



May 2, 2017

United States Transportation Command

Committee on Armed Services, United States Senate, One Hundred
Fifteenth Congress, First Session

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General Darren W. McDew, U.S. Air Force
Commander
United States Transportation Command

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Stenographic Transcript
Before the

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

UNITED STATES TRANSPORTATION COMMAND

Tuesday, May 2, 2017

Washington, D.C.

ALDERSON COURT REPORTING
1155 CONNECTICUT AVENUE, N.W.
SUITE 200
WASHINGTON, D.C. 20036
(202) 289-2260
www.aldersonreporting.com

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UNITED STATES TRANSPORTATION COMMAND

Tuesday, May 2, 2017

U.S. Senate
Committee on Armed Services
Washington, D.C.

The committee met, pursuant to notice, at 9:31 a.m. in Room SD-G50, Dirksen Senate Office Building, Hon. John McCain, chairman of the committee, presiding.

Present: Senators McCain [presiding], Inhofe, Wicker, Fischer, Cotton, Rounds, Ernst, Tillis, Sullivan, Cruz, Sasse, Strange, Reed, Nelson, McCaskill, Shaheen, Gillibrand, Blumenthal, Donnelly, Hirono, Kaine, King, Heinrich, Warren, and Peters.

1 OPENING STATEMENT OF HON. JOHN MCCAIN, U.S. SENATOR
2 FROM ARIZONA

3 Chairman McCain: Good morning. The Senate Armed
4 Services Committee meets today to receive testimony from
5 General Darren McDew on the posture of the United States
6 Transportation Command.

7 TRANSCOM is more than just a functional command that
8 moves personnel and materiel from place to place. It is a
9 crucial asset on which our military's global power
10 projection depends and one we must not take for granted.

11 As General Patton once said, "The officer who doesn't
12 know his communications and his supply as well as his
13 tactics is totally useless."

14 General McDew and his predecessors have warned Congress
15 for years that the proliferation of anti-access/area denial
16 capabilities pose significant challenges for our
17 transportation and distribution networks in contested
18 environments.

19 Put simply, any assumption that TRANSCOM will have
20 uncontested access to international airspace and sea lanes
21 in a future conflict is increasingly outdated.

22 Transport ships and aircraft can be held at risk over
23 greater and greater distances. Our logistic networks are
24 centered on large air and sea ports, which serve as
25 efficient hubs, but are also vulnerable to attack. And then

1 there are threats on the digital battlefield.

2 Even as cyber intrusions have become increasingly
3 prevalent, nearly 90 percent of TRANSCOM's missions are
4 still executed over unclassified commercial communication
5 networks. This vulnerability extends operational risk to
6 every single combatant command that TRANSCOM supports on a
7 daily basis.

8 This committee understands that efforts are currently
9 underway to develop an overarching global plan that would
10 articulate how TRANSCOM would operate in a contested
11 environment, whether that be in the air, at sea, or in
12 cyberspace.

13 General, I look forward to an update on this plan today
14 and ask that you provide as many details as possible as to
15 preliminary findings of this effort.

16 I also hope you can discuss TRANSCOM's inaugural
17 wargame, which took place last fall and examined mobility
18 and distribution operations in a contested environment. Too
19 often, operational wargames focus exclusively on combat
20 capability and take combat logistics as a given. Combat
21 capability is obviously important, but it does not matter
22 much if it never arrives to the fight or cannot be sustained
23 once it does. I look forward to hearing the lessons learned
24 in TRANSCOM's wargame.

25 General McDew, it has been almost 2 years since your

1 confirmation hearing before this committee, and I am looking
2 forward to hearing the steps you have taken to address some
3 of our shared concerns and what more needs to be done. In
4 particular, this committee understands the readiness and
5 modernization challenges across the Department of Defense
6 also affect TRANSCOM.

7 A look at sealift, for example, reveals the same
8 downward spiral we have seen elsewhere in the military.
9 Budget cuts mean fewer new ships. Existing ships get older.
10 Maintenance gets more expensive and more difficult.
11 Readiness suffers. And more money is siphoned from future
12 modernization to pay for current readiness.

13 Military Sealift Command's organic surge sealift fleet
14 is essential for rapid response in the event of a crisis or
15 wartime scenario. But the average age of ships in our surge
16 fleet is now 39 years. Over a recent 5-month period, less
17 than 60 percent of sealift ships were able to activate
18 during planned exercises due to various maintenance
19 problems.

20 The requirement for so-called roll-on/roll-off ships
21 has been relatively stable since the 1990s. But since
22 Desert Storm, the surge sealift fleet has been cut nearly in
23 half to just 27 ships. We are already 10 ships short of the
24 current requirement, enough to move two full armor brigade
25 combat teams. And, over the next 6 years, another nine will

1 age out.

2 So while I look forward to hearing how TRANSCOM plans
3 to address its readiness and modernization challenges, I do
4 so fully aware that it cannot truly do so unless we in the
5 Congress step up and do our jobs, repeal the Budget Control
6 Act, and provide full and steady funding to meet our
7 national security requirements.

8 General McDew, the committee thanks you for your
9 continued service to the Nation, we look forward to your
10 testimony today.

11 Senator Reed?

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

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

4 Welcome, General McDew, to the committee and for your
5 testimony. Thank you for your service and the service of
6 all of the men and women of TRANSCOM. We are knowledgeable
7 and appreciative of the critical role that TRANSCOM plays,
8 and thank you for your leadership.

9 The work of TRANSCOM may be invisible to many, but it
10 is critical because it delivers what our forward-deployed
11 personnel need when they need it. While TRANSCOM performs
12 thousands of operations successfully, it is facing a number
13 of daunting challenges. While all the military works to
14 respond to potential and actual cyberattacks, TRANSCOM faces
15 a unique set of cyberthreats because it must work with
16 private sector entities in the transportation and shipping
17 industries to support DOD deployment operations.

18 Three years ago, the committee issued a report on
19 certain aspects of the TRANSCOM cybersecurity situation.
20 General McDew, we would like to hear what steps you have
21 taken to respond to the issues identified in that report and
22 any others you may have identified since you assumed
23 command.

24 The Ready Reserve Force, a group of cargo ships held in
25 readiness by the Maritime Administration, is aging and will

1 need to be modernized over the next decade, as the chairman
2 pointed out eloquently.

3 DOD also needs to ensure that the Civil Reserve Air
4 Fleet, or CRAF, program, which provides as much as 40
5 percent of wartime airlift needs, remains viable after
6 operations in Iraq and Afghanistan, and will be able to
7 provide needed surge capacity in the future. I would
8 appreciate an update on how TRANSCOM intends to ensure these
9 fleets are ready to meet the command's requirements.

10 Our global transportation capability, owned and managed
11 by TRANSCOM, has been one of our asymmetric advantages for
12 many years now. However, we cannot assume that potential
13 adversaries will allow us free rein in this area in the
14 future.

15 General McDew, as you said in your prepared statement
16 about future conflicts, we expect contested global sea lanes
17 and air routes to a degree we have not faced since World War
18 II. We are interested in hearing how you are addressing the
19 growing reality that the access you enjoy now may be
20 increasingly challenged.

21 General McDew, thank you again for your service, and I
22 look forward to your testimony.

23 Chairman McCain: Welcome, General.

24

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1 STATEMENT OF GENERAL DARREN W. McDEW, USAF, COMMANDER,
2 UNITED STATES TRANSPORTATION COMMAND

3 General McDew: Thank you very much, Chairman. I am
4 glad that you pointed out that it has been 2 years since I
5 have been here. I have a quick opening statement, but I
6 would like to say that my daughter-in-law has forgiven you.

7 If you remember, 2 years ago, I sat here and I had a
8 chance to introduce my family. And over my left shoulder
9 was my brand-new grandson, Henry. Henry was a bit of a
10 rotund child at about 6 months old, and you pointed out that
11 he had not missed many meals.

12 [Laughter.]

13 General McDew: Most of us got a chuckle. My daughter-
14 in-law did not get a chuckle from that.

15 Chairman McCain: Please ask her to accept my
16 apologies. It is a beautiful grandchild.

17 [Laughter.]

18 Chairman McCain: Oops.

19 General McDew: But it is now part of the Congressional
20 Record.

21 [Laughter.]

22 General McDew: Chairman McCain, Ranking Member Reed,
23 and distinguished members of the committee, it is an honor
24 and a privilege to be with you here today representing the
25 men and women of our United States Transportation Command.

1 I thank you for your continued support of our dedicated
2 professionals, all working together to provide our Nation
3 with a broad range of strategic capabilities and options.

4 I also want to emphasize the vital role our commercial
5 industry plays, what I call our fourth component in our
6 success.

7 It is worth noting yesterday was the 30th anniversary
8 of USTRANSCOM's core staff standing up at Scott Air Force
9 Base, and we have been going strong ever since, 30 years of
10 history.

11 I can say confidently that your United States
12 Transportation Command stands ready to deliver our Nation's
13 objectives anywhere at any time. We do this in two ways.
14 We can provide an immediate force tonight through the use of
15 airlift and air refueling fleets. And we can provide a
16 decisive force, a decisive force when needed through the use
17 of strategic sealift and surface assets. You see it every
18 time you read or hear the news.

19 When North Korea increased its provocation of our
20 Pacific allies, America responded with assistance.
21 USTRANSCOM delivered that assistance in the form of missile
22 defense systems, personnel, and support equipment, moving by
23 sea and air 3,000 miles across the Pacific Ocean.

24 When you read about America's brigade combat teams
25 rolling through Europe, it was USTRANSCOM's ability to

1 provide a decisive force to reassure European allies.

2 When America needed B-2 stealth bombers to fly 11,000
3 miles from Missouri to Libya and back, it was our air
4 refuelers that got them there.

5 From national disasters to epidemics to acts of war,
6 the men and women of USTRANSCOM are ready to deliver this
7 Nation's aid, assistance, and, indeed, hope to the world.
8 These missions must execute without fail.

9 All the while, these great professionals quietly manage
10 a myriad of daily tasks around the globe, most of which
11 Americans will never read about. It takes diligence, skill,
12 and innovation to provide that kind of readiness for
13 America, and the men and women of USTRANSCOM have never let
14 us down. I am proud to serve next to them, and I say with
15 confidence that our organization is ready to respond when
16 our Nation calls.

17 That confidence, however, is not without concern. The
18 environment we operate in today is increasingly complex, and
19 we expect future adversaries will be all the more versatile
20 and dynamic, forcing us to adapt, change, and evolve.

21 Furthermore, we are viewing potential adversaries
22 through a transregional, multidomain, and multifunctional
23 lens. Properly understanding the potential threats posed by
24 China, Russia, Iran, and North Korea, as well as violent
25 extremists, in a global context is of utmost concern for our

1 future national security. In each of these scenarios,
2 logistics plays a critical but often overlooked role.

3 Today, USTRANSCOM is critically examining how we
4 execute our logistics mission in the contested environments
5 of the future, a space we have not had to operate in
6 logistically speaking for a very, very long time. We are
7 exercising and wargaming these logistic scenario, forcing
8 planners of every ilk to account for transportation's vital
9 role and for, for the first time, potential loss.

10 Earlier this year, USTRANSCOM held its first-ever
11 contested environment wargame, imagining a scenario where we
12 did not dominate the skies or own the seas. This wargame
13 uncovered a surprising amount of lessons learned, which we
14 have already started to absorb. We have adapted our
15 tactics, techniques, and procedures accordingly, but we
16 still have work to do.

17 I am also concerned about our national strategic
18 sealift capability. Any further delay to the
19 recapitalization of our military sealift fleet creates risk
20 in our future ability to deploy forces across the globe.

21 These concerns are compounded further by Merchant
22 Marine shortages and the reduction of U.S.-flagged vessels.

23 With today's resources, we are capable of meeting
24 today's logistics needs. However, if we, together, do not
25 take action soon, many of our Military Sealift Command

1 vessels will begin to age out by 2026. A significant
2 portion of the DOD's wartime cargo capability moves on these
3 ships.

4 As a bridging solution, and with your approval, we can
5 purchase used ships until we can build new ones ourselves.
6 This will not solve the problem forever, and we will need
7 your help for all of it.

8 My final concern is the threat of attack from the cyber
9 domain. Although cybersecurity is a DOD-wide focus area,
10 USTRANSCOM is distinctly vulnerable because the majority of
11 the command's transportation data resides within and travels
12 through the unsecure commercial Internet. Furthermore,
13 unsecure networks and systems of our commercial
14 transportation service providers coupled with critical
15 infrastructure requirements almost wholly reside outside of
16 our control.

17 In light of these challenges, USTRANSCOM is focusing
18 our cyber efforts on discipline, design, and defense, in
19 order to ensure we continue to accomplish our mission. The
20 command is collaborating with U.S. Cyber Command, DOD
21 agencies, Federal cyber organizations, industry, and
22 academia to identify and mitigate gaps and shortfalls, as
23 well as to seize opportunities to advance our cyber
24 resilience and improve mission assurance.

