

Stenographic Transcript  
Before the

COMMITTEE ON  
ARMED SERVICES

## **UNITED STATES SENATE**

POSTURE OF THE UNITED STATES TRANSPORTATION COMMAND

Tuesday, April 10, 2018

Washington, D.C.

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1 HEARING TO RECEIVE TESTIMONY ON THE POSTURE OF  
2 THE UNITED STATES TRANSPORTATION COMMAND  
3 IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST  
4 FOR FISCAL YEAR 2019 AND  
5 THE FUTURE YEARS DEFENSE PROGRAM

6  
7 Tuesday, April 10, 2018

8  
9 U.S. Senate  
10 Committee on Armed Services  
11 Washington, D.C.

12  
13 The committee met, pursuant to notice, at 9:31 a.m. in  
14 Room SD-G50, Dirksen Senate Office Building, Hon. James M.  
15 Inhofe, presiding.

16 Committee Members Present: Senators Inhofe  
17 [presiding], Wicker, Fischer, Rounds, Ernst, Tillis,  
18 Sullivan, Cruz, Scott, Reed, Nelson, McCaskill, Shaheen,  
19 Gillibrand, Blumenthal, Donnelly, Hirono, King, Warren, and  
20 Peters.

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1           OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S.  
2           SENATOR FROM OKLAHOMA

3           Senator Inhofe: The meeting will come to order.  
4           The committee today meets to receive testimony from  
5           General Darren McDew on the current state of the U.S.  
6           Transportation Command.

7           In the contested environment described within the new  
8           National Defense Strategy, TRANSCOM's capacity to mobilize  
9           and deploy forces across the globe becomes ever more crucial  
10          to our ability to project power.

11          The National Defense Strategy provides clear focus on  
12          the great power competition with China and Russia. We have  
13          been talking a lot about that recently.

14          Further, the National Defense Strategy emphasizes the  
15          importance of resilient and agile logistics.

16          The assumptions that U.S. forces will have uncontested  
17          access to airspace and sea lanes is becoming less and less  
18          likely.

19          General McDew, you appear before this committee at a  
20          time when these responsibilities are of vital importance to  
21          the nation's security. Our adversaries are not standing  
22          still. They are moving fast, and we are very distressed at  
23          some of the things that we see on a firsthand basis.

24          TRANSCOM's job is to ensure that our operational plans  
25          contain valid assumptions for how our soldiers, sailors,

1 marines, and airmen will get to the fight and how they will  
2 be sustained in a contested forward environment.

3       Efforts are currently underway to conduct an  
4 overarching mobility study that would articulate how  
5 TRANSCOM would operate in a contested environment as well as  
6 execute its joint distribution and deployment  
7 responsibilities. Our current approach relies on moving  
8 materiel to large air and sea ports which serve as efficient  
9 hubs but are also well known to our adversaries and would be  
10 very hard to defend against a precision weapon attack.

11       The Department must begin to focus on improving  
12 resilience. Anything less would significantly increase the  
13 risk of our missions.

14       And so we thank you for appearing today and look  
15 forward to your frank discussion on TRANSCOM's potential  
16 problems and successes.

17       Senator Reed?

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

3           Senator Reed: Well, thank you very much, Mr. Chairman.  
4 Let me join you in welcoming General McDew to the committee  
5 this morning and to testify on the plans and programs of the  
6 United States Transportation Command, or TRANSCOM, as we  
7 continue to review our fiscal year 2019 authorization. We  
8 are grateful to you for your service and the service of the  
9 men and women of TRANSCOM. Please thank them for us and  
10 their families who also serve with great distinction.

11           The men and women of TRANSCOM perform duties that  
12 sustain the whole Department of Defense effort in protecting  
13 our nation's security. With the competitive edge and its  
14 ability to deploy and sustain America's armed forces,  
15 TRANSCOM provides DOD with unique capabilities that we have  
16 come to expect and perhaps too frequently take for granted.  
17 TRANSCOM forces are busy supporting all of the combatant  
18 commanders every day, and without these TRANSCOM forces, the  
19 United States would be at a significant disadvantage almost  
20 everywhere in the world.

21           TRANSCOM faces a number of daunting tasks, including a  
22 unique set of cyber threats because you must work  
23 extensively with private sector entities in the  
24 transportation and shipping industries to support DOD  
25 deployment operations.

1           3 years ago, the committee issued a report on certain  
2 aspects of TRANSCOM's cybersecurity situation. And, General  
3 McDew, I would like to get an update from you on the  
4 progress in the cybersecurity efforts that you have made  
5 since last year.

6           The Ready Reserve Force, the RRF, a group of cargo  
7 ships held in readiness by the Maritime Administration, is  
8 aging and will need to be modernized over the next decade.  
9 Last year, the committee authorized the Department to start  
10 a program to recapitalize the Ready Reserve Force by  
11 authorizing DOD to purchase up to two foreign-built vessels  
12 while the Navy moves forward on a plan to design a family of  
13 auxiliary vessels for a number of uses, including  
14 recapitalizing the Ready Reserve Force.

15           This authorization to purchase two vessels was intended  
16 to cover recapitalization requirements for the first several  
17 years of the future defense program. However, this year,  
18 the administration is asking to increase that authorization  
19 to include purchasing up to 24 foreign-built vessels.  
20 General McDew, I am interested in your perspective on this  
21 request, whether such a large increase is needed, and if  
22 there are any alternative options.

23           In addition to the Ready Reserve Force, the Defense  
24 Department also needs to ensure that the Civil Reserve Air  
25 Fleet, or the CRAF, the CRAF program which provides as much

1 as 40 percent of wartime airlift needs, remains viable after  
2 operations in Iraq and Afghanistan and will be able, as  
3 needed, to surge capacity in the future. General, I am  
4 interested in your views on the state of the fleet and if  
5 anything needs to be done to ensure their readiness.

6 Our global transportation capability, owned and managed  
7 by TRANSCOM, has been one of our asymmetric advantages for  
8 many years now. However, we cannot assume that potential  
9 adversaries will allow us free rein in this area in the  
10 future. General McDew, I understand that you have been  
11 conducting an analysis to assess requirements for an  
12 environment where our mobility forces would be challenged.  
13 I also understand that the Department will share those  
14 results later this year. Perhaps you could give us an  
15 update on when we are likely to see the results of your  
16 analysis.

17 Thank you again for your decades of service, and I look  
18 forward to your testimony.

19 Thank you, sir.

20 Senator Inhofe: Thank you.

21 General McDew, we would like to hear your opening  
22 statement. Your written statement will be made a part of  
23 the record. Thank you for being here. You are recognized.

24

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

3           General McDew: Thank you, Senator Inhofe, Ranking  
4           Member Reed, and distinguished members of the committee. It  
5           is an honor to be with you this morning, and thank you for  
6           your leadership and unwavering support you give the men and  
7           women who serve our great and mighty nation.

8           I also want to thank you for the opportunity to  
9           represent the United States Transportation Command and the  
10          work of our soldiers, sailors, airmen, and marines and coast  
11          guardsmen, civil servants and contractors and their  
12          families. The men and women who make up this command  
13          underwrite the joint forces' lethality with unparalleled  
14          capability, and I am exceptionally proud of what they do.  
15          As a matter of fact, we are probably the only command that  
16          has a watch party for this event. So they are all watching  
17          back home in the cornfields of Illinois right now.

18          USTRANSCOM's total force team works every day to  
19          provide our nation with a broad range of strategic  
20          capabilities and options, but they do not do it alone. I  
21          wish every American citizen could understand how much we  
22          rely on the nation's truck drivers, conductors, commercial  
23          pilots, mariners, stevedores, and much, much more to meet  
24          national defense requirements. USTRANSCOM is a global  
25          warfighting command with functional expertise and we move

1 and sustain the joint force, but we are also responsible for  
2 operating the expansive joint deployment and distribution  
3 enterprise. I can say with full confidence that today  
4 USTRANSCOM stands ready to deliver on behalf of national  
5 objectives anywhere at any time.

6       However, I do remain concerned about the future. As we  
7 refocus our efforts on great power competition, we are faced  
8 with potential challenges to our democratic values, our  
9 security. In this environment, we must always be ready. As  
10 we increase lethality across the joint force, the resources  
11 necessary to transport and sustain America's military must  
12 keep pace. Our ability to project a decisive force is  
13 foundational to the National Defense Strategy. The size and  
14 lethality of the force is of little consequence if we cannot  
15 get it where it needs to go when it needs to get there.

16       To that end, the 2018 National Defense Authorization  
17 Act directed a mobility capabilities and requirements study.  
18 This study will determine if in fact the current inventory  
19 of mobility assets is sufficient to support national  
20 security requirements. The study will consider the impact  
21 of multi-domain contested environments as well as the  
22 implications for attrition. The outcomes of this study will  
23 provide valuable insight to ensure we continue to meet  
24 today's needs while simultaneously evolving for tomorrow.

