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P R O C E E D I N G S

MR. O'HANLON: Good morning, everyone. Good morning and welcome to Brookings. I'm Mike O'Hanlon with the Foreign Policy program. Thanks for coming out on this second day of November, last day of summer, I'm not quite sure exactly what it is, and hopefully not the last day or last Friday of the Redskins being in first place.

We're delighted to have you here for a discussion of military readiness today. And I think this is a very important topic for a number of reasons. I'll give a couple more words of introduction to the subject in just a moment.

First let me introduce the panel. It's a great group to talk about this topic because we have some former Pentagon officials who have wrestled with what readiness means for strategy and how it should be viewed in contrast to other priorities in the Defense Department, including long-term modernization, with which I would humbly submit it's sometimes in competition because you can't always be all things to all people and have enough resources to do everything at once. So we have a couple of officials who have wrestled with the problem at that level.

We also have two federal executive fellows, who are military officers coming out of and/or going into operational units, who have been seeing modern American military readiness with their own eyes, trying to improve it with their own people, and very aware of the constraints, but also the advantages of the state of today's U.S. military.

So let me introduce going down and starting at the far end Commander Brendan Stickles is a Navy pilot. He has landed on an aircraft carrier more than 500 times, which is about 500 times more than me and my one time I was facing backwards and didn't what had happened till it was over. So he told me he was nervous about being

up on stage. I think I'm the one who would be nervous doing the real work that he's done, and we're all lucky that I'm not being asked to do it on behalf of the U.S. government.

He is a Prowler and Growler pilot. He comes out of Unit Command at Whidbey Island, so he's been able to see with his own eyes, as I mentioned earlier, the kinds of readiness challenges that we're facing in today's modern American military that's being asked to do so much, to deploy so often, at the same time that it's being asked under the National Defense Strategy to prepare for an era of great power competition, which again puts the priority on longer-term innovation and modernization. At the same time, we're trying to be ready to fight tonight with concerns not only about Russia and China, but obviously the broader Middle East and North Korea and beyond. So Commander Stickles will speak from largely a Navy perspective, but also more generally about what he's seen in the U.S. military in recent years.

Next to him, Mara Karlin, my good friend and colleague here at Brookings, as well as being Professor Karlin across the street at SAIS, and also being former Deputy Assistant Secretary Karlin for Strategy and Force Development, where she has thought about NDSes, National Defense Strategies, or QDRs anyway, defense planning guidance. But more importantly for this panel, the broader question of can you have it all? Can you have top-level readiness and top-level modernization all at the same time? And how do you address tradeoffs to the extent you need to?

Next to her, Alan Estevez, also a seasoned Pentagon official, now at Deloitte. And Deloitte, we're happy to say, is an important member of our Defense Industrial Base Working Group here at Brookings and very glad to have them participating with us here today.

Alan was a deputy undersecretary and an assistant secretary of defense

within the broader world of logistics and acquisition. So, again, I like the fact that those two words are juxtaposed in a lot of previous titles because it suggests the need to wrestle with tradeoffs and to think about what you're doing to build the future force at the same that you're dealing with the here and now of keeping the current force up and running.

And then finally, Colonel Amy Ebitz, who is a Marine Corps colonel and who has, like Commander Stickles, deployed in support of Operation Iraqi Freedom and other Middle Eastern contingencies; also been involved in Far Eastern and Okinawan efforts and units there. Came out of the Pentagon more recently at her previous assignment before arriving at Brookings, and headed for Unit Command after she leaves us in the spring. And so she, too, from the perspective of the Marine Corps and the all important function of law enforcement and stability operations, a big part of what the Marine Corps has been doing in recent years, she, too, wrestles with the issue of readiness.

I just want to say one more word of introduction and then we'll just have a few discussions, questions and answers amongst ourselves before going to you, and looking forward to your thoughts in the second half of the program.

Just to dramatize how hard it is to talk about readiness and how we have to realize, I think, the complexities of this topic, I want to cite one of my favorite Brookings scholars of all time Richard Betts, who's now a professor at Columbia. And he wrote a book on military readiness 20 years ago and he had one chapter in that book which I love. I love especially the title because the title is called, "Lies, Damned Lies, and Readiness Statistics."

And what Betts was getting at is that whoever has sort of a bone to pick or an agenda within the broader defense world tends to be able to find a readiness

statistic that backs up the argument they want to make. So if you want to talk about a crisis, you find the type of equipment that is having the most trouble and you say how it's only got a 32 percent mission-capable rate. Or you talk about how we had a gap in certain skillsets within the military and you find that particular niche capability for which we are at the moment most below target, and you say we've only got 22 percent of the dental nurses we need in the military. This is a travesty. Let's grow the defense budget by $100 billion.

That tends to be the way some of these conversations feel or go. And we have to be careful, especially in era when as much as I love Secretary Mattis as much as the next guy, but one thing I don't love is DOD's trend over the last few years to classify and squelch the public release of a lot of statistics, whether it be on operations in the Middle East, whether it be on the state of readiness. It makes it very hard to get a full sense of the picture of what readiness really is like today. And it makes us all vulnerable to sort of the cherry-picking that can sometimes happen, whether on the Hill or from the building or some other quarter where people use a specific statistic for an agenda that they are trying to advance.

The statistics are all important. They just need to be put in perspective. And I'm going to give two really quick last examples with apologies to our Army and Air Force fellows who are not on the panel, but I'm going to pick on each of their services with a story from history just to drive home this point.

The Army 20 years ago sent a brigade out of each of two division to peacekeeping missions in the Balkans, as you'll recall, in Bosnia and Kosovo. At that time, because of the way the Army did its readiness assessments, that rendered the entirety of those two divisions deemed unfit and unready for combat, a point that then former Secretary of Defense, future Vice President Dick Cheney was more than happy to

point out on the campaign trail when talking about how Bill Clinton had allowed the military supposedly to atrophy.

But, in fact, it's because a division's not ready unless it has all its brigades. And a brigade doing peacekeeping by the defense strategy of that time was considered not to be doing real work in some sense. It was not doing what the National Defense Strategy considered the top tier priorities of preparing for major theater of war. It was doing an operation other than war, a distraction in effect, and that rendered the readiness of those units zero or C-4. And again, people used semantics, sort of Pentagonese to make things sound even more dire than they may be.

So that was an example of where the Army -- by the way, it had temporarily leaked readiness information about the unreadiness of those units for some purpose the previous fall, to win some budget debate with Congress, and that temporary leak is then what Cheney cited in making his contention that the Army units were not readiness. Whereas the other two bridges of each division were perfectly fit for combat and the brigades in the Balkans were arguably doing something important, not necessarily just a distraction.

Another example and I'll be done in just a second with this framing of the topic and we'll get to the panelists, but in the early 1980s, the Air Force was accepting B-1 bombers coming into the Force. As we all know, the Reagan buildup included B-1 and B-2 bombers. And so a B-52 squadron that was scheduled to get B-1s in the course of I think Fiscal Year 1984, only wound up getting half the B-1s. So there was a slight delay in the delivery of those bombers.

So at the end of '84, and I think I've got the year right, at the end of 1984, that unit had half B-1s and half B-52s. The year before it was all B-52s, so it had modernized quite a bit and it had brand-new airplanes. But in the 1983 rating, that unit

was C-1 or C-2, just fine, ready to go. By the end of 1984, however, because the unit was supposed to have had all B-1s and it did not, it was deemed C-4. In other words, it got six brand-new B-1 bombers and its readiness fell by two levels because of the way in which readiness was measured.

And you only found this out on the outside several year after the fact. All we knew from the public releases is the Air Force squadron had lost readiness relative to the year before. Another example of how statistics can be used and abused.

Okay, thank you for listening to me on my soapbox. You can tell that this is one of my favorite topics. And now I'm done and I'm going to go to the panel.

So what we've elected to do is to begin by asking the same question to everyone and just go down the row starting with Mara and then going to Alan and then Brendan and then Amy. And the question is, how do you assess military readiness today for the U.S. armed forces? And also, to what extent is readiness in competition with other defense priorities?

And without further ado, my friend, Madam Secretary, over to you.

MS. KARLIN: Thanks, Mike. It's a real treat to be here. I also have some passion for this, so seeing Mike's enthusiasm is always nice.

So just like Mike, I believe you have to start all readiness discussions with Dick Betts. So Dick Betts tells us in his great work two decades ago that when you're talking about readiness, you have to say ready for what and ready for when? That may seem obvious, and yet we have all seen example after example ad infinitum where folks have said we're not ready. You need them to finish that sentence. Right?

We're not ready for the alien invasion from Mars? I'm less worried. We're not ready for a potential North Korean intercontinental ballistic missile attack? Then I care a little bit more. We're not ready for a war with China in 10 years? That's an

issue. We're not ready for a war with China in a few weeks? That's a much bigger issue.

So you have to say ready for what? Ready for when? Without that, it is a useless conversation.

Moreover, when we're thinking about readiness we want to think about ready stuff and ready people. Are both of those able to do the things that we expect them to be able to do?

And I should also note Mike offers these fantastic examples and keying off those the barriers to understanding readiness are much too high. The Pentagon, as I think he notes and I wholeheartedly align myself with Mike's comments, has made it tougher and tougher to get the detail. And I will say, and I'll see if Alan agrees with me here, even when you're inside the Department, the services all have such different ways of thinking about readiness that you're barriers to understanding are a lot higher, frankly, than they should be.

So what do we know? We do know that particularly starting with sequestration in 2013, the force suffered across the board some serious meaningful readiness challenges. You saw this with maintenance, with degradation of training, with lower exercise numbers. We also know that this was paired with a still very high op tempo, operations tempo. And so those two paired together were pretty problematic for large swaths of the force.

