HEARING TO CONSIDER THE NOMINATION OF:

VICE ADMIRAL CHARLES A. RICHARD, USN

TO BE ADMIRAL AND COMMANDER,

UNITED STATES STRATEGIC COMMAND

Thursday, October 24, 2019

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

The committee met, pursuant to notice, at 9:01 a.m. in Room SD-G50, Dirksen Senate Office Building, Hon. James M. Inhofe, presiding.

Committee Members Present: Senators Inhofe, Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Perdue, McSally, Scott, Blackburn, Hawley, Reed, Shaheen, Blumenthal, Kaine, King, Heinrich, Peters, Manchin, Duckworth, and Jones.
OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S.

SENATOR FROM OKLAHOMA

Chairman Inhofe:  Our meeting will come to order.

Today we are meeting to consider the nomination of Vice Admiral Charles Richard with the appointment of the grade of Admiral and to be Commander of the United States Strategic Command.

I appreciate your being here, and I just really enjoyed meeting your beautiful family and hearing -- even though I do not agree with a couple of things that they are pursuing. But that is all right.

[Laughter.]

Chairman Inhofe:  No.  I think that is really great, and we appreciate very much your bringing them.  Be sure you introduce them to the committee.

We have the required questions.  Let me get these over with first.

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

Admiral Richard:  I have.

Chairman Inhofe:  Will you ensure that your staff complies with deadlines established for requested communications, including questions for the record in hearings?

Admiral Richard:  I will.
Chairman Inhofe: Will you cooperate in providing witnesses and briefers in response to congressional requests?

Admiral Richard: Yes, Mr. Chairman.

Chairman Inhofe: Will those witnesses be protected from reprisal for their testimony or briefings?

Admiral Richard: They will.

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

Admiral Richard: I do.

Chairman Inhofe: And do you agree to provide documents, including copies of electronic forms of communication, in a timely manner when requested by a duly constituted committee or to consult with the committee regarding the basis for any good faith delay or denial?

Admiral Richard: I will.

Chairman Inhofe: Lastly, have you assumed any duties or undertaken any actions which would appear to presume the outcome of your confirmation or the confirmation process?

Admiral Richard: I have not.

Chairman Inhofe: All right.

Well, the National Defense Strategy, which is this document that we have proudly been using -- it is a good document. This is one that was put together by Democrats and Republicans. Everyone was in agreement with it, and we
have been using it all throughout our defense reauthorization process. And it directs our nation’s military to prepare for the return to strategic competition, and that is also in the Nuclear Posture Review.

If confirmed, you will be the most prominent advocate for the requirements for our nuclear forces. We will expect you to monitor the Navy and Air Force programs to modernize the nuclear triad.

We say that. We are sincere about that because we neglected to modernize for a long period of time when we should have been doing it. And a lot of people, even to this day, look at the triad and they consider that to be somewhat redundant just because it is three approaches. But I know you will confirm your dedication to that system.

As a member of the council, we also expect to keep a watchful eye on the Department of Energy’s contribution to our nuclear modernization goals. Without strong support and continued full funding for the DOE’s warhead and the infrastructure programs, STRATCOM will be unable to field a capable and survivable nuclear system in the decades to come.

In early 2018, the Nuclear Posture Review recommended a low-yield warhead for some of the Navy’s ballistic missiles. The program was authorized and funded. The requirements were set, and the Department of Energy completed production
of all units in less than a year. This was an excellent
eexample of the agility and the collaboration that will be
required to compete with the Russians and the Chinese.

You know, that was a great job that folks were able to
get done in that period of time. I think that is a good
eexample for some of the other efforts that we have around
here.

STRATCOM has recently been given more responsibility
for modernizing the nuclear command, control, and
communications. That is the NC3. This is one of the most
complex engineering problems the Department faces at this
time, and I look forward to hearing your thoughts on the
best way to approach it.

You will also be involved in driving requirements for
missile defense, particularly the homeland. Given recent
setbacks in modernization of our homeland defense
capability, I am interested in your thoughts on whether we
can afford to wait another decade to modernize the ground-
based interceptors in Alaska. And I am sure we will get
some other comments and questions about that from Senator
Sullivan.

Lastly, despite the creation of the new Space Command,
STRATCOM will still rely on space systems every day. I am
interested in your plan to ensure STRATCOM priorities like
missile warning are still supported in space.
So I thank you for your willingness to serve in this capacity and look forward to serving with you. Senator Reed?
STATEMENT OF HON. JACK REED, U.S. SENATOR FROM RHODE ISLAND

Senator Reed: Well, thank you very much, Mr. Chairman.
I would like to join you in welcoming our nominee.
Vice Admiral Richard, thank you for your decades of service to our nation. I also want to recognize and thank your family, who are here today, your wife Lisa and your daughters, Allison and Emily. I know they have served and sacrificed right along with you for many, many years, except for that one delightful year in Jamestown, Rhode Island, which was a vacation.

Admiral Richard, you have an impressive record of service to our nation, and I believe you are well qualified for this nomination with your experience as the Deputy Commander at U.S. Strategic Command and also commanding our fleet of ballistic missile submarines.

The Commander of U.S. Strategic Command serves as the principal military officer who advises the President, the Secretary of Defense, and the Chairman of the Joint Chiefs of Staff on our nuclear deterrent and our global missile defense requirements. As is often said, our nuclear deterrent must be safe, secure, and reliable. You will be responsible for articulating the requirement for and managing the readiness of our nuclear triad and its command and control protocols to deter threats that are existential.
Integral to the readiness of our nuclear force is the ongoing modernization of our triad. We are well into modernizing the sea and air legs of the triad, and we will soon begin modernization of the ground-based ICBM leg. At this time, the programs appear to be on track, but I am deeply concerned about the potential risk of this simultaneous modernization of all three legs on the workforce and industrial base. The chances of a delay in one or more programs is high, and we need a clear plan of how we will respond. I am interested in your initial thinking on this issue and will be watching this modernization process very closely.

U.S. Strategic Command is undergoing a number of organizational changes. 3 years ago, the command had responsibility for nuclear, space, and cyber operations, but now space and cyber operations have been shifted to other combatant commands. And one of the consequences of these shifts is the gray areas around which command will be responsible for specific programs that have strong connections to both commands. For example, our missile warning satellites, which are integral to our nuclear command and control architecture, are very important and must not be subject to any ambiguity in managing or sustaining them. While these reorganizations are necessary
for our long-term strategy, they must be made slowly and
carefully to avoid costly mistakes.

   In the area of missile defense, I will be interested to
hear your views on the status of our homeland defenses and
the steps we are taking to address this increasingly
complicated threat from new technologies, particularly
hypersonic missiles.

Admiral Richard, I again thank you for your service and
look forward to the hearing.

   Thank you, Mr. Chairman.

Chairman Inhofe: Thank you, Senator Reed.

Admiral Richard, we would like to recognize you for an
opening statement. Your entire statement will be made a
part of the record. So you are recognized.
STATEMENT OF VICE ADMIRAL CHARLES A. RICHARD, USN, TO
BE ADMIRAL AND COMMANDER, UNITED STATES STRATEGIC COMMAND

Admiral Richard: Thank you, Mr. Chairman.

Chairman Inhofe, Ranking Member Reed, distinguished members of the committee, thank you for the opportunity to come before you today. It is an honor to be nominated by the President to lead U.S. Strategic Command.

Mr. Chairman, in particular, thank you for the opportunity to introduce my family. I would not be able to serve if it were not for them. Lisa to my left, my wife of nearly 31 years, is herself a former Senate staffer who worked on the Senate Veterans Affairs Committee, among other, and I just have to imagine she is getting a bit of a kick from viewing from a hearing from a new, unique vantage point.

Also here with me today are our two daughters, Allison and Emily. Both of our girls graduated this past summer, Allie receiving her master’s in physician assistant studies, and Emil an undergraduate degree in biology.

Our son Chase recently moved to Atlanta and began a new job and unfortunately is not with us today. So it has been a very exciting time for our family.

If confirmed, this will be our 10th move in the last 12 years and the 21st overall. And maybe said a different way, my son went to four high schools. My daughters went to
three each. So I very much appreciate my family’s patience and support to allow me to continue to serve.

My mother and father-in-law, Pat and Tom Moore; my sister-in-law Trish Moore and her partner, Mary Hughes, are also here and I appreciate that.

I would like to thank the President and Secretary of Defense for nominating me, and thanks to the Chairman of the Joint Chiefs of Staff, General Milley, for expressing his confidence that I could serve as a combatant commander.

If confirmed, I will work very closely with this committee and with Congress more generally to address the strategic challenges that face this nation. I firmly believe that open, honest, and timely communications will be necessary to address these challenges.

And with the return to great power competition, as both the chairman and ranking member have noted, we must never lose sight of the fundamental nature and importance of our nation’s strategic forces. A powerful, ready triad remains the most effective way to deter adversaries from conducting attacks against the United States and our allies. We should be reminded its credibility backstops all U.S. military operations and diplomacy around the globe and ensures that tensions, regardless of where or how they arise, do not escalate in a large scale war. As Admiral John Richardson, the former Chief of Naval Operations, said, it is
foundational to our survival as a nation.