25       But USTRANSCOM cannot get there alone. We must have

1 the weight of the entire nation behind us to ensure that  
2 when our diplomats go to the negotiating table, they do so  
3 from a position of strength. One of the greatest threats to  
4 that strength is malicious activities in the cyber domain.  
5 Our adversaries no longer have to stop us with bombs and  
6 bullets. All they have to do is slow us down with 1's and  
7 0's. That, ladies and gentlemen, is the challenge of our  
8 time. We must grow in this domain as a nation so that we  
9 can protect ourselves and protect each other.

10 We also face challenges in the physical domain. The  
11 current ratio of active duty and reserve component forces  
12 means we must rely on the reserves and the National Guard to  
13 fulfill wartime requirements. For 3 decades, our reserve  
14 component has been used to sustain day-to-day operational  
15 requirements, a function for which they were not properly  
16 resourced or structured. Meeting the challenges of the  
17 future may require adjustments to mobilization authorities  
18 or force mix to assure access to vital capacity.

19 While USTRANSCOM operates the most robust patient  
20 movement system in the world, we lack sufficient capacity to  
21 surge for a large-scale conflict. The combination of a  
22 number of factors decreases the likelihood that we will see  
23 the same high survival rates we have seen in the more recent  
24 conflicts. We continue to work with the services, the Joint  
25 Staff, and the national health enterprise to address these

1 challenges.

2           Finally, if we are to maintain our nation's power  
3 projection capabilities, we must first acknowledge our  
4 waning sealift capacity. The U.S. flag fleet has steadily  
5 declined since World War II from 1,288 ships in 1951 to 81  
6 U.S.-flagged ships operating in international trade today.  
7 The degradation of the fleet also means fewer qualified  
8 merchant mariners, the simple backbone of our maritime  
9 industry. With the decline in our maritime capacity, it is  
10 becoming increasingly difficult to characterize America as a  
11 maritime nation.

12           In response to an aging organic sealift fleet, the  
13 fiscal year 2018 Defense Authorization Act authorized the  
14 purchase of two used vessels. We thank you for supporting  
15 this first step.

16           Thank you again for inviting me to speak to you today.  
17 Please say hello to all the folks in the cornfields of  
18 Illinois who are watching you today. And we thank you very  
19 much for allowing me to speak on behalf of USTRANSCOM and I  
20 believe America's heroes and those of the civilians,  
21 contractors, and service members who project and sustain  
22 power around the globe every single day. Thank you.

23           [The prepared statement of General McDew follows:]

24

25

1 Senator Inhofe: Well, thank you very much. And you  
2 will be happy to know that all of your corn guys are right  
3 down here to my right.

4 [Laughter.]

5 Senator Inhofe: I have two things I want to --

6 Senator Donnelly: There is corn in Indiana too.

7 Senator Inhofe: That is right.

8 Senator Wicker: There is corn in Mississippi too.

9 Senator Shaheen: And there is some corn in New  
10 Hampshire.

11 [Laughter.]

12 General McDew: We are okay with all of you.

13 Senator Inhofe: It is great to eat but not good in  
14 your gas tank.

15 [Laughter.]

16 Senator Inhofe: You really started something. Did you  
17 not, General?

18 You have said some things that I look at and I try to  
19 do the math and figure out how this is going to work as we  
20 get our aging fleet going. You made the statement,  
21 America's air fueling fleet is the most stressed of our air  
22 mobility forces.

23 Now, the KC-135 is 61 years old. They have quit making  
24 the C-5 and the C-17, and we are looking at the KC-46. That  
25 is great and it is going to be well maintained at Tinker,

1 and I am very happy that that is going to come. However,  
2 they have ordered 179 of them.

3 I would like to have you kind of explain how this is  
4 going to work. You are going to see a phasing out. At the  
5 same time, it is going to take 10 years apparently to get to  
6 the 179, and then we have our KC-135, which will be at that  
7 time over 70 years old.

8 So I really have two questions on this. Do you think  
9 that the KC-46 will be delivered this year as projected and  
10 the impact on the current operations in maintaining the  
11 existing air fueling because of production delays of the  
12 KC-46? And do you believe the current inventory of C-17's  
13 and C-5's are sufficient to provide the necessary gap that  
14 we are looking at? How is the math going to work on that  
15 down the road?

16 General McDew: Well, Senator, that is a very  
17 insightful set of questions, and I will try to give as  
18 concise a set of answers as I can.

19 Believing whether or not the KC-46 will be delivered on  
20 time, I talked to the Chief of Staff of the Air Force  
21 yesterday. He has some concerns about the ability to  
22 deliver the airplane as projected but is committed to having  
23 the airplane that is delivered be operationally capable when  
24 it is. And I believe Boeing and the Air Force are both  
25 trying to get to that point.

1           Your discussion about whether or not our fleet is of  
2           sufficient size -- thank you for having us do another  
3           mobility capabilities requirements study because that will  
4           answer that question. All the studies we have had to this  
5           point have not included things like a contested environment,  
6           cyber, and some other things that we have discovered over  
7           the last few years that we really need to put a focus on the  
8           mobility forces because no one before has believed that we  
9           are going to lose anything.

10           Senator Inhofe: And I appreciate that, and we will  
11           look forward to getting that report.

12           Now, I do want to have time to get an answer to this  
13           one. It was just a month ago that Senators Ernst, Rounds,  
14           Sullivan, and myself were in the Pacific area. We were  
15           talking to our international partners in South Korea,  
16           Taiwan, Japan, and the Philippines. And it kind of  
17           solidified my understanding of the expansionist activities  
18           of China and what they are doing. People do not realize  
19           they are actually creating these islands. There is no any  
20           legal justification in my mind for this, but it is being  
21           done. And they are actually set up as if they were  
22           preparing for World War III, everything from runways,  
23           cannons. It is 100 percent military. They have got seven  
24           locations down there, and the seven outposts add up to over  
25           3,000 acres. So it is a big deal over there and it has got

1 a lot of attention. And then when you stop and realize  
2 where the seven outposts are in the Spratly Islands, they  
3 are located in international waters between Vietnam and the  
4 Philippines.

5 So I would like to get from you how concerned you are  
6 in terms of what this does to our seaways and our capability  
7 that you are going to have to be using.

8 General McDew: Senator, freedom of navigation and  
9 access to global ports is one of the most significant things  
10 I deal with on a regular basis, not just for me but for our  
11 partners and allies around the world, anybody that loves  
12 freedom and understands how important it is to the global  
13 economy.

14 Senator Inhofe: Yes, but in that particular area,  
15 though, it would seem to me that could be very obstructive  
16 in our ability to fulfill the missions that we have on those  
17 sea lanes. Apparently you do agree with that.

18 General McDew: Absolutely.

19 Senator Inhofe: Okay, good.

20 Senator Reed?

21 Senator Reed: Well, thank you, Mr. Chairman.

22 General McDew, you indicate in your comments and my  
23 comments also that cyber is probably the number one  
24 challenge if you look at your responsibilities. Can you  
25 elaborate a bit about what you are doing? But also I am

1 under the understanding -- and correct me if I am inaccurate  
2 -- that many of your contractors do not have adequate cyber  
3 protection -- civilian contractors. In fact, there is even  
4 some notion that they are not required to report immediately  
5 when they detect breaches. Can you give us kind of an  
6 evaluation of not only what you are doing but the problems  
7 you have in your contractor force?

8 General McDew: Yes, Senator. So cyber is the number  
9 one threat to U.S. Transportation Command, but I believe it  
10 is the number one threat to the nation. And the nation's  
11 problem is there is not a clear national cyber standard.

12 All of our contracts with our contractors include a  
13 cyber standard, a hygiene standard for our contractors. It  
14 doubles down on the requirement federally to report  
15 intrusions. But a greater problem is in our headquarters,  
16 cyber is the commander's business, but not everywhere across  
17 our country is cyber a CEO's business.

18 Senator Reed: How are you doing in terms of  
19 compliance? You have teams that will go out and review a  
20 major contractor for either ships or planes, et cetera, and  
21 then require them to make corrections. Can you do that?

22 General McDew: We have the authority to go out and do  
23 inspections, but that is a relatively new one that we have  
24 not exercised yet. Across our civil reserve air fleet  
25 contractors, they get a regular inspection as part of their

1 safety inspection, and we are trying to get that to be a  
2 regular part too with cyber.

3 Senator Reed: And do you have the resources to do  
4 those types of intensive inspections?

5 General McDew: Not at the pace we probably would like  
6 to. But we also require that they have someone check on  
7 their security as well. The problem is I am not sure  
8 everybody understands how problematic it is.

9 Senator Reed: Right. And I think what you have said  
10 before is that unless it is a command priority -- and in  
11 your shop, it is, but over in civilian shipping lines and  
12 aircraft, it is not so much a leader responsibility. It is  
13 there but it is not being fully enforced. Is that accurate?