We also know that if we were having this panel a year ago, we would all probably be very, very heated. We would be talking about what had been happening with Marine aviation. You remember the Osprey collision, the KC-130 crash. Excuse me, both of those are crashes. You remember with the Navy, of course, what was happening out at Pac Fleet, right, where we were seeing multiple collisions and a grounding. So a whole bunch of really problematic spectacular events. And no doubt, those spectacular

events played into the Pentagon getting the largest defense budget in its history. Those collisions and groundings and crashes also helped facilitate, particularly on the Navy side, a range of four-star efforts to actually really deeply think about how is our readiness, what do we need to worry about.

So all that taken together, looking forward, the question that's most in my mind as we think about readiness is, how is readiness going to be influenced by the National Defense Strategy? So as all of you know, the National Defense Strategy has kind of two thrusts. Right? Be ready to compete with and prepare for conflict with China and Russia. Well, you do very different things if you're thinking about competition or conflict. Right?

So, for example, if I'm thinking about competition, I'm going to use the force a ton. I want it out and about. If I'm preparing for conflict, that's actually not all what I would want to do. Right? I would want to husband readiness in case there is some sort of a contingency I need to worry about.

So how is the Pentagon balancing among these two? Because there are tradeoffs and it's going to need to seriously think through how it is able to ensure you have a force that is helping on the competition front, but, frankly, above all, really making progress on the conflict front.

MR. O'HANLON: Great. I'm going to have one follow-up right now, Mara, for you before we go to Alan. And it's sort -- it's an impossible question to answer, but you're good with impossible questions.

Thank you very much for the excellent framing of how we think about readiness. But if you were to sort of then give your bottom line assessment of where we stand today and, even though you're very young, you've already seen a lot. You've watched the force deploy at the peak of the surges in Iraq and Afghanistan when there

was a great deal of stress. There still is a lot of stress for Brendan's service with ongoing naval deployments. There still is a lot of stress for all the services. But if you were going to sort of take an overall snapshot and rating of today's readiness across the various missions that we have said in the National Defense Strategy we need to worry about in the short term, how would you assess today's military?

Let's say that Ronald Reagan's by the late '80s is sort of the gold standard. We can debate that, but let's just say that it was and that was a 10. What's today's readiness? And then also, just to give people a reference point, for a period of bad readiness, let's say the 1970s, how would you evaluate that? Let's give Reagan the benefit of the doubt and call his military a 10. What's today's?

MS. KARLIN: I think right now the force is in a really good place generally for competition. It knows how to do that. It knows how to be out and about generally. It has been pretty successful in that.

I think it is not in a good place if I have to do a broad sweep in terms of being ready for a potential high-end conflict whatsoever. I mean, our force for the last 17 years has spent a lot of time fighting terrorists and fighting insurgents. It's probably not what a potential conflict with China or Russia will look like. And so I think it doesn't have that background whatsoever.

So in the competition front, if I have to throw a number on it, I'd probably say 7. If I had to say about the possibility of actual conflict with a great power, I'm much closer to 3.

And oh, by the way, we're deploying a whole bunch of troops to the border right now. And that's not in any way going to helpful on either the competition front or the conflict front. So just remember, there are profound opportunity costs here. Right? Any talk of readiness is riddled with opportunity costs.

So we can still have 15,000 or so in Afghanistan. We can send 15,000 or so down to the border. You can do all of those things, just recognize what those forces are not doing, what they're not training for, what sort of equipment they're not getting.

MR. O'HANLON: Well, poor Alan almost fell off his chair when you said 3, so I'm going to give the floor to him.

MR. ESTEVEZ: I did.

MR. O'HANLON: And let him answer the big broad question. And also, if he wants to play my numbers game and give his ratings, as well. Thanks for joining us today.

MR. ESTEVEZ: Thank you, Mike. And thanks to Brookings for hosting this panel. I really enjoy being up here, especially with my former colleague.

A quick anecdote about what is readiness. Mara and I sat in a meeting in the Pentagon back in our day building the budget of the Pentagon, which, of course, impacts the strategy and impacts readiness, and had a whole discussion about what is readiness. This is with senior people building the budget, so I won't name names, and slightly different nuances on every person in that room from every one of the services, undersecretaries, and the like. And you sit there and say, look, we can't explain readiness in this room with Ph.D.'s in readiness for all intents and purposes. God knows how we ever explain it to the Hill and to the American people who think we're talking gibberish when we talk about readiness.

So with that said, I am not going to start off my comments with Dick Betts. I'm going to start off my comments with Potter Stewart. And it's not that I'm comparing readiness with pornography to get everyone riled up here, but you know readiness when you see it, and you don't really know until you have contact. So you can

think you're ready, but if you have the wrong force with the wrong mix of equipment and the wrong leadership and the wrong stuff, you can think and have trained and you can think you're a 10, and not be ready.

So was the Army ready after a year of prep from 1941 to 1942 [*sic*] when they went into battle at Kasserine Pass? I think that proved not to be so good.

Are they resilient? Is our military incredibly resilient? Yes, it is. So readiness also plays into the risk factor.

You can think you're ready and then prove yourself not ready. I believe our military is, despite what some punditry may believe, incredibly adaptable and flexible once contact is hit and we'll adjust. So readiness becomes a risk factor of more casualties, longer duration conflict if you truly were not ready at the time of impact.

So how do you get there? Metrics mean something. Those metrics that you were citing in yours show that metrics do mean something and you can have the wrong metrics and the wrong analysis. There is a ton of data out there in the Department of Defense. Most of that data is not information, it is just data that is not used properly. So you've got to have the right analytic structure around that, so that, again, getting back to Potter Stewart, not only do you know readiness when you see it, you actually understand it when you see it.

So I think that's the framing I'd have. I would agree with you on a 7. I don't know if I'd agree with you on a 3. But I would say that the force, going back to my earlier comment on risk and on having the right force, we do not have the tools, the modernization required for great conflict going forward.

And so you really need to hit that right trade of ready today, and what does that mean? Well, it's not just for the things that you're planning for. It happens to be for the things that pop up that the National Command Authority, whatever that

definition is, says go do, and that could range from typhoon to the border execution, recognizing that when you do that, you are consuming readiness and probably not ready for the things you're planning on really doing.

MR. O'HANLON: Before we go to the military officers on the panel I want to ask each of you the same question to really try to probe a little further on this issue that we're having a mild friendly disagreement about, the readiness of today's force for combat. And the officers may want to comment in a second when they get the floor, too.

And I'm thinking back to a public event we did last year with the Army FEF at the time, who had just come out of Unit Command for the brigade that had been rotated into Korea. And that's a pretty good example of a contingency to look at to try to resolve this debate because, of course, that sort of a near-term concern and even more so perhaps last year, perhaps still today.

And the Army colonel at the time said that his readiness was excellent for that contingency. Now, admittedly, he was the brigade that had spent nine months getting ready to go. He was not going to be adequate with his brigade for an all-out war, but the indications that he gave were that at least for that immediate potential concern, he thought our readiness was high. And then we had Dan Keeler, our Navy FEF, talk about the problems he had seen in the fleet, and Brendan will talk about those in a minute perhaps, as well.

So we actually saw the units that were getting ready for war, or at least this one snapshot, of those officers who were most involved in the Brookings discussion, the people who were actually getting ready for near-term war felt pretty ready. So do you think that that Army colonel was sort of non-representative of the broader situation, Mara, or do you feel that there is some truth to that kind of a contention?

MS. KARLIN: No, look, I think if the Army's not ready for a potential contingency with North Korea, which it has literally been thinking about for decades, then we should all go home. So I think he was spot-on and his experience made sense. And he's a perfect example of how if you make something a priority, you'll be in a pretty decent place should there be some sort of contingency.

My worry and 3 may have been perhaps too low. But my worry is thinking about the potential war over the next, say, 5 years, 10 years with China or Russia. That's really where I have profound concerns about readiness, where I think there has not been sufficient investment in the types of materiel that you would need and the type of training that you would need. Army's a good example. They've started a National Training Command Center rotations thinking about high-end conflict, but only in the last year or two. Right? So this is a slow process.

I think Secretary Mattis' defense strategy is spot-on in is focus on them. And now he's sort of got the drag of getting the Department there.

MR. O'HANLON: So, Alan, should I think about that as a readiness problems or as a modernization problem?

MR. ESTEVEZ: It's both. It's both. So let's talk about that Army unit ready for Korea. I have no doubt that he was ready.

Now, it's not just his unit that needs to be ready. If we have consumed all the hellfires, which we did do pretty much, to shoot pickup trucks in Iraq and Syria, he may be going forward, but the force behind isn't ready and it's not ready for long durations. So again, it's what does readiness mean at the point of contact?

I agree with Mara on the Secretary's National Defense Strategy. It's spot-on and focused on the right things. But again, in order to sort of talk about longer-term readiness, how do you sustain that? Longer-term readiness means modernization

and you need to have both. You need to figure out what the trick balance is to be ready today, taking whatever risk you believe is adequate to do that, while you're putting cash into modernization for the future.

MR. O'HANLON: Great. So Commander Stickles, over to you. And please begin by giving us a little tutorial on how you assess the state of naval readiness today, especially naval aviation, your specialty, but whatever other comments you want to add to frame the topic.

