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IS THERE REALLY A MILITARY READINESS CRISIS IN THE UNITED STATES?

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P R O C E E D I N G S

MR. O'HANLON: Good morning everyone and welcome to Brookings on this Monday morning. I hope you had a good Veterans Day weekend. We are all thinking of our veterans this weekend and remain very grateful, as I'm sure you all are too, for what they've done for our country. Today we're going to talk about some other issues that concern today's military and the men and women who are making it up, who are working so hard to protect us, several of whom are on stage with us today and to talk about the topic of military readiness.

My name is Michael O'Hanlon of the Foreign Policy program. I have, as I say, commanders and colonels to my immediate left who are here as mid-career fellows, still in their respective services. And then at the end, two defense officials who are currently in a more academic mode but have helped run the Pentagon in a civilian manner in the past. I will go down the row in just a second.

Let me first explain the general concept that we're trying to get at today. And by the way, looking to your participation in the second half of the conversation with your questions as well. What we would like to do is assess the state of contemporary American military readiness. I think many of you are aware, as often is, a hot potato issue in American politics and American defense policy. We've heard a lot of people who are very concerned that military readiness is poor. We've even heard people use phrases occasionally that harken back to the hollow force days of the 1970s when the post-Vietnam military, which was just in route to becoming a modern professional volunteer force, was in really terrible straits. Both in terms of the morale of the force, the qualifications of many of the individuals within and certainly the state of equipment, maintenance and training in the force. I think today's military is much better but it is also much smaller and it has been at war for 15 years in one manner or another so there have been enormous strains.

So, I'll just put my cards on the table. I'm primarily going to play the role of

moderator here. While sharing a lot of concerns that readiness has severe problems and strains, I also think we don't want to overstate the problem. Because if we do make readiness our main focus or even our predominant focus in American defense policy, I worry that other things that are equally important will get less attention like long term innovation and modernization. So, it's really the effort to strike that correct balance that we're after today. And that's why I think it is so useful to have people who, just last year, were actually commanding units in the field or in very recent jobs, depending on which one we're talking about.

I'll invite each of our commanders and colonels in a second here, to explain a little bit about their own background. I'll just give a very short summary of each. But they're going to be able to give us a little bit of granularity about what they saw in their jobs. Not just the big picture view of overall Department of Defense readiness but specifically what they were doing, what they saw, what concerns they have.

Immediately to my left is Dan Keeler, Commander Dan Keeler of the U.S. Navy, a helicopter pilot. Was deployed with his helicopter squadron that he commanded just last year and certainly has, I know, a lot of concerns about the state of naval aviation but more generally, navy readiness. We know that's been a concern of two navy ships in the past year as well. We're asking a lot of our sailors and Dan will be able to speak to what he sees as readiness issues there. By the way, we're going to being by trying to diagnose and assess readiness in the first round of questions and then we're going to go through a second round to say what should we do about it. So, that's the very simple structure to the conversation before we then go to you later on.

To Dan's left is Colonel Tim Hayden, U.S. Army. Tim had the extremely important job last year of commanding the brigade that was deployed to Korea. As you know, we have really just one army brigade in Korea at a time. It rotates in and out. It is a different brigade each nine months. Tim prepared that brigade here in the United States and then took it

to Korea where he commanded it. So, he had a bird's eye view of readiness on the front lines as did Dan. Both Dan and Tim have seen operational forces in just the last year that were really at the tip of the spear. And that's no less true for Kate Higgins-Bloom who is our coast guard fellow. As you know, the coast guard is a military service of the United States but it is not within the Department of Defense budget world. It is within the Department of Homeland Security budget world and it is also a far smaller service with a far smaller budget. But arguably just as wide a range if not even wider in some ways, of a portfolio of responsibilities. Because as Kate can tell you, the coast guard does a lot of things overseas as well as here at home and in our home waters. Certainly, the coast guard has been asked to do a great deal with very limited resources so readiness is a relevant question there as well.

Mara Karlin, just to Kate's left, was deputy assistant secretary of defense for strategy and force development in the Obama administration until last winter. So, in addition to wrestling with all the readiness challenges, Mara is a person who has got to think about, what is the broader set of concerns for the Department of Defense going forward and in an era of cyber threats and artificial intelligence arising on the horizon and robotics and other modernization requirements and innovation requirements, the question is, how do we find a way to walk and chew gum at the same time. To address near term readiness without losing sight of the need for longer term force development and improvement. So, certainly Mara has seen that question up close.

