

Stenographic Transcript
Before the

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

HEARING TO CONSIDER THE NOMINATION OF: LIEUTENANT
GENERAL STEPHEN R. LYONS, USA TO BE GENERAL AND
COMMANDER, UNITED STATES TRANSPORTATION
COMMAND

Tuesday, June 26, 2018

Washington, D.C.

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

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

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

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1 OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S.

2 SENATOR FROM OKLAHOMA

3 Senator Inhofe: Our meeting will come to order.

4 The committee meets today to review the nomination of
5 Lieutenant General Stephen Lyons to be Commander of the
6 U.S. Transportation Command.

7 And, General Lyons, we thank you for your service to
8 the country and you are obviously the right guy.

9 In order to exercise its legislative oversight
10 responsibilities, it is important that this committee and
11 other appropriate committees are able to receive testimony.
12 So these are the required eight or nine questions. Would
13 you answer yes or no audibly to each one?

14 Have you adhered to applicable laws and regulations
15 governing conflicts of interest?

16 General Lyons: Yes, sir.

17 Senator Inhofe: Very good.

18 Do you agree, when asked, to give your personal views
19 even if those differ from the administration in power?

20 General Lyons: I do, sir.

21 Senator Inhofe: Will you ensure your staff complies
22 with deadlines established for requested communications,
23 including questions for the record of hearings?

24 General Lyons: I will, sir.

25 Senator Inhofe: Will you cooperate in providing

1 witnesses and briefers in response to congressional
2 requests?

3 General Lyons: Yes, sir.

4 Senator Inhofe: Will those witnesses be protected
5 from reprisal for their testimony or briefings?

6 General Lyons: Yes, they will.

7 Senator Inhofe: Do you agree, if confirmed, to appear
8 and testify upon request before this committee?

9 General Lyons: I do, sir.

10 Senator Inhofe: Do you agree to provide documents,
11 including copies of electronic forms of communications, in
12 a timely manner when requested by a duly constituted
13 committee or to consult with the committee regarding the
14 basis for any good faith delay or denial in providing such
15 documents?

16 General Lyons: Yes, sir.

17 Senator Inhofe: And finally, have you assumed any
18 duties or undertaken any actions which would appear to
19 presume the outcome of the confirmation process?

20 General Lyons: I have not.

21 Senator Inhofe: Thank you.

22 General Lyons, you have been nominated to lead
23 TRANSCOM during a critical time in history. Our capacity
24 to mobilize or deploy forces across the globe is evermore
25 critical and crucial given the contested environment

1 described in the National Defense Strategy. In this
2 environment, we can no longer assume that U.S. forces will
3 have uncontested access to international airspace and sea
4 lanes, which I am going to pursue in a little bit of detail
5 the problems that we have in the South China Sea.

6 If confirmed, your job will be to ensure that our
7 operational plans contain valid assumptions for how our
8 service members will get to the fight and how they will be
9 sustained in a contested forward environment.

10 In light of your experience serving as the former
11 Deputy Commander of TRANSCOM and Director of Logistics on
12 the Joint Staff, we know you are well qualified to tackle
13 these challenges. What we ask of you today is an honest
14 assessment of TRANSCOM's current ability to fulfill COCOM
15 requirements, as well as your plans to improve the
16 resiliency while maintaining efficiency. We know that you
17 will have the right responses to that.

18 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.
4 Chairman. I want to join you in welcoming General Lyons to
5 the committee, and thank you for your dedicated service to
6 the Army and to the nation, General.

7 I also want to thank your family that are here today:
8 your wife Maureen and your children Kara and Dylan for
9 their support and their sacrifice also.

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

20 TRANSCOM faces a number of daunting tasks. Given that
21 you, General Lyons, have served for 2 years as Deputy
22 Commander of TRANSCOM, these are not new issues for you.

23 One primary concern is addressing a unique set of
24 cyber threats because TRANSCOM must work extensively with
25 private sector entities in the transportation and shipping

1 industries to support DOD deployment operations. This
2 situation creates increased exposure of TRANSCOM to the
3 commercial Internet and creates challenges for operating
4 our strategic transportation system. General Lyons, I look
5 forward to your views on how to ensure that TRANSCOM's
6 network is secure and that sensitive information is
7 protected, and indeed, that the commercial networks that
8 you work with are secure and will operate during an
9 emergency.

10 The Ready Reserve Force, a group of cargo ships held
11 in readiness by the Maritime Administration, is aging and
12 will need to be modernized over the next decade.

13 Last year, the committee authorized the Department to
14 start a program to recapitalize the Ready Reserve Force by
15 authorizing DOD to purchase up to two foreign-built
16 vessels, while the Navy moves forward on a plan to design a
17 family of auxiliary vessels for a number of issues,
18 including recapitalization of the Ready Reserve Force.

19 This year, the administration asked for authority to
20 purchase up to 24 foreign-built vessels to modernize this
21 force. The committee is proposing to only increase the
22 current authorization to allow the Department to secure up
23 to seven foreign-built vessels for that purpose. General
24 Lyons, I look forward to hearing what criteria you think we
25 should consider as we undertake this large modernization

1 program. And also, I think you understand we would prefer
2 that it be conducted by American yards with American
3 workers.

4 In addition to the Ready Reserve Force, the Defense
5 Department also needs to ensure that the Civil Reserve Air
6 Fleet, or CRAF program, which provides as much as 40
7 percent of wartime airlift needs, remains viable after
8 operations in Iraq and Afghanistan and will be able to
9 provide needed surge capacity in the future. General, I am
10 interested in your views on the state of this fleet and if
11 anything needs to be done to ensure their readiness.

12 In his testimony to the committee earlier this year,
13 General McDew stated that DOD has been conducting an
14 analysis to assess mobility requirements for an environment
15 where our mobility forces would be challenged. I also
16 understand that the Department intends to share those
17 results later this year. The committee would appreciate
18 any update you may have on these analyses.

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

21 Thank you, Mr. Chairman.

22 Senator Inhofe: Thank you, Senator Reed.

23 General Lyons, why do you not go ahead and give an
24 opening statement? And start by introducing your fine
25 family.

1 STATEMENT OF LIEUTENANT GENERAL STEPHEN R. LYONS,
2 USA, TO BE GENERAL AND COMMANDER, UNITED STATES
3 TRANSPORTATION COMMAND

4 General Lyons: Senator, thank you. Senator Inhofe,
5 Ranking Member Reed, and distinguished members of the
6 committee, thank you very much for this opportunity to
7 appear before you today. And more importantly, thank you
8 for what you do everyday for our soldiers, sailors, airmen,
9 and marines, for your unwavering support.

10 I am honored to appear before you today as the
11 President's nominee to be the Commander of United States
12 Transportation Command.