COMMANDER STICKLES: Sure, Mike. Well, I definitely appreciate you throwing my Air Force and Army brethren under the bus to start off the conversation. (Laughter)

MR. O'HANLON: (off mic) (Laughter)

COMMANDER STICKLES: As the other gentlemen with wings on their chests in the front row will tell you the hallmark of naval aviation is a thorough debrief. And so I don't know if it's a lie or a damn lie or a readiness statistic, but I'll tell you where we sit right now.

MR. O'HANLON: Great.

COMMANDER STICKLES: So right now, as you've written about, the quest is for a 355-ship Navy. As of this morning we have 286. Of those 286, 30 percent are at sea; 14 percent of them are in training missions; and 16 percent of fleet is conducting the business of foreign policy right now.

More germane to my experience, ready for what and ready when is the story of the F-18. So the F-18 comes online -- or excuse me, the F-18 Super Hornet comes online in February of 2000, when we didn't know what we needed to be ready for and we sure didn't know when we would need to be ready for it. F-18 Super Hornet replaced four aircraft: the S-3, the F-14 Tomcat, the F-18-CHARLIE, and then my

aircraft, the EA-6B with the EA-18G airframe.

All of those into a single point of success or a single point of failure that at the time the plan was that would save us $1 billion, an adorable sum of money in hindsight because we know what the story is. September 11th happens, we invade Afghanistan, we invade Iraq. There's a surge in 2008. By 2012, Afghanistan is the longest war in U.S. history. And for those not familiar with geography, if you're going to drop a bomb in Kabul, that's an 800-mile transit from a carrier, which is the geographic equivalent of parking an aircraft carrier off the coast of Kitty Hawk, North Carolina, and flying close air support in Chicago. So that puts a lot of wear and tear on the aircraft.

In preparation for a longer-term conflict, the real problem with readiness comes from me and people exactly like me. Because if you put me on a carrier and you put Amy and her Marines 800 miles away, there is no way I'm not going to fly that mission in anticipation for a potential conflict with China or Russia. Like I am not -- I didn't stay in the Navy or join the Navy for that long-term strategic thinking, although maybe I should have.

So that's where we are right now. So the last readiness statistic I'll give you, what does that mean? You pour all of that situation through the funnel of sequestration in 2013, and you get where we are today with the Super Hornet fleet. There's 546 Super Hornets in existence. Of those, one of my heroes, Admiral Shoemaker, testified on the Hill last year that one-third of them were ready for combat and less than a half were ready to fly, go from Point A to Point B, which is not acceptable.

We've made some great strides over the last year, which I hope we get to talk about, to improve that. But today and over the last week, the average was 260 flyable Super Hornets of that 546, which is also not acceptable.

All those numbers, so all those readiness statistics, what does that

actually mean? It means that I flew a jet off the *USS Eisenhower* on New Year's Eve 2016 after seven months at sea. New Year's Day 2017 was the first time since World War II that no aircraft carrier was at sea.

Bill Clinton famously said, hey, when a crisis happens the first question a President asks is where are the carriers? Well, the answer on New Year's Day was Norfolk, Virginia, which is not the right answer.

So both of your points, Alan, what I found tragic is that that week a B-2 Stealth bomber launched out of Missouri to drop 500-pound bombs on tents in Libya. So that is a mission that is tailor-made for an aircraft carrier, but there was no aircraft carrier to do it. So we borrowed from a strategic asset to do a mission on that day.

Not a coincidence, I think, that last week or two weeks ago a B-2 Stealth bomber had to perform an emergency landing and land in Colorado. This is all open source information. I'm not spilling the beans on anything that you can't go home and Google. But if you connect those dots, we borrowed from Peter to pay Paul and it's mostly the fault of people like me. It's some long-term strategic mismanagement followed by short-term leadership solutions that put us in this position and we definitely got to get better.

MR. O'HANLON: Well, it's a fantastic briefing and it's nice to hear, you're probably giving yourself a little too much responsibility and blame, but it is nice to hear somebody from within one of the services talk about how the services can do better with the resources they have. Because, of course, the narrative that we hear from Secretary Mattis and many others is that it's all the fault of sequestration and the Budget Control Act and the continuing resolutions. And I know those do contribute to the problem.

But can you just say one word before we move on to Amy about just a

little bit of a sneak peek on how things are getting better.

COMMANDER STICKLES: Sure.

MR. O'HANLON: And what's the reason why they're starting to get better, if there's a main cause.

COMMANDER STICKLES: So that's a great question. I think it's important that Secretary Mattis and the National Defense Strategy built it around three pillars: increased lethality, alliances and partners, and then reforming the business practices of the Pentagon. That third pillar opened everybody's eyes at all levels and just recognized that we need to do things different. Let's not even go towards better, but we're on an unsustainable trajectory, so let's just do something different.

So there's plenty of examples in naval aviation of how we did better. The easiest one, and your friends at Deloitte will throw up if they hear we weren't doing this in the first place, but our supply chain was completely under a FIFO principle, first in, first out. The first person to request a generator gets the first generator that's fixed regardless of the status of the jet. So if a jet needs three parts, including a generator, but you asked for a generator first, you get the generator even if the third person to ask for a generator only needs a generator and then it can go flying. So we weren't tracking that information.

So literally overnight, a 24-year-old with an MBA looked at the business practices of the Pentagon and said this must be a mistake. You can't possibly be doing this. And we wrote some analytic maintenance practices in the language of the Navy and in the language of the Pentagon that turned the corner.

I also think that in anything you recognize the problem and then you ask for help. We've admitted that Brendan Stickles cannot solve the problem of naval aviation, so who is doing this correctly? We've partnered with Delta. We've asked Delta, hey, you guys have an 80 percent up rate on your airplanes. What are you doing

differently?

Anybody who took the Metro to work probably saw a G.E. advertisement that said, "Readiness is only metric that matters." I feel like that can't be a coincidence that G.E. is also talking about this.

And so the transforming the business practices of the Pentagon and then using just basic *Moneyball* data analytics, but drinking the Kool-Aid that those analytics can make a difference, has given us overnight pretty much a 12 percent increase in available Super Hornets to fly, which is obviously significant. And if we're going to get this money and we're going to ask and have the taxpayers entrust us with new airplanes, we'd better be taking care of the jets that we already have.

MR. O'HANLON: Thank you.

MR. ESTEVEZ: If I could find the guy who ran logistics in the Pentagon during that period, I'd probably wring his neck. (Laughter)

COMMANDER STICKLES: I know, right? It's so easy.

MR. O'HANLON: Colonel Ebitz, thank you for being here, as well. And I'd just love to get your take. Again, this is a nice ability to really highlight the Department of the Navy because the Marine Corps, of course, is within the same administrative department as Brendan's service, but you folks are obviously a separate service. You take pride in being ready. You take pride in your grit and making do with what resources are there. How would you describe the state of Marine Corps readiness today? And put it in the broader perspective that we're talking about, please.

COLONEL EBITZ: Well, I would have to go in on what you said, sir, and readiness is relative to the enemy. Right? For a battle for today, for what we face today, we are absolutely ready and capable and we are out there doing what we have to do all over the globe. Consistently, the Marine Corps is about one-third deployed, which means

we have folks on ships, about 11,000 on ships, and we're ready to answer any call. And that's what we are, we're the 911 force.

However, looking to the future and looking to not only the battles that we currently have, but any potential near-peer competition, years of having to go with continuing resolutions and not being able to maintain a current, steady flow of budget has had its detractions in our ability to maintain what we have and then plan for the future. So I think that would be our biggest problems.

And Brendan brought up the national military strategy and within that the Marine Corps, our priorities are our own lethality and increasing our lethality; to build and maintain the partnerships that we have; and then to improve our business practices within that guidance from SecDef Mattis to ensure that the flow is easier and we are able and more capable to obtain and maintain that equipment, our personnel. Our personnel is the basis of everything that we do. Having dwell times that are over and above the 1-to-3 threshold and more 1-to-2 and even sometimes 1-to-1, those things take their toll in the ability of a unit to maintain not only their equipment, but their people and their families, and do training.

The enemy evolves and we also have to evolve. I think the biggest concern for me as a Marine is that in my time, my short time in the Marine Corps, we have had the luxury of basically being uncontested in the air and on the sea. We cannot take that for granted in the future and we have got to evolve our own capabilities. We cannot continue to rely upon the technology and capabilities that we have now to ensure that we go to that fight.

And as Secretary Mattis said, we don't ever want to be in a fair fight. We want to be always an overwhelming, capable force. And that goes to the ready for what, ready for when. That's the question we're always asking ourselves. And consistently in

history we haven't always been accurate on that as far as what we think we might have to fight tomorrow. We have to be able to fight not only a fight that we have today, which is the terrorism threat and the extremist threat, but the near-peer competition and the conventional war that is always a possibility, although we never want to see that.

So I think that's it for me.

MR. O'HANLON: That's great. I have a follow-up for both you and Brendan on the continuing resolution issue. I want to come back to that because we often do hear that as the scapegoat. And no one's proud of the fact that we've had so many continuing resolutions for such length for so many years, most in the last decade, most years in the last decade.

But I'm still a little confused and I'd like to ask Amy and then Brendan to explain why continuing resolutions have to be such of a nemesis in regard to readiness. Because as, again, there are people in this crowd who have a lot of expertise in budgeting, but you two have been at the sharp tip of the spear and so you know how it affects you.

My understanding of continuing resolutions is that essentially you're being allowed to do the same thing you were doing the year before and you're being provided enough money, therefore, to keep recruiting, keep paying your people, keep buying spare parts and fuel, keep, therefore, doing your training operations. It seems like, and I understand why this not quite right, but I'd rather hear it from you, it seems like readiness should be the least affected of all different defense priorities. And that what should really be most damaged by continuing resolutions is long-term modernization, programs where have to make changes from year to year, but you're impeded from doing so because you don't have a new authorization bill for half the fiscal year.