14 General McDew: In some. Some are probably leading the  
15 nation in their ability to look at this problem set. But in  
16 our cyber roundtables, which is one of the things we are  
17 doing to raise our level of awareness, some of the CEO's  
18 chief security officers cannot even get to the see the  
19 board, they cannot even to see the CEO. So that is a  
20 problem.

21 Senator Reed: Thank you.

22 We are trying to deal with that on the Banking  
23 Committee with requiring someone on the board to be a cyber  
24 expert. And we are running into some trouble, but the SEC  
25 should do that immediately without waiting for us.

1           Shifting gears, we gave you authority to buy two  
2 foreign ships as, we thought, a bridge to a longer-term  
3 plan. Now you are coming and asking for 24.

4           The first question that strikes me is can our American  
5 shipyards not produce these ships if they are given the  
6 design? And why do we have to go off and acquire so many  
7 foreign ships?

8           General McDew: Our American shipyards build some of  
9 the finest ships in the world. So that is not really a  
10 problem. It really comes down to how much money we want to  
11 spend and when we want to recapitalize this program.

12           So, first, thank you for the authority to buy two used  
13 ships. You know that I focus on the fact that they are  
14 used. Many of these ships were built in foreign yards.  
15 However, they are sailing for us today under the U.S. flag,  
16 and they have been converted to U.S.-flagged and they are  
17 U.S.-crewed ships. And what we would like to be able to do  
18 is to get rid of the steam plants that I own. In 2020, I  
19 become the largest owner of steam plants in all of the  
20 maritime industry across the world. I do not want that  
21 title, Senator.

22           Senator Reed: But we will look carefully at that  
23 request. Obviously, last year we were sensitive to your  
24 requirements for an immediate, quick fix and we did.

25           Another aspect here, which is I think very important,

1 is that in your prepared statement, you point out that the  
2 medical evacuation system has some shortcomings that we have  
3 to respond to in terms of the ability to move injured  
4 personnel quickly to a suitable facility. Can you just  
5 quickly -- I only have a few seconds -- make a comment on  
6 that?

7 General McDew: The biggest part is that we have  
8 transitioned ourselves to thinking that we are no longer  
9 going to work in a permissive environment, that every  
10 environment will be contested. If that is the case, then it  
11 compounds every one of my missions that I have been given.  
12 The biggest part as well is that our medical infrastructure  
13 in the United States is not the same as it was in, say, 19-  
14 whatever. You want to pick the date. It started to  
15 atrophy. And so if we are going to move back hundreds of  
16 patients from the theater in a big war, our ability to scale  
17 and use American hospitals is not the same as it was, say,  
18 20 years ago.

19 Senator Reed: And you have alternative plans to cope  
20 with that situation?

21 General McDew: We are working with the national health  
22 agencies to try to come up with those alternative plans, but  
23 they are not as easy as you could imagine. If you start to  
24 think that we are going to lose more people in a potential  
25 big end fight and have to transport more people back, we do

1 not have the military hospitals we once had and we do not  
2 have the civilian hospitals we once had.

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

4 Thank you, General.

5 Senator Inhofe: Thank you, Senator Reed.

6 Senator Wicker?

7 Senator Wicker: Senator McDew, thank you for your  
8 service. General McDew.

9 [Laughter.]

10 General McDew: I could not do your job.

11 Senator Wicker: Well, we could not do yours.

12 But let me ask you to follow up on this question that  
13 Senator Reed asked. Of these 22 ships, you are asking for  
14 22 more -- 24 used ships. Where were they manufactured? I  
15 guess you have not identified them.

16 General McDew: All those ships have not been  
17 identified yet.

18 Senator Wicker: But typically they would have been  
19 manufactured other than in the United States.

20 General McDew: Most of them.

21 Senator Wicker: And would all of these be currently  
22 U.S.-flagged ships?

23 General McDew: The ones we would target would be U.S.-  
24 flagged ships that are sailing for us -- many of them -- in  
25 the maritime security program that a company might shuttle

1 after 20 years of life. That cuts my fleet's age in half  
2 overnight. And they are pennies on the dollar right now on  
3 the open market.

4 Senator Wicker: And what is their life expectancy  
5 after you would purchase them? These two that you are  
6 already in the process of acquiring and the other 24.

7 General McDew: We would probably end up using those  
8 ships for another 20 to 30 years. And so you are talking  
9 about a ship you can purchase right now from \$20 million to  
10 \$30 million on the open market that you would use for  
11 another 20-30 years versus buying a new ship, which is the  
12 ultimate goal is to build ships in the U.S. yards that would  
13 be built new but maybe cost \$850 million a ship. It would  
14 take a while to recapitalize.

15 Senator Wicker: Now, do you support the Jones Act and  
16 the Cargo Preference Act as being vital to national  
17 security?

18 General McDew: I do, Senator, but for a number of  
19 different reasons. My primary focus is on national security  
20 and the capacity that I need to take this nation to war. It  
21 is our asymmetric advantage to deliver a decisive force in  
22 the maritime domain. The rheostats I have to effect that  
23 balance right now is helped by the Jones Act and Cargo  
24 Preference because being able to get more mariners to work  
25 allows us to have the capacity we need to go to war. If

1 there were other rheostats -- and currently there are not --  
2 maybe we could use those, but those are the ones I have to  
3 use.

4 Senator Wicker: What has happened in a year to cause  
5 you to go from a request of two ships to 24?

6 General McDew: The fact that my request was larger  
7 last year. I am happy to get the two that I got. We have a  
8 requirement to try to recapitalize about 26 steam plants.  
9 So two is the beginning to try to get to 26. We will not  
10 have a brand new ship built that I understand in the Navy's  
11 recap plan till about 2030. Between now and then, I am  
12 going to age out some ships.

13 Senator Wicker: What does the 25 percent reduction in  
14 U.S.-flagged ships do to our labor pool? And what help do  
15 you need from this committee and this Congress in that  
16 regard, sir?

17 General McDew: The labor pool -- we are approximately  
18 a couple thousand mariners short of the need that we have --  
19 we think we will have in the early days of a conflict. And  
20 that labor pool is the true heroes of our national defense.  
21 Those mariners who went to war in World War II and lost at  
22 the highest rate of any single population are the ones I  
23 believe that will be with us in the next big conflict. An  
24 incentive to keep those people going to sea is the kind of  
25 help we need.

1           Senator Wicker: Well, okay, but part of that is having  
2 the ships for them to serve on.

3           General McDew: And the cargo for them to put on a  
4 ship. We have got to be able to also decide as a nation is  
5 this country still a maritime nation. I believe it is.

6           Senator Wicker: I believe it ought to be.

7           General McDew: However, we have a hard time right now  
8 finding the evidence in our policies and laws that would be  
9 able to convince us.

10          Senator Wicker: And one other quick point just for you  
11 to emphasize. I notice on page 15 and 16, you talk about  
12 the nation's infrastructure, and you make the point that an  
13 infrastructure program is great for commerce and great for  
14 transportation domestically but it is also very much part of  
15 your national security program.

16          General McDew: A strong U.S. economy, a strong U.S.  
17 infrastructure, and a strong industrial base -- and I am not  
18 talking about the defense industrial base. Those are the  
19 people that make our exquisite widgets. I am talking the  
20 industry base in this country that does things for us. And  
21 it is the military that we have today that heavily relies  
22 upon those and the infrastructure they ride on.

23          Senator Wicker: And specifically you have a concern  
24 going forward about our nation's rail system being up to  
25 speed in terms of what the military is going to need to

1 transport on rail going forward.

2 General McDew: Our rail companies do a very nice job  
3 because they actually work on that infrastructure. So it is  
4 probably the best shape of our infrastructure. The concerns  
5 I have are in the cyber domain when it comes to rail. Cyber  
6 defenses -- we have got to continually look at it. I would  
7 imagine that every one of our potential adversaries  
8 understands our vulnerabilities in rail.

9 Senator Wicker: Thank you. And I apologize for  
10 calling you a Senator.

11 General McDew: I am actually flattered but I cannot do  
12 your job.

13 Senator Wicker: Thank you, Mr. Chairman.

14 Senator Inhofe: Thank you, Senator Wicker.

15 Senator Shaheen?

16 Senator Shaheen: Thank you, Mr. Chairman.

17 Well, General McDew, thank you very much for your  
18 service and for being here today.

19 I want to follow up on some of the cyber issues that  
20 have been raised already in your testimony and by others.  
21 Have there been any changes to how TRANSCOM writes its  
22 contracts with private providers or commercial partners to  
23 address cyber issues?

24 General McDew: Absolutely. I am quite proud of our  
25 acquisition professionals. When we had our cyber contested

1 war game, the first in the history of the command after 30  
2 years of existence -- we have since had two. And when cyber  
3 came at the top of that list of things we ought to be  
4 considering, we put cyber standards in every one of our  
5 contracts. They are not as stringent as we want them to be,  
6 but we are trying to work with industry to bring them along  
7 because if we push them too fast and too hard without the  
8 help of Congress and the national standard, I am not sure  
9 they will stick with us.