And then finally at the end, Sandy Apgar who has 55 years of service to this nation's military in one way or another. Including notably as the assistant secretary of the army for installations in the Clinton years. Also, he brings to the table, a great deal of private sector expertise and he's going to be a natural lynchpin for our conversation as we start to think about how to deal with readiness challenges and how to make sure that we don't squander resources on the wrong kinds of military expenditure. To make sure that we guard our resources for

readiness and other such requirements.

So, thank you for indulging me the chance to give a little bit of a lengthy introduction to the topic and now I'm done for a while. I'm going to turn things over, again, we're going to go down the row and just try to take a snapshot. I've invited each panelist to be as specific or as broad as they wish. I'm sure we'll hear about their individual units but, of course, they also may speak more generally about conditions within their service or the Department of Defense at large. Dan, without further ado, over to you.

COMMANDER KEELER: Thank you, Mike. So, as Mike mentioned I just finished my command tour at Agency 4 which is a helicopter squadron on a carrier air wing. We deployed from January to June to the Pacific, basically South China Sea and Korea on the Carl Vinson. How is readiness right now? That airwing for that deployment was properly trained to do what we were doing. I think that's an important distinction. Readiness for what and we were ready for that deployment. The impact, but it took a long time to get there. That airwing was not ready for a long time, up until basically right before we deployed. How did that happen?

So, I think there has been a lot written about the BCA, Budget Control Act of 2011 and continuing resolutions. That particular group of squadrons, there is eight squadrons in an airwing, had not deployed since 2011. They lost a deployment in 2012. They moved aircraft carriers, that was kind of planned. We bounced from the George Washington to the Ronald Regan to eventually the Carl Vinson. That group of eight squadrons did not deploy a unit for almost four years. Based on the strategic decisions that navy leadership and Department of Defense leadership has done which is to fully fund deployed and next to deploy units. If you're on the bench, you don’t get what you need right now. And we've been doing that for a long time to manage what the sino calls the triple whammy which is budgetary uncertainty, the high op tempo and sequestration. Those things meant that if you were not in the next to deployed or deployed, you were not getting funded.

So, what did that do to my unit. We lost a deployment in 2012. I wasn't BXO yet, wasn't in my command tour but it was the year before. You would think that, hey that makes everybody happy right, we don't have to go to sea, we can spend more time with our families. That's true but you also don't get the money. So, it means you don't fly as a pilot, you don't get to go to schools as a mechanic because funding for schools is cut back. So, when I arrived, my unit and quite frankly, the other seven squadrons in that airwing, we were at the bare minimum. We were barely functioning. There is think in the naval aviation that we call tactical hard deck. As a pilot, you would like to fly as much as you can. You feel comfortable about 20 hours a month. Tactical hard deck is 12 hours a month. So, when I showed up to my squadron, we weren't even making that. Junior officers were probably flying around 10 hours a month. That's not enough to really stay proficient.

Now, okay so I show up and now we finally get a scheduled deployment, a short one, at the first year of my XO tour basically to take the George Washington to Norfolk. That was very helpful and that was kind of a gift. We argued for money to do that because normally an airwing doesn't have to be on board an aircraft carrier to go to South America but we needed it. So, that was helpful. And gradually, and it took a long time and it took more money probably than we normally would have needed to build readiness back up because we didn't have that 2012 deployment. And we made it.

But to make it, we had to unfortunately, we had been playing this shell game in naval aviation where to get to deploy last year, we had to more or less steal people and airplanes from other airwings that were now on the bench to make our deployment. That is really unhealthy. We call it cannibalization when we talk about the aircraft. You're ripping people and mechanics out of one squadron, ripping a helicopter or a jet out of another squadron and putting it in an airwing to make so the deploying unit is whole. That is not sustainable. If you follow the four star, three star testimony on The Hill, they've been telling people it is not sustainable. We can't

keep doing it. The folks on the bench are just going to eventually not make it.