So why is readiness so severely impinged upon by this continuing

resolution gerbil wheel that we seem to always be on? Why don't I start with you Brendan and then come back to Amy?

COMMANDER STICKLES: Sure. I would say that while the military's adaptable, there is some long- and medium-term planning that is required. So as the commanding officer of a squadron not deployed I have a series of detachments that I need to go on to keep my air crew and my maintainers ready to go. And the continuing resolution problem gave me -- we were unable to do any schedule more than six weeks out from where we were right now.

So that lack of planning put us just constantly behind. We're just constantly behind the 8-ball. And without any end in sight, I mean, it just felt like the equivalent of running a 5K and at the finish line you find out it's actually a marathon. And it just felt like we couldn't get ahead of problem. We couldn't schedule, we couldn't do any long-term planning with the budget ax hanging over our head.

MR. O'HANLON: Fascinating. Amy, anything you want to add to that?

COLONEL EBITZ: Absolutely. In the react versus plan mode, I kind of break it down into simplistic terms. You know, when you're younger and you're living -- or maybe older -- and living paycheck-to-paycheck, right, you may hear that knock in your car, but you can't get it fixed because it's not the closest alligator to the canoe. You have to keep driving it until it absolutely stops and then you have to address that. So that's the kind of analogy I think of. You know, you can't plan for what could come next. You can't do maintenance. If you did that basic maintenance on your car, this might not happen. Right? But you can't because you're in this constantly evolving state that you have to use the car, you have to get to work every day, you don't have the time, the equipment, or the money to maintain it and fix it because you're living paycheck-to-paycheck and you have to deal with what you have to do now.

So in the most simplistic terms that's how I kind of look at it.

COMMANDER STICKLES: And, Mike, to Amy's point, when you're in that reactive mode, you're on defense instead of offense. And you don't know where the car's going to break. You just know it's probably going to break.

And I think the collisions at sea, the mishap increase in my profession in 2014, a year after sequestration start, and then the slow gradual increase of mishaps and the hypoxia episodes in flight school all reared their ugly head as a surprise because we weren't doing the long-term, to Amy's analogy, preventive maintenance. That's expensive, but when you don't to it, it's going to pop up somewhere and you lost the control of where that's going to be.

MR. O'HANLON: Alan?

MR. ESTEVEZ: And I think that car analogy is a perfect one.

COMMANDER STICKLES: It's great.

MR. ESTEVEZ: It's more than just the CRs. It's the CR and what's the budget that's going to come after the CR or whether I'm going to be at least year's budget for the whole year or last sequestration level. So you're doling out the money at the strategic level in little chunks, so it is paycheck-to-paycheck. They can't plan, so they start cutting back on what they're going to do. "Freedom's Forge," our industrial base, also only reacts when they see cash in a contract. And if you can't do that, you're putting a hole on the tactical military force.

MR. O'HANLON: So let me ask just one more question before we go to all of you. But I want to work down the panel and everybody is invited to not just respond to my question, but to anything else that's now in play in the discussion if they want to add.

And my overall question is this, are we working the force too hard? You

know, Brendan said he would never leave Amy alone in Chicago without air cover, which is --

COMMANDER STICKLES: That's not what I said. (Laughter)

MR. O'HANLON: That's not quite what he said.

COMMANDER STICKLES: Don't write that down.

MR. O'HANLON: But I understand very well the point that -- and it's probably not the fault of the military. It's probably more the fault of civilian oversight and the broader defense community because we have created these expectations that we're going to be present in all sorts of theaters with deployments, with continuity of pace of operations. And then there's, of course, the culture of the military, which is always a can-do culture and is willing to accept pain and 18-hour days rather than pull back and do some of the recuperation and longer-term planning.

Are there ways in which we're just using the force inefficiently or excessively or sort of stuck in ruts of the same old deployments that we really don't need to be? And I'll use as a -- just to provoke a reaction, especially from you, Brendan, but you're going to go last, so you'll have to wait because I'm going to start with Amy. But recently, we have learned that the U.S. Navy sent a carrier that was supposed to go the Persian Gulf up to the Baltic Sea to try to get a little bit inside of Russia's and Putin's head. And this is Secretary Mattis being strategically predictable, but operationally unpredictable, one of the memorable lines from the National Defense Strategy.

And it sounds like smart strategy and I'm not against it, but it also sort of underscores that there's no carrier in the Persian Gulf. And as best I can tell, that may be okay. And if there is a worse crisis in the Persian Gulf, we're probably going to need more than one carrier anyway, so we're going to have to surge a number of assets.

So shouldn't we be a little bit more willing to scale back on some

deployments, some existing activities that have become just sort of rote? And is that a way to address some of these readiness problems that sometimes arise because we're just pushing people and pushing equipment too hard unnecessarily?

If I could start with you, Amy.

COLONEL EBITZ: I think there's a lot to be said for strategic messaging and, a lot of times, that could have the potential to keep us from having to go further with engagement. So I would never question any decision like that.

I think that for us, we are always going to want to go to the fight. The Marine Corps is always going to want to, and our brothers and sisters in the other services, as well. That's why we exist. We're here to defend the nation and we're always going to do that.

There may be sometimes where not everyone understands the bigger picture, but we trust that the bigger picture is there. And I know that with his experience, extensive experience, and obviously being a Marine I can't say anything bad, but I trust that SecDef Mattis has those interests in mind. So I would not question that particular scenario.

There are also other opportunities there where you can continue to exhibit readiness, train while on ship. One thing that the wars in Iraq and Afghanistan have really hurt us as a Marine Corps on is our amphibious capabilities. We became a very much land-centric force. That is not what we're here for, for the most part. And those opportunities to get on ship, even if it's just for a show of force, is an opportunity to get on ship and do what we do as Marines.

MR. O'HANLON: So before I go to Alan and then down the line, let me ask you, in your Marine Corps career of a couple decades or so at this point, how would you assess today's readiness relative to previous periods?

COLONEL EBITZ: I think I have to go back to I think we're ready to fight an enemy today. Tomorrow's enemy I don't know. We will. We will take that fight. However, you know, I hate to say this, but I think back to my first tour in Iraq in 2004 and when Donald Rumsfeld made the infamous, "You go to war with the army you have" comment, right? And I remember being there at that time and thinking he's absolutely right. We're a product of what we've had for the past decade and here we are.

So you have to always remember that in the back of your mind. You go to war with the Army that you have, the Marine Corps that you have, the Navy that you have. You can't wish away an enemy's capabilities. You have to be able to address those capabilities and, again, we never want to be in a fair fight.

MR. O'HANLON: Thank you. Alan?

MR. ESTEVEZ: I would like to say, first, we've used our military extensively and probably too much. And I would like to say there is a way to scale back, but history has proven us wrong in any time we try to do that. And I'll let Mara address the ceiling-floor construct that she came up with.

MS. KARLIN: Must I? (Laughter)

MR. ESTEVEZ: But the reality is things happen in the world. Our military's an incredibly capable force. And it tends to be the first tool in the toolbox, even when there are other tools that could do a function, that we draw on. And sometimes it is the right tool.

You know, no one has the capability to do humanitarian relief like the earthquake in Haiti than our military to set the framework for then the follow-on to come in. And that's a consumption of readiness when you do that for the fight that you're actually training for. Nonetheless, you have to look and say what are the priorities of the United States as a nation and in the globe? And that's regardless of what president is

making those decisions.

So then you say, okay, if that's the case, how do I find and what risk am I willing to take against that? And again, to your point on -- and I always think about that, too, of Rumsfeld's comment, well, again, you get adaptable. You surge the industrial base.

Our industrial base will never be able to surge the way it did in World War II, my belief right now, just because of the way the globalization of the industrial base. So I don't expect to see Ford plants cranking out airplanes, let me go there. Nonetheless, the industrial base is also vibrant. You have to use the whole industrial base, not just the traditional primes. And go out and get the military what it needs while we're taking that risk and, unfortunately, getting beat up in that construct.

MR. O'HANLON: Thank you. Mara?

MS. KARLIN: Sure. So a couple thoughts. And I think as you look at readiness going forward you have to be willing to entertain some very discomfiting ideas.

So starting with one discomfiting idea, Amy had talked about the Marines being pretty ready today, and I think that's pretty spot-on. In fact, I might make an argument that I only want the Marines to be ready today. I don't want to think about the Marines playing in a high-end conventional conflict. I want them to be the ready force that can deploy today or tomorrow for something that is going on.

That is going to have a psychological impact, of course. What do you mean we're not going to be part of the big fight? But arguably, that's the Marines' competitive advantage, if not comparative advantage, right? They're really good at getting somewhere right away to deal with a problem.

So there's a roles and missions element here, which if you find interesting, the last National Defense Authorization Act tasked Secretary Mattis and his

team to do a massive relook at roles and missions, and this might be one thing worth brainstorming.

One thing we hear both from Amy and Brendan is effectively the willingness of folks in uniform to sort of duct tape it up and find a way to go forward. Right? They want to go do stuff. That makes a ton of sense and we should expect that. I think it would be odd if that were not the case.

One of the real disconnects we see, though, is folks like that teeing up for the leadership in the Office of the Secretary of Defense and in the Joint Staff to help them understand, hey, look, we want to go do these things. By the way, here's the effect those are going to have. So you've set certain goals for us. You should know if we do X deployment or Y deployment, we're not going to meet those goals.