Our nation’s nuclear deterrent forces must always be safe, secure, reliable, and effective. Our adversaries began upgrading their own capabilities many years ago, a decade. And it is now imperative that we modernize all elements of our triad to include nuclear command and control and the weapons infrastructure, as well as add the modest supplements called for in the 2018 Nuclear Posture Review. We must also ensure that our plans are globally integrated with the other combatant commands.

But nuclear threats are not the only threats we face. In both the space and the cyber domains, among others, we face a myriad of threats that could have strategic implications. If confirmed, I will work hard with General Raymond at U.S. Space Command to ensure that he can execute the significant responsibilities he has been assigned. I will also work closely with General Nakasone at Cyber Command, as well as all of the other combatant commanders to ensure we look at strategic threats globally and execute strategies in accordance with the National Defense Strategy to use all of the nation’s capability to deter our adversaries and, if necessary, defend the nation.

In addition to strategic deterrence, U.S. Strategic Command has many other significant responsibilities: missile defense, joint electronic warfare, global strike,
just to name a few. If confirmed, I pledge my best efforts from STRATCOM to implement the National Defense Strategy in all areas of responsibility.

I will live up to the expectations of the men and women of U.S. Strategic Command. I have served there twice. It is truly a special place. I like to think of it as Rickover meets Lemay and as one of the last officers on active duty who interviewed with Admiral Rickover to join the Navy nuclear propulsion program, I think he and General Lemay would be quite proud of the legacy that carries on to this day in Omaha. The command’s motto is “Peace is our profession,” and if confirmed, I will live up to that motto.

I will also live up to the standards set by the previous commanders. I have served for three of them, and in particular, the current commander, General John Hyten. He is truly a remarkable leader and commander and in large part responsible for my development as an admiral. It is incredibly humbling to even be considered for a position that has such an amazing legacy. And if confirmed, I look forward to working with General Hyten as he takes on his new responsibilities as the Vice Chairman of the Joint Chiefs of Staff.

Chairman Inhofe, Ranking Member Reed, and members of the committee, I thank you again for the opportunity to appear before you, and I look forward to your questions.
[The prepared statement of Admiral Richard follows:]

[COMMITTEE INSERT]
Chairman Inhofe: Thank you very much, Admiral.

I have a couple of things I want to be sure that we get out of the way early. One is a problem, and now and then you hear about it. I have not heard recently and I do not know of anyone around here who has any real interest in any kind of a “no first use” policy. But it has always bothered me because it seems like no one talks about it, and yet it always does appear. And there are people out there. And I would just like to ask you some questions about that.

I assume that you would agree that that would limit our ability to deter an extremely dangerous non-nuclear attack. So we are talking about something like chemical or biological, maybe a cyber attack. Would you agree with that?

Admiral Richard: Senator, yes. My best military advice would be to not adopt a “no first use” policy.

Chairman Inhofe: Yes, and I appreciate that. But I also want to mention a couple other things about that because I want to get that into the record.

One would be our allies. Would our allies not be concerned as to whether or not we would have the capability and desire to do the things that we are doing for our allies if we had such a policy?

Admiral Richard: Senator, yes. I think adoption of a “no first use” policy would have a significant negative
effect on our commitments to our allies.

Chairman Inhofe: So I think you have pretty strong feelings about that.

Well, the other thing that they talk about is the de-alerting. To me the whole idea of de-alerting something -- the whole idea on responding is to respond quickly and you do not have the luxury of time, but to deliberately de-alert, I would assume you would agree that is something that we should not be concerned about or we should be concerned about it if someone starts bringing this up.

Admiral Richard: Again, Mr. Chairman, I would not recommend that. It would diminish one of the key attributes that the intercontinental ballistic missile leg adds, and also in a crisis situation, a potential race to re-alert would be destabilizing probably when we need it the least.

Chairman Inhofe: I appreciate that.

Now, in my opening statement, I mentioned that we recently canceled a program for modernization of ground-based interceptors in Alaska, and I am sure our Senator from Alaska is going to be bringing this up. But according to the initial plans, the proposed replacement program, the NextGen interceptor will likely not be fielded until 2030.

What are we going to be doing between now and 2030 in that field? What capabilities do we have, even though we have been a little disappointed in what has happened in
Alaska?

Admiral Richard: Mr. Chairman, the capabilities that we have fielded today are quite effective against the threats that we face today. General Dickinson, the responsible commander, recently discussed his confidence -- and I share that confidence -- in the ability of the fielded system today to defend us. Any delay, of course, is of concern. I have great confidence, though, the Missile Defense Agency and the services will be able to work through the challenges represented and be able to pace the threat.

Chairman Inhofe: I am sure that is right.

And lastly, I mentioned in my opening statement this document that I am very impressed with. Do you support the recommendations of the Nuclear Posture Review, as well as the recommendations in this document, including the low-yield, submarine-launched ballistic missile?

Admiral Richard: Mr. Chairman, I do. I think they are both well written documents.

Chairman Inhofe: Very good.

Senator Reed?

Senator Reed: Well, thank you very much, Mr. Chairman.

Admiral, again thank you for your service and your dedication.

Our nuclear posture is in the context also of decades and decades of arms control agreements. The most
significant one is the New START agreement which, if nothing is done, will expire in January of 2021. There is the option to renew it for 5 years with agreement between ourselves and the Russians. It caps the number of strategic missiles to 800 so we are not in a race to produce more and more missiles and warheads at 1,550.

Do you think there is a significant value in maintaining this agreement in place?

Admiral Richard: Senator, I support any arms control agreement that enhances the security of this nation. And there are many historical examples that go to that.

Your are quite correct. The New START treaty has provided us with valuable insight into Russian, in this case, capabilities. It gives us a feel for their size, capacity, capability.

But it also does not address large categories of weapons that are not treaty-constrained. It is only with Russia, and they are developing new systems. I would provide my best military advice, if confirmed, into the pros and cons of any future agreement, including this one.

Senator Reed: There is a possibility. We are hearing very disturbing comments coming out of Turkey that President Erdogan wants nuclear capabilities. He is not I think, unfortunately, alone in that. If the New START agreement is dispensed with, we will find ourselves for the first time
since the 1970s I believe where we do not have an arms
control regime in place at all, which could give rise to
people like Erdogan thinking they have a free ride.

Is that a concern you have?

Admiral Richard: Senator, any effort at proliferation
of nuclear weapons is of concern. And so I would support
any efforts to maximize this nation’s longstanding goal of
minimizing proliferation of nuclear weapons.

Senator Reed: Thank you very much, Admiral.

One of the key initiatives in Secretary Mattis’ Nuclear
Posture Review in 2018 was reorganizing nuclear command,
control, and communications. And Strategic Command is now
in the process of standing up a new NC3 Center.

Could you give us a notion of the key issues you see in
this process?

Admiral Richard: Senator, one, I applaud this
committee’s leadership and the Department’s actions to stand
up the NC3 Center that you just described. And by bringing
this under a single responsible commander, providing
visibility across a large and complex enterprise with the
focus on the acquisition and sustainment pieces of this by
the Under Secretary of Defense for Acquisition and
Sustainment, I think we are on a good trajectory to
understand the system we have today, which is very reliable
and ready to go, understand the threats that the system will
face in the future, and then recapitalize and, in fact, redesign, reconceive the NC3 system. So I am very pleased with the direction that we are headed in that.

I think the number one issue between -- two issues would be sufficient intellectual capital to think our way through that, to achieve the same results that our predecessors did in the system we have today. And then adequate resourcing, stable, timely, adequate, predictable is the number one thing under our control to ensure that we are able to do that.

Senator Reed: I think the point about intellectual resources -- we discussed this in the office. But in the good old days, it was more of a government-led, government think tank, government approach, and now a lot of particularly cyber and sophisticated computer technology and intellectual property is outside. And that is something you are going to have to bring under the tent, if you will. I think you concur.

Admiral Richard: Senator, I agree.

Senator Reed: Just a quick question here, less of a question because my time is expiring. I did indicate concerns about the potential for delay in our triad modernization. This is the first time we have really tried to do everything at once. We have already seen the submarine fields -- they are the lead-off hitter, if you
will -- problems with nuclear tubes and welding. This goes to the whole issue of the industrial base. And again, I know you will do this, but you have to be very, very diligent and vigilant watching the nuclear base, both the submarines, the air, and ICBMs. And hopefully, you will keep us informed of any significant trends, particularly unfortunate trends you see developing.

Admiral Richard: Senator, I absolutely agree.

Senator Reed: Thank you very much, Admiral.

Chairman Inhofe: Senator Fischer?

Senator Fischer: Thank you, Mr. Chairman.

Welcome, Admiral. Nice to see you.

You touched on this with Senator Inhofe, but I would like maybe a clearer answer. Do you support the deployment of the supplemental systems called for in the Nuclear Posture Review? And do you believe these enhancements are truly necessary if we are going to maintain deterrence?

Admiral Richard: Senator, I absolutely do. I think the Nuclear Posture Review got it right. These modest supplements add to the flexibility and capability in the triad, and that is what necessary to deter the threats we face today.

Senator Fischer: Thank you.

Your predecessors have strongly recommended against any unilateral reductions in our nuclear forces. You talked
about that somewhat with Senator Reed. What impact do you believe any kind of unilateral reduction would have on our ability to deter threats?