10 Senator Shaheen: And are those standards that have  
11 been developed by TRANSCOM? Are they DOD standards? Are  
12 they reflected across the Federal Government? Do you know  
13 the answer to that?

14 General McDew: The standard is a NIST standard. It is  
15 a NIST-800 standard we have adopted.

16 Senator Shaheen: Great. And is that consistent with  
17 what the rest of DOD is doing? Do you know?

18 General McDew: I cannot say that all of DOD in all of  
19 their contracts has that standard in there.

20 Senator Shaheen: But it is probably something we  
21 should strive for.

22 General McDew: There should be a standard across the  
23 nation in the Federal Government of how we are dealing with  
24 cyber.

25 Senator Shaheen: One of the things you mentioned in

1 your testimony last year was that you believed we need a  
2 cyber-related -- you called it -- bridging of the gap  
3 between DOD and the rest of the Federal Government. Have  
4 you seen any progress on that, and can you enunciate what  
5 that is?

6 General McDew: I have not seen as much progress as I  
7 would have liked to have seen. However, there has been  
8 incremental progress. U.S. Cyber Command and DHS, the two  
9 entities that are responsible for each side of the gap, are  
10 completely coordinating and involved. I sit in the middle  
11 of that gap in a lot of areas that we do not focus on. I go  
12 back to the defense industrial base. Everybody is focused  
13 on the defense industrial base. Not everybody is focused on  
14 all of industry. I deal with a lot of mom and pop  
15 organizations, single owners, the folks that make our  
16 country run. They do not have the help and the cyber  
17 technical expertise to do what they need to do.

18 Senator Shaheen: So when there is a question about who  
19 is complying and who is not, who is in charge of that? One  
20 of the concerns that I have is that we do not have a  
21 singular person or entity who is responsible for cyber  
22 throughout the Federal Government.

23 General McDew: So on the civil side, .com, .gov, it  
24 would be DHS. On the .mil side, it is U.S. Cyber Command.

25 Senator Shaheen: And so if there is a difference for

1 some reason around an issue, who resolves that?

2 General McDew: I would imagine that it would have to  
3 go to a cabinet-level discussion because the Cyber Command  
4 commander is a COCOM -- well, about to become a COCOM --  
5 just like me. So he cannot argue with the Department of  
6 Homeland Security.

7 Senator Shaheen: It is my understanding that there  
8 have been some issues with the European Deterrence  
9 Initiative and movement of personnel and equipment around  
10 Europe. Can you describe what those challenges have been  
11 and what we need to do to address them?

12 General McDew: I believe that U.S. European Command  
13 and our NATO allies have done a very nice job of  
14 illuminating some things that we have lost track of over the  
15 last few decades. When we had 300,000 soldiers on the  
16 European continent, we had a better understanding and  
17 relationship with the multiple countries that would be  
18 involved, the border crossing issues, and all of those  
19 things that you just routinely dealt with because you had a  
20 lot of people there. Now we are facing some atrophy in that  
21 understanding. We have been seeing changes in how the  
22 Europeans themselves deal with transportation across the  
23 continent. So all of that is compelled us to say that we  
24 need to put more focus in that area, and EUCOM is doing a  
25 nice job of that.

1           Senator Shaheen: So the issue has not been so much the  
2 transportation capacity. It has been around the  
3 coordination of how we move people and equipment?

4           General McDew: A little bit of both. So many of the  
5 things that used to be government-owned are contracted out  
6 in Europe, as well as in our country. So you have got  
7 multiple contractors now where it might have been a  
8 government-owned entity before at some point. You have got  
9 different rail gauges in one side of Europe to another. All  
10 of those things are a bit more complicated because we do not  
11 have the forces in the theater that actually just make that  
12 much smoother.

13          Senator Shaheen: And how important have our allies  
14 been in helping us address some of those issues?

15          General McDew: One of the reason that we are as good  
16 as we are is we have some wonderful allies in some wonderful  
17 places. And we have got to continue, as the national  
18 security strategy says, to by, with, and through our allies  
19 and partners, and they have been exceptional.

20          Senator Shaheen: Thank you.

21          Thank you, Mr. Chairman.

22          Senator Inhofe: Thank you, Senator Shaheen.

23          Senator Rounds?

24          Senator Rounds: Thank you, Mr. Chairman. And I would  
25 like to thank the chairman for bringing up the importance of

1 corn as a food source and also recognizing the availability  
2 of our farmers to produce enough to not only produce food  
3 but energy as well. And it does a great thing when it comes  
4 to the petroleum produced in your State because when added  
5 to petroleum, it actually improves petroleum. So I  
6 appreciate the opportunity to bring that up again today, Mr.  
7 Chairman.

8 General McDew, first of all, thank you for your  
9 service. I most certainly appreciated the time that you  
10 spent with us ensuring some of the concerns that you have  
11 expressed here today publicly. Let me just work through a  
12 couple of items that I think I would like to flesh out just  
13 a little bit.

14 We have heard from GAO and others that decisions about  
15 transportation infrastructure such as ports and equipment  
16 have struggled because of the lack of prioritization by the  
17 services and the lack of visibility to TRANSCOM and the  
18 larger community of transportation professionals where they  
19 may be existing issues.

20 To your knowledge, is DOD working to establish some  
21 sort of internal capability to expose capability gaps and  
22 funding needs for transportation infrastructure?

23 General McDew: Senator, DOD is working on and  
24 continues to work every year on prioritizing how we spend  
25 our money to get the best use of every taxpayer dollar that

1 we get. We have been very blessed to get the amount of  
2 money we have gotten particularly for the next couple years  
3 of a budget cycle. But when the services go and decide that  
4 they have to -- and they balance their budget every year.  
5 But when they balance it under constraint and the fact that  
6 it is not always delivered on time, that means that a  
7 service chief and the service secretary has to make a  
8 decision on what priorities get funded. And when they make  
9 those, sometimes logistics falls at the end and the bottom  
10 of that priority list.

11 I fully understand having to have a kinetic effect, but  
12 I am parochially interested in the fact that our ability to  
13 project that power is what makes us the world's last super  
14 power.

15 I think the priorities that are established are as  
16 about as good as they can get. What I would like to get is  
17 more emphasis on kinetic. Also it has to have projection.

18 Senator Rounds: I think I was fortunate to accompany  
19 the chairman on a CODEL earlier this year where we went into  
20 the Pacific region. And clearly, the distances there are  
21 critical. As we have said, if we have to fight a war, we  
22 want to do it away from our shores. We fight away. We do  
23 not fight at home. And that means that in order to get  
24 there, we have got to have your operation be as successful  
25 as possible. It has got to be efficient, and it has got to

1 have the means to not only get people there and get them  
2 home safely but to resupply them while they are there as  
3 well.

4 I am just curious. You have talked about cyber and  
5 about the need to continually improve the cybersecurity that  
6 we have got right now.

7 There has been a little discussion today about where  
8 you believe we are at today. Can you share how serious the  
9 cyber threat is to your command? Can you give us some  
10 examples in this open setting about how serious the threats  
11 are that are out there today?

12 General McDew: Senator, I believe it is serious enough  
13 for me to challenge one thing you just said, and I try not  
14 to challenge a Senator in public testimony. But you talked  
15 about us fighting away games versus fighting on our home  
16 field. I believe in the cyber domain we are fighting on our  
17 home field right now. That is how serious I think it is. I  
18 believe every single day in both the information space and  
19 the cyber space, we are fighting right now, and our  
20 contested environment is actually inside the continental  
21 United States.

22 Senator Rounds: I think that is well taken, and I  
23 would agree with you. But I think sometimes we have a tough  
24 time publicly being able to discuss how serious that threat  
25 is. Assuming that we are actually fighting it right now at

1 home, is this something that happens once in a while? Is  
2 this something that happens occasionally? Is this a case of  
3 where you are concerned about somebody checking to see  
4 whether or not they can get into your plans? Or how deep is  
5 the threat? Just for the public, how deep is the threat to  
6 our ability actually wage war and keep the kinetic war off  
7 of our home borders?

8 General McDew: The American public needs to understand  
9 how advanced the cyber threat has become, so advanced that  
10 an adversary can every day -- and I believe that every  
11 single day across this country an adversary or potential  
12 adversary is probing us to see how we operate, where our  
13 most important data resides, and what triggers they can use  
14 to stay short of armed conflict. Nobody right now wants to  
15 take on the United States military head to head. So why  
16 would they?

17 Senator Rounds: One last thought, Mr. Chairman, if I  
18 could. The point I guess I would make is this just is not  
19 the peer adversaries looking at our military operations.  
20 They are looking at the soft underbelly, which is our non-  
21 defense but critically important resources that we rely on  
22 to move our men and women and our equipment from our shores  
23 to any place in the world. It is the civilian side that  
24 they are also looking at as well.

25 General McDew: Absolutely. I would like to point to

1 the fact that we have a National Security Strategy. Many  
2 people believe that it is actually a national DOD strategy.  
3 It is the nation that most of our big adversaries and small  
4 adversaries will try to attack. I do not think they will  
5 actually try to go after, say, a United States Pacific  
6 Command or a European Command when they could easily get  
7 into the United States of America.