It's really important that that data gets teed up so that then you can get the senior leadership to really make the right call and say, you know what, I know you're excited, but maybe this is not the deployment to do. Or I know you're excited, this one makes sense, all right, fine, you should do it.

And there have been all sorts of systems. I think ceiling-floor was one attempt to try to get at it. But it's been a real challenge, not least because, and I'm empathetic here somewhat, you know, folks want to go out and do things. That's great. You should think about the tomorrow fights. You should and you should be thinking about today's fights. It's not your job. You got to help people do their job better.

So last piece, Mike, I'm delighted you mentioned Gulf posture. This is one of my favorite topics. You know, it's really dangerous, I think, when we baseline what the force has done over the last 17 years as the future. So the Gulf carrier example is a perfect one.

The U.S., as of March, has not had a carrier in the Gulf for the first time

in I think decades, I think two decades or so. In some ways, you might say, wow, that's a really big deal. Right? We haven't had it. What does that mean? I think the move to have the carrier head over to deal with potential challenges by Russia is exactly spot-on and exactly the right thing to do.

Ideally, what would happen is now there'd be some really interesting discussions inside the Pentagon like, look, we haven't had a carrier there for a couple months. What effect has that had? Right? Let's actually study the deterrent value of having it. So what missions haven't we been able to fulfill because it hasn't been there? What steps has Iran taken or not taken or perhaps other nefarious actors because there hasn't been a carrier there? My guess is the story's actually a lot brighter than folks might have thought it would be when decisions were first made to actually pull the carriers.

So when we're thinking about using these assets, it's really important to sort of first ask that obvious question of what effect are we having with these assets? And when we are choosing to, say, reshape Gulf posture, the carrier not being there since March, pulling missile defense systems from three Arab countries over the last few weeks, all really interesting. Let's study what effects that's having.

MR. O'HANLON: Commander, same question to you.

COMMANDER STICKLES: If there is one silver lining that I could hope for, and this doesn't happen as rapidly as it happens in the private sector, but when you constrain different resources in the military, opportunities rise. So the story I always tell is that the same year Kodak went bankrupt, Instagram got sold for a billion dollars even though they only had 16 employees and had never turned a profit. So if -- the carrier is way more like Kodak, unfortunately, than like Instagram.

But I think that some of the financial constraints are the reason that we

expedited the UAV development and implementation. That wouldn't have happened if we had continued -- if the money was still flowing and we had been able to continue to keep a 2-O presence in the Gulf, which went to a 1-O presence, which then evolved into the gap in the Gulf. I think some of the enthusiasm and reliance on cyber came from some of the constraints of the conventional force.

So I hope -- and, frankly, like off the charts on this, but in the last two weeks Jeff Bezos has come out and said, hey, I would be willing to take a defense contract for Amazon, which I think -- which is great for me. Again, for that third pillar of Secretary Mattis', that we're energizing the industrial base. Ford won't make airplanes, but other people are stepping up and bringing tools to the fight to fill some of those gaps in readiness and capability that we haven't seen.

So there is some entrepreneurial spirit that comes from the pain as much as -- maybe it's not worth the pain, but I think there are going to be some long-term technology and readiness benefits to some of these short-term pains.

MR. O'HANLON: So I just have one very last question for the officers and then go to you. And it's to ask you about the state of the men and women in the military today --

COMMANDER STICKLES: That's a great question.

MR. O'HANLON: -- because, obviously, that's a huge part of readiness. And you're both showing the kinds of qualities that we all have come to admire and expect in the military and a real positive willingness to work hard, to do whatever's required by the nation. But, you know, sometimes we do ask a little too much. And I'd like your sense of whether we're pushing you all too hard right now.

And the other part of the question, it's sort of related is, Brendan, in particular, you talked earlier about some of the reforms the Navy's been making lately in

thinking smarter about logistics and prioritization of who gets what. What can we on the outside do to support you folks on the inside as you're trying to continue that kind of reform, that kind of improvement in efficiency?

So those may be related questions, maybe not. But state of people and then what can we do on the outside to foster and support the kind of reforms you're talking about?

COMMANDER STICKLES: Sure. I think I really appreciate what Mara said that you need to recognize that if Secretary Mattis came in right now and told me to run through that wall, I would do so, but I know Amy would beat me to it. (Laughter) So the objective then needs to become to not ask us to do that. So the objective of the civilian control of the military and people is to prioritize and not delegate the responsibility to the person in the aircraft.

I think the example of that that you and I spoke about is my friend and former VFA-106 student who had an air-to-air kill in Syria, shot down a Syrian jet in Syrian airspace, 15 years after the authorization for the use of military force to the perpetrators of September 11th. That's a pretty big jump and I think that as a country we should be having dialogue about what we expect from our military members and not delegating that decision to one person sitting in a jet.

With regards to the status of the force, it's not helping that FedEx is paying people $300,000 to fly from Memphis to China four times a month with regards to retention of aviators. But I think a bigger problem was the repetitive nature and not feeling like they were making a difference, feeling like they were in the coal mine of national defense and not moving the needle on behalf of the country.

We have made specific directions. The National Defense Strategy is great. It clearly articulates a mission and a vision and a grand strategy for the U.S.

military that we can all get behind and follow, so I think that that has helped move the needle on retention.

And then internally, just because I stayed in the Navy and I love the Navy and I'm going to stay in it until they kick me out, that doesn't mean that a millennial or a Generation Z is not as much of a patriot because he wants to go to grad school or because he wants to come home for Halloween and watch his kids grow up, because he doesn't want to move his family four times. Those are realistic expectations and we're not coddling them by listening to those concerns and adjusting the force and making sure that we're not fighting a war today at the expense of losing great talent for the fight tomorrow.

So we're making small moves. There's still work to do.

MR. O'HANLON: Super. And Colonel, same question to you.

COLONEL EBITZ: I have to say that in my time in the military and the Marine Corps specifically I have never failed to be impressed by my fellow Marines, whether they outranked me or they were with me or I was leading them. That continues today. There's a lot of -- there's always a lot of generational talk and generational concerns. Right?

One thing that is consistent is that most of the Marines that we have, they join the Marine Corps to be Marines and they join the Marine Corps to be challenged. As we continue this stage where we are increasing our readiness and we are looking at specifically recovery of readiness and then modernization, part of that is challenging this next generation and really cashing in on the talent that's out there and what they can do.

You know, these things, these challenges that we have now, UAVs and cyber warfare and all this, this didn't exist when I came in. We had different challenges.

We were still working on World War II doctrine of taking the hill, you know, that sort of thing. Make sure your radio's working.

It is a multifaceted, multidomain spectrum of warfare now. And we are always grooming our future in the Marine Corps to ensure that we can address those concerns. The best way that we can do that is to educate, lead, and train them, and to harvest that talent and apply it to the challenges that we have.

So modernization is key to that, but first we have to recover what we have. We have to be able to sustain our force. And then we have to build upon that talent that's out there.

MR. O'HANLON: Super. Fantastic. Okay, let's go to you. In a perfect world, I'm going to take about four questions per round. In a perfect world, that would be roughly one per panelist, although it's possible to have more than one person comment on a question. But if you can direct your question to one person in particular that's preferred, not required.

I'll start with Harlan Ullman in the purple, the fantastic purple sweater, about seven rows back. And then we'll get a few more from up front.

MR. ULLMAN: Thanks, Mike. And you are a terrific ringmaster. Well done. My question really is to you, Michael, on the following observations.

The Naval War College at Newport is doing a major effort called Breaking the Mold, looking at war and strategy in the 21st century. And our operating propositions are, first, war is violent, costly, and bloody, something we've really overlooked over the last 20 or so years.

Second, as Bob Work says, the force is too big for the budget and too small for the requirements.

Third, when Don Rumsfeld came in to be Secretary of Defense he hired

Steve Friedman, former chairman of Goldman, to do a review of business practices. Steve gave up. And even the business transformation agency that was put in place could not deal with those problems.

And finally, we are profoundly -- let emphasize profoundly -- vulnerable to cyber.

My question is this. If the mission is to deter and, if necessary, defeat say, for example, Russia, before we talk about readiness, what does it take to defeat Russia in a way in which nuclear weapons use is highly probable?

MR. O'HANLON: Thank you. Wasn't disappointed by getting that question, but I was hoping it was for somebody else. (Laughter)

We'll go here to the front row and take a few more.

MR. GRADY: Hi, John Grady from the Naval Institute. The question is for the two officers.

I'm not talking about the first-to-fight units here. I'm talking about if you were the commander of the follow-on unit after going in and seeing, as the Army does and the Air Force does when they deploy, they deploy 110 percent to 125 percent of the force needed to include equipment, so what does that do to you as the follow-on Marine commander, follow-on aviation commander?

MR. O'HANLON: Great. A couple more here. The gentleman here in the fourth row and then in the second row.

MR. ATKINSON: I'll direct my question to Ms. Karlin. I was very interested in the --

MR. O'HANLON: Please identify yourself, if you don't mind.

MR. ATKINSON: Oh, sorry, Dwayne Atkinson. I was interesting in what you had to say about competition versus conflict and how preparing for the two, I guess,

creates different priorities. We also talked about the difference between actually operating now, being ready now, versus preparing for a high-end conflict and modernizing the force. So my question to you is, how does preparing for a future conflict and modernizing the force affect those two priorities, the conflict versus -- or competition versus conflict? What acquisition choices would you make now to prepare for those two choices and how would they differ?

MR. O'HANLON: Great question. And then here finally and then we'll go to the panel.

SPEAKER: I'm pretty sure I don't need that, but I'll use it anyway.

MR. O'HANLON: You will for the people in the back.