Admiral Richard: Senator, I think it would have a negative effect. It would be harmful for our ability to deter. And I am reminded this nation has led the world in unilateral reductions in nuclear weapons throughout our history and no one else has matched us with that. Every one else has gone in the other direction.

Senator Fischer: As you aware, in the past year a number of critics have argued that the ICBM force is not necessary for deterrence, and many have sought to reduce the funding for its replacement, which is the GBSD program.

What are your views on the deterrent value of the ICBM force, and how important is it in the recapitalization effort to proceed without delay?

Admiral Richard: Senator, the intercontinental ballistic missile leg, GBSD, is an essential component of the triad. It adds special unique capabilities that we have from no other leg. It is essential in achieving our nation’s deterrence objectives.

Senator Fischer: Following on that point, you and I discussed a couple days ago the larger problem of our nuclear modernization schedule and that there really is no margin for delay in that schedule.
Can you talk a little bit more about that and how we simply cannot extend the life of our current systems? You and I focused on an area that you are truly an expert on, and that would be our submarines. Can you talk to us a little bit about what we are facing with the Ohio class?

Admiral Richard: Yes, Senator. We have delayed and life-extended the current triad systems to the maximum extent possible. What I mean by that is we are bumping into physics and engineering limits. As the Senator alluded to, I am a submariner. So, one, the Ohio class was designed for 30 years. It went for 42, a great credit to the people that put it together. But there are only so many times that you can take a high strength piece of steel tubing, subject it to the great pressures of submergence, cycle it by taking that off to the point you just do not want to get in the tube anymore. We do not have confidence in the strength, corrosion, and others. That is the type of thing we are bumping into with all the triad systems. It is just not feasible to life-extend them anymore.

Senator Fischer: And staying on our schedule, when would we see the first Columbia class?

Admiral Richard: It would be in 2031, ma’am.

Senator Fischer: It is a long ways away still.

Admiral Richard: Yes, ma’am.

Senator Fischer: Thank you, sir. I look forward to
your confirmation. You have my support.

Admiral Richard: Thanks.

Chairman Inhofe: Senator Blumenthal?

Senator Blumenthal: Thanks, Mr. Chairman.

I represent the State that is home to the Columbia class program, as you know. And we would be very happy to host you there, as we did Secretary Esper just very recently in August. I do not know when the last time is that you visited Electric Boat and the shipyard there.

Admiral Richard: Senator, that was the last time up with Secretary Esper.

Senator Blumenthal: Right. Well, we welcome you back. As you know, then and now one of the major hurdles to that shipbuilding program is in fact the industrial workforce, development of the skills and training that are necessary for the thousands of new employees Electric Boat and the supply chain that is essential to build those submarines by the date that we need to do it. And I would like your commitment that you will continue to support those training and apprenticeship and other programs that are necessary for that program.

Admiral Richard: Senator, absolutely. And again, I applaud the States of Connecticut and Rhode Island for their efforts to also contribute to the development of that workforce.
Senator Blumenthal: We have no margin of error in the Columbia class program. As you know, China is rapidly developing its submarine capability. Russia has long been pacing our nuclear threat in the undersea environment. Last week, from October 15th to the 17th, Russia conducted a military exercise called Thunder 2019. They actually launched one ballistic missile, submarine-launched ballistic missile. Another apparently failed.

Could you give us your assessment of both that threat and the North Korean threat? That country also recently launched a submarine-launched ballistic missile.

Admiral Richard: Senator, thank you for reminding us of that. Both of those are graphic, real-world demonstrations of the capabilities that both those nations possess. And I cannot think of a better way to demonstrate what the threat is to this nation from those countries and what we have to do to defend and deter against it.

Senator Blumenthal: Are you confident that we can track the Russian and North Korean and Chinese submarines? The North Korean submarine, according to my understanding, was a diesel electric powered submarine that is pretty noisy, but I do not know about the Russian and Chinese.

Admiral Richard: Senator, as you know, I am the submarine force commander now. I have great confidence in our ability to address any threat, including the ones that
you mentioned. And we are not static. So it is a
competition. And the U.S. Navy has made great strides in
recent years and is poised to make some really great strides
in the near future to address that threat.

    Senator Blumenthal: Do you believe, as I do, that
these recent tests also emphasize the importance, highlight
the critical significance of continuing the Virginia class
fast attack program?

    Admiral Richard: Senator, this nation’s military
advantage in the undersea is one of the last remaining
places that it is unquestioned that we have the advantage.
And continuing the Virginia program is an essential piece of
making sure that we maintain that advantage into the future.

    Senator Blumenthal: And are you familiar with the
issues that have arisen with respect to the coating on the
stealth or the adhesive that is used to attach the stealth
coating to submarines? I do not know whether you can
address it in this setting, but are you familiar with those
issues?

    Admiral Richard: Senator, I am. I am confident that
the Navy’s engineering ability will work through that issue.

    Senator Blumenthal: It has been a longstanding issue.

    Has it not been?

    Admiral Richard: Senator, that is correct.

    Senator Blumenthal: And are you confident that we will
develop new technology or new manufacturing expertise to address it?

Admiral Richard: Senator, it is actually both, but it is more in the adhesion process where we expect to make the best gains.

Senator Blumenthal: I would like to ask you to -- my time has expired, but if I could ask you to or your staff to brief me in my office on these issues, I would appreciate it.

Admiral Richard: Senator, I appreciate that opportunity.

Senator Blumenthal: Thank you.

Thanks, Mr. Chairman.

Chairman Inhofe: Senator Scott?

Senator Scott: Thank you, Admiral Richard, and your family for your service and their support.

When you look at the threats of China, Russia, Iran, North Korea, what is your biggest concern about what the United States needs to do that we might not be doing or that you are concerned that we might not do in the future?

Admiral Richard: Senator, I could give you a pretty long list of technologies and capabilities that have my attention in terms of threats to the United States. But I would start the list that both of those nations do not view the world the same way that we do. They do not necessarily
agree with us on rule of law, market-based economic
competition, free and open order. And I look forward to
diplomatic efforts to attempt to resolve that.

But in the meantime, we are going to need to defend
ourselves, and then that will get to a number of
capabilities, hypersonics, quantum, AI, on top of the
capabilities that we have today that we are going to have to
think through and be ready to defend.

Senator Scott: Do you think that we are allocating
enough resources to be able to do that when you look at the
budgets that we are passing?

Admiral Richard: Senator, specifically in my areas of
responsibility, yes. For the larger defense budget, also
yes. But I would add that in addition to being adequate,
stable, timely, predictable enables us. That is a
fundamental assumption in the National Defense Strategy and
the recapitalization of the triad. Things like a continuing
resolution do not help with that.

Senator Scott: So that what we are going through now
with the continuing resolution, how much will that impact
your ability to do your job?

Admiral Richard: Senator, it results in multiple tens
of billions of the Department’s loss of buying capability.
It inhibits our ability to pivot the funding into areas that
we need to move faster on specifically in research and
development. It will lose in excess of $10 billion in terms
of readiness accounts to lock in the readiness gains we have
achieved over the years. So across the board, it keeps us
from moving fast to be able to pace a rapidly changing
threat.

Senator Scott: When you look at the amount of money
that China is committing and just the overall resources they
are committing to their nuclear ability, do you believe the
path we are going down will be enough to deter them?

Admiral Richard: Senator, if we recapitalize the triad
on schedule, we will be able to maintain sufficient
capability to address China’s actions. But you are quite
correct. She is modernizing and increasing every aspect of
her strategic forces.

Senator Scott: Thank you, Mr. Chairman.

Chairman Inhofe: Senator Heinrich?

Senator Heinrich: Thank you, Chairman.

Admiral Richard, congratulations on your nomination.

I know you have been out to both Sandia and Los Alamos
in the past, and if you are confirmed, I would certainly
like to welcome you back to those facilities.

With that in mind, as you know, DOD set an initial
requirement to produce 30 plutonium pits per year at Los
Alamos Labs by 2026. How important is that milestone?

Admiral Richard: Senator, that is critical to our
ability to maintain the strategic plan and the
recapitalization on our weapons complex.

Senator Heinrich: The secondary goal is for 80 pits
per year by 2030. How confident are you that NNSA will meet
that requirement?

Admiral Richard: Senator, one, I applaud the
committee’s leadership in establishing the Nuclear Weapons
Council which gives the Commander of U.S. Strategic Command
a direct opportunity to go address that. That requirement
is sound. And, yes, I recognize that there are issues in
terms of DOE’s ability to meet that, and I would pledge to
look very closely at that if I was confirmed.

Senator Heinrich: STRATCOM took over the modernization
of our nation’s nuclear command, control, and communications
systems from the Air Force Global Strike Command just over a
year ago now. And I am encouraged to see that the SACC
system, which is a system used to send emergency action
messages from nuclear command forces in the field, recently
retired these. Some of my colleagues may recognize these.
Some may be too young to recognize these.

[Laughter.]

Senator Heinrich: So one of the things that concerns
me is just the timeline for the rest of that architecture,
much of which was developed in the 1960s and 1970s and
currently is still expected to remain in service for a few
Talk to me about the timeline for that transition.

Admiral Richard: Well, Senator, one, I applaud your depth of interest inside this subject.

Senator Heinrich: I think this was retired in June.