8 Senator Rounds: Thank you.

9 Thank you, Mr. Chairman.

10 Senator Inhofe: Thank you, Senator Rounds.

11 Senator King?

12 Senator King: Thank you, Mr. Chairman.

13 First, General, by the power vested in me, I want to  
14 bestow upon you the rank of honorary Maine citizen. I know  
15 that you started your career I believe and not only that in  
16 Aroostook County, which is a particular honor. I want to  
17 acknowledge that and delighted to have you here today.

18 I consider your command one of the most important, if  
19 not the most important, in all of the commands that we have  
20 because without you, none of the combatant commands can  
21 function. On July 2nd, 1863, the 15th Alabama was charged  
22 with coming up Little Round Top and dislodging the 20th  
23 Maine. Joshua Chamberlain gets a great deal of the credit  
24 and should for the leadership that day that he displayed.  
25 But a key element in that engagement was that the Alabamans

1 did not have water. Their canteens were empty. They had  
2 marched 20 miles on a very hot day, and the fact that they  
3 did not have water and were exhausted was a factor in what  
4 happened, which turned American history at that moment. I  
5 think it exemplifies how important what you do -- it does  
6 not get the headlines or the credit, but what you are doing  
7 in supplying both people and materiel is so critical.

8         Here is one of the things that concerns me. A great  
9 deal of your capability is in the private sector, and you  
10 are given the responsibility without full authority because  
11 you cannot tell Delta Airlines or a shipping line exactly  
12 what to do. Do you feel that we are sufficiently wedded,  
13 that the contracts are strong enough that the  
14 responsibilities are being met in the private sector that  
15 will allow you to meet your obligations in a time of  
16 conflict?

17         General McDew: First, Senator, I duly accept the honor  
18 of being an honorary Maine citizen. My daughter was born in  
19 Maine in Aroostook County in lovely downtown Limestone. She  
20 has a 007 Social Security number, which I just gave out some  
21 PII on her.

22         [Laughter.]

23         General McDew: But that double 0 means a lot to us,  
24 and we spent 5 and a half years and six lovely winters in  
25 upper Maine.

1           Logistics, as you said -- and the folks that are  
2 watching this back in the cornfields of Illinois are quite  
3 proud of the fact that we do things for other people and we  
4 take great pride in it. It is like oxygen. When you have  
5 it, you do not think about it; when you do not have it, it  
6 is all you can think about.

7           The contracts are not as strong as I would like them to  
8 be. I do not believe that all of our vendors across the  
9 country fully understand the threat they are under, nor do  
10 they have necessarily the capabilities. We are trying to  
11 strengthen our contracts through relationships and bringing  
12 our commercial partners along with us. I call them my  
13 fourth component. I am just as interested in their  
14 readiness and their viability as I am the other military  
15 components I have. So we try to bring them along with us  
16 and educate them as well.

17           Senator King: I hope that you will be very tough on  
18 your partners in these situations because my sense is from  
19 dozens of hearings here both in this committee and others  
20 that the private sector is not fully cognizant of the threat  
21 that they are under, and we do not want to find that out in  
22 a time of crisis.

23           The other thing that has changed in your situation is  
24 that we have been operating essentially in an uncontested  
25 environment for 2 or 3 decades. I understand you did a war

1 game, a contested environment war game, recently. Insofar  
2 as you can share in this setting what you learned from that  
3 because now the whole National Defense Strategy is shifting  
4 toward peer competitors, and how does this play out in your  
5 strategy and capabilities?

6 General McDew: Our big revelation, Senator, was that  
7 cyber is in fact a bigger problem than we had thought before  
8 and that we had to do some things to secure our networks  
9 better, which they are pretty secure, but also provide  
10 ourselves a level of resilience.

11 The biggest takeaway for me as a warfighting combatant  
12 commander is the fact that all of our exercises to this  
13 point had assumed no loss of any logistics capability, like  
14 the enemy would not target it and so we did not have to  
15 think about it. And some of the numbers that were relied on  
16 to say this is the requirement assumed no attrition of the  
17 force. And attrition is everything from kinetic effects to  
18 the lack of maintenance and reliability.

19 Senator King: But if we are dealing with a peer  
20 competitor who has submarines and underwater drones and  
21 aircraft, that is a whole different calculation.

22 General McDew: It is and it is generational. So go  
23 back to World War II. We had that lesson learned. We have  
24 forgotten it.

25 Senator King: And I take it that we are now trying to

1 play catch-up in terms of our capabilities to operate in a  
2 contested environment.

3 General McDew: We are actually trying to catch up on  
4 what this new contested environment looks like. Before, we  
5 always thought we were in either peace or war, and the gap  
6 between the two is about the gap between my hands now. We  
7 now realize there is a bigger gap in that space. And what  
8 is in that space is the difference between being at peace  
9 one day and the nation deciding to go to war. The last time  
10 we decided to go to war as a nation and the entire nation  
11 was behind it was 1942 in Romania. That space in the middle  
12 is not an easy space to live in, and we live in it every day  
13 and it is contested.

14 Senator King: Thank you, General. Thank you again for  
15 the work that you are doing. I know that we are very  
16 cognizant of how important it is. Thank you.

17 Thank you, Mr. Chairman.

18 Senator Inhofe: Thank you, Senator King.

19 Senator Warren?

20 Senator Warren: Thank you, Mr. Chairman.

21 And thank you, General McDew, for your service, for  
22 your hard work here.

23 The U.S. military is one of the largest consumers of  
24 fuel, and TRANSCOM's operations in particular are highly  
25 fuel-dependent. According to the U.S. Information

1 Administration, the price of crude oil has been on the rise  
2 for more than 2 years now.

3 So let me ask, General, what impact does the rising  
4 price of fuel have on TRANSCOM's budget?

5 General McDew: Obviously, amongst the large consumers  
6 of fuel, we are the largest, I believe, in the Department of  
7 Defense. So every time the price of fuel goes up, that  
8 increases the amount of money we must spend to do our  
9 operation.

10 Senator Warren: Right. And I take it it is large  
11 enough that it has a real impact on your budget. That is  
12 what I am really asking.

13 General McDew: It does. I am also blessed enough to  
14 have a budget that is a little different than everybody  
15 else's. However, the services' budgets are the ones that  
16 are more directly impacted.

17 Senator Warren: So in your prepared testimony, you  
18 discuss the current stress on our logistics fleet, both air  
19 and sea. DOD has been working for years on efforts to  
20 reduce fuel consumption and incorporate alternate fuels. In  
21 my home State of Massachusetts, for example, the Army  
22 scientists at the Natick Laboratory have been experimenting  
23 with new, more energy efficient shelters in base camps with  
24 a goal of reducing fuel demand for the deployed Army by  
25 about 25 percent. Would a 25 percent reduction in fuel

1 consumption by our deployed forces help mitigate some of the  
2 stress on your command and the Defense Logistics Agency?

3 General McDew: Yes, Senator, it would.

4 Senator Warren: So that would be a helpful direction.  
5 Good.

6 You know, we know that transporting fuel to our forward  
7 deployed forces in combat zones is expensive and dangerous  
8 even when we have full control of the skies and the shipping  
9 lanes. But as Senator Inhofe said earlier, that is not  
10 guaranteed in the future.

11 The new defense strategy says that DOD must be prepared  
12 to fight a high-end adversary. That guidance applies not  
13 only to the tip of the spear but also to your ability to  
14 supply the logistics chain our deployed service members rely  
15 on over time.

16 So let me ask this one, General. Would it be  
17 challenging for TRANSCOM and the Defense Logistics Agency to  
18 refuel assets and meet deployed energy needs in an  
19 environment where we did not have air or sea supremacy?

20 General McDew: Everything gets more challenged when we  
21 do not have domain dominance. That is air, land, sea, and  
22 cyber and space.

23 Senator Warren: Thank you.

24 Reducing use of our fuel and exploring renewable  
25 alternatives is not just about the environment. It improves

1 mission effectiveness and it saves money that we can use to  
2 reinvest in the kinds of capabilities that you need. And in  
3 a future combat situation like the ones the defense strategy  
4 describes, it is going to be an operational necessity. I  
5 think we need to get ahead of this now while we can. If we  
6 wait until our resupply lines are under threat, it is going  
7 to be too late.

8 So I appreciate your good work in this area, General.  
9 Thank you.

10 General McDew: Senator, if I can just add one more  
11 thing.

12 Senator Warren: Please.

13 General McDew: The fact that cyber is such a  
14 warfighting domain now, we are under threat right now.

15 Senator Warren: A fair point. So all the more about  
16 the urgency of this moment, and we have got to make these  
17 changes. Thank you. Thank you, General.