SPEAKER: Oh, sorry, I guess there is that. And this is for you Mr. Alvarez [sic], but I guess anybody who wants it, as well. I'm an analytics person and so I'm used to dealing with numbers and metrics and measuring them. But my question is you work in the technology acquisition and logistics portion of the Pentagon. How do you deal with the fact that for eons and eons and eons shall we say -- I don't want to say necessarily people are gundecking readiness reports, but you have the company commander tells the platoon leader, the platoon leader tells the idiot with a wrench like me, okay, gee, golly whiz, keep it patched up, keep it working? How do you do honest assessments of readiness when you've got people trying to avoid looking bad? Because, god forbid, they ever look back because their efficiency report gets dinged and then their career goes away.

MR. O'HANLON: Great. So here's what I propose, we'll start with the colonel, the question for the officers, and then go to the commander, and then just work down the panel. And thank you all for being so specific in your questions. Amy.

COLONEL EBITZ: Well, sir, the first thing I would say is that generally

we do not want to follow the Army. We want to go in first. (Laughter) That's why we -- I don't mean that against the Army. We are trained to be the force in readiness that is going to kick the door in. I have personal feelings about being a second-land Army. That's not our role and mission. So, you know, ideally we wouldn't go in behind the Army.

Now we have, you know.

SPEAKER: I'm talking about a follow-on force in the Marine Corps.

COLONEL EBITZ: From?

SPEAKER: One Marine unit's here, you're replacing it with another Marine unit.

COLONEL EBITZ: Ah, okay.

SPEAKER: And you've trained to make that first force go in. What happens to that second force?

COLONEL EBITZ: Well, that can get creative. (Laughter) And so the only experience I can give you on that is having to do back-to-back-to-back deployments in Iraq or Afghanistan. Right? There were times where we had to cannibalize other units, other gear and equipment to ensure that whoever was in the fight was able to stay in the fight. Where that gets you on the back end is obviously if you don't have the equipment, you can't train with the equipment. So if it's forward, it stays, you don't have it, and that can become difficult.

Being innovative, obviously that means we open up the old store closets and we find new things or old things that haven't been used. I've personally shot an M-79 for those of you that may remember from Vietnam what that is. So you get creative and you work around it, but, yes, you do have to recapitalize sometimes on what exists out there and hit that closest alligator to the canoe.

COMMANDER STICKLES: I agree with Amy. You're accepting a certain level of risk. So in the story I told you about the Super Hornet coming online in 2000, if somebody said we need to preserve these resources because we're going to fight in Afghanistan for the next 17 years, that was not a rational thing to say on September 10, 2001. That became the situation and that's what led us into this right now, some of the drastic maneuvers and the reaction to doing that.

So to your question, I think, not to be pessimistic, but I think it's impossible to plan to every scenario. But we need to clearly articulate the risks we're accepting and then -- and hopefully, a reasonable reaction to prevent Amy from shooting Vietnam-era weapons.

COLONEL EBITZ: It was fun. (Laughter)

MR. O'HANLON: Mara.

MS. KARLIN: So on this idea of competition versus conflict, and to be clear you don't just get to choose one, of course. Right? It's an issue of bias. So ideally, while the defense strategy talks about both, ideally, given what the force has been doing for the last 17 years, it seems to me it will bias increasingly towards preparing for conflict. So it is going to need to compete. We're going to need a Navy sailing all over the place, right, and out there and what have you.

But what I really want the Navy to do is to be ready for a future conflict with China and Russia. So this leads you down different acquisition paths. And again, you're never choosing just one.

So, for example, the sorts of things I might want for competition include things like the security force assistance brigades that Army has created. I can see that making a lot of sense. I might want surface ships, which right now the Navy has no shortage of.

For conflict, for example, I would want other things. I would want more undersea capabilities. Right? That is a competitive and occasionally comparative advantage for the United States, so I would want to invest undersea should there be a high-end contingency. I'd probably want to buy some munitions since, I think as Alan has talked about, if you don't actually have them, this conflict will not look the way that you want it to.

So you can play this out pretty far and see I think actually some pretty different force mixes that you're going to buy depending on which one you want.

MR. O'HANLON: Thank you. Alan.

MR. ESTEVEZ: First I'm going to comment on Mara's point because you and I used to have this -- we usually agreed, but we used to have this discussion over what's the right force mix to buy. You know, how modern do I buy the force?

MS. KARLIN: I remember our F-16 fights well.

MR. ESTEVEZ: Yeah.

MS. KARLIN: I'm still right. No. (Laughter)

MR. ESTEVEZ: F-16 versus F-35. So if you think you're going into a great power conflict, you should be buying F-35s and not a newer version of an older airplane that's going to get cut up over the South China Sea. Point A there.

How do you not cook the books on readiness? Which is what your question essentially is.

SPEAKER: Yeah, I mean, I was the E-4 technician back in the day. I'm now the analytics guy now.

MR. ESTEVEZ: So that gets to my earlier comment, the Department is data-rich and information-poor. Right? So there's all sorts of data out there that we do not apply modern tools for pulling that data up into a true analysis. So it becomes less

subjective on someone pulling out what their readiness is, but I can look and do a scrub of the personnel system real quick and see how many people haven't gone to the dentist and are undeployable, how many people have gone through the right training, all that, so I can make an assessment there.

I can look -- should be able to look, I can't say I can, should be able to look in GCSS Army or GCSS Marine Corps or SASSY or whatever the hell the Marine Corps is using for their tactical logistics system. What's on order, what's not on order, what's down, what's up, so that you can make an assessment. Is it just not ready today because I have to put a widget on it or is it not ready because the widget doesn't exist?

And once you start using modern tools for analysis, and they're all over the place, let's get real -- and the Department's trying to get there, you know, give credit to the Department -- you can start making a better, truer, assessment of what readiness looks like. So it's not about DRRS. It's about reimagining what readiness looks like for the future.

MR. O'HANLON: And then finally, Harlan's question about nuclear war. I think it was excellent because I have a little bit of a concern that even though I agree with Secretary Mattis that we need to reprioritize our focus on great power competition, there are parts of our national security thinking that are sort of sloppily verging towards thinking we're actually really going to have this fight and it's okay. And it's inevitable, so it better be okay. We just got to win it when it happens.

I think that's crazy talk. These wars have to not be fought. We cannot fight Russia or China. A few days ago, I think General Hodges said something to contrary. I respectfully disagree. The goal has to be reinvigoration of deterrence. It's different from possibly fighting another ISIS-like foe in the broader Middle East.

And so while I agree with Mara's point that we need to focus on, you

know, a fight with Russia or China the way she just put it, because that's the way to make sure deterrence works, I really want to think hard about how we manage certain kinds of plausible crises so they don't just go towards escalation as if it were a regional foe of the type we've been fighting in Korea, Vietnam, Iraq, Afghanistan. It's totally different. That war has to be avoided, not fought and won.

And so an example of what I'm talking about, I'm a strong supporter of the European Deterrence [*sic*] Initiative that Mara and others created during the Obama years that President Trump and Secretary Mattis have now turned into the European Deterrence -- from reassurance to deterrence. It's all the same basic concept. It's probably a little small in terms of being a robust tripwire. That's all it is, is a tripwire, 5,000 NATO troops in the Baltic states and Poland. But at least we're there and at least Putin knows that any kind of serious threat to NATO member states means war.

But I worry about another category of conflicts and you'll hear more about this from me in a couple of months when I finish my book called *The Sakoku Paradox*, but I'm worried about little aggressions that are not so much designed to take meaningful swaths of territory, but designed to throw an alliance into crisis as we figure out how to respond to an Article 5 challenge over stakes that are unimportant on their own terms, but raise profound strategic consequences for the health of the international order writ large.

And on those, I'll just give you one concrete example. If Putin uses little green men to manufacture a crisis and then take one little farming town in Eastern Estonia, I do not think the right answer is Operation Desert Storm on steroids to take back that town. I think we have to allow ourselves that option and not tell Putin the option's off the table, but think about a more creative multidimensional economic sanctions-based strategy, basically economic war for the long term combined with

forward deployments to make sure other towns in Eastern Estonia are not the next victims. And then basically settle in for a long-term, hopefully non-violent kind of operation, if you will.

More on that later, but I'm glad you raised the topic. Because I do think we have to be careful in talking about Russia and China, not to get ourselves thinking that these are really wars that we're likely to fight and that we probably will fight. I think that's dangerous thinking. That's worthy of a whole new debate, but it's obviously relevant because readiness versus modernization is a tradeoff. And then when you're modernizing, modernizing for what? For an actual war or to reinvigorate deterrence? There may be subtle nuances between those two goals.

Others may want to comment on what I've just said or we can move on.

MR. ESTEVEZ: Well, I think you have to modernize for war and modernizing for war provides the deterrent factor. I would agree with you, you don't want to be in any of those conflicts, but you need to have the tools to preclude those conflicts.

MR. O'HANLON: We'll have a longer discussion on that in the wintertime unless anybody else wants to speak.

Okay, let's go to round two and we'll start here in the third row with the two ladies right here and then we'll take a couple more.

MS. ROQUE: Hi, Ashley Roque with *Jane's Defence*. I wanted to ask there's going to be some turnover in the Pentagon in the coming year or so with General Dunford and General Milley and possibly the Secretary. What impact do you see this having on readiness and preparing for some of these key modernization programs that aren't actually programs yet, like the Army's six modernization priorities?