13 I would also like to thank the President, Secretary
14 Mattis, Chairman Dunford for their trust and confidence.

15 At the same time, I would like to recognize my good
16 friend and former boss, General Darren McDew, who I know
17 has appeared before you on several occasions, and his wife
18 Evelyn for their extraordinary contribution to our nation
19 over the last 36 years.

20 If confirmed, I recognize that I, indeed, have big
21 shoes to fill. The TRANSCOM team is absolutely
22 exceptional, and I have been the beneficiary of their
23 unparalleled professionalism throughout my entire career.

24 As you stated, Senator, my family is with me today:
25 my wife of nearly 30 years and 16 moves around the globe,

1 Maureen, my better half, who has an infinite appreciation
2 and love for our military families; and our children Kara,
3 who is a middle school special education teacher here in
4 Virginia; and our son Dylan, who is a rising high school
5 junior that aspires to attend the military academy at West
6 Point in the future. And while I take my responsibilities
7 as a flag officer very, very seriously, they would tell you
8 and remind me routinely that my most important job, job
9 number one, is being a good dad and a good husband.

10 As this committee well understands, the United States
11 and our global partners face an increasingly complex
12 security environment for which we must field the joint
13 force that is relevant to our times, one that can compete,
14 deter, and if necessary, respond and win decisively.

15 TRANSCOM's mission is to project and sustain military
16 power globally at our time and place of choosing, providing
17 an immediate force tonight and a decisive force when
18 needed.

19 If confirmed, I look forward to working with this
20 committee to ensure that DOD's ability to project power
21 globally remains a comparative advantage, capable of
22 providing multiple options to our national leadership and
23 multiple dilemmas to potential adversaries.

24 And with that, sir, I look forward to the committee's
25 questions.

1 [The prepared statement of General Lyons follows:]

2 [COMMITTEE INSERT]

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1 Senator Inhofe: Well, thank you, General Lyons.

2 You know, Maureen, I have to say this because every
3 time I hear, in your case, they have been married 30 years
4 and the countless times that you have been moved around, my
5 wife and I have been married twice that long, and she
6 actually was born in the house across the street from where
7 we live now. The furthest she has moved in 60 years is 30
8 feet.

9 [Laughter.]

10 Senator Inhofe: What a contrast.

11 Let us start off. Those of us who have been over
12 there -- certainly I have been over there with Senator
13 Rounds and Senator Ernst, and I am sure some of the others
14 on this platform have too. And we look and see what is --
15 we know the reason for this. We know how aggressive China
16 is in the South China Sea. We know they have some seven
17 outposts right now, some 3,000 acres. Now, they could have
18 put these things anywhere. I would always hasten to say it
19 is illegal anyway because they do not own that property,
20 but they could have put them anywhere. Could they have
21 not? They have put them exactly where they are. And if
22 you look at that chart there or look at the one in front of
23 you, you have to wonder why those chose particular areas.

24 Now, your responsibility is to make sure that our sea
25 lanes are not going to present a problem in our being able

1 to defend this country and move our goods and services
2 around.

3 And so I would like to have you look at that and look
4 at the one in front of you and kind of try to analyze where
5 is this obstructing the things that we need the most. Why
6 did they choose those particular areas? Have you given any
7 thought to that?

8 General Lyons: Senator, we clearly support a free and
9 prosperous Pacific. And long-term, we would like nothing
10 more than a military relationship that is transparent and
11 based on non-aggression.

12 But I think to your point exactly, we cannot ignore
13 that China's military growth and the use of their military
14 to coerce their neighbors and to compete in a way that
15 violates international norms and standards, and what I
16 would characterize as the unlawful growth of these
17 platforms in the South China Sea is of great concern I know
18 for the national security apparatus and specifically for
19 Admiral Davidson at INDOPACOM.

20 Senator Inhofe: Well, you know probably better than
21 we do, but over there -- of course, talking to Admiral
22 Harris -- it is almost as if they are preparing World War
23 III. And it is having an affect on our allies over there
24 because as we visit them, they are not sure which side they
25 are going to be on because China is clearly making much

1 more aggressive moves in that part of the world. And I
2 just cannot help but think that it goes beyond just
3 impairing our sea lanes and creating problems for us.

4 General Lyons: Senator, I agree with your assessment.
5 I think what we see today is some pretty fierce competition
6 below the threshold of open armed conflict. We see it in
7 these kinds of areas. We see it in foreign investment. We
8 see it in infiltration through subcontractor networks. We
9 see it in reconnaissance across our cyber networks. And it
10 is of great concern for all of us.

11 Senator Inhofe: Yes, it is.

12 Now, you mentioned in your opening statement your
13 friend, General McDew. He was before this committee just
14 not long ago.

15 And it is really kind of shocking to me. We went back
16 and studied the history of all of the flagged ships that we
17 have had. Back in the 1950s, we had 1,288 U.S. flagged
18 ships -- 1,200. Now, that dropped down in the 1990s to
19 408. And in 2013, there were 106 and today 82. How serious
20 is it? Did we have way too many in the beginning, or we
21 just do not have enough now?

22 General Lyons: Senator, it is a serious concern. And
23 I think General McDew talked to you about whether we were a
24 maritime nation or not a maritime nation.

25 Senator Inhofe: That is right.

1 General Lyons: I know that collectively we believe in
2 this room we are a maritime nation and need to remain so.

3 The U.S. flagged fleet has dwindled over time. And I
4 certainly appreciate the Congress' support for programs
5 like the Maritime Security Program that has retained that
6 capability. But without those kinds of programs, I am not
7 sure we would have a maritime fleet underneath the U.S.
8 flag for a wide number of reasons.

9 But this is concerning for our national defense
10 because that not only offers capacity, it also provides the
11 merchant mariners that sail our sealift fleets to deliver
12 the surge fleet and it also provides global international
13 networks that we use routinely using these partners.

14 Senator Inhofe: Well, in his testimony to us, he
15 recommended that we buy used 24 additional systems. Do you
16 agree with that?

17 General Lyons: Senator, I do. I acknowledge the Navy
18 has a plan to extend the service life of some vessels, to
19 acquire used vessels, probably out of the MSP program, but
20 acknowledged, many of them have been built in foreign
21 shipyards, and then ultimately in the out-years procure a
22 new sealift capability.

23 But, Senator, I appreciate your support on that
24 because that fleet is aging rapidly, and most of that
25 fleet, about half that fleet, will age out by 2028.