25 I thank you again, Chairman McCain and Ranking Member

1 Reed and the members of the committee, for inviting me to
2 speak to you today to represent this 30-year-old command,
3 USTRANSCOM. Our TRANSCOM team will continue to provide
4 joint solutions to ensure our Nation is able to deliver an
5 immediate force tonight and a decisive force when needed
6 anywhere in the world.

7 I respectfully request my written testimony be
8 submitted for the record, and I look forward to your
9 questions.

10 [The prepared statement of General McDew follows:]

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1 Chairman McCain: Thank you. Without objection.

2 Thank you very much, sir.

3 A major concern for the Navy is a lack of sufficient
4 U.S.-flagged ships and robust Merchant Marine to meet future
5 demand. Is that a major concern of yours?

6 General McDew: Yes, it is, Senator.

7 Chairman McCain: Do we have any plans, that you know
8 of, to rectify that?

9 General McDew: Chairman, I believe that we are working
10 very closely with the United States Navy. The Navy
11 understands the depth of the problem.

12 Chairman McCain: Do we have any plans to rectify that
13 shortfall?

14 General McDew: There is a Navy recapitalization plan
15 that is being built right now. It should be unveiled in the
16 next few weeks. I do not want to get ahead of the Navy, but
17 we worked very closely with them on that.

18 Chairman McCain: The real secret is that our ability
19 to move supply and support modern military forces, to a
20 large degree, rests on the support it receives from private
21 sector companies, right?

22 General McDew: It does.

23 Chairman McCain: And so suppose we are in a combat
24 scenario. Can we continue to rely on those private
25 companies or corporations to supply us with what we need?

1 General McDew: Our U.S.-flagged fleet of ships has
2 been a reliable partner for decades. The Merchant Marine
3 force that does this work is a viable and proud patriotic
4 unit.

5 Chairman McCain: I guess I am talking about having to
6 transport troops and materiel into a contested region. Can
7 we rely on these nonmilitary companies, such as UPS and DHL
8 and Maersk and others to go into combat areas?

9 General McDew: Chairman, our first force to go into
10 these contested environments is our organic aircraft and
11 organic sealift ships.

12 Chairman McCain: Yes, and that is some 600 refueling
13 tankers to transport one combat team, according to the
14 information I have. Do we have the capability to move a
15 sufficient number of individuals and materiel into a combat
16 zone without relying on civilian sources of transportation?

17 General McDew: Chairman, it depends on what sufficient
18 means. If we are going to --

19 Chairman McCain: Let's take Korea. Suppose that a
20 conflict broke out in Korea, and the North Koreans have some
21 limited antiship capability. Can we rely on those
22 nonmilitary corporations to go into -- maritime capabilities
23 to go into contested areas, into combat zones?

24 General McDew: Today, Chairman, I would not call upon
25 the commercial industry to go into a contested environment.

1 We have organic --

2 Chairman McCain: So you have sufficient capability to
3 move what we need without relying on them? Is that correct?

4 General McDew: We have a sufficient force today, and I
5 have talked to General Vince Brooks and his staff, to
6 provide him what he needs in the first 30 days organically.
7 Beyond that, we will have to continue to assess how much
8 continues to flow and how much of that we can mitigate the
9 threat by the time we have to get to the use of commercial
10 vessels.

11 Chairman McCain: According to what I am told, it can
12 take 200 C-17 sorties to deploy a single brigade combat
13 team. Is that your correct assessment?

14 General McDew: I would not like to argue numbers with
15 you at all, but I do know that --

16 Chairman McCain: I am not getting into an argument. I
17 am saying that this is the information that is provided to
18 us by the Department of Defense. It is not my opinion.
19 That is the information that we have from the Department of
20 Defense.

21 Are you able to ensure that global force projection is
22 a primary capability given the assets that we have and not
23 having to rely on non-DOD capabilities for, say, a conflict
24 in Korea?

25 General McDew: It is not easy. However, with a global

1 force, and that is what U.S. Transportation Command is, and
2 we use the forces that are available, we can do 200 C-17
3 sorties.

4 Chairman McCain: You can do 200 C-17s, and that gives
5 you one brigade combat team. I doubt, if there is a
6 conflict in Korea, that one brigade combat team would be
7 sufficient for us to reinforce our forces on the ground in
8 Korea.

9 What I am saying, General, is that we are reliant to a
10 larger and larger degree on the private sector companies,
11 and there is great question amongst many experts that we do
12 not have the capability, say in Korea, say in Eastern
13 Europe, to resupply and maintain our ability to carry out
14 success in combat.

15 Now are you telling me that we can and are and have
16 that?

17 General McDew: We do not have the capability that I
18 wish we had, but we have a capability that can provide a
19 force when needed. And the force that General Brooks is
20 asking me to deliver can be delivered initially by our
21 organic fleet. We have put a lot of capability into --

22 Chairman McCain: In contested areas?

23 General McDew: We have put a lot in the commercial
24 sector that we cannot rely on in contested areas. But the
25 initial force can be brought by organic fleets, and then we

1 will have to see what we can do after that.

2 It is a challenge because of how we have gotten to
3 where we have gotten to.

4 Chairman McCain: Well, General, to "see what we can do
5 after that" is not comforting to this committee.

6 Senator Reed?

7 Senator Reed: Thank you, Mr. Chairman.

8 Let me focus on the issue of cyber, which you brought
9 up, and I brought up in my comments.

10 As you know, the committee did a report based upon
11 incidents of your contractors, private contractors, in June
12 2012 through June 2013, where there were cyber breaches. I
13 thank TRANSCOM, because they cooperated in the report. Just
14 a few points emerged that were very critical, and I wanted
15 to get your sense of how much progress you have made.

16 First, there appeared to be confusion within DOD about
17 what information relating to cyber compromise of private
18 sector contractors may be lawfully shared. That is one
19 issue.

20 Second, TRANSCOM had not provided other DOD components
21 or the FBI a list of operationally critical contracts about
22 whom the command would like to be alerted when a compromise
23 occurs. And then there were gaps in cyber reporting
24 requirements contained in TRANSCOM's contracts.

25 Although I must give you credit, sir, because TRANSCOM

1 was the first DOD component to require contractors to report
2 cyber intrusions.

3 Can you comment on these issues and, in general, where
4 we are?

5 General McDew: Senator, we have transformed our view
6 of cyber. Last year, cyber roundtables that we did, we did
7 three separate sets of cyber roundtables to get us to a
8 different level of awareness and knowledge. What that has
9 driven us to do is that our contracts are now more cyber-
10 aware. The way we deal with contractors is more cyber-
11 aware. And we are asking industry to partner with us to set
12 a higher cyber standard.

13 The problem we have is, sitting in the seam between DOD
14 and commercial industry, is that the rule sets are
15 different. We can defend the Department of Defense
16 networks, but we do not have any control over what happens
17 in the civil networks. Sometimes, a commercial company is
18 disincentivized to report an intrusion. And sometimes, they
19 do not have the wherewithal to know that they have had an
20 intrusion.

21 Those things need to be squared away. So we are
22 partnering with CYBERCOM and also the interagency to see
23 where the FBI and DHS can maybe look at those intrusions
24 differently. I am having a meeting with them later this
25 week because I believe the commercial viability of the

1 company is one thing. National security is another. And
2 because a company is intruded upon, it is not always just a
3 commercial problem.

4 Senator Reed: Are you planning to suggest legislative
5 proposals that would give the Department of Defense more
6 authority in this regard, or clarify its authority? Maybe
7 clarification is a better word.

8 General McDew: I am not sure that DOD needs more
9 authority, but I believe a bridging of the gap between DOD
10 and the rest of the Federal Government is needed to happen,
11 and to see where we can square that.

12 Senator Reed: Let me follow up on two of the questions
13 that Senator McCain asked.

14 First, as we move to more emphasis on the Pacific,
15 particularly North Korea, there is the issue of platforms,
16 both air and sea. But there is also the issue of
17 facilities. Do you have an assessment of the needs for
18 docks or airfields that have to be repaired or remediated so
19 that you can continue to operate?

20 General McDew: We do a regular annual assessment, a
21 rotating assessment through every year. We publish an en
22 route master plan of ports and rail all around the world.

23 We believe we have sufficient facilities globally to
24 handle most contingencies. Unfortunately, until you get
25 into the fight, you do not know specifics about which exact

1 ones you are going to need when, because you do not know
2 what the enemy is going to take away from you.

3 So based on initial assessments, we do it, and then we
4 continue to assess as the enemy moves and we countermove.

5 We believe that, in the early days, as we provide ways
6 to mitigate the threat, maybe we have greater access in some
7 places that we do not think of using now, and we have to be
8 resilient enough to go to those places.

9 Senator Reed: And with regard to the issue of ships
10 particularly, or aircraft going into contested areas, do you
11 have any contractual authority to compel them to do that?
12 Or do they have an opportunity in the contract to just
13 simply decline?

14 General McDew: So it is twofold. We also have a
15 responsibility to them to not send them into harm's way if
16 they are not prepared to go, in particular with the Civil
17 Reserve Air Fleet.

18 Right now, with the FAA, the FAA trusts us to make the
19 determination of when a place is sufficient to send in a
20 commercial aircraft. We owe that to them. We also owe them
21 a little bit better training on tactics and procedures, and
22 maybe some way of how to operate in a convoy environment.

23 My Military Sealift Command commander right now is
24 trying to work with commercial industry to see where we can
25 strengthen their ability to operate at least on the edges of

1 the contested environment.

2 Senator Reed: And again, is there any consideration to
3 legislation that might give you more appropriate authorities
4 in this regard? Because the problem the chairman has
5 pointed out is a real problem.

6 General McDew: The problem is, indeed, real. We have
7 gone down the path of trying to work with industry because
8 they have been beside us a long time. We believe they will
9 want to. But we do not want to put a ship in harm's way,
10 because losing the ship is worse than not sailing the ship.

11 Senator Reed: Thank you.

12 Thank you, Mr. Chairman.

13 Chairman McCain: Senator Inhofe?

14 Senator Inhofe: General McDew, one of the problems
15 that we have when you are trying to move this equipment, the
16 function that you perform, it is either by sea or by air.
17 Air, obviously, is the one that meets the needs because you
18 do not have a lot of the time that you normally would have
19 to be dealing with.

20 But we also know the risks that are out there. We know
21 the surface-to-air capability of the enemy. We know the
22 air-to-air capability. We know those problems that exist.
23 And as was pointed out by the chairman in his opening
24 statement, we are not able to handle the capacity by air, so
25 it ends up being by ship. Then you have problems there too.

1 So with the age of our fleets right now, 39 years for
2 the ships, and then when you look at the C-5s, C-17s, you
3 look at what we are doing right now at Tinker Air Force
4 Base, trying to take the KC-135s down to the skeleton and
5 then just rebuilding them, how big of a problem do you see
6 this today and as you look into the future, to perform the
7 functions that you are supposed to be performing with just
8 the sheer age of this stuff? The KC-46 will not be around
9 for some time to relieve this. So what kind of a problem is
10 this?

11 General McDew: Senator, recapitalizing all of those
12 fleets is a problem. Doing it underneath the budget
13 constraints we have had will be nearly impossible.

14 And also, we owe the Congress possibly better numbers.
15 I have been part of propelling some numbers of tankers that
16 are needed to provide help around the globe, the number of
17 ships. Our contested environment wargames tell us that
18 those numbers may not be sufficient, because we have never,
19 in the history that I can remember, planned for attrition of
20 our logistics. And we have not fought for 70-plus years an
21 adversary that can do that to us.

22 So age is one level of attrition. Enemy action is
23 another level of attrition. Lack of sufficient maintenance
24 so that it is reliable is another.

25 The tanker problem, if we are going to go after 12

1 airplanes a year, of the KC-46, of recapping, that is going
2 to produce risk long-term as these airplanes continue to age
3 as we recap.

4 Senator Inhofe: That is true. It is also, as you are
5 making the decisions now, I can remember when we were making
6 decisions on the C-17. I remember we talked about at one
7 time that it was going to be 210. Then it was going to be
8 -- anyway, when Cheney came along and actually increased
9 that.

10 But every time you make those changes, you are
11 affecting risk. That is the thing that concerns me.

12 Now the chairman brought out our reliance upon the
13 private sector in some of these areas. I was reading in
14 your prepared statement, and I will just repeat it here:
15 "Unfortunately, the U.S.-flagged international commercial
16 fleet and Mariner pool has shrunk over time. While we have
17 contingency plans, further reductions may cause us to
18 investigate other options, such as using more foreign-
19 flagged international commercial vessels manned by foreign
20 crews during crisis or war. American shipping companies
21 continue to re-flag vessels to foreign nations, diminishing
22 the size of our commercial fleet."

23 Now, we had said that our commercial fleet should be
24 able to take care of some 90 percent of the need. My
25 concern is every bit as much the reliance upon the other

1 countries as it is being reliant upon the private sector.