18 Thank you, Mr. Chairman.

19 Senator Warren: Thank you, Senator Warren.

20 Senator Hirono?

21 Senator Hirono: Thank you, Mr. Chairman.

22 Nice to see you again, General. Thank you for your  
23 work.

24 You mentioned that the cyber threat is one of your  
25 major concerns and that the contested environment is inside

1 the U.S. You also said that our adversaries will not go  
2 after PACOM or European Command but that they would get into  
3 the U.S. Can you talk a little bit more about what you mean  
4 by they are going to get inside the U.S. and what can we do  
5 to counter them getting inside the U.S., as you put it?

6 General McDew: And I probably misspoke, Senator. A  
7 potential adversary will always fight head on with the  
8 fighting force. However, what we have been seeing over time  
9 is that the information warfare space and the cyber warfare  
10 space does not have the geographic boundaries that we once  
11 thought of. So PACOM geographic boundary or CENTCOM  
12 geographic boundary is not as interesting to a cyber or an  
13 information warfare officer. So they will go to where they  
14 can go. So the United States of America, without a strong  
15 cyber standard or without us debating the information  
16 warfare space, means that it is a potential target for a  
17 potential adversary.

18 Senator Hirono: So can you give a concrete example of  
19 the kind of vulnerability that we have? You mentioned that  
20 we have a National Security Strategy, which should include a  
21 cyber strategy, but are you saying that it is not  
22 implemented? It is not robust enough for your comfort?

23 General McDew: No, it is really not.

24 I visited Estonia last fall. And Estonia in 2007 was  
25 taken down by a cyber threat, took to their knees, and they

1 changed their entire perspective as a country on what the  
2 cyber threat means to them and their survival as a country.  
3 And so they put coding in elementary schools because they  
4 thought the threat was significant enough.

5 I am not sure if we have gotten to a point that we  
6 believe that something that we can do as a nation would  
7 strengthen our ability to protect ourselves from this new  
8 threat. It is a new threat. And so the specifics would be  
9 I may be a bit paranoid, but when I see an airline company's  
10 reservation system go down, I do not immediately think that  
11 it is just a problem part. I think is that an actor  
12 potentially probing. If I see a rail switch not work, I  
13 also want to make sure that it is not a cyber problem, and  
14 it could be just mechanical. But we have all got to think  
15 about how do we protect ourselves ahead of the investigation  
16 after a problem happens.

17 Senator Hirono: So what I get from your response is  
18 that we certainly are not prepared as a nation to counter  
19 effectively all of the different ways that particularly our  
20 infrastructure can be vulnerable to cyber attacks. This is  
21 why we have a Cyber Command, and there is a lot of emphasis  
22 in this committee, as well as other committees, on our cyber  
23 vulnerabilities. And I can see where we need more. What I  
24 would like to see is more of a whole-of-government kind of  
25 approach to what we can do regarding the cyber issue, and I

1 do not think we have that.

2 In your testimony, you stated that the maritime  
3 security program provides an intermodal logistic capability  
4 outside of the DOD portfolio that would be too expensive to  
5 replicate. And so can you describe the challenge as to the  
6 TRANSCOM mission if you did not have this program?

7 General McDew: So the maritime security program  
8 provides about 60 U.S.-flagged ships with U.S. mariners on  
9 board to do our needs and to potentially take this nation to  
10 war. Without that stipend paid to those companies, I  
11 believe that many of them might cease to exist as U.S.-  
12 flagged companies, and that has been something we have been  
13 doing for a number of years to assure that access to that  
14 capability and capacity.

15 Senator Hirono: You also indicated the number of U.S.-  
16 flagged ships are also decreasing, have decreased over time,  
17 and that you also have concerns about whether we have a  
18 labor pool of U.S. personnel that can staff these ships. So  
19 this is a double-edged problem, and what are we doing to  
20 counter these problems?

21 General McDew: Similar to the CYBERCOM issue that you  
22 brought up -- so USCYBERCOM cannot defend the entire nation.  
23 It does not have the authorities to do so. I personally  
24 cannot change all the things that need to probably be  
25 changed. I am not sure where the young men and women who

1 grew up in my day who wanted to be mariners and truckers and  
2 pilots are because we are seeing a decline in a lot of  
3 those. And I am not sure what all of the forces that are in  
4 play to have 1,288 ships flying the U.S. flag in 1950  
5 dwindle down to 88 ships today. I am not sure of all the  
6 forces. But the MSP program allows 60 of them to keep their  
7 U.S. flag and to stay with us.

8 Senator Hirono: Mr. Chairman, if I could just ask one  
9 follow-up question. Is it your preference that you have  
10 access to U.S.-flagged U.S.-crewed ships as opposed to, at  
11 some point, having to resort to internationally owned ships?

12 General McDew: It is not a decision that I made. It  
13 is a decision the country made that we will move our U.S.  
14 forces on U.S.-flagged and U.S.-built ships -- U.S.-flagged  
15 ships. If the nation wants to change that, that is a debate  
16 the nation can have, but I right now will comply with what I  
17 am told to do.

18 Senator Hirono: Well, as a strong supporter of the  
19 Jones Act, that is kind of where we should be, I would say.

20 Thank you very much.

21 Senator Inhofe: Thank you, Senator Hirono.

22 Senator Scott?

23 Senator Scott: Thank you, Mr. Chairman.

24 General, good morning. Thank you for being before the  
25 committee.

1           In your last war games exercise, what vulnerabilities  
2           were exposed that we should think about addressing, and in  
3           what order would you address those exposures?

4           General McDew: It was a grand flash of the obvious  
5           after we did it. The importance of doing it was it  
6           identified several areas that we need to focus on internal  
7           to U.S. Transportation Command and I would say possibly  
8           across the nation because our problems are actually not just  
9           our problems. They are actually national problems.

10           The first and foremost is cyber. Cyber is, I believe,  
11           the challenge of our time. It is the one that will define  
12           this period of time in our history more than just about any  
13           other challenge, and it brings potentially the fight that we  
14           would have on other people's shores -- it brings it here.

15           The other for us is attrition. The fact that logistics  
16           capabilities and mobility capabilities have not been counted  
17           on to attrit in a fight is something that we cannot probably  
18           have as a reality going forward.

19           Mobilization. Just about every option I give to the  
20           nation today requires me to mobilize the Reserve and Guard.  
21           I do not think we formulated them, resourced them to be the  
22           operational force that they have become over the last 3  
23           decades.

24           That is just a few of those things, Senator.

25           Senator Scott: Let us take a little more time on the

1 cyber exposure. I understand that 90 percent of your  
2 command's mission takes place over unclassified  
3 communication networks. And I think you said in your  
4 written statement establishing secure IT infrastructure for  
5 our commercial industry must be a priority.

6 Can you walk me through the complex exposures and  
7 vulnerabilities that you have when 90 percent of it happens  
8 in a commercial environment?

9 General McDew: Senator, what I have been learning over  
10 time is there are many companies out there who understand  
11 how vulnerable they are in the cyber space. Because I  
12 bridge the gap between the authorities that are invested in  
13 U.S. Cyber Command and the authorities inherent in the  
14 Department of Homeland Security to protect respectively the  
15 .com and .mil different domains -- because I live in that  
16 space, we have had a series of cyber roundtables as a result  
17 of our contested environment war game where we are inviting  
18 academics, commercial industry, and some hackers to help us  
19 understand the problem better. In one of those roundtables  
20 in one of the panels, a series of security officers in  
21 corporate America said that they cannot get in to see the  
22 board or can they get in to see the CEO to talk about the  
23 problem. That is not every company, but it is at least a  
24 few that do not understand the severity of the problem. And  
25 even if they understand it intellectually, they may not have

1 all the tools required to fully understand the  
2 sophistication of today's threat.

3 Senator Scott: On the attrition aspect, there is a  
4 likelihood that during transportation you lose something.  
5 Is that pretty simple?

6 General McDew: I think that is pretty simply stated  
7 and quite true.

8 Senator Scott: On the mobilization, can you expound  
9 upon that for a minute?

10 General McDew: Absolutely. So when I was a youngster  
11 150 years ago coming in to fly airplanes for the very first  
12 time, the majority -- and I will use one example and it can  
13 apply to all of the logistics force. The KC-135 was heavily  
14 invested in the active duty. Strategic Air Command existed.  
15 And so 80 percent of those airplanes were in active duty  
16 units. Transition to today, and about 60 to 65 percent of  
17 that is now in the Guard or Reserve. It has nothing to do  
18 about my trust and confidence in their ability to do the  
19 mission. It has everything to do with how available they  
20 are.

21 And so with all of that shift in the Guard and Reserve,  
22 a high-end fight says we must mobilize. If our history says  
23 that we would immediately decide to go to war, immediately  
24 decide to mobilize, that is fine. If history shows that we  
25 will live in this space between peace and war for a period

1 of time, I am worried that I will have access to those folks  
2 that I need when I need them.

3 Senator Scott: Chances are pretty high we are going to  
4 live in that purgatory for a lot longer than we are  
5 comfortable. Thank you.