1 Senator Inhofe: And I agree with that.

2 Senator Reed?

3 Senator Inhofe: Well, thank you very much, Mr.
4 Chairman.

5 And thank you again, General, for your service.

6 As we spoke previously at your visit, one of the major
7 challenges is cyber. There is a possibility you will not
8 be able to move anything not because we do not have ships,
9 we do not have planes, et cetera, but there is no way to
10 communicate with them or they are being misdirected, et
11 cetera. And your difficulty is you are not just within the
12 .mil. You have to play in the .com world too.

13 Can you tell us what we have to do to make you
14 operational in any circumstance?

15 General Lyons: Senator, I would characterize -- and I
16 know General McDew has characterized this the same way --
17 for you that the cyber vulnerabilities that we see today
18 are a significant threat to our strategic logistics and
19 frankly our national security.

20 I would suggest to you that there is not necessarily a
21 silver bullet here, but that we have to treat the cyber
22 domain as an operational domain in the most classic sense
23 of maneuver. We must understand our adversaries, their
24 capabilities and intentions. We must understand our key
25 train in the cyber area and how to protect it at echelon,

1 and then we must have an offensive capability that deters
2 rogue actors from entering our networks. And so it is a
3 multifaceted problem for which there is not a single
4 answer, but it is a layered answer. It begins with good
5 cyber hygiene, good infrastructure, good cyber defense
6 measures, and ultimately an offensive capability with the
7 right kind of policy and authorities behind it.

8 Senator Reed: I think that is a very sound strategy.

9 Getting to one more specific area, you deal with lots
10 of commercial entities, and you have to be able to ensure
11 that they have good cyber hygiene. Again, it is a little
12 easier for .mil to look. You can delegate that, inspect
13 that, et cetera. Within your contracts, I think you have
14 to start thinking about much more rigorous requirements in
15 terms of these private entities, that they have experts,
16 that those experts are communicating with their boards,
17 that they have some red team operation which you can look
18 at the results, et cetera. Is that something that you are
19 going to get involved with aggressively? I hope so.

20 General Lyons: Sir, I can assure you, if confirmed,
21 that will be a top priority. And I think you know that
22 General McDew has started that effort with contract
23 language. This is not unique to the mobility enterprise,
24 but I think he is certainly leading the way. That in my
25 view is a great first step, but there has got to be a much

1 richer dialogue and information sharing. And some of our
2 commercial partners are much better prepared and are
3 incentivized to be much better prepared, particularly on
4 the airline side, than other partners who are less
5 prepared. And we saw that play out about a year ago in the
6 attack.

7 Senator Reed: And frankly, our adversaries are very
8 clever. They go in the back door. So it might not be the
9 airline with all the bells and whistles, but it is that
10 maintenance company that is a small local operation. And
11 they get in there and then suddenly they have got the whole
12 system paralyzed. So, again, I think the more you do, the
13 better off we will be.

14 Let me shift gears briefly. As I mentioned in my
15 opening statement, there has been a study of the Civilian
16 Reserve Air Fleet. Can you give us any preliminary
17 conclusions, sort of a heads-up of what we could expect to
18 be asked to do over the next several years to improve the
19 fleet?

20 General Lyons: Senator, I think you are referring to
21 the NDAA-directed mobility capabilities and requirements
22 study?

23 Senator Reed: Yes, sir.

24 General Lyons: And, sir, that study is ongoing. I
25 know there is a report out due in the fall. I have not

1 seen any initial results. That will be a phased approach.
2 So they will look today against the National Defense
3 Strategy, but the National Defense Strategy and the
4 planning associated with that will continue to evolve and
5 we will continue to have to evaluate that.

6 But what I would point out, though, is this is the
7 first study that will consider contested environments,
8 consistent with the National Defense Strategy. So we are
9 all eagerly awaiting to see how we need to emerge the
10 mobility enterprise to make sure we remain relevant, to
11 your point, to be able to project power at the end of very
12 long and contested lines of communication.

13 Senator Reed: So we would expect the results in the
14 fall so that we would have those ready for at least our
15 next NDAA. But if anything comes to your attention prior
16 to that, either through the study or otherwise, please
17 communicate with the committee.

18 General Lyons: Sir, I will. Thank you.

19 Senator Reed: Thank you very much, General.

20 General Lyons: Thank you, sir.

21 Senator Inhofe: Thank you, Senator Reed.

22 Senator Rounds?

23 Senator Rounds: Thank you, Mr. Chairman.

24 General, first of all, thank you for your service.

25 Thank you to your family for their sacrifice as well.

1 We are hearing from GAO and others that decisions
2 about transportation infrastructure suggest ports and
3 equipment have struggled because of, number one, a lack of
4 prioritization by the services and, number two, lack of
5 visibility to TRANSCOM and the larger community of
6 transportation professionals where they may be existing
7 issues.

8 To your knowledge, is DOD working to establish some
9 sort of internal capability to expose capability gaps and
10 funding needs for transportation infrastructure? We spoke
11 about this in my office a little bit with regard to -- you
12 know, there is no reason to have a ship sitting there
13 waiting if you cannot get men and equipment to a port. And
14 at the same time, we have aging infrastructure. We have
15 talked about an infrastructure bill here, and I think there
16 is a possibility of something being put together if we
17 recognize for defense purposes the need to improve aging
18 infrastructure across this country, not only transportation
19 systems, but ports and so forth as well. Can you talk
20 about that a little bit and the challenges that you face?

21 General Lyons: Sir, I appreciate that.

22 There is a program that we discussed briefly in your
23 office, highways, railways, seaports for national defense.
24 TRANSCOM, as the executor for the Department, does run and
25 manage that program through their Transportation

1 Engineering Agency. I commit to you, as I did in your
2 office, to go back and look thoroughly end to end to see
3 where that infrastructure may be lagging behind our power
4 projection needs. And, sir, I will come back to you on
5 that if that is okay.

6 Senator Rounds: That is fine.

7 I think Senator Reed has brought up a very important
8 part of the discussion that we have right now with regard
9 to cyber and threats that cyber creates for us. Have you
10 had the opportunity to look at and observe the different
11 types of threats that, to our knowledge, have been
12 attempted to slow down or to test our capability to deliver
13 men and equipment within the United States, within our own
14 borders, by outside and, in many cases, near-peer
15 competitors?

16 General Lyons: Sir, we have seen where our
17 adversaries have, indeed, whether intentionally so or
18 collaterally, affected the ability of our commercial
19 partners. There is no question about it. It is a serious
20 vulnerability and a serious threat. And so we certainly
21 have that. I have seen that. I think you are very
22 familiar with the Maersk incident and the subsequent FedEx
23 simultaneous attack there. Fortunately for USTRANSCOM, they
24 have a very solid working relationship with those carriers
25 and we are able to work through that and continue

1 operations. But I do not want to, for a second, dismiss or
2 diminish the issue at hand.