2 Do you agree with that?

3 General McDew: Senator, we have always been a Nation
4 that has had a large enough maritime fleet, and we have been
5 a maritime country, and we have always had the ability to do
6 that indigenous to U.S.-flagged vessels.

7 Senator Inhofe: Yes, that is what we have always been
8 able to do. That is not the case now.

9 General McDew: We are in jeopardy now. Now we are at
10 about 80 ships.

11 Senator Inhofe: This is a new threat that was not
12 there before, and I agree with that, and I am concerned
13 about that.

14 Thank you, Mr. Chairman.

15 Chairman McCain: Senator Shaheen?

16 Senator Shaheen: Thank you, Mr. Chairman.

17 General McDew, thank you for being here. I certainly
18 appreciate what you said in your statement about the
19 importance of TRANSCOM to any action we take anywhere in the
20 world, so thank you, and everyone who serves in TRANSCOM.

21 As I know you are aware, the 157th Air Refueling Guard
22 Wing is at Pease in New Hampshire. We are one of those
23 places that is going to first get the KC-46A tankers. I
24 have had a chance to go up with the 157th and watch them
25 refuel and am amazed at the skill and precision that all of

1 those fliers have and how important it is to have that
2 refueling capability as we are looking at what we need to do
3 around the world.

4 While I appreciate what you said about our problems are
5 not going to be solved by the KC-46, can you talk about how
6 important it is to have those planes delivered? I know the
7 delivery date has slipped a little bit, so what are we doing
8 to make sure that they are coming in on time where we need
9 them to go?

10 General McDew: Senator, behind the cyberthreat, tanker
11 recap is probably my number one priority. If there was one
12 thing that keeps me awake at night, that is the ability to
13 provide the air refueling support that we need globally to
14 respond anywhere around the world at the time of our
15 choosing. The 157th is one of those units that we count on
16 to do that.

17 The KC-46 recap, or recapping tankers writ large, is a
18 very, very important program that cannot be allowed to slip
19 much more. We are already assuming some level of risk, and
20 that is before we learned about the things that we have
21 going on in contested environments. We do not plan for
22 losing tankers. And if we do not recap them, any loss is
23 more catastrophic.

24 Senator Shaheen: Thank you. I certainly agree with
25 that.

1 I know that when we were in Afghanistan and Iraq, one
2 of the challenges that we had at the height of those
3 conflicts has been the ability to have our fuel keep up with
4 the actions that were going on in the field. One of the
5 things that I think the military has done an excellent job
6 of is research into alternative ways to make us less
7 dependent on those fuel lines and particularly foreign
8 sources of oil.

9 Can you talk a little bit about how you see the
10 importance of those alternative fuels as you are looking at
11 TRANSCOM's future?

12 General McDew: Senator, I believe that a level of
13 resilience across the entire portfolio is needed. The
14 ability to have different sources of fuel, the ability to
15 have different methods of delivering that fuel, DLA and all
16 of our partners really work hard at that. I think it is
17 important that we cannot just be relying on one source for
18 anything.

19 Senator Shaheen: And are you concerned about the
20 progress that they are making? How are we doing? Is there
21 any branch that is falling behind that we need to be worried
22 about?

23 General McDew: You know, with technology, always
24 faster is better. But sometimes, the journey is important
25 as you are going down new innovative paths.

1 So I cannot tell anybody that is falling behind. But I
2 think research and development on different ways of doing
3 fuel is going to be important.

4 Senator Shaheen: And just following up a little bit on
5 the cyber concern, what more can we do on this committee to
6 support the efforts to address both the intrusions and the
7 cyberattacks that we are seeing? And how can we help
8 encourage the private sector that we are relying on to come
9 to the table? Do we need to give you more authority? Do we
10 need to take action that is going to address the private
11 sector? What should this committee be looking at to support
12 your efforts?

13 General McDew: I would ask, Senator, that this
14 committee and all the committees in the Congress, as well as
15 the American public, become as paranoid about the
16 cyberthreat as I have become.

17 Senator Shaheen: Oh, I think we are pretty paranoid,
18 actually.

19 General McDew: I am not sure in the commercial
20 industry that every CEO sees the cyberthreat as something
21 beyond their commercial viability, and I am not sure every
22 CEO understands that it is CEO business and not the IT
23 department's business.

24 Senator Shaheen: Thank you, a very important
25 observation.

1 Thank you, Mr. Chairman.

2 Chairman McCain: Senator Rounds?

3 Senator Rounds: Thank you, Mr. Chairman.

4 General McDew, thank you for your service to our
5 country.

6 A unique and significant part of the Nation's air
7 mobility resource is the Civil Reserve Air Fleet, as the
8 chairman has indicated, commonly referred to as CRAF. The
9 average American may be surprised to know that, in 1991's
10 Operation Desert Storm, 60 percent of all deployed troops
11 and 25 percent of all cargo airlift went by commercial
12 carriers, not military airlift.

13 At the time, the Air Force had about 330 C-5s and C-
14 141s for strategic airlift. Today, your posture statement
15 says the CRAF requirement has grown from 60 percent to 90
16 percent for all passengers, and from 25 percent to 40
17 percent of all cargo.

18 Meanwhile, the latest numbers that I have been shown,
19 there are roughly 280 C-5s and C-17s in the inventory for
20 this mission. This reduction of 50 aircraft since 1991,
21 combined with the erosion of sealift availability, tells me
22 that our ability to project military power is increasingly
23 tied to our commercial air segment, blurring the lines
24 between military and nonmilitary organizations required for
25 national defense.

1 Specifically, you have noted that one of the greatest
2 challenges that TRANSCOM faces is from cyberattacks.
3 Because it is not a DOD entity, the Civil Reserve Air Fleet
4 resides outside the direct reach of CYBERCOM. How can we
5 make certain that this fleet receives the same level of
6 cyber defense as our strategic air units?

7 General McDew: Right now, I have no mechanism to
8 ensure that that can happen. I do not have the authority to
9 compel a commercial industry to bring their standards up to
10 the level that we have inside, nor are we assured exactly
11 what that standard is. We do know that inside the
12 Department of Defense, USCYBERCOM and others have
13 established a standard that we believe that our networks are
14 protected. Outside, I guarantee you that every CEO thinks
15 that they have the level that they think they need.
16 Reconciling what they think and what the reality is is
17 important.

18 Sharing information across from DOD to commercial
19 industry, the Federal Government to commercial industry, is
20 one. I can talk to CEOs, and I have talked to some that
21 have no idea that they have been attacked. That is a
22 problem.

23 So before you can ensure that they are protected, they
24 have to have the wherewithal to know that they have been
25 attacked.

1 Senator Rounds: The Department of Homeland Security,
2 which is charged with protecting critical infrastructure,
3 defines it as the assets, systems, and networks, whether
4 physical or virtual, so vital to the United States that
5 their incapacitation or destruction would have a
6 debilitating effect on security, national economic security,
7 national public health or safety, or any combination
8 thereof.

9 My question, I guess, would be, given our significant
10 reliance on CRAF, would you consider it to be critical
11 infrastructure?

12 General McDew: I would, and I would also broaden the
13 definition. There are many more things, because of the risk
14 we have taken in the portfolio over the last couple decades,
15 many more things are in the private sector. All of those
16 things I rely upon for national security, and many of those
17 things are not thought of that way on a regular basis.

18 Senator Rounds: Are there any other nonmilitary
19 elements critical to TRANSCOM's mission that you would
20 consider critical infrastructure?

21 General McDew: Critical, I do not want to get into the
22 actual definition of critical, but there are elements of
23 commercial, everyday use -- road, rail, seaports -- that are
24 all critical. When we need to go to war as a Nation, they
25 are all critical.

1 Senator Rounds: What interaction does TRANSCOM have
2 with the Department of Homeland Security regarding such
3 infrastructure?

4 General McDew: Most of our links are through the
5 Department of Transportation. We do have links to the
6 Department of Homeland Security. We meet regularly. I have
7 a liaison officer from both the FBI, and we work extensively
8 with the interagency.

9 The problem is, I do not know if we have sung loud
10 enough. We have just learned a number of things ourselves
11 over the last year about how vulnerable we are. We have
12 learned some things over the last year on how we can protect
13 ourselves better. Now we are able to be a better partner, I
14 believe, in the interagency.

15 Senator Rounds: General, thank you.

16 Thank you, Mr. Chairman.

17 Chairman McCain: Senator Hirono?

18 Senator Hirono: Thank you, Mr. Chairman.

19 General, it is good to see you. Thank you for your
20 service.

21 I want to talk about Red Hill. The Red Hill Bulk Fuel
22 Storage Facility at Joint Base Pearl Harbor is a key
23 component of the Navy's operations in the Pacific and Asia
24 to provide secure underground fuel storage for ships and
25 aircraft, and it is of vital strategic importance.

1 For anyone who is not visited the Red Hill Bulk Fuel
2 Storage Facility, it is massive. And the engineering feat
3 to create that facility is on the order of Hoover Dam, so we
4 are talking about a huge facility.

5 Can you discuss the impact that this secure storage
6 facility has on the reliability and resilience of refueling
7 in the Pacific? And what would happen if this facility were
8 closed?

9 General McDew: I cannot speak directly to that one.
10 That would be more in the purview of DLA and partners at the
11 Defense Logistics Agency.

12 However, anything that lessens our ability to have fuel
13 available in the Pacific region is detrimental to our
14 ability to go to war.

15 Senator Hirono: Have you ever visited this facility?

16 General McDew: Not directly, Senator.

17 Senator Hirono: If you ever get to Hawaii, please do
18 so. I am sure you do get to Hawaii. Please do so.

19 The Air Force has been using Active Associate Units for
20 many years. These can be very strong units showing the
21 collaborative capabilities of joint Active Duty and Guard
22 organizations.

23 What are your thoughts on Active Associate Units? And
24 could you use more in the tanker and airlift fleet?

25 General McDew: Senator, Active Associate Units have

1 been a part of our DNA in the transportation business since
2 the 1960s. They have been a viable way of augmenting and
3 strengthening our ability to provide air refueling, in
4 particular in airlift. I think it is vital going forward
5 that every unit -- and I believe the Air Force has this as
6 part of their plan -- every unit in the KC-46 will be
7 associated in some way. We can do more with many.

8 Some units are better at this than others and have a
9 proven track record. Some need some help. As we go
10 forward, I believe that we will get better and better at
11 doing this in the future.

12 Senator Hirono: Admiral Harris testified before SASC
13 last week that, of the five global challenges that currently
14 drive U.S. defense planning and budgeting, four are in the
15 Asia-Pacific region.

16 How does tyranny of distance in the Asia-Pacific region
17 impact your planning for the projection of forces and
18 sustainment in the region? And how would those plans be
19 modified if more than one global challenge needed to be
20 immediately addressed in the region?

21 General McDew: I do not like to disagree with my good
22 friend Harry Harris, and I understand why he focuses on that
23 particular region. I tend to focus on the globe, and there
24 is not one of those problems that is not resident everywhere
25 on the globe.

1 And so for my portfolio, it is a global problem. It is
2 a transregional problem. We need to be able to make sure
3 that every combatant commander that has a region understands
4 that they may not be the primary effort, depending on what
5 is happening around the globe.

6 Senator Hirono: So since you look at the threats
7 globally -- and, of course, PACOM represents 51 percent of
8 the world's area. So especially with the threat of North
9 Korea, how do you go about determining what resources you
10 would place with regard to the needs of our combatant
11 commanders?

12 General McDew: We respond to the priorities set by the
13 Secretary of Defense and through the joint staff. So the
14 priority of effort must be set. Right now, the priority of
15 effort is providing General Vince Brooks and Harry Harris
16 the resources they need to ensure that they can respond to
17 whatever provocative actions are taken by North Korea. If
18 they are no longer the priority of effort, we swing to some
19 other part of the world. We do not have the resources to be
20 everywhere for everybody.

21 Senator Hirono: So you say right now the priority area
22 is the DMZ and Pacific Command, Harry Harris?

23 General McDew: I may have misspoken slightly. So I
24 did say that. I am giving a lot of effort to Harry Harris
25 and Vince Brooks because I know that they have a challenge

1 that they are facing immediately. Scaparrotti, Votel, all
2 of them have issues that they are dealing with, and we try
3 to work around the globe for all of them.

4 Senator Hirono: Thank you.

5 This question has come up before, our reliance on
6 commercial assets for power projection and sustainment. If
7 sea lanes and air lanes are compromised, how will the U.S.
8 either defend our commercial partners or assume a larger
9 role in transportation?

10 General McDew: Senator, one of the reasons that I
11 started calling the commercial industry my fourth component,
12 I have air component, I have an Army component, I have a
13 Navy component, but a very important component that we have
14 not looked at in that way is the commercial industry. Some
15 of my predecessors actually would not even call them our
16 partners, would not say the term out loud. I understand why
17 they did it at the time.

18 But in today's environment, I have to and must rely on
19 this commercial industry to get things done. So we owe them
20 a better view of their resilience. We owe them a better
21 view of how they are going to contend in contested
22 environments. And we owe that to them in partnering with
23 them.

