, 20 went 51:9 West 72:13 **Western** 84:19 **Whiteman** 50:*12* **wholly** 14:8 **wide** 6:8 widespread 73:22 **wildland** 72:12 wing 26:23 27:1 50:13 59:10, 14 63:16, 21 64:14 65:3 72:9 77:20,

**web** 33:22

24 80:20, 21	w
81:4 93:11	w
Wings 60:23	
64:1, 8, 19 80:12,	<
14, 15, 16, 17, 22	X
81:1, 7	
wing's 64:3	<
women 7:8 82:5	Y
<b>word</b> 31:10	10
work 4:15 5:12	5
6:11 11:19 14:8	7
15:2 18: <i>14</i>	1
44:25 47:23	1
53:20 55:22	2
56:2, 11 57:10,	3
13 58:7, 13, 24	4
59:21 60:8, 10,	5
12 62:22 65:18	6
75:3 77:7 78:19	7
83:21 84:20	7
85:7, 11, 15, 16	9
92:16, 19 98:6	9
worked 84:24	Y
workforce 41:22	1
working 7:13	2
20:4 21:6 41:19	3
55:24 57:11, 18	3
58:19 76:12	5
86:2 87:11, 16	7
91:12 92:18	8
97:20	9
works 51:25	y
57:18 83:23	8
<b>world</b> 16:20	18
22:1 26:9 37:7,	y
8 51:10 55:15	Y
86:17, 19, 20	y
95:8, 18 97:12	
<b>worry</b> 40:7	
<b>wrap</b> 92:1	
_	1

vritten 98:21 vrote 83:13 X >**(i** 93:20 Y >**YEAR** 1:3 3:7, 0 4:2, 7, 8, 17 5:23 6:13, 16 7:11 9:25 10:22 4:6 16:3, 5, 16 8:9 21:8 22:24 29:15 32:6 39:12 40:15 42:*4*, *5* 44:*18* 56:5 57:3 58:11 63:19 68:24 71:20, 22 72:20 76:22 83:9 93:13 94:1, 25 95:13 **EARS** 1:3 10:4 18:3 19:1 21:2 25:20 32:19 35:20, 25 36:21 37:4 41:5 50:16 59:16 71:14 80:6 81:15 91:8 93:7, 96:23 ear's 22:6 28:1, 63:15 71:12, 8 esterday 47:24 ork 28:17 oung 87:19