Admiral Richard: Senator, the first step, which General Hyten has a good plan, is making sure that we reconceive the CONOPs, the concept of operations, that we are operating on, and then to make sure that we put together a system not because it is the way we used to do it, but the way we ought to do it in the future, particularly pacing the threat.

There are several nearer-term decisions that we have to go make with some urgency to recapitalize pieces of the nuclear command and control system. So the bottom line on the timeline is we must move with urgency to go redo the system.

Senator Heinrich: My understanding is that NC3 modernization is largely being handled by the individual military services in part because STRATCOM does not have acquisition authority. Is that the best arrangement? Is that working well in your view? Are there changes we need to make in terms of authorities for STRATCOM?

Admiral Richard: Senator, what I am encouraged by the Department’s decision to stand up the NC3 center is a stack
of authorities that is held by the Under Secretary of
Defense for Acquisition and Sustainment and all the services
report back to the secretary. That is the mechanism I think
that will be effective in addressing the issues that you
mentioned.

Senator Heinrich: So you do not have concerns about
that.

Admiral Richard: Not today. I would pledge to look at
it in the future to make sure it maintains the effectiveness
we expect.

Senator Heinrich: Talk to me a little bit about the
situation with regard to the ground-based strategic
deterrent program and the development that we may only have
one final bid. Do you have concerns about that? What
issues do you foresee if that does become the situation as
we move forward?

Admiral Richard: Senator, I have great confidence in
the Air Force’s ability to execute this acquisition program
in a timely fashion. I am responsible, if confirmed, for
the requirement and would be willing to engage with the Air
Force to make sure that we are trading requirements against
our technical ability to achieve them to the best benefit
for the nation.

Senator Heinrich: Getting back to pit production for
just a moment, you mentioned the Nuclear Weapons Council, of
which you would be a member, if confirmed. The chair of the
council is required to certify each year that NNSA is on
track to meet the military’s requirements. Under Secretary
Lord’s last certification was in April of this year.

If you are confirmed, will you commit to a review of
NNSA’s status and plans and then provide that feedback back
to both the council and this committee?

Admiral Richard: Senator, I will.

Senator Heinrich: Thank you.

Thanks, Chairman.

Chairman Inhofe: Senator Cotton?

Senator Cotton: Admiral Richard, thank you for your
service. Thank you for your family’s long record of service
as well and being willing to answer the call of service
again.

I want to speak about the Open Skies Treaty, a treaty
that allows overflight surveillance of the United States and
Russia, in addition to many other partners, but those are
the two main partners.

In 2017, the United States Government determined that
Russia had violated the Open Skies Treaty specifically by
limiting overflight of Kaliningrad, Russia’s vital strategic
enclave in northern Europe between Poland and Lithuania, as
well as limiting flights in the vicinity of South Ossetia
and Abkhazia in the Republic of Georgia. That was
reiterated last year and by some of your predecessors and colleagues.

Here is what Admiral Haney said in 2015. The treaty has become a critical component of Russia’s intelligence collection capability directed at the United States.

Here is what General Stewart, the Director of the DIA, said in 2016. The things that you can see, the amount of data you can collect, the things you can do with post-processing allows Russia in my opinion to get incredible foundational intelligence on critical infrastructure, bases, ports, all of our facilities. So from my perspective, it gives them a significant advantage.

And then 2 years ago, General Joe Dunford, then Chairman of the Joint Chiefs, said we believe that on balance it would be best if the treaty continue to be in place, but we do not believe the treaty should be in place if the Russians are not compliant. So there is a decidedly aggressive diplomatic effort right now to bring the Russians back into compliance, which we think would be the best outcome.

That was more than 2 years. That diplomatic effort has continued apace to no avail. Russia remains in violation of this treaty while the United States continues to adhere to it. I would submit that perhaps rather than calling this the Open Skies Treaty, maybe it should be called the Open
Skies Over America and the Closed Skies Over Russia Treaty.

Admiral, do you see value in remaining in a treaty where only one side is following the rules?

Admiral Richard: Senator, one, I will support any arms control or treaty that enhances the security of this nation. Your analysis is quite correct on the Open Skies Treaty. We do derive some benefit from it particularly with our allies. We would need to make the appropriate resource and operational commitments to utilize the full provisions of the treaty if we were to remain. And I would just offer my best military advice, if confirmed, if a decision were to be reached.

Senator Cotton: Do we have the best satellite constellation in the world?

Admiral Richard: Senator, we do.

Senator Cotton: Superior to Russia’s?

Admiral Richard: Senator, it is not directly in my area of expertise, but yes, I think so.

Senator Cotton: So it would stand to reason then that Russia gains more from this treaty, which they are violating, by gaining the overhead imagery from these flights since they have an inferior satellite constellation system.

Admiral Richard: Senator, again, you are getting into an area that I pledge to look closely at, if confirmed. I
do not have direct expertise in that. But you are hitting
on the factors that have to be considered whether or not we
stay in the treaty.

Senator Cotton: And would it be to a signatory
country’s advantage if they also had on-the-ground
intelligence officers coordinating with their overflights of
another party’s territory to collect intelligence on
military bases or other critical infrastructure?

Admiral Richard: Senator, it is important in any
treaty or agreement for all parties to comply.

Senator Cotton: The Air Force has sent up a long
unfunded priority list to reach the growing force of 386
squadrons, more spare parts for F-35’s, more additional
tanker capacity, supply inventories. We also propose to
spend $250 million on Open Skies aircraft and operations.
Perhaps if Russia is not complying with the Open Skies
Treaty, that money might be better spent on some of these
urgent priorities for the Air Force?

Admiral Richard: Senator, again, you are getting at
the actual elements of a decision.

Senator Cotton: All right. Thank you, Admiral. I
appreciate that.

I just have to say I think this is a lot like the
Intermediate-Range Nuclear Forces Treaty. Everyone agrees
that Russia is not complying with it. Everyone agrees it
would be best if we brought Russia back into compliance.
Everyone agrees it would be great if everyone had a pony as well. But we have spent years trying to get Russia into compliance with this treaty, and in the meantime, Russia has continued to gain significant intelligence advantage over the United States, a situation which because we have our superior constellation would be advantaged if Russia was not taking these advantages of the Open Skies Treaty.

Congratulations again on your nomination.

Chairman Inhofe: Senator King?

Senator King: Admiral, it is 2:00 a.m. on a Monday morning in July. You receive credible evidence that there are incoming missiles from Russia. The GPS is out. The satellite system is out. The phone system is down. Can you communicate to the President and can the President communicate to our triad?

Admiral Richard: Senator, yes.

Senator King: And you are confident of that. I think command and control is an essential part of the deterrent.

Admiral Richard: Senator, one, I could not agree with you more that command and control is an essential element to the deterrent. That mission set is practiced every day at U.S. Strategic Command to allow people like me to be able to say that.

Senator King: Without satellites, without the
telephone network.

Admiral Richard: Senator, we have thought through all of that. Obviously, satellites are a critical component to our NC3 capability, but we have capabilities beyond that.

Senator King: That is reassuring, but I want your commitment to keep on this issue. And interestingly, it seems to me it has to be more or less public. I mean, we do not want to advertise to our adversaries our techniques, but we do need for our adversaries to know that we have a credible deterrent because we can continue to communicate. Otherwise, the deterrent effect goes away.

Admiral Richard: Senator, you are absolutely correct. You absolutely have that commitment, and I have that responsibility in writing from the Secretary of Defense.

Senator King: Thank you.

Let us talk again about deterrence. Deterrence has worked as a strategy for 70 years, but it is based upon a principle of a kind of mutual rationality in effect that neither side wants to incinerate their country and their countrymen.

What worries me is the theory of deterrence does not work if non-state actors get a hold of nuclear weapons because the normal -- what happens if, A, it is not a country and, B, the people do not care about dying? I think we need deterrence 2.0 to be thinking about that eventuality
because I see that as not as a probability but at least a possibility and a very frightening one.

Admiral Richard: Senator, I agree with you.

Deterrence is based in the eye of the opponent. Can I deny your aim? Can I impose a cost on you that is unacceptable to you, and do you believe me based on your value and how you judge things?

A terrorist scenario is a very challenging one. The value systems are very different. Denying them the ability to have the weapon, deterring them, again their value system. The efforts this nation has been after for many decades will be essential to ensure that what you described does not happen.

Senator King: It seems to me that part of the key to that in that scenario is intelligence. We have to know that such a threat is imminent or possible and how to deal with it in a different way than the traditional deterrence because, obviously, to somebody who is willing to give up their life instantaneously, that is not an effective control.

Let me change the subject entirely from these very serious matters we are talking about and go back to the beginning of your testimony. This is a more general question.

You talked about having redeployed I think 10 times in
20 years, every 2 years. Does that make sense in terms of both national policy and wear and tear on your family and their furniture? It worries me that a person of your expertise and knowledge gets set in a job, gains some expertise and knowledge, whether it is a commander of a submarine or of all the submarines or our commander in Afghanistan. I worry that the churn undermines the continuity of information and knowledge and experience that would be beneficial if the tours were longer. I want your personal reflections --

Admiral Richard: Senator, one, I may not be the best example of the military writ large. Also, if you go earlier in my career, I tended to stay longer.

Senator King: Could you not get along with the people where you went to all these places?