24 Senator Hirono: So you are taking specific steps to
25 bring them more into an understanding of the challenges that

1 we face?

2 General McDew: Absolutely. And through organizations
3 like the National Defense Transportation Association, which
4 most of them are members of, we work on subcommittees to try
5 to get after these problems.

6 Senator Hirono: Thank you.

7 Thank you, Mr. Chairman.

8 Chairman McCain: Senator Ernst?

9 Senator Ernst: Thank you, Mr. Chairman.

10 General, it is good to see you. Thanks for being here.
11 And your grandson I am sure quite lovely. My own daughter,
12 we called her chubbo-bubbo when she was a baby as well.

13 But thank you for your testimony this morning. I do
14 appreciate you being here.

15 As a transportation officer, I do have a lot of respect
16 and understanding of the important role that TRANSCOM plays
17 for all of us that have served in uniform, so thank you so
18 much.

19 The risk you describe from the cyberthreats to the
20 refueling shortfalls could have incredible impacts on our
21 national security. I am glad we are addressing those today.

22 You mentioned in your testimony that your tankers are
23 conducting aerial refueling operations every 5 minutes over
24 the skies of Iraq and Afghanistan. When I hear about that,
25 I think about how we are misallocating fourth generation

1 fighter jets and tankers to bomb a pickup truck when they
2 could be keeping Russia or China at bay.

3 To me, it highlights why the services need to continue
4 pursuing highly lethal and low-cost solutions in one theater
5 to allow better use of high-cost technologies where they are
6 needed most.

7 Can you describe to me, General, how pursuing more
8 cost-effective tactics on the battlefield can help alleviate
9 some of the stress that we have put on TRANSCOM?

10 General McDew: First of all, Senator, thanks very
11 much. There are a bunch of folks in the cornfields of
12 Illinois right now that loved every statement that you had
13 to say about the wonders of the transporters.

14 What we do, I believe, does keep the 4-plus-1
15 priorities and our enemies at bay. They understand that we
16 still have the capacity to bring a decisive force or an
17 immediate force when needed. I still believe that most
18 adversaries get that. We are challenged in how well we can
19 do it, how long we can do it. But I still believe it causes
20 them pause.

21 Going forward, how long will it stay that way?
22 Innovation will help us. We have to get after autonomy. We
23 have to get after a lot of different ways that we can use
24 cheaper methods in some regions because we will never have
25 enough resources to place them in every region around the

1 world permanently.

2 Senator Ernst: Truly. Thank you. I appreciate that.

3 And, General, U.S. special operations teams are some of
4 the most utilized forces against our current enemies. But
5 unfortunately, their remote locations and need for secrecy
6 create quite a unique transportation challenge. As you
7 probably know, the special forces team that led the American
8 invasion in Afghanistan rode in on horseback.

9 Just tying in with that, what challenges do you face in
10 TRANSCOM when you are seeking to support our special
11 operators?

12 General McDew: One is to let General Thomas know that
13 I do not have horses.

14 Senator Ernst: No stables, no horses.

15 General McDew: General Thomas and his team and our
16 team at TRANSCOM talk regularly. We understand that they
17 are in small places with small teams doing big business. So
18 we work very closely with them on both how they contract,
19 how they supply themselves, and we try to make sure that we
20 are giving them the value of our expertise. They do a lot
21 of things well. We do this well.

22 Senator Ernst: Very good. I appreciate that.

23 You had given some inspiring remarks on innovative
24 thinking last month, telling your servicemembers that you
25 needed true innovation and not just technology. And I do

1 agree with that.

2 I also agree with your remarks about our failing
3 acquisition system. As you say, taking 10 years to develop
4 a weapons system will leave us behind our adversaries.

5 How is that failing acquisition system impacting
6 TRANSCOM? And what can we do a better?

7 General McDew: It is a broad problem as you know,
8 Senator. One of the things is it is everything from how we
9 train our acquisition professionals who do the best they can
10 with the tools they are given to giving them better tools
11 and then giving them different expectations.

12 Sometimes commanders need to be more involved with
13 setting an expectation for what is going to come out of that
14 acquisition process and how quickly, and then sometimes we
15 have to press the system because on the edges of the
16 regulations are opportunities. Maybe we have not explored
17 all the edges, but we do need to get after better training
18 and better tools.

19 Senator Ernst: Fantastic. Thank you, General, for
20 being here today.

21 Thank you, Mr. Chairman.

22 Chairman McCain: Senator King?

23 Senator King: Thank you, Mr. Chairman.

24 First, General, I did not know until today that you
25 spent your first 5 years in the Air Force at Loring Air

1 Force Base.

2 General McDew: Actually, 5.5 years, six winters.

3 Senator King: Five and a half years, six winters. I
4 always knew you were a man of insight, intellect, and
5 character, and now I understand where it came from.
6 Aroostook County will do that for you.

7 I also understand Senator Shaheen mentioned --

8 Chairman McCain: I think we need regular order here.

9 [Laughter.]

10 Senator King: I will not violate Rule 19, Mr.
11 Chairman.

12 But I have to mention 101st Air Refueling Wing in
13 Bangor. I was with the chairman in Qatar a couple years
14 ago, and they were proudly serving there. We affectionately
15 refer to them as the Maniacs, and they do a wonderful job.

16 In fact, they allowed me to fly the boom in one of the
17 planes. For some reason, they did not allow me to fly the
18 boom when there was a jet aircraft attached to it.

19 General McDew: I appreciate that.

20 Senator King: Yes, I thought that you might want to
21 know that.

22 I know Senator Rounds talked a bit about the cyber
23 issue. I am gravely concerned because, as you have
24 testified, your capacity is very dependent upon commercial
25 partners. You said that every CEO says they are safe, and I

1 do not believe it. I hope that you can do more than
2 admonish them. I would hope that we have these contracts
3 with them, which they believe they are profitable, that is
4 why they enter into them, but the contracts, in my view,
5 should have conditions that take seriously this threat,
6 because this could be a critical disruption that would
7 absolutely devastate our ability to respond to a crisis.

8 General McDew: Senator, one of the first steps we
9 believe is setting a clear cybersecurity standard. That
10 standard has to continue to evolve as we learn more and the
11 tools get better in how we defend networks, so it cannot be
12 a static requirement.

13 The next thing we probably need to get to is some level
14 of third-party verification that companies are complying
15 with said standard, and we are not there yet, but we are
16 working with industry right now to try to get after both of
17 those.

18 Senator King: And testing the system, wargaming or
19 testing the system to be sure that it actually will work
20 under a stressful condition, a red team kind of approach,
21 which I know that other areas of the government do, and I
22 think it has been very effective. So that is an area of
23 vulnerability I hope that you will really focus upon,
24 because when we need it, we have to have that commercial
25 capacity there.

1 General McDew: Right. Senator, as you know, right
2 now, we have no authority to compel commercial industry to
3 do that, nor am I seeking it. Right now, we are working
4 with them to collaboratively get to a place, and also
5 working with DHS and FBI to try to help them --

6 Senator King: Well, but I would suggest you do have
7 contracts with these folks, and they are getting paid high-
8 test U.S. dollars, and that gives you some power to make
9 some pretty serious requirements. I urge you to set your
10 general counsel loose on that issue.

11 Let me go back to the wargame, which I understand you
12 participated in. Was it successful? Well, I will leave the
13 question at that, and then we will explore the answer.

14 General McDew: When I first started doing wargames and
15 exercises as a young officer, success was defined
16 differently. As I am a little bit more senior now and have
17 become a senior citizen in the United States military,
18 success is a level of knowledge attained at the end of it
19 that you can do something with.

20 Senator King: Exactly. That was going to be my
21 question. Success is not winning. Success is learning.

22 General McDew: So that journey was so profitable for
23 us as a command that I cannot even put a dollar figure on
24 it. It is now driving everything we think about mission
25 assurance in our portfolio -- everything.

1 Senator King: Let me ask about a specific problem that
2 I think we are all facing, we are certainly facing in the
3 Air Force generally, and it faces you both in commercial and
4 Air Force -- the pilot shortage, the looming pilot shortage.

5 Isn't that an essentially a kind of logistical
6 challenge? We cannot get troops places if we do not have
7 pilots. And there is a shortage -- Senator Cotton and I are
8 having a meeting on this in the next several weeks -- in the
9 Air Force, but it is happening on the commercial side as
10 well. Is this a concern?

11 General McDew: It is a concern. We are actually
12 showing shortages across several places in our portfolio,
13 from mariners to pilots to truck drivers. Each of those has
14 its own problems in the manpower solution area. Right now,
15 the Air Force Chief of Staff and the commander of Air
16 Mobility Command are trying to meet with the CEOs of the
17 major airlines to get after how they may partner differently
18 to improve that problem.

19 Senator King: A final question. Are you comfortable
20 with the relationship with the commercial industry on the
21 sealift side, on the air side, that they will be there when
22 we need them, I guess is the question?

23 General McDew: I am. I am confident, Senator. But I
24 am also confident that they do not know where "there" is. I
25 am confident that we have not fully defined the "there" for

1 them yet enough, and we have not thought our way through,
2 what does it mean to go to war reliant upon this much
3 commercial activity in a contested environment?

4 Senator King: I would suggest that wargaming and
5 stress-testing would be very important, particularly where
6 you do not have direct control over these assets.

7 General McDew: We are with you, and we are working on
8 it right now.

9 Senator King: Thank you very much, General.

10 Chairman McCain: Senator Tillis?

11 Senator Tillis: Thank you, Mr. Chair.

12 General McDew, thank you for being here.

13 Just to briefly touch on the cyber discussion, if I
14 were planning a way to disrupt your ability to play your
15 role in the logistics chain, it would be one of the first
16 places. I would go find a supplier network.

17 If you go back and take a look at the exercise, the 580
18 Stryker tires, I do not know how much you have in inventory,
19 but at that scale, to a large engagement or a large
20 deployment, I would go after whatever that supply chain
21 looks like and try to disrupt their ability to communicate
22 with your organization.

23 The one question I would like to get an answer to,
24 though, is that I think if you are going to try to get --
25 you know, it is the weakest link. If the DOD feels

1 relatively comfortable that they are protecting their
2 systems, that is great. But if major suppliers in the
3 supply chain are vulnerable, then it does not really matter.
4 It just means that you are not going to be able to execute.

5 So why wouldn't we start creating, in your acquisitions
6 hat, or with your expertise in acquisitions, a tiebreaker?
7 We have to come up with standards, and I get the third
8 party. I used to be in a firm that did ethical hack
9 testing.

10 So you need third party verification, but why not a
11 tiebreaker between potential contractors that depends upon
12 their level of sophistication and impenetrability? And why
13 wouldn't you be seeking the authorities, if it is necessary,
14 for you to have that baked into any kind of acquisition
15 contracts or RFPs or selections going forward?

16 General McDew: I believe we have the authority right
17 now to bake it in. We may not have the full knowledge on
18 how to bake it in. So we are working on those very things.
19 I have challenged my acquisitions team to some of those very
20 things.

21 What we have found over time, if the commercial
22 industry is my fourth component, it is better to work with
23 them than against them, so we believe that we are working
24 together, maybe not as quickly as we want, so I may have to
25 turn the heat up a little bit.

1 The first heat is to set a clear, definable cyber
2 standard that evolves over time, and then go after third-
3 party verification to ensure they are in compliance.

4 Senator Tillis: Senator King brought up the recent
5 exercise with the 12 ships, five failures, and I already
6 mentioned the Stryker tires. I am not sure if just learning
7 is winning.

8 If you were to scale that, I mean, this is obviously a
9 wargame. This is not the added level of complexity of
10 actually going into a contested area, and that by itself can
11 create distractions and probably cause a higher failure rate
12 just because things are moving quickly. And it looks like,
13 based on what I have read, that it did look like it was a
14 lack of training on the part of contractors, at least for
15 the Stryker. I am not sure about the ships.

16 Where are you getting the resources to do that? How do
17 you actually get them trained up to a level to where you can
18 rely on this pretty significant component on contractors?

19 General McDew: Anyplace that we look inside of our
20 portfolio, we are struggling on a regular basis with how you
21 get beyond what you can do on a daily basis. I have
22 sufficient manpower and expertise to do our job every single
23 day. Under sequestration, we lost some manpower, but we are
24 still sufficient to do that work every day.

25 What we are struggling with right now is our ability to

1 think forward, our ability to innovate, our ability to come
2 after resiliency standards, and to be resilient ourselves.

3 We have gotten so efficient and lean that some of this
4 stuff just takes more time because you do not have the
5 people there to do it.

6 Senator Tillis: It seems to me, based on some
7 responses to some of the other members, that we have the
8 ability for a short-term -- to basically be able to support
9 in a short-term environment. But if we got into a
10 protracted environment, it does not sound like you have a
11 high level of confidence that whatever we may be able to
12 perform over some period of time, that we could do it on a
13 sustained basis. Is that fair to characterize your comments
14 that way?