3 Senator Rounds: I think part of the reason for my
4 question on this is to bring focus on the fact that we
5 really do not have the resources within the Department of
6 Defense. We rely on outside partners. And in the case of
7 a major conflict, we are going to rely very, very heavily
8 on outside partners to be able to coordinate the delivery
9 of men and equipment to the ports or to overseas
10 destinations. And those separate, independent parties,
11 those other businesses -- they are subject to the attacks
12 of outside near-peer competitors when it comes to cyber,
13 and if they can slow down or delay those, that impacts our
14 ability to actually be successful in a confrontation.

15 General Lyons: Sir, I completely agree. Our ability
16 to project the force is inextricably linked to our
17 commercial partners. We have got to make sure that we do
18 not have a dependency that is unique or a single point of
19 failure and that we have sufficient depth and resiliency.
20 And that is, indeed, one of the issues that is going to be
21 looked at in the mobility capabilities and requirements
22 study.

23 Senator Rounds: One of the areas that we do not rely
24 on outside resources to do, and that is to refuel our
25 aircraft in flight. So our inflight refueling capabilities

1 are totally held within DOD. You have a responsibility of
2 making sure that we have access to the appropriate number
3 of aircraft that we need in order to move large numbers of
4 men and equipment by air.

5 Can you talk a little bit about right now what the
6 KC-46 means and what happens if we are delayed in the
7 implementation or at least the delivery of those in an on-
8 time schedule with regard to replacing the aging KC-135's?

9 General Lyons: Sir, I think you know that our tanker
10 force is the lifeblood of our ability to project air power.
11 No question about it. I will defer to the Air Force
12 programmatic in terms of the cost, schedule, and
13 performance on the program. I know they anticipate to take
14 first delivery sometime in the fall in the October time
15 frame. But from a combatant commander's perspective, we
16 are clearly focused on the requirement to maintain a viable
17 tanker fleet that can project power globally at our time
18 and place of choosing. And we acknowledge that today we
19 are short on that capacity against our high-end
20 requirements. So we have got some ground to make up,
21 Senator.

22 Senator Rounds: Thank you.

23 Thank you, Mr. Chairman.

24 Senator Inhofe: Thank you, Senator Rounds.

25 Senator Peters?

1 Senator Peters: Thank you, Mr. Chairman.

2 And, General, thank you for your service and for your
3 family's sacrifice over these many years.

4 General Lyons, earlier this week, the "Washington
5 Post" published what I thought was a disturbing article,
6 and it was under the headline -- and I will quote here --
7 "If they needed to fend off war with Russia, U.S. military
8 leaders worry they might not get there in time." The
9 article details logistical issues in Europe, including
10 railroads with different sized track gauge, limits on when
11 heavy equipment can be moved on public roads, and the
12 customs paperwork requirements imposed by many of these
13 countries as well.

14 And according to the "Washington Post," quote again,
15 during at least one White House exercise that gamed out a
16 European war with Russia, the logistical stumbles
17 contribute to a NATO loss.

18 Last June, I saw some of this firsthand when I
19 traveled to Latvia and Lithuania, including the Suwalki
20 Gap, to observe the Saber Strike exercise. And after
21 seeing that exercise and asking lots of questions, I came
22 away concerned that our plans for moving equipment and
23 personnel in the region will be challenged, to say the
24 least. And while the NATO enhanced forward presence
25 missions in the Baltics and Poland are a start, as you are

1 well aware, the bulk of our equipment is far away from that
2 site, and to arrive in time to provide a credible defense
3 is probably not likely in the short term. And fighting our
4 way back, after that gap may be breached, fighting our way
5 back to support our allies and the NATO alliance would be
6 more challenging. The cost would be higher both in
7 equipment and human losses as well.

8 So it seems that many of the logistics challenges in
9 Europe remain unimproved from what I have seen.

10 So I would like you to just comment. Share your views
11 with the committee on the logistical challenges we face in
12 Europe and how you plan to address it.

13 General Lyons: Senator, those challenges that you
14 articulate that were in that article are real today. They
15 range from geopolitical access, in other words, cross-
16 boundary coordination through the EU and NATO, although
17 there is a tremendous amount of work going on in that area,
18 to some of the infrastructure issues that you alluded to,
19 to frankly some transportation capacity issues, i.e., for
20 example, rail.

21 So the theater that we grew up in has changed quite
22 dramatically. The good news is that the border has shifted
23 wide to the east. So it is a much better position to be
24 in.

25 I will not speak for General Scap with regard to

1 whether we are moving fast enough at the political level to
2 satisfy his appetite. I know from a military perspective
3 the challenges are real. I have certainly engaged at my
4 level with my NATO counterparts and the other nations
5 there, as well as EUCOM and will be prepared, if confirmed
6 for this job, to help in any way that I can.

7 Senator Peters: I appreciate that.

8 As you know, General, autonomous systems are also
9 advancing quite rapidly to deal with some of the issues
10 that we have with workforce. Some of my colleagues have
11 already mentioned workforce issues with pilots, mariners,
12 and truckers. In fact, your predecessor called it a hurt
13 locker in regards to workforce of what you are dealing with
14 in TRANSCOM.

15 A great deal of work is being done in autonomy, self-
16 driving vehicles, something I am very involved in on the
17 civilian side, which we are looking for major, quick
18 advances in the next year or 2. TACOM in Michigan is doing
19 leading work for the Army on self-driving vehicles,
20 particularly in logistics operations.

21 So I just wanted to get your comments. Where do you
22 see that going? What do we need to be focused on, and how
23 do you think it will improve the situation?

24 General Lyons: Senator, I think there are enormous
25 opportunities here. As you indicated, the technology is

1 here today. Frankly, many of the barriers are going to be
2 cultural more so than technology.

3 I know the Department of Transportation is working in
4 this area very heavily as well. I think there is
5 tremendous opportunity.

6 I also think that in the area of technology and
7 innovation, when you think about what is going on in terms
8 of data analytics and big data and machine learning and
9 artificial intelligence, there are enormous opportunities
10 for the joint logistics enterprise and mobility enterprise
11 specifically. And I think there are plenty of
12 opportunities to work in this area.

13 Senator Peters: Thank you, General.

14 General Lyons: Thank you, sir.

15 Senator Inhofe: Thank you, Senator Peters.

16 Senator Ernst?

17 Senator Ernst: Thank you, Mr. Chair.

18 General, thank you very much, and thank you to your
19 family as well for joining us here today.

20 And I just want to echo what Senator Peters had said
21 about autonomous vehicles. Dr. Mike Griffin, the Under
22 Secretary of Defense for Research and Engineering,
23 testified in front of my Emerging Threats and Capabilities
24 Subcommittee, and he spoke about the potential lifesaving
25 use of autonomous trucks and other vehicles to transport

1 those military supplies. And I saw that firsthand serving
2 as a transportation company commander in OIF-1, the dangers
3 that our convoys face while they are out on the roads. And
4 I think all of us here on this committee have seen the
5 devastating injuries that have been caused by IEDs while
6 our drivers are out on the roads.