Admiral Richard: I was appreciative of the opportunity to broaden my experience base that the Department gave me, and so there is a difference between particularly after making flag rank and what happens before. The military very much values exactly what you are talking about. It is a policy, for example, in the submarine force. We do not turn over commanding officers of submarines except about every 3 years to make sure we have the continuity that you are talking about.

Senator King: Is 3 years the right number? How about
5 years?

Admiral Richard: I think 3 years. We have actually moved that around. No, 3 years is very demanding. You have to go all in for those 3 years. So 3 years is about the right amount of time. Endurance, stamina, commitment, refresh with new leadership. 3 years is about the right time.

Senator King: Well, I appreciate those comments. But I remain concerned about this general policy and whether 2 and 3 years is the right amount of time. There is also enormous cost to the taxpayers in terms of retraining and moving people. But I appreciate your comments.

And thank you for your commitment. I understand the knowledge and experience you bring to this, and I think it will be a great benefit to the country.

Admiral Richard: Thank you, Senator.

Chairman Inhofe: Senator Hawley?

Senator Hawley: Admiral Richard, thank you for being here today. Congratulations again on your nomination. I enjoyed visiting with you the other day.

When you and I met in my office, you offered what I thought was a very compelling argument to how to think about the cost of nuclear modernization relative to the size of the defense budget as a whole, and I wondered if you might just share that today for the record for the committee
because I think it is a great perspective.

Admiral Richard: Senator, thank you. We were discussing the large numbers that are sometimes used to describe the cost of the recapitalization. For example, there was a recent CBO number. That is a 10-year overall cost and by itself looks very large. But that is only 3.5 percent of the defense budget on top of the 3.5 percent that we spend to maintain the system that we have. That defense budget is itself a fraction of the discretionary budget of this nation which is also a subset of the overall things that this nation chooses to spend its resources on.

So if you do that math, the recapitalization is a fraction of a percent of all the things that this nation chooses to apply its resources to, and that is what buys our deterrence and defense against the only existential threat this nation faces. I think that is a good investment, and in the words of former Secretary of Defense Mattis, this nation can afford survival.

Senator Hawley: Thank you for that. I think that is very compelling.

Let me ask you about the Nuclear Posture Review which stresses the need to integrate conventional and nuclear forces. Could you define for us conventional-nuclear integration and maybe give us a sense of why it is so important and why it actually strengthens conventional
deterrence?

Admiral Richard: Senator, both of those are capabilities that this nation has and our ability to think through use of both conventional, non-kinetic space, cyber in an integrated way worldwide in a synchronized and integrated fashion across combatant commands is the best way to address the threats that we face in the 21st century which are global in nature.

Senator Hawley: Let me ask you this. The Director of the DIA said earlier this year that like Russia, China is working to field nuclear theater range precision strike systems. Is it possible in your judgment that Beijing would use limited nuclear strikes or at least threaten them to compel the United States to surrender if we found ourselves losing a conventional war or if they found themselves, rather, losing -- China did -- a conventional war with us over a Taiwan fait accompli scenario?

Admiral Richard: Senator, unlike Russia, China is very opaque in terms of what her doctrine and strategies are. She does that I believe intentionally. I think she believes that she derives benefit from that. They certainly possess capabilities that would allow them to adopt that type of strategy if they so chose.

Senator Hawley: Let me ask you this. For some time, the disarmament community has argued that the U.S. could
maintain nuclear deterrence while dropping to a nuclear
dyad, say, or even just sea-based nuclear platforms. In
your view, can you tell us how do the different legs of the
nuclear triad reinforce one another and why are they each so
important?

Admiral Richard: Senator, the Nuclear Posture Review I
think wisely has us on a strategy that tailors our deterrent
response to each individual adversary. This is not the Cold
War. We face multiple threats from multiple actors, and the
complementary nature of the attributes of the triad enables
us to be able to tailor our deterrent strategies.

We could go into a lot of detail, but the ballistic
missile leg, the submarine leg is the survivable leg. The
intercontinental ballistic missile has a promptness that is
not achieved by any other system. The bombers provide a
signaling and man-in-the-loop opportunity that the other
systems do not have. That is just a very high level wave at
the tremendous wisdom of the initial designers of the triad.

Senator Hawley: Let me ask you about the ICBM leg,
since you mentioned it. How would you respond to the
argument that we could cut the ICBM leg of the triad and
offset that capacity by uploading additional weapons to our
SSBN force, for instance?

Admiral Richard: The ICBMs provide unique attributes
that cannot be provided by the other legs of the triad.
Senator Hawley: Thank you very much, Admiral.

Thank you, Mr. Chairman.

Chairman Inhofe: Senator Kaine?

Senator Kaine: Thank you, Mr. Chair.

Admiral Richard, I enjoyed our visit yesterday and have two topics I want to ask you about.

The value of the nuclear triad in deterrence is very clear. A concern about the nuclear posture of this and other nations is the risk of miscalculations. And so you are balancing off the deterrent value and trying to minimize risk of miscalculations. And I am, along with many, increasingly worried about risks of miscalculations in the world for a variety of reasons.

In January of 2018 in the same week, there were two kind of shocking instances of emergency alerts being sent out, one in Hawaii and one in Japan, about North Korean incoming missiles. The Hawaii instance was sent out by a State emergency response department that was countermanded about 40 minutes later after a call to INDOPACOM and the Hawaii officials realized there was no incoming missile. The Japanese missile alarm was sounded by a broadcaster and then was retracted.

Offer the committee and the country some reassurance that we have mechanisms in place to reduce the risks of miscalculation.
Admiral Richard: One, Senator, I agree with you. And that drives back to the need for as much transparency as we can provide between us and other nations to minimize that possibility of miscalculation. Transparency adds to strategic stability.

The nation has a great capability to understand the threats that it faces. The Department of Defense does inform other elements of the Federal Government who have responsibility for the warning functions that you describe and we take those responsibilities very seriously.

Senator Kaine: In the aftermath of the Hawaii incident, which is one that we needed to grapple with here, the FCC did an investigation and imposed some additional requirements with respect to the early alert systems that are often managed by State departments of emergency management. I think NORAD was involved in after-action analysis as well.

But this is something that I think we are going to have to continue to really focus on and give our public the confidence that there will not be an accidental use of these or other weapons.

You and I talked yesterday in the office, and I was impressed with your thought about how the Space Command could pertain to our strategic deterrent strategy. You had mentioned the importance of the work this committee and the
administration has done to elevate Space Command as a combatant command. Talk a little bit about why you think that new structure is going to be important to our strategic deterrence and how you would foresee STRATCOM and the Space Command interacting going forward.

Admiral Richard: Senator, thank you. And you are referring to some advance policy questions that I received prior to this hearing.

So I had been asked in those am I concerned about the effect on STRATCOM’s missions with the elevation of Space Command. In fact, it is quite the opposite. I am encouraged by both this committee’s leadership and the Department’s direction to establish a separate Space Command. That is one of the most direct and immediate steps that we can do to ensure nuclear command and control capability, adequate warning. And I am particularly encouraged about General Raymond’s assignment as the sensor commander. And so this is the beginnings of us starting to think across individual mission areas and think more broadly, in this case, missile warning, a missile defense, and space situational awareness to optimize this nation’s ability to achieve all of those missions and also do so with an effective use of our resources.

Senator Kaine: This is going to be a hard question to answer specifically, but I just want to sort of get your
general sense of it. Obviously, the triad that we have is more effective because we have been able to forward-deploy some of our assets around the world, and that increases the effectiveness of the triad.

There has been a recent concern in the press about the U.S.-Turkey relationship, for example. Should you be confirmed as STRATCOM Commander, how will you approach the question of where we should forward-deploy assets to continue to maximize the deterrent value of our triad?

Admiral Richard: Senator, as you know, I can neither confirm nor deny the presence of any U.S. nuclear weapon anywhere in the world. But all U.S. nuclear weapons, no matter where they are, are under responsible U.S. commanders, and I have great confidence that they maintain the safety and security of those weapons or take steps, if necessary, to achieve that objective.

I would like to remind the committee -- I would love to find the person that came up with our extended deterrence and assurance policies, including the forward-deployed weapons. I can think of no other single thing that has been more effective at achieving this nation’s nonproliferation goals than our extended deterrence and assurance policies, and it is an example of why the United States is the security partner of choice and there are advantages to allying with us.
Senator Kaine: Thank you, Mr. Chair.

Chairman Inhofe: Senator Perdue?

Senator Perdue: Thank you, sir, and thank you, Admiral.

You know, it gives me great confidence in our future when American institutions like the Department of Defense and our Navy can produce leaders like you and families like yours. And I want to thank you for stepping up again. You have my full support for this nomination. I hope you get it soon and get out there and do what you know how to do.

I want to talk about two things very quickly. When you and I visited in Norfolk on my way out to visit the USS Truman, you made probably the greatest quote of any individual since I have been in the United States Senate. Now, I am going to give you a full opportunity to deny this quote today, but I remember this very well. You said give me a boomer, an air command post, a President, and I guarantee you we will never say “I surrender.”

Today Secretary Spencer has assured us that the Columbia class is a top priority procurement item in the U.S. Navy. We have a President. And I want to talk about the air command post.