15 General McDew: I think some of it is I am a bit
16 inarticulate. I am trying not to pin myself down by
17 specifying a period of time. "Protracted" is a word that
18 can mean anything to anybody. Is it 1 month, 2 months, 6
19 months?

20 In some of the conflicts, depending on the level of
21 classification we can talk, we can go up to 6 months fairly
22 easily. Beyond 6 months, there is a challenge. So it
23 depends on what conflict and what the level of contested
24 environment there is as to how far that protraction can be.

25 Senator Tillis: Thank you, Mr. Chairman.

1 Chairman McCain: Senator Peters?

2 Senator Peters: Thank you, Mr. Chairman.

3 General McDew, it is great to have you here. Before I
4 ask you a few questions, I have to join some of my
5 colleagues in giving accolades to Michigan Air National
6 Guard and to our 127th Air Refueling Group out of Selfridge.

7 General McDew: Can I get the chairman to acknowledge
8 one thing? During my confirmation hearing, he chastised me
9 because I actually said nice things about all the units as
10 every Senator brought up their units. I have refrained from
11 doing that this time.

12 [Laughter.]

13 Chairman McCain: An impressive improvement.

14 [Laughter.]

15 Senator Peters: Well, I will give those accolades, and
16 I appreciate your nod. They are doing a great job, General.

17 My question is, China has made significant investments
18 globally in ports and railways. By some estimates, China
19 has some degree of investment in nearly two-thirds of the
20 world's top 50 ports, which handle 67 percent of the global
21 container volume.

22 The Committee on Foreign Investment in the United
23 States, or CFIUS, reviews transactions that result in
24 control of U.S. businesses by foreign entities to determine
25 if there could be an impact on national security. But CFIUS

1 does not have a role if there is not a U.S. nexus for an
2 investment, merger, or takeover.

3 I know you have a very deep understanding of the link
4 between investments in strategic assets and U.S. national
5 security. But my question is, should analysts in the U.S.
6 Government and military pay more attention to foreign
7 investment in strategic assets like ports around the world?

8 General McDew: Yes, Senator.

9 Senator Peters: Could you elaborate, please?

10 General McDew: In my business, I did not know the two-
11 thirds number, but I do not see many ports around the world
12 where the Chinese are not investing. I know that on one
13 level in this country, we are linked economically, and they
14 are not an adversary today, but they have the potential to
15 be one in the future.

16 Anybody that is investing globally in ports, and if we
17 are a maritime Nation, we ought to be concerned about their
18 feelings about freedom of access and how we operate around
19 the globe, and they have not shown that freedom of access
20 means the same to them as it does to us.

21 Senator Peters: So are you concerned then about the
22 potential for strategic investments by other nations could
23 have on your ability to operate? Is that what I am hearing
24 from your answer?

25 General McDew: I am and that is one of the reasons

1 that I spend a great amount of my time traveling around the
2 world, in particular working with the State Department,
3 strengthening relationships that we have in countries, and
4 having them fully understand why those relationships are
5 important, and their ports and their rail infrastructure are
6 important to us.

7 Senator Peters: We have talked a great deal about some
8 of your challenges in terms of capacity to move both fuel
9 and heavy material with sealift operations. If you could
10 talk a little bit about pre-positioned forces and the
11 importance of that? Certainly, that is one way to deal with
12 the challenges of moving something from A to B, is to
13 already have moved it to B prior to a conflict. We have
14 challenges in Europe to move heavy material, should we see
15 increased aggressive behavior there, certainly with what is
16 happening in Korea as well.

17 Please discuss the importance of pre-positioned forces.
18 And do you believe that perhaps we should consider
19 increasing the amount of pre-positioned equipment in various
20 strategic locations?

21 General McDew: I believe, first, Senator, we need a
22 clear strategy of what we want to achieve in a particular
23 region. That strategy then needs to be informed by the
24 resourcing to do whatever that strategy would call us to do.

25 Pre-positioning forces have always been important

1 resources for us. They have become more important as we
2 have withdrawn forces from places around the world and
3 brought them back into the CONUS, because now we are a
4 projecting force. With that, as you said, having stuff
5 already at B is very, very helpful.

6 To ensure that each one of those stocks is fully
7 upgraded -- i.e., is it new equipment? Is it equipment that
8 has at least been tested? Is all of the equipment set
9 there? All of that is important, and it all plays together.

10 Senator Peters: Thank you, General. I appreciate it.

11 Chairman McCain: Senator Cruz?

12 Senator Cruz: Thank you, Mr. Chairman.

13 General, thank you for your service and dedication to
14 the country.

15 Last week, Admiral Harry Harris addressed the resources
16 requirements to conduct military operations in the Asian-
17 Pacific in the event of hostilities. He told this committee
18 that he had the forces in place to "fight tonight, if
19 necessary," but that what concerned him was the "follow-on
20 resources" and how those follow-on resources would get to
21 the region in terms of airlift and sealift.

22 General, do you share Admiral Harris' concerns?

23 General McDew: I believe that Admiral Harris has a
24 right to be concerned because it is his AOR. And I believe
25 that he has a point to be made in that any time we have to

1 project a force, we ought to be concerned about how it is
2 going to get there.

3 We are no longer assured that everything that we send
4 from the CONUS will arrive at its point of destination. It
5 could be because it is old. It could be because of weather.
6 It could be because the enemy had a vote. So I am
7 concerned.

8 Now, from my discussions with him and with General
9 Vince Brooks, the immediate follow-on forces that he needs,
10 we are ready to send.

11 Senator Cruz: So what most worries you with respect to
12 our ability to flow resources into the Asia-Pacific theater?

13 General McDew: Our ability to rely upon the commercial
14 industry, which we will have to rely on over time, and how
15 long the environment remains contested and to what level.
16 Each of those are a bit of unknowns, and how we will
17 maneuver through that space is going to be vitally important
18 for how long protraction is and what protraction will mean.

19 Senator Cruz: So let's shift to a different topic.

20 In the past decades, the United States has had the
21 luxury of having secure air and sea lines of communication.
22 Given the increasing anti-access/area denial efforts of
23 China, there is a chance we could be denied that luxury in a
24 future conflict.

25 A recent article by Dean Cheng, a senior fellow at the

1 Heritage Foundation, posited that, "The ability of the
2 Chinese to deploy substantial forces into the central
3 Pacific would place American logistics and support forces at
4 risk. The loss of one or more underway replenishment ships
5 would rapidly curtail the ability of the American surface
6 forces, including aircraft carriers, to operate."

7 What is TRANSCOM's plan to replenish ships and aircraft
8 in the event that we must fight our way into an area where
9 anti-access/area denial has succeeded?

10 General McDew: Senator, without getting into too much
11 level of classification, I can tell you that we are in new
12 territory. As you said, we have not been in this place in
13 decades. And so I believe that the Navy, in particular, the
14 Air Force, are both working on plans that get back to
15 dominating those domains, but realizing that the logistics
16 infrastructure has not been challenged for so long, it is
17 just a new place for us, and we are having to go after that.

18 I believe that we are making progress, not as fast as
19 we all want.

20 Senator Cruz: On another topic, one of the critical
21 backgrounds of Air Mobility Command is the tactical airlift
22 capacity of the C-130 Hercules. The 136th Airlift Wing,
23 part of the Texas Air National Guard, and you are free to
24 defy the Chairman and praise them vociferously, is flying C-
25 130s and performing extraordinarily well.

1 You expressed concern in your House testimony last
2 month that, "Continued modernization efforts in our C-130H
3 fleet must be prioritized as a relatively inexpensive means
4 of maintaining critical capacity."

5 Could you expand on those sentiments?

6 General McDew: I believe that one of the things we
7 have to look at as we look at our tactical airlift
8 capability is to ensure that all of those units that fly
9 those airplanes have the wherewithal to fly in the new
10 airspace and are modern enough to continue to be a viable
11 resource.

12 I was an old C-130 pilot myself. I flew E models. If
13 anyone had E models today, I would say that we need to
14 retire them all until they are all gone.

15 Depending on which level of H, it is just a matter of a
16 software upgrade, so I believe we are okay. I would make
17 sure that we are not overprioritizing C-130s to the
18 detriment of takers right now, because that is a higher
19 priority need for me.

20 Senator Cruz: Thank you, General.

21 Chairman McCain: Senator McCaskill?

22 Senator McCaskill: Thank you, Mr. Chairman.

23 Good to see you, General. I know well that cornfield
24 you referenced. It looks familiar since it is right across
25 the border. I understand the importance of Scott Air Force

1 Base not just to TRANSCOM and our military but to the region
2 in St. Louis. And I am a big fan of all the work you do
3 there, and I am pleased that we are having this hearing
4 today.

5 Let's talk a little bit about contested environments
6 and airlift in contested environments. Since my colleague
7 from Texas was talking about his unit, I know you know I am
8 going to mention the 139th, because, as you are well-aware,
9 this is an international training school for resupplying
10 contested environments. That is obviously Rosecrans, once
11 again, right in the heart of America. We call it the top
12 gun of airlift. I think that is an accurate description
13 since I have run into people who have been trained at
14 Rosecrans literally all over the world, particularly when I
15 have been to Iraq and Afghanistan.

16 Could you talk a little bit about the plan for testing
17 new equipment that we are going to have dedicated training
18 rather than having to pull these aircraft out of units for
19 training that they are trying to site for C-130Hs, each a
20 different variant, with a training wing?

21 We are hopeful, obviously, that that would get sited at
22 St. Joe because of the inherent capabilities we have and the
23 advantage of the location and the already international
24 clientele we have in terms of our allies getting trained in
25 this important resupplying in contested environments.

1 Talk to me, if you would, about the 139th Airlift and
2 the training that goes on there, and what your view is of
3 that capability in terms of training in contested
4 environments?

5 General McDew: I believe that the instructors that we
6 have at Rosecrans are some of the best in the C-130
7 business. They have a lot of experience. They have been
8 flying the airplane for a long time, and they are steeped in
9 tactics, techniques, and procedures for the aircraft. So it
10 is a resource that we have to rely on as we go talking more
11 broadly about contested environments.

12 I have tasked Air Mobility Command to lead a contested
13 environment summit. I would hope, and I have to believe,
14 that they will have Rosecrans members there to help us get
15 after solutions to our contested environment wargame level
16 of learning.

17 We have learned a bunch of things that should scare us.
18 Now we are going after what we do about it and how we fix
19 and mitigate some of these concerns.

20 Senator McCaskill: Let me talk a little bit about your
21 testimony, which I found stunning, the shortage of 75,000
22 licensed drivers in the trucking industry, and understanding
23 how important this is for our capabilities in terms of
24 supply and resupply.

25 The projected shortfall is due to increase to 890,000

1 drivers by 2027. The current shortage has the trucking
2 industry operating at a 95 percent capacity every day, which
3 basically leaves no surge capacity for high-volume DOD
4 requirements in a time of conflict without severely
5 disrupting commercial services across the country, which is
6 a whole other price we would have to pay in our economy if
7 that were the case.

8 While I want to make sure that we are making it as easy
9 as possible for trained military to transition into civilian
10 life, and, obviously, we have a lot of great truck drivers
11 that are trained in the military -- once again, trained in
12 my state at Fort Leatherwood -- I am worried that even if we
13 put every single truck driver we train in the military into
14 the civilian trucking industry, we are still not going to
15 have enough.

16 So let me ask you, have you all looked -- I worry about
17 driverless trucks, in terms of what it is going to do to
18 jobs in this country. But have you all begun to talk about,
19 in the future, the use of driverless trucks in this
20 capacity? And could you speak to that for a few moments?

21 General McDew: Senator, we have actually looked at
22 autonomy across a broad portfolio, from ships to trains to
23 trucks to airplanes. We believe that you must have that
24 level of technological advancement as you go forward.

25 Somewhere along the way, we are losing the young men

1 and women who grew up wanting to be truck drivers and
2 airplane drivers and train drivers. And so with a lack of
3 capacity, the technology will have to take over. We just
4 have to have this technology going forward.

5 And I believe the advances being made by some in the
6 civil sector is pretty impressive.

7 Senator McCaskill: It is. And I know that we have
8 some autonomous buses going now and other trucks.

9 Have you reached out to some of the companies doing
10 this to see if it would be possible for you all to do some
11 pilot work, maybe over on the base at Scott, to begin to get
12 your arms around what driverless trucks would feel like in
13 terms of your need to supply our troops?

14 General McDew: Most of that work is being done in the
15 services, in the organized train and equip role. The Army
16 is working a lot on autonomous vehicles. The Navy has some
17 autonomous vehicles. And the Air Force is also working with
18 some semiautonomous and autonomous work through DARPA.

19 Senator McCaskill: Great.

20 Thank you, Mr. Chairman.

21 Chairman McCain: Senator Warren?

22 Senator Warren: Thank you, Mr. Chairman.

23 Thank you for being here, General.

24 I want to quickly ask about the importance of our
25 nonmilitary agencies and assistance to your mission.

1 TRANSCOM maintains a presence around the world, and we
2 need other countries, ports and rail and road networks to be
3 upgraded and to be secure, so that those countries can
4 receive our military equipment. And we rely on diplomatic
5 agreements with other countries for our pre-positioned
6 equipment.