6 Thank you, Mr. Chairman.

7 Senator Inhofe: Thank you, Senator Scott.

8 Senator Sullivan?

9 Senator Sullivan: Thank you, Mr. Chairman.

10 General, good to see you, and thanks for all you are  
11 doing.

12 I just want to ask you a very -- just off the top --  
13 your command does so much and it is so critical to the  
14 warfighter, to any kind of military operation. I think it  
15 is unsung in many ways how much work you do and how we  
16 cannot function as a U.S. military without you operating  
17 effectively, efficiently. What is the top issue that keeps  
18 you up at night right now, General, and the biggest  
19 challenge?

20 General McDew: Well, first, let me thank you for  
21 acknowledging the great men and women who live in the  
22 cornfields of Illinois who are watching you right now in  
23 watch parties all across the command.

24 Senator Sullivan: They do a great job, and I think  
25 they are unsung.

1           General McDew: And then you just pumped me up because  
2 all of my self-esteem is derived from how good they are  
3 because I do not actually do much anymore.

4           Our number one threat, Senator, is cyber and how well  
5 we are able to protect ourselves and protect my fourth  
6 component, which is commercial industry, in the cyber  
7 domain.

8           Senator Sullivan: And so you have some control over  
9 the cyber domain as it relates to the military, but it is  
10 much less control in the commercial realm. Is that not  
11 correct?

12          General McDew: I have no personal control in the cyber  
13 domain in the military. U.S. Cyber Command does and they do  
14 an effective job of that. I have zero control except  
15 through contracting mechanisms with the commercial industry.

16          Senator Sullivan: I want to ask a question relating to  
17 the great State of Alaska. You know, with the National  
18 Defense Strategy out, which I strongly support the kind of  
19 shift in focus -- I think most Senators do, by the way -- to  
20 kind of a great power competition and some of our national  
21 security challenges, whether it is Russia, North Korea,  
22 China. My State actually happens to be close to all of  
23 those countries. And as you know, we are the hub air combat  
24 power for the Asia-Pacific and the Arctic with soon to have  
25 over 100 fifth generation fighters based in Alaska, and all

1 the C-17's and C-130's and F-16's and a whole host of  
2 important military assets, including expeditionary forces  
3 that can get to North Korea or the Korean Peninsula or  
4 anywhere else in a moment's notice.

5 I know that you -- and I have talked to the Secretary  
6 of the Air Force and General Goldfein a lot about this --  
7 are looking soon at the OCONUS decision with regard to  
8 KC-46's and the tanker refueling deployments. I have been  
9 trying to make the case that it makes a lot of strategic  
10 sense not just because of the assets that are in there but  
11 every airplane that flies over the Asia-Pacific from the  
12 Lower 48 actually flies over Alaska.

13 Can you give us a sense of where we are in the OCONUS  
14 KC-46 deployments and give me assurances that Alaska's  
15 strategic location -- as you know, Billy Mitchell, the  
16 father of the Air Force, called it the most strategic place  
17 in the world -- is in strong consideration for those OCONUS  
18 deployments?

19 General McDew: I will acknowledge that Alaska is  
20 strategically important. Although I wear this wonderful  
21 blue uniform and I am an airman and have been a proud airman  
22 for 35, nearly 36 years, I am not currently in the Air Force  
23 right now. So I cannot talk to you about the choices the  
24 Secretary of the Air Force and the Chief of Staff of the Air  
25 Force made about the actual basing of those assets.

1           The thing I would like to highlight, though, is as the  
2 combatant commander who has combatant command authority over  
3 those assets in a war fight, our ability to set, balance,  
4 and use the globe entirely is going to be important.

5           Senator Sullivan: Thank you.

6           One final question, General. I am sorry I missed my  
7 colleague, Senator Scott's question but I think it relates  
8 to that. But on the integration of Reserves and Guard and  
9 active forces with regard to your command, how important is  
10 that, and how important is it that we continue to make sure  
11 that our Reserve and Guard components are fully trained,  
12 fully funded, fully resourced to make sure that when called  
13 upon they can do the mission that is so important to your  
14 command?

15           General McDew: My command would cease to exist and  
16 operate the way it does today without the Reserve component.  
17 A good portion of my force is in the Reserve component  
18 across all the services, and my Army component -- I am not  
19 sure of the percentage, but the plurality is in the Reserve  
20 component. The air component -- the majority is in the  
21 Reserve component. And so I am very interested in both  
22 their readiness and training and resourcing, and it is not  
23 the way it should be based on often we will use them and how  
24 much we will be able to rely on them.

25           Senator Sullivan: And do continuing resolutions help

1 or hurt the readiness of those forces?

2 General McDew: CR's are probably the most disastrous  
3 thing that we could have happen to a military force that is  
4 trying to, one, recapitalize and maintain a level of  
5 readiness to fight today's high-end fight.

6 Senator Sullivan: Thank you, Mr. Chairman.

7 Senator Inhofe: Thank you, Senator Sullivan.

8 Senator Blumenthal?

9 Senator Blumenthal: Thanks, Mr. Chairman.

10 Welcome and thank you for your service.

11 As you know, the United States has continued to  
12 reassure our partners in Europe, our NATO allies, of  
13 America's dedication to that region in the face of Russia's  
14 continuing belligerent and aggressive actions. TRANSCOM  
15 continues to support the services of our presence in Europe,  
16 including aircraft, tanks, personnel, so that we do joint  
17 exercises and we demonstrate a joint resolve.

18 I would like to know what capabilities Russia has to  
19 interfere with our logistics pipeline in Europe. And should  
20 we be more concerned about the physical obstruction and  
21 manipulation that Russia can present, the potential  
22 destruction of our pipeline, including the cyber realm but  
23 in other domains as well?

24 General McDew: Senator, because our contested  
25 environment war game allowed us to see more clearly the

1 problem set and how contested the world is, we see access as  
2 being one of those areas in the physical domain. If we look  
3 around the globe and particularly the European continent, we  
4 are going to have to be able to use as many ports of entry,  
5 as many lines of communication as possible if we were to  
6 find ourselves in a potential fight in that theater. All of  
7 those are not as assured as they once were, say, 20-30 years  
8 ago. So Russia has levers of influence in that domain that  
9 we probably have not considered for a number of decades.

10 Senator Blumenthal: As you know -- and I think you  
11 made reference to it -- compared to the 300,000 troops in  
12 the Cold War, we have about 64,000 now. They could be used  
13 in crisis. The European Union is also seeking to build  
14 European defense capabilities. Do you think that Europe is  
15 contributing or doing enough?

16 General McDew: There are several ways to go down this  
17 path, and I am going to choose one. One is I have great  
18 faith and confidence that one of the reasons that America is  
19 as respected as we are around the globe is our partnerships  
20 and allies. The things that we can do today with partners  
21 and allies is something that some other great powers in the  
22 world just do not have. And the fact that we have an  
23 alliance like NATO, the fact that we have partners that are  
24 willing to be with us and contribute what they can when they  
25 can is important. Many of them can contribute more, and I

1 believe the administration is trying very hard to get them  
2 to that level of contribution. But I will tell you there  
3 are some potential adversaries out there that do not have  
4 any partners and allies, and I would go to war with us  
5 anytime.

6 Senator Blumenthal: You would go to war with our  
7 allies.

8 General McDew: With our allies anytime.

9 Senator Blumenthal: And do you think they can and  
10 should do more?

11 General McDew: I believe that every country ought to  
12 do as much as they can. I think sometimes our asks are not  
13 as specific as they need to be in today's environment. For  
14 example, Estonia has some of the greatest cyber experts on  
15 the planet. Maybe that is their contribution. Maybe they  
16 do not have exquisite planes or exquisite ships, but they  
17 have the cyber capability. So contribute where you can.

18 Senator Blumenthal: And some of their contributions  
19 are in kind, not necessarily monetary.

20 General McDew: Correct.

21 Senator Blumenthal: So they are more difficult to  
22 measure. They still are material.

23 General McDew: They are. However, there are some  
24 countries that can provide monetary aid at a higher level  
25 than they are and they ought to.

1 Senator Blumenthal: Thank you very much.

2 Thank you, Mr. Chairman.

3 Senator Inhofe: Thank you, Senator Blumenthal.

4 Senator Nelson?

5 Senator Nelson: Thank you, Mr. Chairman.

6 General, good morning.

7 I have the privilege, along with Senator Rounds, of  
8 heading the Cyber Subcommittee. He is our chairman. And  
9 needless to say, I think that we are very vulnerable in  
10 cyber. What authorities do you need to help the private  
11 sector improve their cyber defenses before we end up having  
12 a major disruption?

13 General McDew: Senator, I do agree with you that cyber  
14 is one of the challenges of our time, probably the greatest  
15 challenge of this generation. And in that regard, we need a  
16 national cyber standard. We need to decide where the low  
17 watermark is for the country and get at least everybody to  
18 that direction.