7 And so I would like to see more opportunity in
8 leveraging the technology of autonomous vehicles where
9 appropriate. I do think it could be lifesaving and very
10 beneficial to our forces. So thank you for your comments
11 there.

12 You also mentioned, sir, artificial intelligence and
13 data. And I have been working a lot on artificial
14 intelligence technology again with Senator Peters. We have
15 some work that we are doing together there as well. And
16 TRANSCOM inherently deals with and manages extraordinary
17 amounts of data and will be well served by focusing on AI.

18 What are your thoughts, if you could give us just a
19 little bit more, on AI? And if confirmed, how will you use
20 it to enable TRANSCOM to manage the data and also improve
21 those logistical networks?

22 General Lyons: Well, ma'am, I think you are exactly
23 right. And every time I scratch on this issue, I do it
24 from the perspective of how are we doing analytics across
25 the enterprise. In order to get to just the basic

1 discussion of analytics, you have got to get to the
2 discussion about data and the infrastructure that provides
3 that data. And today we have got a legacy infrastructure
4 in our IT networks and our data networks that we have kind
5 of just emerged over many, many decades. And it is very,
6 very difficult. And I applaud General McDew's initiative
7 to move to a cloud-based solution to virtualize many of
8 those platforms which then moves us in a direction to be
9 able to leverage the data for the things like you are
10 describing, which I think are far more powerful, which is
11 machine learning, potentially artificial intelligence. I
12 think the logistics enterprise, because it largely does
13 reside in the unclassified domain, does offer a tremendous
14 opportunity to benchmark industry and move in that
15 direction.

16 Now, ma'am, if confirmed, I certainly intend to focus
17 on that.

18 Senator Ernst: Yes. And I will assume confirmation
19 for you.

20 And I do think we need to work a lot more in this area.
21 We have a number of private industry partners that are
22 leveraging AI to great use. So I look forward to working
23 with you on that.

24 Sir, the 2018 National Defense Strategy prioritizes
25 building new global partnerships and strengthening our

1 current relationships. And can you talk a little bit about
2 the importance of those global partnerships? We have
3 already heard discussions about different transportation
4 lanes, sea lanes, and so forth. But how will you work
5 within the defense enterprise to increase our access to
6 those ports and airfields around the globe? And if you
7 could, just in the minute and a half we have left, also
8 maybe tell us strategically who do you believe is our best
9 partner out there.

10 General Lyons: Ma'am, you know from your time in
11 service -- and by the way, thank you. I think our
12 transportation companies are unsung heroes across the
13 battlefield.

14 Senator Ernst: Thank you. I appreciate that.

15 General Lyons: I have worked with many of them in my
16 time.

17 The deployment and distribution enterprise is an
18 interconnected system of systems, if you would, that ranges
19 from routes to nodes and modes and access. They are all
20 part of that. And we cannot assume that we will have geo-
21 access when we need it unless we work on that on a day-to-
22 day basis. And so global posture is extraordinarily
23 important, and our partners and allies around the globe
24 provide that capability for us to be able to move the force
25 when and where we would want to.

1 On the record, ma'am, we have so many great allies and
2 partners. If I mentioned one, I would be in trouble by
3 several other friends. And so if you do not mind, ma'am, I
4 will defer on that answer.

5 Senator Ernst: It would just be good to have many,
6 many solid partners around the globe.

7 Well, I appreciate your time very much, sir, and
8 thanks again to your family for being here.

9 Thank you, Mr. Chair.

10 General Lyons: Thank you, ma'am.

11 Senator Inhofe: Thank you, Senator Ernst.

12 Senator Blumenthal?

13 Senator Blumenthal: Thank you, Chairman.

14 Thank you for your service, Lieutenant General Lyons,
15 and to your family as well.

16 I want to ask you a couple questions about, first of
17 all, space. How serious are the current threats from our
18 adversaries in the space domain to communications, as well
19 as other aspects of the kind of mobility capabilities that
20 you would command?

21 General Lyons: Sir, space is absolutely a contested
22 environment. I know that you know that. We see it every
23 day. It is critical to the success of the joint force. I
24 know there is a lot of work going on in this area.

25 For the mobility enterprise specifically, when we

1 think about global communications, there is a significant
2 reliance on that. We have got to look at redundancies, as
3 well as position, navigation, and timing and other
4 capabilities that are linked to space at a higher
5 classification level.

6 Senator Blumenthal: Do you think there ought to be an
7 independent space force, as has been proposed?

8 General Lyons: Senator, we have heard the direction
9 of the President. I know that the Secretary has asked the
10 deputy to form a group to look at that. I know whatever
11 they work to move in that direction will include
12 congressional involvement to be able to stand up another
13 service.

14 Senator Blumenthal: What would be the factors that
15 would argue in favor of it from your standpoint?

16 General Lyons: Sir, not having grown up in that
17 community or looked at it thoroughly, I would be probably a
18 little bit unfair to comment on that.

19 Senator Blumenthal: Let me ask you about a separate
20 area, climate change, which affects the movement of goods
21 and people all around the world under your command. How
22 significant is climate change as a factor to be considered
23 by this nation in planning our future in terms of the
24 mobility enterprise?

25 General Lyons: Senator, in terms of the mobility

1 enterprise, I would not say that it is something that we
2 are integrating into our war planning efforts per se, but I
3 think, as you allude, there are potential scenarios where
4 underlying climate change could cause a great deal of
5 famine and stress in a population that could result in
6 conflict in a region or across the globe. So it is a
7 consideration from that perspective.

8 Senator Blumenthal: And in terms of rising sea levels
9 that you would encounter both in this country and elsewhere
10 that the United States has facilities, will it be a
11 potential threat or at least a factor to be considered?

12 General Lyons: Senator, I would have to go back and
13 do some study, some scientific work to see the rate of rise
14 and over time what that would look like. And I would have
15 to come back to you on that one, sir.

16 Senator Blumenthal: Do you not think it is an
17 appropriate issue to be considered?

18 General Lyons: Senator, I do. In my current position
19 and in my previous position, it is not something that I
20 have looked at the science on. And so it would be somewhat
21 unfair for me to comment on that.

22 Senator Blumenthal: I understand. Well, very
23 respectfully, if you could look at it. I do not mean to
24 add to the work that you have to do, but I think it is a
25 factor that should be considered in terms of the ports and

1 the facilities and in fact availability of the kind of
2 assistance that my colleagues have alluded to.