First of all, I have been aboard the NAOC, the E4-B. They were gracious enough to take me up and demonstrate its capabilities and so forth. I understand that there is a
NEAT program that we are looking to update several different aircraft, including the C-32A and the E-6B. The Navy has the Airborne Ops Center. If you are confirmed, tell us how important this is and what are your thoughts regarding the updating of particularly the E-4B since it is very long in the tooth?

Admiral Richard: Senator, one, I thank you for your interest in this vital segment of nuclear command and control, the airborne piece. I have over 160 hours of mission crew time in the Airborne Command post, the Navy element of that, and it is absolutely critical. And this is our ability to provide command and control no matter what threat faces the nation.

So you are quite correct. There is an analysis of alternatives going on to determine how to recapitalize that. The capacity may have to be adjusted based on the threat. It is worth remembering we used to operate the Looking Glass aircraft, which was a much larger aircraft, up airborne 24/7 based on the threat environment that we have.

But, Senator, I would also commit to you the goal is survivability. Airborne Command post provides that survivability today. It is important for us to look to see is that still the best way to provide that survivability in the future. And the NC3 Center is on a trajectory to go answer that question.
Senator Perdue: Thank you, sir. I would love to have a deeper conversation in a classified environment about that to be comforted about that. Thank you.

I want to talk about the missile development that China has been under over the last 30 years really and the fact that many people in the Navy say that we are clearly “out-sticked.” That is their term today.

In early August, the United States formally withdrew from the Intermediate-Range Nuclear Forces Treaty. We have talked enough about that today. I am not going to go there. But I want to talk about what China has been doing in those 32 years to where now they have developed the foremost conventional missile force in the world with ranges from 500 to 5,500 kilometers, as I understand it.

Admiral Harris in 2017 testified when he was then commander of PACOM -- and I quote -- Beijing controls the largest most diverse missile force in the world with an inventory of more than 2,000 ballistic and cruise missiles. And 95 percent of those, according to Admiral Harris, violated the INF Treaty, which implies that we obviously do not have that capability since we complied with the INF.

Now unshackled from the INF, what are your thoughts and what can and should the U.S. do to level this playing field?

Admiral Richard: Senator, one, you are quite correct on the analysis of the situation in the Pacific. And now
that we are not under the INF Treaty, I think it is important for us to accelerate our research and development into competing systems. And also as your submarine force commander, I would offer that the submarines have an ability to counter that, and that is also an important capability to make sure that Admiral Davidson and INDOPACOM have those capabilities to address that threat.

Senator Perdue: One last question. I am almost out of time.

The Navy was gracious enough to expose me to their FONOP capability in the South China Sea, and I participated in one with a great crew out there. What are your thoughts on the importance of the FONOP efforts out there and the frequency in which we are doing those? And are those a continuing necessary part of the deterrence strategy vis-a-vis our friends in China?

Admiral Richard: Senator, they are. As you well, the freedom of navigation operations have been going on for many, many decades, and it is a part of the way the United States asserts freedom of the seas in compliance with international norms, even more important today given the actions that China has taken in the South China Sea.

Senator Perdue: Well, thank you, sir, for being willing to do this. Thank you for your career and your service.
Thank you, Mr. Chairman.

Senator Reed [presiding]: On behalf of the chairman, let me recognize Senator Shaheen.

Senator Shaheen: Thank you.

Admiral Richard, thank you very much to you and your family for your service and for all those moves. And congratulations on your nomination to be Commander at STRATCOM and for taking time to sit down with me yesterday to talk about some of the challenges.

One of the things we discussed is the lawful versus unlawful orders in terms of a decision to use nuclear weapons. In November of 2017 at the Halifax International Security Forum, then STRATCOM Commander General Hyten said during a panel discussion that he would push back if the President asked him to carry out an illegal order. He further went on to say that we think a lot about these things, and when you have this responsibility, how do you not think about it?

Now, if confirmed as Commander of STRATCOM, you would be responsible for providing strike options if a nuclear launch was ordered. Have you talked about what you would do in that situation, and if you believe an order to be unlawful, how you would respond to that? And can you walk me through the process on what is determined to be a lawful versus an unlawful order?
Admiral Richard: Well, Senator, one, General Hyten gave a textbook definition of what a lawful order is in that interview that you referred to back in Halifax.

What I will say is, one, not addressing hypothetical situations, but I want to make it very clear I will execute all lawful orders that I receive and I will not execute any that are not.

Senator Shaheen: And again, can you describe for us the difference? I understand that General Hyten referenced that, but can you describe the difference between lawful and unlawful?

Admiral Richard: Ma’am, it has a very strict definition. We are all trained in it. We have staff judge advocates that advise us on that.

But the bottom line here is for me to say anything other than I will follow a lawful order that I am given starts to call into question civilian control of the military. This is an ideal that is a long-cherished American ideal. I strongly support that, and that would be the basis of my decision.

Senator Shaheen: Well, and I am sure everybody on this committee agrees with that, that it is a very important aspect of our democracy. I think what I am still trying to understand is what is the difference between a lawful and unlawful order, and that I think is not clear to the public.
Admiral Richard: Yes, ma'am.

Senator Shaheen: So maybe you could direct me on where to get further insight into that or maybe we can have that discussion in a classified setting?

Admiral Richard: Senator, I would be happy to do that.

Senator Shaheen: Which? Which answer?

Admiral Richard: I will be happy to come back in a classified -- whichever one suits you best, ma'am. I can come back in a classified setting. I can certainly give you the definition of a lawful order. Happy to do both.

Senator Shaheen: Okay. I appreciate that. We will follow up with a question for the record on that so that you can give us the definition of the lawful order.

Admiral Richard: Yes, ma'am.

Senator Shaheen: I want to follow up a little bit on what we do next now that we are no longer part of an INF Treaty. And I know that or at least I understand that we are looking into options to deploy our own ground-based system.

Can you comment on the political realities in Europe and whether our allies in Europe would work with us on deploying such a system?

Admiral Richard: Senator, my current responsibilities do not afford me any particular insight on the current political dynamics in Europe. I would pledge, if confirmed,
to provide my best military advice and understand that situation very carefully.

We have historical precedent there where we were able to deploy those systems, but there was a large amount of political effort that had to be thought through to enable that in a way that it was acceptable to those nations.

Senator Shaheen: And as we look at future disarmament and the effort to try and bring China under an umbrella that would include their limiting or getting rid of nuclear weapons, do you think there is a role for NATO to play in that? Or is there an international initiative that might help get that done as we are thinking about how we might make overtures to China to participate with us in any future negotiations?

Admiral Richard: Ma'am, there very well could be. And again, I would welcome any effort by any mechanism that would provide greater transparency into China’s capabilities and intentions.

Senator Shaheen: And do you think NATO has any potential role in that?

Admiral Richard: NATO potentially could, yes, ma'am.

Senator Shaheen: Thank you.

Thank you, Mr. Chairman.

Chairman Inhofe [presiding]: Senator Blackburn?

Senator Blackburn: Thank you so much. And thank you
for the visit yesterday. I appreciated the conversation and talking with you a little bit about spectrum and spectrum utilization.

I think it is fair to say that the EMS has been treated as a permissive environment, and I would like for you, for the record, to talk a little bit about how we regrow the expertise that is necessary to operate in a contested EW environment and then how we conduct our modeling and testing without revealing our expertise to our adversaries. And you and I spoke a bit about this yesterday. And as we look at moving forward with your confirmation, which we hope will be swift, I would like for you to just expand on that for a few minutes.

Admiral Richard: Senator, one, I thank you for the question today, as well as the conversation yesterday. This is an area that deserves more attention and conversation.

You are quite correct that our military’s ability to operate in an electromagnetic spectrum is being contested in a way that we have not seen in a long time. It is no longer a permissive environment. I could draw parallels to what is happening in the cyber domain and the space domain. So we have work to do.

STRATCOM has a very specific unified command plan responsibilities in terms of -- for joint electronic warfare. And a lot of that starts with building the
expertise. The services are doing this. I did not give you this example yesterday, but I have just reorganized the submarine force to bring electronic warfare into a principal warfare area on its own and regrow a series of specialists that will put that on par with cyber and communications in terms of a certain number of sailors dedicating their careers to expertise in that area.

Beyond that, we have to get more agile in the spectrum. We have to be able to dynamically maneuver. You are quite correct that our ability to do modeling and simulation will enable us to train better without revealing what our capabilities are.

Senator Blackburn: Do you have the simulation capabilities that are necessary?

Admiral Richard: We have some but we do not have sufficient ones. We have work to do.

Senator Blackburn: And quantify that a little bit, if you can, the amount of work that is necessary to bring us to par.

Admiral Richard: It is, one, an intellectual challenge. There is a resource challenge to it. Models are not accurate enough yet for us to be high fidelity. There is a joint nature to this that we need to bring it together. The services are doing individual things, and we are just in the beginnings of putting the joint interoperability pieces
on this to the level that we need to do.

Senator Blackburn: Do we have a concept of operations plan or not?

Admiral Richard: Senator, we have multiple individual service concepts of operation.

Senator Blackburn: But nothing cohesive.

Admiral Richard: We have not pulled those together in a more current, total joint look across all services.