MR. O'HANLON: And in taking the next question I'm going to invite everyone if they want to do what I'm doing and go to summer rules here. I'm taking my

coat off because I think we've managed at Brookings to make this feel like a South Asian bus station in August. (Laughter) And I don't quite know why it's 80 degrees in here, but I'm going to do this.

Please, over to you.

MS. HELF: Well, on that note, I'm Shana Helf. I'm with a nonprofit supporting the military. So you sort of touched on it, Brendan, but to what extent do you believe the strength and readiness of the individual service member and of their families impacts the readiness of our military as whole? And I'm saying that on the back of several years of cuts to MWR programs and other services of the like.

MR. O'HANLON: Great. And then we'll take a couple more over here on this side and come back to the panel. The gentleman in the blue.

MR. GAGVAN: My name's Daniel Gagvan. I'm a current grad student over at SAIS. My question is you've talked a lot about modernizing. Where does modernization of education for soldiers, for members of the corps come into the play?

MR. O'HANLON: So maybe we'll -- and we'll go to Greg and then we'll come back to the panel.

COMMANDER STICKLES: I love all these questions.

MR. NUMBER: Thanks, Mike. Greg Number, former Navy FEF and student of Commander Stickles. We talked a lot about cyber and data, both the colonel and the commander and the deputy undersecretary, so I'll say this question for Ms. Karlin. With all the kinetic weapons that we've spoken about and the levels of readiness of ships, tanks, aircraft, as well as the training of personnel for high-intensity, you know, direct kinetic conflict, we haven't really touched on the cyber piece too much except for the bit comments that you made.

So if, as Mike alluded, we're not going to have a global nuclear war and if

we saw during the Cold War 40 years, you know, we had that high-end competition ready when we had to pull the trigger, but for the most part it was small skirmishes, low-intensity conflict, proxy wars, et cetera, if today's analogy that is the cyberspace where we have one adversary stealing our intellectual property, we have another adversary running constant information operations on a day-to-day basis, what's our cyber readiness? Because we've seen offensive capability with taking out uranium centrifuges, but we haven't really seen the cyber defenses in terms of stopping those adversaries from impacting our -- not on an existential level, but on a direct effect.

You know, if China has chips that they're putting into servers and then they're able to draw data from our F-35 designer and produce what cost us 20 years and billions of dollars and they can do it in a couple of years from virtually nothing, what is the readiness of our cyber defense?

MR. O'HANLON: So why don't we start with the commander and just work down? Take any question you want.

COMMANDER STICKLES: So I'll take quickly those two questions. I really appreciate the question about the support for the family. And some of those, the traditional models, like the MWR, Fleet and Family, those were all cut as a part of sequestration. And I think we saw with the retention cliff that we drove the United States Navy off, especially naval aviation, we drove it over that cliff, I think we saw that while it's hard to apply direct causation with that correlation that we need to maintain the priority on family.

More germane to your point, I think that there's an enormous modernization required in the military with regards to the family dynamic. So 7 out of 10 high school valedictorians this year are going to be women. Amy, I believe, is one of six colonels in the United States Marine Corps who's a woman and a dual military couple.

So if we're going to be successful, we need to modernize in a way that allows for -- to change the traditional military model and allow for more dual military members, more people having children later in life. But the changing dynamics of the American family, we need to evolve the military to make sure we're keeping the best people and taking care of them and their families to provide that.

Which falls into the education question. I'm a huge fan of the post 9-11 G.I. Bill. I'm a huge fan. There was some missteps in the implementation, especially with regards to for-profit colleges. We were spending $13 billion in 2015, which is roughly the price of the *Gerald Ford*, on the post 9-11 G.I. Bill without enough return on investment. So I think that that has energized, at least for me, the force, the tuition assistance program; allowing people to use the post 9-11 G.I. Bill while staying on service, so it's not this giant carrot that you can only use if you leave the military. That's not what the VA should be. So I think we've energized that.

And because of all these threats, we still need riflemen to carry a gun and storm the beach, but we also need people to write the code in a cyber war, to work on my jet that's $76 million and primarily software-driven. And that requires an educated, smarter, upwardly mobile workforce. So recruiting them and then retaining, education is going to be an enormous part. I'd like to talk to you after this, if you're still interested in any of those educational or family questions.

MR. O'HANLON: Fantastic, thank you. Mara.

MS. KARLIN: All right, three quick comments. One on education. The National Defense Strategy, in case you missed it, a really short document and yet there's a massive paragraph talking about the state of professional military education. I think the language in it is as strong as the language against China and Russia, so please notice that. I think that's pretty meaningful.

As recently as two years ago, a friend teaching at one of the war colleges said they're not teaching Iraq and Afghanistan. That's a little too sensitive. I think that's terrible and worrisome. So if we are not helping people process these experiences and think through the legacy of these experience while they're in a professional military education environment, then we are failing the force 1,000 percent. And we're going to pay for it in the future, by the way, there should be no doubt whatsoever. So I have profound worries along these lines.

On the personnel front, I think it's such an interesting point to ponder. We are going to see a ton of personnel changes. And there are the known knows and the unknown ones, if we can throw Secretary Rumsfeld's quotes out there. Again, you know, I'm a strong believer that folks will do the job based on how they understand the last 17 years. What have they been doing? What has their service been doing over the last 17 years? And depending on that, they will be more or less willing I think to sort of bias towards preparing for a pretty different type of conflict.

And then finally, on the cyber front, as you note, I know cyber has become sort of the fairy dust answer. Let's just sprinkle cyber and then it's all going to be okay. I think the barriers to understanding on all things cyber still remain a little too high, and that's sort of worrisome. I say that as a former policymaker in particular. You know, if I think about what the carrier's doing, I can get my head around it. It's a lot harder with cyber, whether you're thinking defensively or offensively.

Data points that worry me in particular is to look at TRANSCOM. And you've seen in public testimony comments by TRANSCOM commanders about how everything they're doing is largely unclassified. And so it seems to me that's a delicious cyber opportunity if I'm an adversary or even perhaps a frenemy.

What I also think is interesting in the cyber world, and Alan may have

some deep thoughts on this in particular given his background, is that a lot of the companies who we might want to sort of be helpful to the U.S. military in this regard might not see themselves as U.S. companies. Right? May not have -- I mean, this is where I think Mike's earlier comment -- I'm sorry, no, I think it was Alan's comment about mobilization in World War II, how we can't really conceive of industrial base mobilizing in the same way. I think that's meaningful particularly for this sort of world, also. Right?

The smartest cyber people are not in the U.S. military. And at least as of now they're not joining the U.S. military. So what does mean, right? What do we do? How do you at least help them at a minimum not be unhelpful to what the U.S. military's trying to do and at a maximum find ways where you could perhaps take advantage of their capabilities for set periods of time?

MR. O'HANLON: Alan.

MR. ESTEVEZ: Let me start off with the cyber and the United States Transportation Command, since you brought that up, and then I'll answer some of the other questions.

On that I've talked extensively to Steve Lyons and John Broadmeadow about that. Before I walked out the door, I signed out a Defense Science Board study on logistics in a contested environment. The results of that study are getting staffed right now, but they look at things exactly like that, that TRANSCOM relies on the commercial sector to do its business and it itself is incredibly cyber vulnerable and so are those companies.

I went to a baseball game with the Commander of Army Installations Command and I asked him what his biggest threat was, and he said cyber, cyber, cyber. And he said I told the guy who runs the switch at Fort Hood that that switch is not going to work to load out a railcar. Go find some big can of WD-40 and the crank that you used

in 1940 when that same switch was there because that's what you're going to need. So all things cyber need to be thought about.

I'm also not sure that I'm ready, if I was in a position of that kind of authority, to send Brendan or Amy into the maw saying don't worry about that radar or that cyber, that air defense is down because we've taken care of it with cyber. They can tell when it's kinetically taken care of. They can't tell when it's cyber taken care of.

But nonetheless, we need to practice all things about what it's going to look like in a cyber-denied environment. In other words, were there's no radio and there's no com and no GPS and where am I on all facets.

On other points, you know, it's not just cyber modernization that needs to be taken care of. Space is another area and I'm not talking about Space Force. I'm talking about defense of space and our space assets and how to do that, and that's a huge area of concern.

On the personnel changes issue, I'm with Mara on that. Inertia's a big thing in the Department of Defense. Frankly, I think budget, you know, we are at the high water mark, is going to have bigger impact on some of those big six, for example, in the Army and other modernization account than changes in personnel.

MR. O'HANLON: And Colonel.

COLONEL EBITZ: I will take up the readiness issue, this personal readiness especially, because the individual Marine being mentally, spiritually, and physically fit is at the very crux of everything that we do. Within that the largest challenges we've had in the past 10, 15 years has been that deployment-to-dwell ratio and allowing them that time to decompress.

Again, since I like analogies I'll go back to another one I like, which is building a house. Right? You have a foundation. You have to lay that foundation and

the foundation for individual person, especially a Marine, is their family and their background, where they come from. Right? So being able to sustain and support that and allow them that decompression time not only to recuperate themselves mentally, physically, and spiritually, but their families.

Education plays a large piece into that. We are always looking to ensure that we have a professionally developed force. Al Gray, General Gray, back in the '80s really put that into motion for us and we continue on that trajectory. A smart, well-equipped Marine is a massive weapon and we want to keep on the trajectory. So we continue to find adaptive ways to allow for education on and off duty. And not only to educate them in the realms of civil education or military education, but part of that process is ensuring that they're educated on the gear and equipment that they have and they're able to continually adapt to new requirements be innovative, so that when we do have gear and equipment, we have that pipeline where we not are only able to acquire it, but we can maintain it and then we can allow for training on it and continue to modernize it as we move along.