7 So I just want to ask, General, would a reduction in
8 funding to the civilian agencies and programs that enable
9 your global distribution networks make your job easier or
10 harder?

11 General McDew: Senator, our job as a co-com with
12 global responsibilities relies on every partner we can get
13 our hands on. One of our biggest partners is the State
14 Department, and a lot of interagency partners around the
15 globe, because they help us build relationships in the areas
16 that we cannot be at on a regular basis. And you cannot
17 build a relationship when you need a relationship.

18 Senator Warren: Right. So I take it the answer is, it
19 would make your job a lot harder.

20 General McDew: It would make it a little harder.

21 Senator Warren: It would make it a little harder. I
22 agree with this, and I point out that the administration is
23 seeking significant reduction to the Department of State and
24 to USAID.

25 Of course, our military is critically important to our

1 security, but we cannot forget that nonmilitary programs are
2 critical enablers of the military to do the jobs that you
3 need to do.

4 Now, General, I also want to ask you another question.
5 When you testified in front of the House Armed Services
6 Committee several weeks ago, you said that getting C-5s out
7 of the backup inventory was your number one priority for the
8 NDAA. The upgraded C-5 is currently our only cargo aircraft
9 that can make a transcontinental flight without refueling.

10 So, General, would having those additional C-5s back in
11 inventory help mitigate your aerial refueling challenge by
12 providing more capacity to move cargo without needing to
13 refuel?

14 General McDew: I believe we can also do a
15 transcontinental flight with a C-17. But the C-5s, we need
16 those additional C-5s back in the inventory. I believe the
17 Air Force has just recently committed to doing that over the
18 next few years, so that will be very, very helpful.

19 Senator Warren: All right. Can you just expand just a
20 little bit on the importance of the C-5? Why the C-5 is a
21 critical piece of equipment for you to get your job done?

22 General McDew: It is the totality of the mission set.

23 First, we have limited numbers of strategic assets.
24 The C-5 provides an outsized cargo capability and a long-
25 range capability. Having been on the receiving end at a

1 deployed location of a C-5's stuff, there is nothing like a
2 C-5 load full of the stuff arriving time after time after
3 time if you are standing up an operation quickly.

4 Senator Warren: Right. I understand it is the only
5 aircraft that can carry two Abrams tanks, or that it can
6 carry six helicopters simultaneously.

7 So I take it that is a good boost to efforts on the
8 ground.

9 General McDew: That is a good thing.

10 Senator Warren: That is right. Good.

11 Well, I just want to say, making sure that we have
12 every available C-5 seems pretty important to me, not to
13 mention the fact that we have invested a lot of money to
14 upgrade them, and now they are sitting on the ramp. The
15 economics of that just do not add up.

16 Westover Air Reserve Base in Massachusetts has eight of
17 these aircraft, and the people there tell me that these
18 planes are in use pretty much all the time, and I am sure
19 they would welcome additional C-5s to be able to work on
20 their mission.

21 So thank you.

22 Thank you, Mr. Chairman.

23 Chairman McCain: Senator Blumenthal?

24 Senator Blumenthal: Thanks, Mr. Chairman.

25 Thank you, General, for your service. I would like to

1 focus a little bit on a topic that has been raised before,
2 the cyberthreat, and ask specifically about your experience
3 so far with some of the contractors.

4 Are they required to report to you incidents or
5 episodes of attacks, cyberattacks by a nation-state?

6 General McDew: I believe that is a Federal
7 requirement, but they are required to report.

8 Senator Blumenthal: And do they report to you?

9 General McDew: I believe they report to an
10 organization called DC3. I am trying to remember. I have
11 to get back to you on what that stands for. We speak in
12 acronyms, and sometimes we forget what the acronym actually
13 stands for. But they actually report through an
14 organization I believe that is part of DHS.

15 Senator Blumenthal: Part of what, sorry?

16 General McDew: Department of Homeland Security.

17 Senator Blumenthal: So they do not report to the
18 Department of Defense?

19 General McDew: Not that I am aware of.

20 Senator Blumenthal: But they are under contract with
21 Department of Defense.

22 General McDew: Right.

23 Senator Blumenthal: Why aren't they reporting to you?

24 General McDew: Let me be more clear about that
25 afterward. I will get back to on the record for that. I am

1 trying to remember exactly the reporting chain. The
2 reporting requirement may be dual, and I do not want to
3 misspeak.

4 Senator Blumenthal: I am somewhat surprised that they
5 are carrying out an essential national security and defense
6 mission; they are under attack, just as they would be as if
7 they were conducting a convoy in Afghanistan; and the
8 Department of Defense is not informed directly.

9 General McDew: Well, part of it, Senator, is "attack."
10 Let's talk about "attack" for a second.

11 Let's say today, and I hate to name a company, because
12 it will get somebody in trouble. If someone is not
13 necessarily contracted with us and they get attacked, that
14 is the same as if they are actually contracted with us and
15 they get attacked.

16 So I do not care where they report to, because if an
17 adversary gets on their network and stays on their network,
18 it does not matter whether they are actually doing my work
19 at the time when the adversary moves laterally through their
20 network and potentially invades my network.

21 Senator Blumenthal: And that is exactly the reason,
22 General, why I think they should be reporting to you,
23 because even if they are attacked -- well, let me put it
24 differently. It makes no difference whether they do
25 civilian as well as military work. If they are attacked, it

1 is an attack on a network that is performing national
2 security military work and potentially not only undermines
3 the function they do for you but gains entry into your
4 computer networks --

5 General McDew: Absolutely.

6 Senator Blumenthal: -- the Department of Defense
7 computer networks. So I am somewhat at a loss to know why
8 they are not instantaneously telling you, we have been
9 attacked by Russia or China.

10 General McDew: Part of it is I cannot do anything
11 about it. This organization that they would report to has
12 partnerships and alliances with the Department of Defense.
13 So the Department of Homeland Security in their role to have
14 the non-DOD side of cyberdefense is partnered with DOD and
15 CYBERCOM.

16 So that organization that would respond to an attack is
17 linked that way. My organization would be interested to
18 know that that company has been attacked, but we would rely
19 on others to do something about it. We would like to know
20 because then it would tell us what we could do with that
21 organization going forward.

22 Senator Blumenthal: Well, I would think for a variety
23 of reasons you would like to know. Have you ever asked?
24 And have you ever sought that information?

25 General McDew: So that information-sharing is what I

1 am really talking about. We have good information-sharing
2 in some areas. It can be better across the entire spectrum,
3 because most of the time, the attack or the intrusion takes
4 place and no one thinks it is an attack or an intrusion. It
5 can look like a harmless mechanical failure.

6 Senator Blumenthal: Let me ask you this. Would you
7 like that information directly?

8 General McDew: I think I do need it directly. I do
9 not need it as quickly as CYBERCOM needs it or DHS needs it,
10 but I need the information.

11 Senator Blumenthal: You do need to directly.

12 General McDew: Right.

13 Senator Blumenthal: When you talk about it, you do not
14 need it as quickly, if it is made available to them, it can
15 be made available to you.

16 General McDew: Absolutely.

17 Senator Blumenthal: Thank you, Mr. Chairman.

18 General McDew: And the unfortunate thing, Senator, is
19 that the speed of this domain does not comport well to how
20 we do information-sharing. Things happen so quickly, and we
21 have to not think about sharing. We just have to share in a
22 classified way.

23 Senator Blumenthal: Thank you.

24 Chairman McCain: General, all I can say is that we
25 need to share. We also need to have an ability, either your

1 organization or someone, to respond and to try to prevent,
2 which is one of the major issues that this committee is
3 having to address since certainly the last administration
4 did not.

5 Jack?

6 Senator Reed: No, sir. I am fine.

7 Chairman McCain: Thank you, General.

8 General McDew: Thank you, Chairman. Thank you.

9 [Whereupon, at 10:56 a.m., the hearing was adjourned.]

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Statement of
General Darren W. McDew, United States Air Force
Commander, United States Transportation Command



Before the Senate Armed Services Committee

On the State of the Command

2 May 2017

Introduction

The United States Transportation Command (USTRANSCOM) delivers National objectives on behalf of the United States, and has proudly done so for nearly three decades. As we near our 30th anniversary, we stand ready to deliver an immediate force through our airlift and air refueling assets or a decisive force with our strategic sealift assets when and where needed. Our delivery of these forces assures an unparalleled global expeditionary capability and gives our Nation options when needing to respond to a variety of crises. Ultimately, this unmatched capability extends a helping hand or projects combat power anywhere, at any time and provides a key strategic advantage for our Nation. We must continue to invest in and preserve our edge. Our ability to sustain strategic power projection is challenged on several fronts by potential adversaries growing ever more capable. However, we continue to look forward and innovate as we face challenges, uncertainties, risks, and complex demands placed upon the unique capabilities we provide daily to our Nation.

Mission

USTRANSCOM delivers full-spectrum global mobility solutions supporting our Nation's requirements in peace and war. In the simplest terms, we provide viable national security options to the National Command Authorities. Those options range from immediate humanitarian or combat deliveries by our airlift and air refueling fleets, to the global delivery of the Nation's decisive combat power via our strategic sealift fleet. While ensuring the readiness and availability of these options on a daily basis, the command also leads the Joint logistics enterprise which is the foundation on which every other Department of Defense capability rides.

Although transportation remains USTRANSCOM's core competency, our span of influence extends from the source of supply, through each segment of the DoD supply chain to

any designated point of need. Through logistics enterprise forums, the Services, Combatant Commands, DoD interagency partners and commercial providers, we continue to collaborate with logistics leaders in order to better identify, prioritize, and close capability gaps within the enterprise. Since 2009, these efforts have resulted in efficiencies and cost avoidances for the DoD distribution supply chain of nearly \$1.6 billion, which translates to more buying power for the Services.

In addition to our primary mission of providing full-spectrum global mobility solutions, our subordinate command, the Joint Enabling Capabilities Command (JECC), provides decisive, rapidly deployable joint command and control capabilities. By doing so, they assist in the initial establishment, organization, and operation of joint force headquarters.

The JECC is a unique total force joint organization that delivers highly effective, cost efficient, joint planning, public affairs, and communications capabilities to all combatant commanders. This Subordinate Command is alert-postured to respond across the full range of military operations. They routinely deliver high-impact mission-specific teams of experts who produce executable solutions for emergent global crises. In fact, they provided more than 40,000 man-days of support that touched every combatant command in 2016; notably providing key Joint Task Force staff and planning expertise within 72 hours to assist Southern Command in responding to Hurricane Matthew. In addition, the JECC's robust support to the Chairman of the Joint Chiefs of Staff Combatant Command Exercise and Training program improved our National proficiency, knowledge, preparation, and response to emergent events.

The JECC continues to have significant forces deployed in support of missions around the globe, including direct support to ongoing counterterrorism operations in Iraq and Afghanistan. Their ability to deliver highly effective joint planning, public affairs, and

communications capabilities have enabled better integration of DoD, U.S. government, and partner responses to strategic challenges in every part of the world.

Operating Environment

Today's diverse global security environment is dramatically different and more complex than the one we operated in for the last 30 years. China, Russia, Iran, North Korea, and violent extremist organizations continue to challenge us in new ways, ultimately demanding new and innovative solutions. As we look to the future, we expect trans-regional, multi-domain, and multi-functional conflicts will define our future operating environment. A global view is essential in such conflicts. Fortunately, USTRANSCOM has operated globally every day since its inception.

We also expect that future conflicts will cross regional boundaries and potential adversaries and peer competitors will field numerically superior forces with near-technological parity. Those adversaries are aware the United States has become accustomed to geographically-isolated conflicts and enjoyed technological superiority over its adversaries, so we expect contested global sea lanes and air routes to a degree we have not faced since World War II. Potential adversaries seek asymmetric means to cripple our force projection and sustainment capabilities by targeting critical military and civilian assets, both within the U.S. and abroad. Additionally, our enemies continue to use our dependence on the cyber domain against us. With those challenges in mind, every Soldier, Sailor, Marine, Airman, Coast Guardsman and Department of Defense (DoD) Civilian of USTRANSCOM and its Component and Subordinate Commands recognizes it is our duty to ensure the Command remains postured to operate in such an environment and effectively answer the Nation's call, should it come.

Our Approach

To effectively operate in that future environment, we are focused on four priorities: ensuring readiness today while advocating for future capabilities, advancing our capabilities in the cyber domain, evolving the command for tomorrow, and championing an innovative, diverse, and agile workforce.

In prioritizing today's readiness while keeping an eye toward future capabilities, we are advocating for the right mix of personnel, platforms, systems and training to ensure we can provide the global transportation and logistics capabilities our Nation requires. By making the right investments today in enhancements for our air, sea and surface fleets, we will ensure USTRANSCOM delivers the Nation's objectives tomorrow. Through this pursuit, we posture to meet the full range of Unified Command Plan roles and missions in current and emerging trans-regional transportation, logistics, and patient movement requirements.