3 And finally, I want to return to cyber. This issue of
4 the potential intrusion or invasion of our adversaries,
5 particularly of Russians, has been well known publicly for
6 some time. In fact, earlier this year, reports indicated
7 that the Russian hacking group known as Fancy Bear, also
8 responsible for interfering in our 2016 elections, targeted
9 87 -- that is 87 -- United States defense contractors who
10 work on weapon systems critical to our national security.
11 They use the same phishing techniques that they employed in
12 the 2016 election. They hacked emails, seeking to collect
13 classified information. I know you are familiar with the
14 report. It was an Associated Press report in February of
15 this year.

16 How can we support companies, as Senator Reed
17 mentioned, that are working with us, in fact have access to
18 some of the most highly classified and important
19 information, to avoid these kinds of attacks?

20 General Lyons: Sir, I wish I had the answer for that.
21 This is an enormous problem facing us today. And the
22 implications to our national security are significant.

23 I do not know that there is one answer here, but
24 clearly there are tiers. And the cleared defense
25 contractors that you may be speaking of -- we need to be

1 clear about the standards in terms of cyber hygiene,
2 defense, et cetera, et cetera. There is enormous
3 competition going on in this space: intellectual property
4 theft, cyber reconnaissance, et cetera. And so I do not
5 have a single answer, but I can tell you that in the
6 mobility enterprise, I am certainly committed, if
7 confirmed, to work on that with CYBERCOM, as well as the
8 Department of Homeland Security, and many others. To your
9 point, Senator, this is much bigger than just the logistics
10 or the mobility enterprise.

11 Senator Blumenthal: It is much bigger and we need
12 answers.

13 Thank you, Mr. Chairman.

14 Senator Inhofe: Thank you, Senator Blumenthal.

15 Senator Tillis?

16 Senator Tillis: Thank you, Mr. Chairman.

17 General Lyons, thank you for being here.

18 Congratulations to your family and thank you all both, you
19 and your family, for your years of service.

20 I want to get to the business component of your job
21 and look ahead. We have had a good opportunity over this
22 Congress to provide funding that gives you some certainty
23 over the next 2 years and then zero certainty after that.

24 If we have to deal with sequestration in 2 years, how
25 does that affect your job? What are the first things that

1 are going to be directly affected by having to deal with
2 the sequestration cuts?

3 General Lyons: Senator, the first impact directly is
4 on readiness, is on warfighting readiness. The services
5 will see it first, and we will see it secondarily in the
6 mobility enterprise largely because the services fund the
7 mobility enterprise through a reimbursable baseline.

8 So I want to thank this committee for last 2 years of
9 budgets which have been very, very helpful. But I think to
10 your point, Senator, it is really, really important that we
11 have a steady and predictable, long-term approach to
12 modernization and readiness.

13 Senator Tillis: I think we could hope for the best
14 but plan for the worst if we are dealing with those sorts
15 of cuts. What sorts of things do you think you can focus
16 on to possibly fund resources within the enterprise or
17 within the current expected funding streams, the weather,
18 some of that?

19 I will give you one example. I think General McDew
20 mentioned a requirement for some 22 or 24 ships -- I do not
21 remember the exact number -- transport ships, that he had
22 identified sources, existing capabilities. I think the
23 number was somewhere around \$20 million-\$25 million per
24 ship. But we have some hesitance about authorizing that in
25 favor of spending \$800 million per ship and taking whatever

1 length of time it would take to produce those.

2 Are those the sorts of things that you think are worth
3 looking at to free up resources so you can still complete
4 your mission and maybe deal with the bubble that we have if
5 we have a shortfall in funding in 2 years?

6 General Lyons: Senator, absolutely. I absolutely
7 agree. I know the Navy has got to balance that. They have
8 gone some enormous recapitalization efforts on the horizon,
9 as well as the sealift and the useful life issue that they
10 are contending with. And so I think it is reasonable if
11 you could come up with a much less expensive option like
12 the one you alluded to, which is acquiring used vessels off
13 perhaps the Maritime Security Program under U.S. flag but
14 have built perhaps in a foreign shipyard, which would take
15 congressional approval, might be a better way to
16 depressurize the Navy's challenge in order to spend \$30
17 million per ship or \$25 million per ship as opposed to \$750
18 million per ship. That is a rather significant trade,
19 although I think we would all acknowledge the need to
20 continue to maintain a healthy industrial base in the
21 United States of America as well for shipbuilding.

22 Senator Tillis: And maybe it is does not need to be
23 all or nothing. Maybe it could be immediate needs based on
24 resources available, out-year needs so that you are
25 maintaining the industrial base.

1 But I think that it is important, when you get into
2 this role -- I am obviously going to support your
3 nomination -- that you do a top to bottom review of the
4 programs and recognize all of them probably were founded on
5 some rational basis, some business case. But when you have
6 to deal with less than ideal circumstances of
7 sequestration, you have got to make some tough choices.
8 And I think it would be very helpful for this committee to
9 know what those tough choices may have to be to maybe to
10 maybe give us more incentive to do our jobs, repeal
11 sequestration, and actually start funding on a consistent
12 out-year basis.

13 Thank you. I look forward to supporting your
14 nomination.

15 General Lyons: Thank you, sir. I will certainly do
16 that.

17 Senator Inhofe: Thank you, Senator Tillis.

18 Senator Kaine: Thank you, Mr. Chair.

19 And, General Lyons, congratulations to you and to your
20 family. I would like to ask you a little more about the
21 KC-46, which you have talked about, and then an additional
22 question.

23 TRANSCOM currently has 450 strategic tankers, and I
24 think the newest of those are 30 years old. And the total
25 buy of the KC-46 program is scheduled to be 180 aircraft.

1 I guess I wanted to ask you, even if we provide the
2 budgetary resources to do that, is that sufficient given
3 the switch in sort of national defense strategy toward more
4 focus on great power competition? Does the 180 give us the
5 capacity that we need?

6 General Lyons: Senator, that is one of the issues
7 that will be looked at in the ongoing mobility capabilities
8 and requirements study, is to validate the area refuel
9 requirement baseline. I would confess to you, though, that
10 that will probably take a couple turns because the global
11 war plans, defense planning scenarios are still in
12 development consistent with the strategy. So we will look
13 at the current set and we will take a look and see what
14 that looks like.

15 Today the objective is 479 airplanes. We are not
16 there today. The KC-46 will move us in that direction. I
17 know the Air Force would very much like to retire the KC-10
18 at some point, you know, to recoup that. So I will defer
19 to the Air Force.