Senator Blackburn: Okay. Would that aid us in being more intentional with our spectrum use? As you and I talked yesterday, I think that inventory and analysis on our spectrum utilization and especially looking at the mid-bands is something that we probably should do. So talk a little bit about that.

Admiral Richard: No, Senator, you are again quite correct in that, one, spectrum is essential for military operations, our ability to access, and it is not only in the mid-bands, but this gets up into ultraviolet and infrared. So it is a scarce resource. Static allocation, while effective in a permissive environment, will not work in a dynamic environment. There are competing commercial demands that need to be addressed in peacetime. And so there is work across the board in our understanding to dynamically use and operate inside the spectrum.

Senator Blackburn: With that, Mr. Chairman, I am going
to yield back.

Chairman Inhofe: Thank you.

Senator Peters?

Senator Peters: Thank you, Mr. Chairman.

Admiral Richard, thank you for your service and your commitment to our country, as well as your family’s commitment to our country. We appreciate all of you.

Admiral, Russia has been developing an unmanned nuclear autonomous underwater vehicle known as Poseidon, which some have described as a doomsday weapon. Last April, “Newsweek” published a story detailing the Poseidon’s capability and quoted Russian President Vladimir Putin as saying -- and this is a quote from Mr. Putin -- they are quiet, highly maneuverable, and have hardly any vulnerabilities for the enemy to exploit. There is simply nothing in the world capable of withstanding them. End of quote.

Putin himself, during the March 2018 state of the union address, confirmed Russia’s development of a -- again I quote -- unmanned submersible vehicle that can move at great depths, I would say extreme depths, intercontinentally at a speed multiple times higher than the speed of submarines, cutting edge torpedoes and all kinds of surface vessels, including some of the fastest.

So my question to you, Admiral, is how would a strategic competitor with an unmanned autonomous underwater
vehicle that is capable of carrying nuclear weapons change
or alter any of your thinking in regards to deterrence?

    Admiral Richard: Well, Senator, one, so I would point
to that as a vivid example of the threat that this nation
faces in a way that we have not seen in many decades. You
are correct. That would not be constrained by New START, by
the way.

    In the end, Senator, it comes back to the basic
deterrence equation. Right? Can I deny you your aim or
impose a cost on you that is intolerable to you such that
you do not take the action? So this nation certainly
possesses the capability to impose a cost greater than what
they seek to gain by the use of that weapon.

    Senator Peters: Admiral, in your advance policy
question response, when asked if the Department of Defense
leadership has leaders with the training, academic degrees,
and expertise in the scientific and technical skills
discipline to lead the STRATCOM future joint force, you
stated -- and I am going to quote your statement here. You
are concerned about our ability to continue to attract and
retain the highest quality talent necessary to achieve the
National Defense Strategy. To that end, we must compete
with the public and private sectors for talent and further
establish the Department as an employer of choice was your
quote.
The Bureau of Labor Statistics job outlook shows that the nuclear engineer career field has 50 percent less growth over the next 7 years compared to all other engineering fields and 3 percent less than other occupations. And certainly as the United States shifts its energy sources away from nuclear power and turns to renewable energy to protect our nation from threats associated with climate change, we need to maintain a pipeline of future talent to support the defense industry, particularly in nuclear engineers.

So my question is, how should we work with universities to ensure that we are cultivating this talent in this sector?

Admiral Richard: Senator, so one, I applaud your interest in this area. It is very important.

There are a number of things the Department can do, but one I would point to specifically is U.S. Strategic Command has an academic alliance with over 70 universities and colleges designed to solicit, encourage, and develop the talent that we need. It is not quite as focused on the nuclear propulsion side of the house that you refer to. It is more in strategic deterrence theory. But it is mechanisms like that that the Department can use to encourage us to develop the intellectual capital, both capability and capacity, inside this nation to address our
challenges.

Senator Peters: I appreciate that answer.

Do you have some specific proposals on how the Department can market itself to the limited number of nuclear engineers that are in that field as to why they would choose to come to work with the Department of Defense as opposed to other options that are out there?

Admiral Richard: Senator, in addition to -- I mean, I look at this, for example, as the submarine force commander. I was just in a meeting last week changing the nuclear bonus structure to attract and retain more talent to your direct point.

We should not forget that the other thing that happens if you are wearing the uniform that I am wearing is that you are given a license to do organized violence on behalf of this nation. You get a chance to defend this nation in a way that no other occupation or no other person can do. We should remind people that is a unique attribute of being in the military, and I think that is something that is worth some people choosing to come join us.

Senator Peters: Thank you, Admiral.

Chairman Inhofe: Senator Sullivan?

Senator Sullivan: Thank you, Mr. Chairman.

And, Admiral, congratulations to you and your family, and thank you for your decades of service, all of you,
including your family. I know it is not always easy.

As the chairman mentioned, I certainly want to focus a little bit more on missile defense. It is a really important element of what your job is going to be, and it has actually been a really, I think, a good news story coming out of this committee. There has been bipartisan legislation in the last three NDAA:s on this. The President launched the Missile Defense Review at the Pentagon earlier this year. In March, you may have seen MDA successfully completed its first-ever salvo test, which was really remarkable. It did not get a lot of news but very successful. Certainly our adversaries took notice.

I have a particular interest authoring a lot of this legislation, but as you probably know, Alaska is the cornerstone of our nation’s missile defense with the radar sites out in the Aleutians, the long-range discrimination radar site being built at Fort Greely, testing at Kodiak. So that is the good news.

But then I will tell you I and I think a number of the members of this committee were surprised in August when the under secretary over at the Pentagon abruptly cancelled the redesigned kill vehicle. And first of all, very little notice. I was not given any notice. And I focus on this issue as much as anyone in the Congress.

So can I first get your commitment? Any kind of major
policy decisions that, to be honest, this body has been
driving, not the Pentagon -- the Congress has been driving
missile defense the last 5 years. If there is going to be
major abrupt changes, I need your commitment to make sure
you reach out to the chairman, the committee, other members
to make sure we know what is happening, make sure we know
what the reasoning is, maybe even to seek our advice on it.
We sometimes have a little wisdom over here too. Can I get
your commitment on that?

Admiral Richard: Absolutely, Senator.

Senator Sullivan: So the explanations for this abrupt
cancellation were all over the place. I was actually in
Alaska when this happened. First, it was about hypersonics.
As you know, the GBIs are not even focused on hypersonics.
They are focused on rogue missile, like North Korea, Iran.
The estimates for the next interceptor, again, are all
over the map, that we would develop 5 to 10 years. I know
the number is classified, but to be honest, nobody really
knows.

Are you aware of this? And if we are not going to be
testing the new RKV over the next several years, how do we
show deterrence?

Admiral Richard: Senator, one, my current
responsibilities do not afford me any particular insight. I
am generally aware of what you are referring to.
Senator Sullivan: Well, if you are confirmed, which I think you should be, we will need to sit down and go into this in a lot of depth. There is a number of members on both sides of the aisle who were quite surprised by this announcement. And I think it leaves us open. I think it leaves us vulnerable to be perfectly honest.

Do you have a view on that?

Admiral Richard: Well, Senator, one, I will absolutely commit to that. I will look very closely at this issue. But I have confidence today that the system that we have fielded will defend us against the threats we face today. You are quite correct. In the future, it is something we need to go look at.

Senator Sullivan: But there is a continuing threat -- right -- from North Korea, from Iran. These are the rogue states. Again, our GBI system is meant primarily for rogue states not deterrence against --

Admiral Richard: That is our policy, yes, sir.

Senator Sullivan: It does seem to me a little bit again -- and I know you have not been fully briefed into it -- but in search for the perfect, which is what I think Under Secretary Griffin was looking for, we are leaving ourselves a bit vulnerable, particularly given that the system that was being developed, as was demonstrated in this March salvo test, seemed like it was coming along quite
well.

    Do you have a view on that?

Admiral Richard: Sir, I agree with you that we need to be very careful about setting too high a bar in our effort to develop any system such that it delays us. We used to move faster in history, being willing accept some failure and learning along the way. And I would support our ability to get back to that pace.

    Senator Sullivan: One of the things that we had in our legislation that passed was -- and this was MDA’s request to us -- to encourage more testing even if we, quote/unquote, fail because as you know, Admiral, when you fail, you are not really failing. You are still learning. I am sure you have seen that in your career.

    Again, do you think that -- I would like to work with you on looking at it to make sure this cancellation of the RKV program does not undermine the ability for us to conduct -- we had pressed for, in legislation, at least yearly testing. Can I get your commitment on that as well?

Admiral Richard: Absolutely, Senator.

    Senator Sullivan: And finally, do you have any views on -- and again, this is a different topic. It is certainly an emerging threat. The chairman has certainly talked about it a lot. But it is not the threat that is being addressed by our GBI system -- what we should be doing and how we
should be looking at the hypersonics threat.

Admiral Richard: Sir, one, the nation has some limited
capability against hypersonics today. I agree with you we
need to accelerate our ability to address that threat. And
it starts with the ability to track. Right? If I have the
ability to track and warn against hypersonics, it opens up a
number of responses, including direct defense.

Senator Sullivan: Thank you.

Thank you, Mr. Chairman.

Chairman Inhofe: Senator Duckworth?

Senator Duckworth: Thank you, Mr. Chairman.