You know, we're in the military. We don't generally buy things and use it for a year and get rid of it. It's a long-term relationship, so we have to be able to ensure that they have the education and the ability to train on modernization of any of that sort of gear. And that's a lot of what we're doing right now is ensuring that we can, first, maintain the readiness, but then continue to modernize and build upon that.

MR. O'HANLON: Thank you. I think we have time for one last lightning round and so we'll take a couple of questions for that round and then we'll wrap up. So I see two hands. That's just about the right number for this round in row 6 and 7, I guess.

MS. ULRICH: Hi, my name is Taylor Ulrich. I'm a student at UCLA. My question probably mostly can be answered by the commander.

So I know there's a lot of issues surrounding the T-45 aircraft down in flight school and, as a result, a lot of your students are being selected for the jet pipeline. And this is a result of physiological issues and hypoxia. And I know it's not just with the T-45, as well. It's kind of extended to other aircraft. So I was wondering if you could speak a little bit to that, as well. Because I know it's taking some people upwards of three years to finish flight training. So if you could speak a little bit to that issue, as well as how does this impact our overall readiness and if there's anything that the Navy's doing to address this issue.

COMMANDER STICKLES: Sure, great question.

MR. O'HANLON: And we'll take one more from the gentleman right in front.

MR. BARNES: Hi, I'm Troy Barnes, a strategic policy fellow with the Air Force. My question is for Ms. Karlin.

How can we better stewards of the dollars that we are given by Congress to balance this most dangerous course of action by the enemy in the near-peer threat against the most likely course of action by the enemy in violent extremist organizations over the next decades and avoid sending very exquisite, very expensive equipment and organizations that are ready for the high-end fight into ungoverned spaces to fight non-state actors?

MR. O'HANLON: And I will take one more. Otto's been very patient here in the front row and that'll be the last question. Then we're start with the commander and work down.

MR. KREISHER: Otto Kreisher, *SEAPOWER Magazine*. This is primarily for the two former Pentagon officials.

Ready for what? If we're getting ready for the competition, that's

basically modernization. Are we buying the right things?

I'm with the commander, I'm a great fan of aircraft carriers, but our aircraft carriers, what we would need to go against China and Russia with their long-range defenses, the A2/AD, you know, problem and the short-range aircraft that we're flying? Are we buying the right things that we need for that future competition?

MR. O'HANLON: Great. So Brendan, the first question I guess was for you and feel free to add any concluding thoughts, as well. We'll just work down the row.

COMMANDER STICKLES: You got it. So that's a great question. For those of you who don't know, there was a -- over the last 18 months we had some hypoxia, some physiological episode issues in the Training Command, flying jets in flight school. So why is that a big deal? This mishap rate in flight school was higher than the mishap rate in combat. We were killing more flight students than we were combat aviators, which is completely unacceptable.

The physiological episodes, we had people flying the 245 that were becoming incoherent and not being able to properly process information and put themselves in scary situations. So rightfully so, the Navy said, hey, this is unacceptable and we had a safety stand-down. We stopped all T-45 flights for a period of months.

The problem with that is that now we are cleaning up the mess. That was 100 percent the right thing to do. We bought, I believe, 24 F-18E and F Super Hornets this year from Boeing. Boeing can crank out an F-18 in about six months to a year. To put a pilot into the seat of that F-18, I needed to send him or her to the Naval Academy seven years ago, put them through two years of flight school, and then train them in the F-18 and VFA-106 or VFA-122 for an addition year before they can go fly a combat mission.

The T-45 issue has become a rat working its way through the snake. It

is having all sorts of second and third order effects, where we stopped production of flight students for a six-week period of time. And then I guess instead of the rat through the snake, it's more like *I Love Lucy* with the chocolates on the conveyor belt. (Laughter) People still graduated from the Naval Academy, they still lived their lifelong dream of being a pilot, we just didn't have any aircraft to train them on.

SPEAKER: And ROTC.

COMMANDER STICKLES: And ROTC, that's right. Sorry about that, and ROTC, which I should have gone to. (Laughter) So, I mean, it's a significant problem. How that manifests itself is a leadership challenge.

And then to Mike's point is that it can put us in a predicament where now we have people in the flight school process who haven't flown an aircraft in six months. So now we need to look at is their mishap rate going to go up? Is their training effective? How can we rewrite the syllabus? How can we mitigate those efforts? Can we buy any low-cost simulators, virtual reality, put them in a Cessna? Like what can we do to do this? And we're exploring all those options.

But it was 1,000 percent the right thing to do. If there's a risk of somebody killing themselves in flight school and we know that it's going to happen, the correct answer is to stop training, which is what we did. And now we're cleaning up the mess after that and figuring out what to do.

MR. O'HANLON: Thank you. Mara.

MS. KARLIN: So those two questions, those last two, actually bleed into each other really nicely. Some thoughts on them.

You know, you are balancing between likelihood and consequence, and you have to recognize, of course, that we're always just guessing. These are illustrative guesses, definitely not exhaustive whatsoever.

But there is a political element, right? So the F-22 used against ISIS, the F-35 used in Afghanistan, those are not the sorts of environments that you actually need really, really expensive stealth capabilities, of course Right? We all know why those platforms were used under those circumstance. And that's pretty unfortunate, right? But it exists and so we might as well be clear-eyed about it.

So, ideally, you'd want to think about what the challenge is and are you using the right capability to counter that challenge in the kind of way that involves the least blood and treasure as possible, which really runs into this idea of are we buying the right things? Definitely not. Right? This has been the largest defense budget in history and yet it barely moved the needle on what is, I would argue, a really tremendous, thoughtful, and far-reaching strategy that Secretary Mattis put out. There are all sorts of things that don't make sense in it.

For example, you had mentioned my favorite term, which is 355 ships. I care a lot what those ships look like. If those are Sunfishes that I can use on Lake Michigan, not useful. So, ideally, you would want a Navy that is buying fewer surface ships, right, fewer littoral combat ships, for example, and more undersea capabilities.

Air Force portfolio, totally messed up. Right? You need where you've got some serious balance on both the high end and the low end.

The Marines, impressively, couldn't manage to spend more money on their aviation portfolio if they tried, across the board. They have absolutely don't that. You need to give it some serious thought.

Munitions, yet another huge point that we rarely want to invest in. It's a real orphan issue.

So, I mean, I can walk through all sorts of ways in which are not buying the right things. And what makes me so sad about that is because this is a moment

where you have a large defense budget, there's a lot of evidence you're not going to get a budget that's at the same level, so this was a real missed opportunity.

That said, I will be somewhat generous to the current Pentagon and I'll say let's see what happens. They tell us the next budget will look a little different, will start to move the needle in more meaningful ways. I'm really eager to see that because there is not a lot of evidence yet.

MR. O'HANLON: You're talking about the "masterpiece?" The "masterpiece?"

MS. KARLIN: I'm talking about the "masterpiece."

MR. O'HANLON: The "masterpiece" budget, as it's been nicknamed.

MS. KARLIN: Yes.

MR. O'HANLON: Except now it's going to be $33 billion less perhaps.

MS. KARLIN: It's still a masterpiece, like a discounted masterpiece. (Laughter)

MR. O'HANLON: Alan.

MR. ESTEVEZ: Let me start off with the are we buying the right things question. You know, this budget, we're buying what was in the pipeline, more of basically, which probably is not the right things. Again, there's a whole bunch stuff in the R&D pipeline. We're not putting in enough money into R&D. There's a whole bunch of talk right now of the new things in the pipeline and in R&D.

We're going to go do lasers. The reason we don't have lasers is because lasers is hard, by the way, not because we haven't thought about doing lasers. Hypersonics is also hard. So just because General Milley wants to put a hypersonic missile in a cannon doesn't make it so.

So if you're not going to put the money in to jump that divide of failure,

failure, failure, success, you're not going to get there. And those are the things that tend to fall off when we start cutting back on the budget, unfortunately. So there needs to be some discipline.

And it's not just those things. We need to be prepared to fights ones and zeroes, back to the cyber discussion. Right? Which means not just the regular industrial base and, you know, of course there's lots of tools out there of DUI and SCO and things like that that were swirling around out there, but we need to truly reach out to the full gamut of America's industrial might regardless of whether those are global companies or non-global companies, and make them understand that they are part of Freedom's Forge and they need to be with us and putting effort into America's defense and America's greatness.

Are we spending dollars properly? You know, your point on how does the logistics system work and I could go on and on on that point. But a better assessment, better analysis, better analytics turning into data, better tools that are out there, understanding your supply chain can go a long way, and that's not reforming the business sense of the agenda. That's reforming the executive sense of the agenda.

MR. O'HANLON: Thank you. And Colonel Ebitz for the last word.

COLONEL EBITZ: Wow, that's a tall order. I appreciate the opportunity to be here today. I think we've broached on a lot of topics.

The cyber issue, you know, I can empathize with the fairy dust comment. I think that's been the case for a long time, but it's something we're really taking a hard look at now. And I love to say it's challenge here, everybody says it's a challenge, right? We have to look at it. But the integration of those capabilities down to even the lowest level for us is going to be make a massive impact on our war-fighting capability and what we can do and the integration of our abilities with the Navy fleet that will be modernized

and updated, as well, because that affects our readiness.

We are going to continue to forge on and this budget is a huge opportunity. I hope it's not a missed opportunity. I think that we have to feed the children we have before we adopt more, so we have to be able to put things in order of what we need to do, and I have faith that it's going to move way as smartly as can be done.

MR. O'HANLON: Awesome. Well, thanks to all of you for being here. Please join me in thanking the panel.

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