20 I can just say that clearly from a combatant commander
21 perspective, if confirmed, that we continue to watch that
22 very, very closely because that is linked to our immediate
23 force tonight and our global strike capability.

24 Senator Kaine: I want to ask you about something that
25 General McDew used to always just suggest to us, was a

1 point of analysis that he was engaged in, and I imagine you
2 will grapple with it too, and that is how much to rely in
3 the entire work of TRANSCOM on our own organic capacity
4 versus how much to rely on a surge capacity that we could
5 get through contracting with private sector transportation,
6 air or waterborne. Talk a little bit about how you
7 approach that issue of balancing what we need, organic and
8 contracting, on the private sector side.

9 General Lyons: Senator, I think there has to be a
10 balance. We do rely on the commercial sector for a
11 considerable amount of capability, for their networks, for
12 their mariners, et cetera. But we do not want to be in a
13 position where we are so reliant where that becomes a
14 single point of failure. So from a philosophical
15 perspective, I think we need to look at all those
16 portfolios and make sure we are balanced, we have
17 sufficient organic capability to operate in contested
18 environments, and then not be at all dismissive of the
19 power that industry does bring because they bring enormous
20 capability, as well as networks to the enterprise.

21 Senator Kaine: One of the risks is if you get too
22 reliant on the private sector, then depending when you
23 might need them for some surge capacity, if they are
24 already contracted up or it is difficult to access the
25 supply that they can give you. So that is part of the

1 balancing equation that you have to strike.

2 General Lyons: Yes, sir. That is correct. When I
3 was there, the TRANSCOM philosophy was more was better. So
4 you had inside the Civil Reserve Air Fleet program,
5 underneath that contract, you had 25 different carriers.
6 So you were not relying on just one sole source kind of a
7 condition. The same thing on the sealift side. So it is
8 important that you have that level of resiliency inside
9 your vendor base as well.

10 Senator Kaine: All right. Thank you.

11 Mr. Chair, that is all the questions that I have.

12 Thank you.

13 Senator Inhofe: Thank you, Senator Kaine.

14 Senator King?

15 Senator King: Thank you, Mr. Chairman.

16 It seems to me that given the new National Defense
17 Strategy and the new reality that the defense strategy
18 recognizes, your job has fundamentally changed because we
19 have been working in uncontested transportation corridors
20 for a long time, 20, 30, 40 years. How do you view the
21 change in that circumstance that we may face contested
22 transportation corridors in order for you to fulfill your
23 mission?

24 General Lyons: Well, Senator, I think you described
25 it exactly right. For many decades, we had dominance in

1 those domains. We could deploy when we wanted. We could
2 assemble where we wanted. We could employ the force on the
3 timeline that we desired.

4 As we look to the future and the emerging joint
5 operating environment, we can no longer make any of those
6 assumptions. And we clearly expect -- and we are contested
7 in all five domains, land, maritime, air, cyber, and
8 cyberspace. And so that requires a different perspective
9 on the mobility enterprise. Today our mobility enterprise,
10 which is quite capable, generally tends towards efficiency,
11 but as you might appreciate, large nodes with large
12 infrastructure and large stockpiles of munitions and fuel,
13 et cetera may also present a viable target for an adversary
14 on the high end. And so we have got to relook the way we
15 sustain and generate combat power on a global scale and
16 sort of confirm that certainly my focus is -- job one is
17 warfighting.

18 Senator King: It seems to me that this really
19 requires a whole new way of thinking, and you are going to
20 have to turn a culture and a thought process rather
21 substantially.

22 General Lyons: Sir, I agree. But I would confess to
23 you from my 2 years at TRANSCOM as a deputy, they have a
24 phenomenal workforce, phenomenal people. I think they are
25 up to the challenge. But we certainly must adapt the way

1 we think about the mobility enterprise. I agree with you,
2 Senator.

3 Senator King: Going back in time, the U.S. Merchant
4 Marine fleet in the early 1950s was almost 1,300 ships. We
5 are now down to 80. Is this a concern, a problem. How do
6 we deal with that reality?

7 General Lyons: Senator, it is a significant concern.
8 I work closely with the maritime administrator on this, and
9 they count the numbers of qualified merchant mariners that
10 could meet the surge requirements. And the way I think
11 Administrator Buzby would describe it is that we are
12 probably on the ragged edge of having sufficient numbers of
13 mariners without having to rely upon a foreign flag
14 capability, which none of us want that in our future. So
15 that is of concern. The number of vessels that are out
16 there today are at an all-time low, and the amount of cargo
17 moving on the U.S. flag is also at a low.

18 Senator King: How about the Maritime Security Program
19 in the Department of Transportation? Is that important?
20 Is that something we should be focusing more attention on
21 and perhaps more funds?

22 General Lyons: Sir, I appreciate Congress' support
23 for the Maritime Security Program and the approval of the
24 authorized money to sustain that program. That program is
25 critical to national defense because without the Maritime

1 Security Program, I do not know that you would have a U.S.
2 flagged fleet, and without the U.S. flagged fleet, you
3 would not have the capacity nor the mariners to surge the
4 U.S. Navy sealift fleet. And so they are inextricably
5 linked.

6 Senator King: I view it as an insurance policy. Is
7 that the way you would look at it?

8 General Lyons: Sir, absolutely, and I would confess
9 to you that if you had to procure that type of capacity
10 inside the Department, we are really talking about pennies
11 on the dollar.

12 Senator King: Or pennies on the billions of dollars.

13 General Lyons: \$300 million, yes, sir.

14 Senator King: What are the greatest risks that you
15 see to TRANSCOM? We have talked about some of them, but as
16 you go into this new job -- and by the way, I do not want
17 to leave this hearing without rendering a compliment to
18 your predecessor, who I think is one of the most capable
19 officers I have ever met. He has done a superb job, and I
20 want the record to show that, at least from myself.

21 What are the risks that you see? What are your
22 biggest priorities going in and looking at the future of
23 TRANSCOM?

24 General Lyons: Well, sir, first thanks for pointing
25 out the leadership of General McDew. As I was a deputy out

1 there, he was my commander for 2 years, and I completely
2 agree with you on his leadership. He is an exceptional
3 individual.

4 Senator King: And by the way, his character was built
5 by his first assignment in the Air Force. It was at Loring
6 Air Force Base in northern Maine. So I am sure that had
7 something to do with it.

8 General Lyons: As a tanker pilot, yes, sir. That is
9 correct. He remembers it well. He can tell you exactly
10 the number of winters he spent up there.

11 [Laughter.]