Thank you, Admiral Richard, for your service to our
nation. And I could not agree with you more, being able to
serve in uniform is truly a privilege that not everyone gets
to enjoy. And I also want to thank your family for their
dedicated service as well.

Today I would like to examine how, if confirmed, you
would leverage your previous experience as Deputy Commander
of STRATCOM to effectively transition into this top
position. Specifically, I would like to sort of plumb your
background and experience. How will you make sure the
Department successfully modernizes all three legs of the
triad?

And I want to get a little bit more detailed. I do not
need to tell you how important avoiding schedule slippage is
in the B-21, the Columbia class submarine, and ground-based strategic deterrent programs. Unlike most procurements, delays in the schedule for these programs are guaranteed to result in a gap in the capabilities. And yet, like any procurement, there will be failures and schedule slippages. So how are you planning to mitigate the impact of such inevitable problems?

Admiral Richard: Senator, as the chairman noted in the opening statement, one of the responsibilities of the Commander of Strategic Command is to be the leading advocate for the recapitalization of the triad. So it will be my responsibility, one, to follow these closely to be able to describe concisely what the impacts of potential delays are.

And, Senator, the way we will go mitigate this is on the acquisition side of the house. We have pulled the operational rheostat about as far back as it can go. That is what enabled us to get to the delays we have already had in the recapitalization. It is a specific operational mitigation. The systems are a ways off. It will depend on the threat environment at the time. We will address that if necessary.

Senator Duckworth: Thank you.

While I do support the modernization of the triad, I do want to note that Presidents of both parties have committed to lessening our dependence on the use of weapons of mass
destruction in our National Defense Strategy. As we return
to great power competition, what is your vision for how
STRATCOM can effectively balance the need to advance our
nuclear nonproliferation goals while also preserving our
capability to deter our adversaries?

For example, based on your experience, can we employ
cyber attacks, conventional prompt global strike weapons,
and other non-nuclear weapons to achieve the same deterrent
effect as low-yield nuclear weapons?

Admiral Richard: Senator, let me answer that in two
pieces.

So, first, I do not see the nation’s nonproliferation
goal’s in tension with our strategic deterrence objectives.
Actually I see them complementary. The less proliferation
we have, the easier the burden it is to accomplish a
strategic deterrent. And I go back to our extended
deterrence and assurance guarantees as one of the most
effective mechanisms that we have available to us to lessen
the threat that we face and therefore make it easier to
accomplish strategic deterrence.

To your second point about space and cyber, I think the
2018 Nuclear Posture Review was very wise in acknowledging
the possibility that strategic attacks could be other than
nuclear and start to set a policy for us to address those.

But to answer your question today, no, not today.
There is no cyber or space attack that could have the same strategic effect as a nuclear weapon, including a low-yield nuclear weapon. Will that be true into the future? I do not know. Probably not. But today there is no threat on par with what nuclear can do.

Senator Duckworth: Which again goes back to my first question. It really stresses the importance of not having schedule slippages and making sure that we stay on track with the modernization of the triad.

Switching topics, I would like to get your best military advice on treaties and the role they serve in our national defense. Recently there have been signals that the United States may refuse to renew the New START and the Open Skies Treaties. Without commenting on the merits of a hypothetical policy action, can you please expand on what you believe would be the projected real world impacts for STRATCOM if we were to exit both treaties?

Admiral Richard: Again, ma’am, I will support any arms control or other treaty that enhances the security of this nation.

You had mentioned New START specifically in there. New START has provided us valuable insight in terms of the character and composition of Russian strategic forces in exchange for the Russians having that visibility into ours. That provided a level of strategic stability. But there are
a large number of capabilities, weapons that the Russians have that are not covered under New START and there are a number of novel capabilities. We were just discussing one earlier that is also covered.

If confirmed, I will provide my best military advice in terms of the pros and cons of a decision such as that.

Senator Duckworth: What are the cons of us leaving Open Skies?

Admiral Richard: The primary negative to that, ma’am, I would put in the category of the assurance of our allies. We are not the only signatory to that treaty. It provides valuable insight and partnership opportunities with our allies, but it does require us to -- like the capital and resource investments to fully use the provisions inside that treaty and it does come at a counterintelligence cost to the United States.

Senator Duckworth: Thank you, Admiral.

I yield back.

Chairman Inhofe: Thank you, Senator Duckworth.

We are at the conclusion of your remarks. We are not going to entertain any others in the hearing. I think we are aware that right now we are in the Senate chamber. We have the group that is going to be attending Elijah Cummings lying in state.

Senator Manchin: Mr. Chairman, can I just have --
Chairman Inhofe: Of course. You will have all the time you need.

Senator Manchin: Okay. Thank you very much, Mr. Chairman.

First of all, Admiral Richard, let me just say thank you for your service, but more thank you to your family. They have moved 10 times in 12 years?

Admiral Richard: Yes.

Senator Manchin: They have got battle scars. God bless them all.

And next of all, I wanted you to know that I have the utmost appreciation and respect for the submarine class. And I will tell you why. USS West Virginia. As a governor, I would spend 2 or 3 days with them. They took me out, and I have a deep appreciation of the commitment that they make and what you have done.

Admiral Richard: A great ship.

Senator Manchin: A great ship. And we have a blue and gold crew, and they are great crews and we love them.

Next of all, I know you are a proud Roll Tide, Alabama, and Nick Saban is my dearest friend. We grew up together in coal mining towns 4 miles apart. So I will be going down to visit him and I will give him your best. I know you are still rooting for him.

I just got back from the Middle East, and I was on the
USS Abraham Lincoln, and then I went over to the Ramage to see the operations of our sailors and what they are doing to keep us safe and keep those open lanes, if you will. How many carriers do we have in the fleet right now?

Admiral Richard: Senator, I think the number is 11.

Senator Manchin: How many are operational, sir?

Admiral Richard: Sir, I do not have the number right off the top of my head. It is a fraction of that.

Senator Manchin: I am just going by what I was told that we only have three operational out of 11. And I do not know the status of the other eight, how soon they will get back, how much of a retrofit is going on.

Admiral Richard: Senator, we have more than three that are operationally available. That is I think the number that are currently deployed.

Senator Manchin: Well, here is what else I was told, which is concerning to me, Admiral. I was told that the Harry S. Truman cannot get out of port because of electrical problems. So it is in right now. It was totally retrofitted the same as Abraham Lincoln.

The reason I am saying this is my question would be, very quickly, what is the greatest threat that the United States of America faces or who is the greatest threat we face?

Admiral Richard: The greatest threat, Senator, is that
we cannot move fast enough to pace the threats that face us, whether they come from Russia or China. We have lost a level of agility that we used to have that we need to get back.

Senator Manchin: Well, my observation was this. When I was in the Arabian Sea -- you know, we are not even in the Gulf anymore. We moved down to protect our carriers because it is not that safe in the Gulf, and that is why we have our destroyers there. But in the South China Sea, if we are that thin, do we have any carriers in the South China Sea trying to keep that --

Admiral Richard: Senator, I am not current on the force laydowns in the Pacific. I would be happy to provide --

Senator Manchin: Maybe we can do that at a later time, sit down and go through --

Admiral Richard: I will offer, though, that we have a substantial undersea presence that is able to execute missions in the Pacific AOR.

Senator Manchin: The concern I have is the same concern. You mentioned China, and you mentioned Russia. The Middle East is where we seem to be bogged down no matter what. It has taken all of our sources and our inventory, if you will, as sparse as it is. And it seems to me the South China Sea is going to have a greater threat to us
economically than what we are bogged down where we are right now. Probably in a classified hearing, I would have to get in deeper in some of this with you, and maybe you could help me on it to understand it better and how we give the support that we need.

Admiral Richard: I would be happy to do that.

Senator Manchin: And you could on the aircraft carriers, sir. I am really concerned about that because I talked to some of our captains and commanders on those, and there were some concerns they were sharing with us. I am sure you will be on top of that pretty quick.

Admiral Richard: I am happy to offer you a follow-up.

Senator Manchin: Okay. Well, thank you so much. I know every question has been asked that could possibly be asked, and I was anxious to hear your answers. And it is very informative. But I will look forward to meeting with you and sitting down in a classified setting in the SCIF and maybe getting more information.

Admiral Richard: Certainly, Senator.

Senator Manchin: Thank you very much.

Chairman Inhofe: Thank you, Senator Manchin. It was not my intention to rush you in this. I was only saying that other members will not be recognized because of the event that is taking place.

Senator Manchin: I know that, sir, and I appreciate it.
very much. I wanted to be very quick.

Chairman Inhofe: Thanks so much. We really appreciate your responses and your willingness to meet with I guess each one of us prior to this meeting.

And I would like to tell you there was a reason I wanted to pursue your thoughts on the “no first use” because while we were starting this meeting, there was a meeting taking place with a group that is very supportive of the “no first use.” And I did not know whether or not you were aware of that. That was taking place today.

Admiral Richard: Senator, I was not.

Chairman Inhofe: Well, we appreciate it very much. Your family -- I would say to Allison and Lisa -- is it -- would you not like to be able to do this every day? That would be great.

So thanks for your patience. We appreciate that very much. We look forward to serving with you in this new capacity.

Admiral Richard: Thank you, Mr. Chairman.

Chairman Inhofe: And we are adjourned.

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