Improving our cyber defense allows USTRANSCOM to operate freely and effectively. We continue to broaden our scope to actively evaluate and mitigate our command and control, weapon system, and infrastructure vulnerabilities, while identifying and advocating for the critical capabilities, policies, and procedures that ensure mission accomplishment.

As a global Combatant Command charged with delivering national objectives in tomorrow's dynamic security environment, we must challenge our assumptions, accurately forecast trends that shape that future environment, and develop the technologies and ideas that maintain our Nation's competitive advantage. In our pursuit to continuously evolve for tomorrow, we established a relationship with the Defense Innovation Unit Experimental to expedite the implementation of logistics- and cyber-based technologies such as commercial cloud-based technologies which can provide Infrastructure-as-a-Service, Platform-as-a-Service, and Software-as-a-Service offerings to host USTRANSCOM's unique applications. These and

other initiatives will increase our responsiveness, agility, efficiency, and operational processes, while enhancing transparency with our customers and positioning us ahead of emerging challenges and threats.

Finally, our approach recognizes USTRANSCOM requires a talent rich, diverse, creative, adaptive, and innovative workforce to survive today and thrive in tomorrow's dynamic environment. We will create this workforce by recruiting, developing, and retaining the best talent America has to offer. We recognize that doing so requires us to remove cultural, procedural, and policy barriers along the way such as significant civilian hiring reform. We appreciate the attention Congress has placed on this issue with the recent passage of legislation in the 2017 NDAA creating a streamlined civilian on-campus recruiting authority, fast tracking the ability to hire talented personnel for critical positions in an ever-more competitive marketplace. Initiatives improving the speed at which talent can be hired, and opening aperture to additional fast-tracked hiring authorities and policy flexibility, ensures better access to streams of talent benefitting USTRANSCOM.

State of Our Readiness

Without reservation, USTRANSCOM stands ready to deliver on behalf of the Nation today. However, as our approach to the future operating environment indicates, there are challenges that demand our attention to ensure our readiness is never called into question. These challenges fall into the following broad categories: airlift and air refueling, sealift, surface, budget, and workforce issues.

Airlift/Aerial Refueling

Air Mobility Command (AMC), a Component Command of USTRANSCOM, provides an incredible capability to our Nation and the world. As one Total Force team with commercial

partners, AMC provides airlift, aerial refueling, air mobility support, and aeromedical evacuation around the globe, supporting eight combatant commands while operating in 23 countries.

On average, tankers are conducting aerial refueling operations every five minutes over the skies of Iraq and Afghanistan. Additionally, AMC refuels fighter squadrons across the Pacific Ocean to ensure a constant presence throughout the Pacific and refuels nearly all of our North Atlantic Treaty Organization allies during operations and exercises around the globe. Yet the scarcity of forces and their current distribution, coupled with the high operations tempo placed upon them, comes at a cost to the health of the KC-10 and KC-135 fleets.

Currently, the KC-46A program is on track to deliver 179 aircraft by 2028, which will enhance operational agility. The delivery of these aircraft over the next few years remains a critical investment to ensure we can continuously project power around the world, whether in support of humanitarian relief missions or combat operations.

The delivery of the KC-46A alone, however, will not address present concerns with the allocation and distribution of the global tanker fleet. For example, since 2011, the authority of the USTRANSCOM commander to manage tankers globally has been constrained by congressional language prohibiting changes to command and control of scarce KC-135 forces. As global tanker requirements continue to expand, we are seeing more cases where the requirements of a given combatant command are in competition with others. At the same time, we recognize a trans-regional, multi-domain, and multi-functional operating environment combined with proliferating anti-access and aerial denial threats will only place greater strain on the air refueling force. Although we continue to work closely with AMC and the Joint Staff to mitigate the effects on the global tanker fleet, the restriction in place since 2011 continues to limit the USTRANSCOM commander's ability to exercise operational control of high demand Pacific and European tanker forces necessary to meet global and national defense requirements.

Also key to air mobility are our airlift assets and the additional capabilities commercial industry brings to the fight. For our part, the C-17 and C-5 continue to provide strategic airlift the world over while our C-130s meet tactical airlift needs in every region of the globe. We are seeing stress on the strategic airlift fleets and have some concerns about hard choices that have been made to close active duty C-17 squadrons with an eye toward buying that capability back in the reserve component. While both components are capable, maintaining the right balance is critical so we do not create a situation where mobilization is needed for every new mission that might arise.

On the commercial airlift side, our Civil Reserve Air Fleet (CRAF) partners commit aircraft to augment DoD airlift during contingencies and/or emergencies in exchange for government airlift business while also providing commercial airlift services to DoD during peacetime. USTRANSCOM closely coordinates with the Department of Transportation (DoT) in administering the CRAF program. This steadfast relationship has historically provided lift for roughly 40 percent of all DoD air cargo and 90 percent of all passenger movements in direct support of our warfighters. Our 24 CRAF carriers remain ready to support DoD readiness requirements with cargo and passenger support worldwide and we will continue to rely on viable and healthy CRAF program in the future. To ensure the relationship with our CRAF partners remains robust, we've begun contracting with them based on early demand signals, allowing us to move workload to them which would have otherwise been handled by our organic aircraft. This has the dual benefit of providing additional workload to our CRAF partners while also reducing flying hours in our organic fleet.

Sealift

Historically, nearly 90 percent of wartime transportation requirements are delivered through strategic organic and U.S. flagged commercial sealift. In fact, our strategic sealift fleet

provides the ability to deliver a decisive force over great distances. Our U.S. Navy component, the Military Sealift Command (MSC), provides sealift capabilities through ship chartering, prepositioning, and sustainment operations while also executing operational command over the Maritime Administration's (MARAD) Ready Reserve Force ships during contingencies. Without a healthy and viable U.S. Commercial Sealift Fleet, MSC Surge Fleet, and MARAD's Ready Reserve Force, our Nation's military may not be able to deploy as quickly and efficiently as it can today.

The National Security Directive on Sealift and the Sealift Emergency Response Programs provide assured access to U.S. flagged commercial sealift assets, Merchant Mariners, and the global intermodal capability required to augment government owned (organic) sealift capabilities during contingencies. This assured access is provided via the Voluntary Intermodal Sealift Agreement (VISA) which ultimately ensures the U.S. maintains its capability to meet sealift requirements in peace, crisis, or war. The VISA program provides a responsive transition from peace to contingency operations through pre-coordinated agreements for U.S. flagged commercial sealift capacity and systems to support DoD's contingency sealift needs. It allows USTRANSCOM to meet mobilization requirements in a rapid fashion.

At the core of the VISA vessels are our Maritime Security Program (MSP) partners, who are essential to our wartime U.S. commercial sealift capability, and all are participants Sealift Emergency Response Programs. Over time, MSP has provided access to required commercial U.S. flag shipping assets, while also supporting the pool of Merchant Mariners needed to operate MSC's Surge and Ready Reserve Fleet. In this way, the MSP significantly contributes to the supply of Merchant Mariners available to serve on U.S. vessels in time of war while mitigating future risk to our national commercial capacity.

Along with MSP, The Merchant Marine Act of 1920, also known as the Jones Act, provides an additional pool of trained Merchant Mariners and sealift capacity. It does this, and contributes to national defense, by subsidizing a robust, domestic, maritime industry including U.S. industrial shipyard infrastructure for building, repairing, and overhauling U.S. vessels.

Ensuring a healthy U.S. fleet has proven difficult in the larger global context where international shipping has slowed while the industry as a whole has ended up with an excess of ships. Excess supply has caused prices to fall, which has put considerable financial pressure on U.S. flagged vessels. Unfortunately, the U.S. flagged international commercial fleet and Mariner pool has shrunk over time; while we have contingency plans, further reductions may cause us to investigate other options such as using more foreign flagged international commercial vessels manned by foreign crews during crisis or war. American shipping companies continue to re-flag vessels to foreign nations, diminishing the size of our commercial fleet, although that fleet stabilized in recent years at around 80 today. While the U.S. flagged commercial fleet remains the most effective means for us to obtain the necessary sealift capability to meet national defense needs, we are considering a range of options to ensure that we retain the ability to deploy a decisive combat force at the time and place of our choosing. Those options may include new approaches to preserving essential capabilities in the Ready Reserve Force, which among other options, may include non-US built vessels.

Sealift Fleet Recapitalization

Since the 1990s, DoD mobility studies have indicated a requirement for nearly 20 million square feet of Roll-on/Roll-off (RO/RO) capacity to promptly transport materiel wherever needed in defense of the Nation's interests in major conflicts abroad. This includes over 15 million square feet of organic RO/RO capacity on 65 total ships and nearly 4.5 million square feet of U.S. flagged commercial RO/RO capacity gained through VISA. However, we are

projecting a loss of 4.5 million square feet of organic surge RO/RO capacity by 2033 as these vessels reach the end of their service life, with an accelerated loss expected between 2026 and 2031. The organic vessels tasked to meet this requirement are becoming obsolete or unsustainable. Our organic surge vessels, for example, have an average age of 39 years and will begin to reach their 50-year service life in the 2020s. This will result in a critical sealift capacity shortfall, which limits our ability to support the national security requirements. In addition to the RO/RO capacity loss, 10 of 12 special-capability ships will age out of the fleet between 2020 and 2024. These ships provide expeditionary capabilities such as over-the-shore fuel distribution and crane lift to austere or damaged ports, a critical necessity for the deployment of ground forces and for operations in a contested environment. The aging and loss of sealift capacity places a particular urgency on the need to explore options for maintaining critical capabilities, without which the Nation's strategic sealift capability to support future operations will be at risk. We are working closely with the U.S. Navy to maintain the full spectrum of strategic sealift capabilities required to move U.S. forces in current and future operational environments.

In order to keep the recapitalization strategy on track and achieve success in the near term, the used vessel acquisition component must start as early as fiscally possible. This component seeks to purchase vessels leaving MSP or other commercial vessels regardless of country of origin. The acquired vessels would replace the aging organic vessels for a fraction of the cost of new construction and could remain in service for several decades. Congressional support will be needed to gain the necessary authorities and funding for this effort.

Additionally, DoD's current organic surge fleet is composed of several steam-propelled ships. The manning of these ships with seasoned steam certified engineers is a growing concern as commercial industry is expected to retire all steam ships by the early 2020s, while we need to operate them until 2035 unless recapitalization efforts allow us to replace them sooner. As

commercial industry retires their steam ships, our access to a civilian pool of steam-certified engineers and mariners may fall severely (and eventually be) eliminated.

Surface

Since the first stage in delivering a decisive force happens on the ground, our Nation's infrastructure of roads, rails, and ports plays a fundamental and crucial role in the deployment and sustainment of the Joint force. USTRANSCOM closely partners with the Department of Transportation (DoT) and other Federal and State entities to ensure infrastructure within the continental U.S. is ready to support DoD deployment and distribution needs.

USTRANSCOM, through its Army component the Military Surface Deployment and Distribution Command (SDDC) represents the interests and requirements of the DoD to access and safely utilize both private and public transportation infrastructure and services. Currently, the public sector road network remains capable of meeting DoD ground transportation needs while providing adequate access to commercial trucking capacity to meet current and anticipated surface transportation needs.

Just as the availability and safety of drivers and roadways are critical to national defense, our national rail system is of equal importance. Through our Railroads for National Defense Program, and close collaboration with civil sector rail officials and DoT's Federal Railroad Administration, we assess the ability of the U.S. rail system to support military needs. Currently the rail network required to deploy our force is in place and viable. In the next fifteen years, however, we face age-mandated retirements of some of our uniquely capable DoD railcars. We are developing a plan in close collaboration with the Department of the Army to retain this critical transportation capability.

To successfully execute our deployment mission, USTRANSCOM also relies on a collection of both DoD and commercially-owned U.S. seaports, designated as Strategic Seaports.

The primary mission of the Strategic Seaport Program is to ensure DoD has access to sufficient seaport infrastructure to meet contingency deployment needs. None are more important than the main West and East Coast ports of Military Ocean Terminal Concord (MOTCO) and Military Ocean Terminal Sunny Point (MOTSU).

MOTCO on the West Coast is indispensable to USTRANSCOM's support of U.S. Pacific Command's operations and DoD's military capability in the Pacific Theater. Due to the nature and size of this mission, no suitable alternatives exist on this coast and MOTCO's infrastructure assets require critical upgrades and maintenance to remain relevant in the current military environment. Current efforts are centered on preserving the operability of MOTCO's primary pier until it can be replaced. We are also examining additional options for MOTCO to become a modern ammunition port, fully capable of safe and efficient operations to enable uninterrupted delivery of ammunition to the Pacific theater.