12 General Lyons: But, sir, I think you pointed out the
13 challenges very well. As we look at the emerging
14 environment of contested environments, as well as strategic
15 competition, great power competition, we must reevaluate
16 and ensure that we can continue to project power at our
17 time and place of choosing. That is the role of USTRANSCOM
18 and that is a strategic comparative advantage, I would
19 argue, that no other nation in the world enjoys. But I
20 think you would expect that as adversaries look at centers
21 of gravity and advantages and comparative advantages, they
22 look to seek where they can find potential weakness. If
23 confirmed, my job will be to make sure that we are shored
24 up and retain that strength for the nation.

25 Senator King: Thank you, General. Thank you for your

1 service.

2 General Lyons: Thank you, sir.

3 Senator Inhofe: Let me just make a comment about
4 this. One of the problems that Senator Reed and I have is
5 that we have so many members who will come and go, of which
6 I was guilty before I was chairing this. But what we are
7 going to attempt to do is encourage people to be here on
8 time to benefit from all the testimony. And I will just
9 kind of serve notice now that while I am chairing these
10 committees, that I am not going to hold it open for people
11 who come in late. I do not mean that critically because we
12 did wait for you and I am happy to have you here.

13 Senator Warren: Thank you, Mr. Chairman.

14 So in this committee, we often talk about the need for
15 the United States to be on the cutting edge of innovation
16 so that we can meet 21st century threats. Now, in an
17 article that you wrote last year, you said innovation such
18 as autonomous technologies, artificial intelligence, and
19 smart data will clearly play larger roles in the wars of
20 tomorrow. But, of course, none of us want innovation just
21 to be a bunch buzzwords. We have to walk the walk.

22 So I just want to make sure. I just want to try to
23 get this on the record at this point. Do you believe it
24 should be a priority for the United States to make
25 significant and sustained investments in research and

1 development in leap-ahead technologies in order to maintain
2 our competitive advantage in a rapidly changing operating
3 environment?

4 General Lyons: Yes, ma'am, I do.

5 Senator Warren: Then let me follow up on that. You
6 are a former Deputy Commander at TRANSCOM. You know the
7 command pretty well. So what are some ideas you have for
8 putting innovation into practice at TRANSCOM, and how are
9 you going to make sure that those innovations that you have
10 in mind actually come to fruition?

11 General Lyons: Ma'am, a fair question. I would offer
12 to you two thoughts on this. There is what you described
13 as leap-ahead. So in my current position as the Joint
14 Staff J4, trends that I see across the globe and across the
15 joint force are increasing demands largely based on
16 consumption, failure, damage, destruction in the battle
17 space and the envisioned battle space. So if we are not
18 careful, we will find ourselves on the wrong end of the
19 cost curve, and sometimes we often do. And so when I think
20 about leap-ahead, as you described it, I am thinking about
21 ways in which our joint force can bring lethal effects
22 without the enormity of the logistics apparatus that it
23 requires today. That I do see in the future.

24 In the current force structure, which is what we will
25 contend with in our present time frame, I believe that as

1 you look at the potential for leveraging data and when we
2 think about just the basic baselines of data analytics and
3 machine learning, we keep coming back to you have got to
4 have the data that is accurate, relevant, and timely. You
5 got to have the data structures. You got to have the
6 infrastructure. And so you keep coming back. And I think
7 that is largely why General McDew has moved out on the
8 cloud initiative to begin to move to a virtualized
9 environment where he can leverage data and information to
10 get to a higher level, which I believe will be machine
11 learning across the joint logistics enterprise. And I
12 think that is extraordinarily powerful as we move in that
13 direction.

14 And so, ma'am, if confirmed, I am certainly committed
15 to push in that direction.

16 Senator Warren: Well, I appreciate that.

17 You know, I think you have expressed before a real
18 sense of urgency about prioritizing innovation. You wrote,
19 the nation's future adversaries are becoming more advanced
20 and more deadly. The DOD must face difficult truths and
21 understand potential weaknesses so they can be fixed now
22 not later.

23 I think you are right, and I just want to make sure we
24 are making more robust, more sustained investments in
25 innovation so that we really are able to hold our own

1 against our adversaries. I appreciate that.

2 And one other thing I wanted to ask you about, about
3 cybersecurity. And I know that Senator Reed and Senators
4 Rounds and Blumenthal all touched on this, but I have a
5 little different question I want to ask.

6 Transportation Command is necessarily interconnected
7 with commercial providers and the movement of information
8 across unclassified commercial networks. The commander you
9 are nominated to replace, General McDew, took steps to
10 strengthen TRANSCOM's cybersecurity in coordination with
11 commercial partners. He told this committee that TRANSCOM
12 has the authority to conduct onsite visits or request third
13 party assessments to check whether industry partners are
14 actually fulfilling their contractual obligations to
15 upgrade their cybersecurity systems and report cyber
16 threats.

17 So can I just ask, General Lyons, is TRANSCOM actually
18 conducting these assessments? And could you just say a
19 brief word about what you have found so far?

20 General Lyons: Ma'am, from my experience in the
21 command, I think their relationship with their providers on
22 the commercial side is probably a model for many
23 organizations to look at. It is very interactive. It is
24 rich in information.

25 I would suggest, though -- and I fully applaud General

1 McDew's initiatives to include basic cyber hygiene in
2 contractual relationships. And frankly, I think our
3 vendors ought to be incentivized to do that on their own.
4 So basic NIST standards and so forth and so on are kind of
5 a first step.

6 But this is an operational domain. This is a
7 warfighting domain. We must be prepared to maneuver. Our
8 adversaries are capable and have shown intent. They
9 maneuver. We must be able to counter both defensively and
10 sufficiently offensively to deter their activities in the
11 cyber domain.

12 And so on the commercial provider side, this is a real
13 challenge just for a number of reasons. And some
14 companies, because they are incentivized to invest in that,
15 are much better than others, and others are lagging. But I
16 think having a minimum standard in contractual language is
17 the first step to a lot of work that we have to do in the
18 future.

19 Senator Warren: Well, as you rightly say, first step.
20 But then we really have to enforce it. You know,
21 TRANSCOM's disproportionate reliance on unclassified
22 commercial networks, our partners need to understand --
23 these commercial partners need to understand there are
24 going to be consequences for failing to implement strong
25 cybersecurity standards. The logistics chain is just too

1 important for cyber vulnerabilities to go unchecked.

2 So thank you, General.

3 General Lyons: Thank you, ma'am.

4 Senator Warren: Thank you, Mr. Chair.

5 Senator Inhofe: Thank you, Senator Warren.

6 Senator Reed, any further comments?

7 Senator Reed: No, sir.

8 Senator Inhofe: Senator King? All right.

9 Then with that, we appreciate very much your
10 participation here and excellent answers and excellent
11 questions I might add. Thank you very much.

12 And we are adjourned.

13 [Whereupon, at 10:35 a.m., the hearing was adjourned.]

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