19 I believe the other help we need is to understand this  
20 generation, as they grow up as high-end users of cyber,  
21 understand the high-end vulnerabilities of cyber. We taught  
22 them at one point in their lives to cough into their sleeves  
23 and to wash their hands when they are sick, but we have not  
24 taught them the dangers that face them in the cyber realm.

25 Senator Nelson: What is it going to take? Is it going

1 to take a major cyber attack and therefore a shutdown of  
2 American industry for the private sector to really realize  
3 what is happening?

4 General McDew: Senator, I hope not. I still believe  
5 in America and I still believe in America's ingenuity. And  
6 I still believe that we will eventually get it right.  
7 However, our history shows that getting our attention  
8 sometimes is difficult and painful, and sometimes it takes  
9 an economic crisis or sometimes it takes a financial ruin  
10 for some companies to get kind of religion on this one.

11 Senator Nelson: Over in the Commerce Committee,  
12 General, we are, hopefully, going to be able to pass an FAA  
13 bill, and since your Transportation Command certainly  
14 involves a lot of the use of the airspace, I think we have  
15 pretty well put to rest the fact that there was an effort by  
16 the airlines to want to privatize air traffic control. I  
17 think that is pretty much over and done with. Do you want  
18 to do any comment about that?

19 General McDew: No, Senator.

20 [Laughter.]

21 Senator Nelson: Well, just so the record is complete,  
22 I will say that for several years now, up until just  
23 recently, it was the position of the Department of Defense,  
24 as articulated by the Secretary of Defense's Office, that  
25 since they had about 20 percent of the airspace, they did

1 not want to privatize air traffic control. So I will just  
2 leave it at that.

3 The KC-135's are really doing a workhorse job for you.  
4 Are they not, General?

5 General McDew: They are. They have been for 60-plus  
6 years, Senator.

7 Senator Nelson: But now the delays on the KC-46 are  
8 putting additional pressure on the 135's. Are they not?

9 General McDew: There are actually a number of factors  
10 working on those things besides age. I would love to be as  
11 young as some of them, but I am not. The other, maintenance  
12 capability and the fact that the parts are not as readily  
13 available as possible -- but those great young men and  
14 women, particularly the ones who maintain them, are doing a  
15 great job.

16 Senator Nelson: Well, has this impacted your  
17 readiness?

18 General McDew: It has. And a series of continuing  
19 resolutions do not help the fact that the Air Force has had  
20 to make some tough decisions on what they can fund and what  
21 they cannot fund, when they can fund those things. And it  
22 has taken a slight dip in readiness in the KC-135 fleet.

23 Senator Nelson: When is it going to become apparent  
24 that it is a significant issue that is going to have to be  
25 confronted by the Air Force?

1           General McDew: I believe the Air Force understands the  
2 nature of the problem. They have also had a problem with  
3 being able to fund all the things that they need to fund and  
4 to be able to do it on a regular recurring basis. I am  
5 thankful for the budgets we have. I am hoping that they  
6 continue at least to be on a regularly scheduled period of  
7 time.

8           Senator Nelson: Thank you, Mr. Chairman.

9           Senator Inhofe: Thank you, Senator Nelson.

10          Senator Cruz?

11          Senator Cruz: Thank you, Mr. Chairman.

12          General, welcome. Thank you for being here.

13          In your testimony today, you explain that in today's  
14 operational environment, mobility forces may be required to  
15 transport and sustain U.S. and allied forces while under  
16 persistent multi-domain attack, including deception and data  
17 manipulation in cyberspace.

18          In your opinion, which TRANSCOM assets are most  
19 vulnerable in this contested environment?

20          General McDew: This may surprise you a little bit when  
21 I talk about TRANSCOM assets. The ones most vulnerable are  
22 the ones I do not own, and that is commercial industry. We  
23 have a strong cyber defense standard inside the Department  
24 of Defense, but outside the Department of Defense, I am not  
25 sure it reaches all of American citizens and all of American

1 industry the way it ought to.

2 Senator Cruz: And if those assets are compromised, how  
3 would that impact your ability to perform the task given to  
4 you?

5 General McDew: It would be disastrous because 90  
6 percent of our ability to take troops to war is in the  
7 commercial industry. 40 percent of the cargo capability is  
8 in the commercial industry. It would be disastrous.

9 Senator Cruz: So from your perspective, are there  
10 aspects in your budget that are focused on dealing with the  
11 vulnerability on the commercial side?

12 General McDew: Not at all, Senator.

13 Senator Cruz: Let us shift. In your testimony, you  
14 also state that volatile geopolitics, shifting demographics,  
15 and emerging technology have all changed the character of  
16 war, the way we fight, and they are changing where wars are  
17 fought and who is fighting them. These new dynamics have a  
18 potential to bring a dramatic shift from the wars in the  
19 Middle East that have shaped much of the current force's  
20 expertise and experience.

21 How have you begun to shape the training and the  
22 mindset of TRANSCOM forces to prepare them for a war fought  
23 under these new conditions?

24 General McDew: Senator, we have not been perfect to  
25 date, but what we are purposely good at is understanding

1 where our problems are now. And so our contested  
2 environment war game that we had 2 years ago, followed up  
3 with one last year, has illuminated a number of the problem  
4 areas that we will have so that we have problem statements  
5 and solutions that we are trying to go after in each of  
6 them. I do not control all the areas because in my  
7 components that do the business of this nation projecting  
8 power to go to war, a good portion of it is outside of my  
9 control. So we are using contracting mechanisms to bring  
10 people up to a certain standard in some of those areas, and  
11 then we are continually having war games and exercises where  
12 we invite not just the services but commercial industry and  
13 academia to participate.

14 Senator Cruz: Now, you just mentioned the contested  
15 environment war games. How are you measuring success during  
16 these training events?

17 General McDew: Unfortunately, Senator, we are in its  
18 infancy. And so success right now is bringing everybody's  
19 knowledge level up. 2 and a half years ago, we did not have  
20 a cyber standard in our contracts. We have one now. That  
21 is a direct result of that level of learning and  
22 understanding. If you were to come to my headquarters --  
23 and the invitation is out there now. If you were to come to  
24 our headquarters, you would see a level of discussion and  
25 dialogue and language being used that is vastly different

1 from any other combatant command. I am a little bit  
2 parochial and proud, but I would say that would be true.

3 Senator Cruz: I understand.

4 So have you all been able to take any lessons learned  
5 that have been operationalized as a result of the war games?

6 General McDew: We have. Most of it has been through  
7 what we have included in our exercises. So all of our  
8 exercises now assume some level of cyber degradation, every  
9 last one of them. It may be just at the tabletop level, but  
10 it is in every exercise. We bake attrition into every one  
11 of our exercises and everything we discuss, and then, as I  
12 said, the contracts all have cyber standards in them.

13 Senator Cruz: One area that has been a persistent  
14 concern for me has been our vulnerability in space, and we  
15 are seeing more of our near-peer competitors targeting space  
16 assets. To what extent in war games or exercises are you  
17 all exercising in a space down environment with no satellite  
18 support or contact whatsoever?

19 General McDew: I cannot say that we do it in every  
20 exercise, but the cyber degradation also has a level of  
21 space because it is the precision navigation and timing  
22 aspect. That loss is catastrophic. So we are trying to  
23 bake more and more of that in every time we have an  
24 exercise.

25 Senator Cruz: Very good. Thank you, General.

1 Senator Inhofe: Thank you, Senator Cruz.

2 Senator King, did you have a follow-on question?

3 Senator King: Thank you, Mr. Chairman.

4 I was struck by your testimony a few minutes ago that  
5 we went from, I think you said, 1,288 U.S.-flagged ships in  
6 1950 to 80 today. Is that the correct number? It seems to  
7 me that really underlines the importance of the MSP program.  
8 I never thought of it that way before, but it is kind of an  
9 insurance policy. Should we be investing more heavily in  
10 that program in order to be sure that 80 does not become 20?

11 General McDew: Right now -- I love the way you stated  
12 that. It is an insurance policy, and I think it is a very  
13 cheap insurance policy. If we were to have those 60 ships  
14 in our own yards, I would tell you it would cost you a lot  
15 more than \$300 million, and that is all it costs us right  
16 now. It is an effective policy.

17 In our next set of mobility capability study, we will  
18 look at how much maritime capacity do we need and is it  
19 sufficient. And I will be able to come back to you with  
20 that answer.

21 Senator Cruz: I hope you will because I would hate to  
22 low ball this and end up with a lack of capacity again in a  
23 crisis and say, gee, why did we not spend a relatively small  
24 amount compared with trying to build that fleet ourselves  
25 in-house. So I hope you will track that, and perhaps in

1 your presentation for next year's budget, that is a factor.

2 General McDew: That study is due in September of this  
3 year to the Senate.

4 Senator Cruz: Good. Thank you very much.

5 Senator Inhofe: Thank you, Senator King.

6 And thank you very much, General McDew. We were  
7 commenting how excellent your answers have been during this  
8 hearing, and we appreciate that very much.

9 We are adjourned.

10 [Whereupon, at 10:53 a.m., the hearing was adjourned.]

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