At MOTSU, significant infrastructure improvements within the last few years have enhanced our ability to support the EUCOM, AFRICOM, and CENTCOM Combatant Commanders' operations and allow the terminal to meet throughput requirements. We continue to work with the Department of the Army to preserve both seaports by finding and applying resources to reduce risk and prevent capability gaps.

Although our nation's roads, rails, and ports play a fundamental role in the deployment and sustainment of our Armed Forces, nothing is more important than the people and their families who support and execute the mission, at home and abroad. The Defense Personal Property Program provides our Service members, DoD Civilians, and their families with an effective and efficient system for the relocation, storage, and management of their household goods and privately-owned vehicle (POV) shipments. As a testament to our partnership with the Deputy Assistant Secretary of Defense for Transportation Policy, the Services, and commercial

transportation service providers, the Defense Personal Property Program enables nearly 875 service providers to support the movement of approximately 70,000 POVs and around 430,000 household goods shipments globally each year.

An initial review and analysis of the Defense Personal Property Program identified that the end-to-end household goods value chain lacked proper alignment to consistently produce high quality relocation services due to lack of a single program manager and the need for more commercial capacity. Consequently, stakeholders from across the Department have collaborated on initiatives to recommend to key leaders from the military Services. Additionally, the Defense Digital Service recently assessed our primary software and customer interface within the Defense Personal Property System and found that while we are working toward reasonable solutions to the problems our customers have with the system, we are plagued by common problems that can be overcome by focused effort and assistance from the Defense Digital Service. Although still a work in progress, these initiatives are intended to improve the move experience for our Service members while simultaneously posturing the program for institutionalized and sustained continuous improvements. Addressing the challenges of program accountability, customer service, entitlements, standardization, and automation provides an opportunity to incorporate updated technologies and processes that will improve the quality of life and security of our Service members, DoD Civilians, and their families.

Budget Uncertainties

USTRANSCOM's mobility readiness depends highly on our financial health, which in turn relies on the financial posture of Services that provide the capabilities we use to execute our critical missions. Notably, the Budget Control Act and recent Continuing Resolutions have forced the Services to prioritize immediate operational needs over prudent long-term planning and investment, decisions that ricochet inefficiencies through the logistics and transportation

enterprises. More generally, sequestration's impact on readiness, mission operations, and modernization funding will result in the Services being unable to adequately man, train, and equip mobility forces thus presenting a significant readiness challenge. Irregular budgets jeopardize critical mobility acquisition programs like the schedule for the KC-46A program which addresses significant challenges with our aging aerial refueling fleet.

Additionally, our overall readiness and that of other combatant commands is influenced by the joint training and exercises conducted solely through resources provided by the Combatant Commander's Exercise Engagement and Training Transformation program. With an increased emphasis on trans-regional, multi-domain, and multi-functional operations, adequate support to combatant command joint training and exercise programs is as critical as ever.

As we head into FY18, we are projecting adequate financial levels to ensure our readiness, but remain vigilant in light of budget uncertainty. While maintaining our overall readiness, we continue to focus on our commitment to becoming audit ready by complying with the initiatives of the Financial Improvement and Audit Readiness (FIAR) program. At the same time, as we move to multi-modal operations and new Plan, Order, Ship, Track and Pay processes, we are integrating FIAR throughout those processes to ensure audit compliance. Furthermore, we continue to work closely with our DoD counterparts to ensure Transportation Financial Audibility throughout the Department. In an effort to ensure our business processes remain relevant today and into the future, we are striving to be cost-competitive and more transparent with our customers while simultaneously seeking ways to provide a lower, more predictable rate structure. These actions enhance our coordinating role across the deployment and distribution enterprise and ultimately enhance the support we provide the warfighter.

Availability of the Transportation Workforce

Each mode of our transportation network (air, surface, and sea) requires commercial and/or military operators such as truck drivers, aircraft pilots, and sealift mariners. These operators allow USTRANSCOM to transport forces and materiel to the point of need and to return our ill and injured to appropriate medical care. Worsening shortages of these operators limit our ability to successfully deliver required combat power across the globe.

In order to respond anywhere in the world in a matter of hours, appropriate manning levels of both Air Force and commercial pilots are essential. In fact, all DoD aerial refueling and nearly all strategic aeromedical evacuation capability relies on the availability of the U.S. Air Force aircrews from the active and reserve components. Additionally, USTRANSCOM's organic and commercial airlift capabilities deliver roughly 10 percent of all transportation requirements and continue to be a significant force multiplier for the Nation by delivering an immediate force overnight into an area of operations when needed. Pilot manning will remain vital for the near and long-term future of this critical USTRANSCOM capability.

Our Mobility Air Forces and commercial airline partners, however, are experiencing manning shortages. Reduced undergraduate pilot training quotas, changes in force structure, and declining retention (along with aggressive airline hiring for the foreseeable future) will require a concerted effort if we are to mitigate potential negative impacts across the active and reserve components of the U.S. Air Force. By comparison, U.S. commercial airlines, including our partners participating in the CRAF program, expect a pilot shortage of roughly 35,000 pilots through the year 2031. Contributing factors include retirements exacerbated by statutory age limits (i.e., max of 65 years old), an increase in new airline transport pilot certificate requirements, and the continuous growth of the global airline industry.

While monitoring the health of pilot manning, we are keenly focused on the strain the trucking industry continues to feel due to the commercial truck driver shortage (current shortage of 75,000 with a projection of 890,000 by 2027). The industry's ability to attract and retain qualified commercial truck drivers required to move freight for the DoD and the Nation is a growing concern. Persistent shortages are caused by several factors such as quality of life, younger generations not seeking out the truck driving profession, and the pursuit of more desirable job alternatives. Due to the shortage of operators, the trucking industry is currently operating at greater than 95% capacity leaving little to no surge capacity for DoD. In an effort to address and reverse the shortage of drivers, the DoT Federal Motor Carrier Safety Administration implemented initiatives such as granting test waivers for military members with previous commercial motor vehicle experience and expanding their experience validation timeline from 90 days to one year. These efforts are the first steps in addressing the shortage; however, they may not be sufficient to alleviate likely impacts in times of increased demand for DoD's surge requirements. To combat this issue, we are continuously engaged with industry and conducting ongoing analysis and reviewing plausible alternatives, such as increasing the use of multiple modes (rail and truck) and un-manned vehicles.

We will continue to monitor and manage the manning shortages across our three fundamental domains. While supporting DoT's efforts in reversing current trends, we remain determined to ensure a sufficient pool of transportation operators are available to provide our Nation transportation options.

Advancing the Cyber Domain

The greatest challenge USTRANSCOM faces every day is the threat of attack from the cyber domain. Although cybersecurity is a DoD-wide focus area, USTRANSCOM is distinctly vulnerable because the majority of the Command's transportation data resides within and travels

through the unsecure commercial internet. Furthermore, unsecure networks and systems of our commercial transportation service providers, coupled with critical infrastructure vulnerabilities around the globe, almost wholly reside outside our control and pose significant risk to mission assurance. Due to these challenges, USTRANSCOM is prioritizing our key cyber concerns. The Command is collaborating with U.S. Cyber Command, DoD Agencies, Federal cyber organizations, industry, and academia to identify and mitigate gaps and shortfalls, as well as to seize opportunities to advance our cyber domain capabilities.

We have and will continue to encourage industry partners to join together in a transportation-related Information Sharing and Analysis Organization, focused on supporting DoD's transportation mission. Our current partnership with the National Defense Transportation Association (NDTA) Cybersecurity Committee and our semiannual Cybersecurity Roundtables that have drawn interest from across government, industry, and academia are cornerstones of our efforts to build a more responsive, aware, and collective approach to mission assurance.

For example, through our partnership with the NDTA Cybersecurity Committee, we seek to address: cybersecurity issues of mutual concern, rapid sharing of threat information, the application of best practices, and, research on existing and emerging cybersecurity technology and development activity. The committee provides a mechanism to address urgent concerns, such as cybersecurity contract language and the exchange of unclassified and sensitive information between USTRANSCOM and industry partners.

However, there is still much more to do in order to address our current and future cyber capabilities. People, processes, and technology are all key areas where we can enhance our cyber resiliency. Specifically, we must grow and retain a highly skilled cyber workforce; clarify cybersecurity roles and responsibilities across the critical infrastructure sector; implement acquisition policy to provision cloud services and other innovative cyber solutions at the "speed

of need.” We also need to ensure that DoD can rapidly share threat and vulnerability information with our commercial partners while continuing to improve cybersecurity compliance reporting that enables informed risk management decisions appropriate to the situation at hand. We will continue to work with U.S. Cyber Command, DoD Agencies’ cyber organizations, Department of Homeland Security, and commercial transportation partners to mitigate cyber risks to global distribution operations.

Evolving for Tomorrow

Beyond the contested cyber domain, we recognize we will face new challenges across the other domains as well. As mentioned, we expect future conflicts are increasingly likely to occur in an environment contested across all domains, subsequently restricting our freedom of action. Adversaries and geopolitical competitors have the ability today to challenge our freedom of movement from deployment to employment using kinetic and non-kinetic means to disrupt, delay, or deny operations. This creates an environment that places our strategic assets at great risk. As our Joint force prepares to face this challenge, operational plans must reflect the anticipated attrition of both combat and mobility assets and associated personnel.

Future conflicts within the contested environment will also greatly challenge global patient movement operations. USTRANSCOM currently operates the best patient movement system in the world, safely and efficiently moving thousands of our nation’s ill and injured Service members to the medical care they need every year. We are not content, however, to rest on our successes. Recognizing future adversaries might be able to limit our access to the air and cyber domains, we are aggressively exploring surface movement solutions to ensure we remain the best in patient movement no matter the threat or environment. We continue to partner with the Services to expand maritime patient movement capabilities and we are working to rebuild our ability to move patients by rail. Our Nation’s joint casualty stream must be supported by joint

patient movement capabilities that are interoperable, multi-modal, and capable of functioning in a cyber-compromised environment. Synchronized policies, training, and research and development are needed across the DoD to ensure we remain the best in safely moving our ill and injured whenever and wherever needed.

We also conducted a Future Deployment and Distribution Assessment focused on deployment and distribution in a contested environment. This assessment solidified our concerns about the challenges of conducting operations in contested environments and again highlighted that our global network (to include partners and allies) is at risk from threats in all domains – land, sea, air, space, and cyberspace.

Finally, we hosted our inaugural contested environment war game aimed at creating a common understanding of our operations in contested environments. We also sought to recognize the enterprise-wide challenges and develop prioritized mitigation efforts to enable future operations in those environments. The war game also addressed the necessary investments in planning and collaboration with the entire DoD logistics enterprise necessary to develop appropriate mitigation strategies for these threats. Finally, the war game highlighted the need for multiple operating options to ensure resiliency, agility, and responsiveness in future conflicts. An important insight from the war game is that operational plans and fleet sizing considerations must account for the loss of capital assets. These vital principles ensure realistic planning and aligned with risk, resulting in operational resiliency across all domains in future contested environments.

Based on these findings and published defense guidance, we will work with the Office of the Secretary of Defense, CAPE to initiate a new mobility requirements study once defense strategic guidance and the supporting elements, such as defense planning scenarios, mature.

Championing an Innovative, Diverse, & Agile Workforce

In light of all of the challenges and opportunities ahead of us, we recognize our people are our greatest resources and are the ones who will rise to those challenges and seize the opportunities. At the same time, it is clear the competition for talent is becoming more acute. Given that, we are working to recruit, develop, and retain the best talent America has to offer. At the heart of that effort we completed our first-ever headquarters Human Capital Strategic Plan setting short and long term goals for cultivating and managing our large professional civilian workforce. We also entered into an agreement with Defense Logistics Agency that created an individual civilian experiential development opportunity. Goal of effort is to address how USTRANSCOM and Defense Logistics Agency can work together to collectively develop the skills, knowledge, and effectiveness of our civilian workforce. We expect this initial agreement to serve as a baseline we can expand upon in the future. Beyond these early accomplishments, we are positioning ourselves to remain competitive in attracting future talent by identifying and establishing developmental positions within USTRANSCOM.

Our Commitment

For nearly three decades, our Nation has turned to USTRANSCOM's strategic power projection capability to respond rapidly to global threats and disasters. Today, USTRANSCOM continues to deliver 21st century, enterprise-wide, global expeditionary capabilities to the joint force. Anticipating and adapting to challenges will allow us to perform our missions in an ever-changing security environment. These missions continue to trend toward non-permissive, remote, austere, and widely-dispersed locations, but this team of transportation and logistics professionals always finds a way to deliver our national objectives. Our continuous focus on the resiliency and preservation of the Joint logistics enterprise while advocating for the right

investments in our cyber-enabled air, sea, and surface fleets ensures we can deliver the Nation's objectives tomorrow.

Continued Congressional support, coupled with the hard work of the professional men and women of USTRANSCOM and our components, will ensure we are ready to deliver the Nation's Objectives. We will continue to address challenges and vulnerabilities and advocate for innovative solutions as we provide the joint force options for delivering an immediate force tonight and a decisive force when needed. "Together, we deliver!"