How is readiness now, it is getting better. In 2017, we argued for just under $3 billion to add to the budget. It went straight into O and M or readiness accounts and that helped. I think my old squadron is deploying again in January on the Carl Vinson. From talking to them, they're better. They're not as much in the hole as they were when I started and that's money. That is a pure function of money. I think in 2018, we've got another roughly, they've put another $3 billion into O and M accounts to keep that going. That's vitally necessary. I would say, what is the readiness right now, it's improving but it is very fragile. We're recovering and if we continue -- so December 8th is when the next CR runs out. There is this debate on The Hill about tax reform about if the Defense budget will get approved. If we go back to the BCA caps, I'm afraid that we'll take another hit and this fragile recovery would get broken.

MR. O'HANLON: Just one quick follow up Dan, thank you, that was very helpful. You say that in 2017 an injection of additional money helped. Does that mean in the previous years, a lack of money was the main culprit or was it more the unpredictability of knowing when you'd get the money because of all the budgetary shenanigans in Washington.

COMMANDER KEELER: It's a little bit of both. What my bosses were doing was basically fully funding flight hours, fully funding deployed and next to deploy and robbing the money from parts, things like that. So, that the folks on the bench didn't have aircraft, didn't have all the people so it made it difficult for them to maintain a baseline that you could then ramp up quickly to deploy. Does that make sense?

MR. O'HANLON: Yes, thank you.

COMMANDER KEELER: That gap is just getting bigger every year that you don't fully fund those accounts.

MR. O'HANLON: Thank you. Tim, over to you.

COLONEL HAYDEN: Thank you, Mike. Again, my name is Tim Hayden and I'm

a Colonel in the United States Army. Up until about mid-July of this summer, I commanded the first brigade combat team, first infantry division and we had just returned from a deployment to the Republic of Korea. We served as the rotational brigade combat team. Prior to that, about a year in the War College and then just before that I was the operations officer of the first cavalry division. So, I have seen training and training readiness, the impacts of continuing resolutions on our readiness over the last four to five years, up front and personal.

My experience is at tactical level units. So, I'll avoid some of the strategic readiness which we could certainly bifurcate the readiness question to current operational readiness and our fighting formations and our sustaining formations versus long term strategic readiness. Do we have power protection, do we have mobilization and what I'd like to focus on is just the current readiness fight.

I'm an optimist. I think I owe it to you to tell you that your army has never been better trained, better lead, and frankly, from where I sit, better resourced for the current fight. I can tell you for a fact that I am biased. That the brigade combat team returning home from Korea was far more lethal, far more capable and an intangible element of readiness that we certainly can't put a dollar figure on, it is far more confident in their ability to accomplish their decisive action mission.

So, if we go back in time a little bit and I deployed and took command under the last of the ARFORGEN model. Which was discreet periods of readiness for a defined mission for a period of time. And we knew that because we had a program, we call it the patch chart, and so we allowed ourselves to man the deploying unit, resourced them to the levels that they needed to be resourced to achieve their readiness goals for the mission that they were assigned. We have transitions from ARFORGEN into what is now a sustained readiness model. You may have heard it, the fight tonight, the fight anywhere, to go back to our decisive action, our full spectrum of military tasks. And in the brigade combat team on any given moment in the

fight, there is about 5000 individual tasks and over 700 collective tasks being accomplished simultaneously and that's very hard.

So, the business of readiness at the brigade combat team and the brigade size formation below is the hard work of good army professionals. Now, my experience, and here's why I'm an optimist. Is because about two years ago, we made this shift, both mentally as well as we started the physical transformation of our units. We reduced structure to allow ourselves to manner our fighting formations to a higher degree. We returned to our decisive action rotations at our national training centers to make sure that we gave our brigade combat teams and the supporting elements, the full decisive action workup to prepare for any kind of threat. That way we had confidence in their ability should they be employed as such.

But more importantly, what we've done is we have rebuilt the cadre of our junior, mid-grade and senior leaders on the fundamentals of war fighting tasks. That will allow us to continue this glide slope as we have our target goal of a full return to readiness in fiscal year 2021 to 2023. Right now, as we build our brigade combat teams, we know that about a third of them are ready to fight tonight and that is by design. We are incrementally building the bench, we are incrementally building the skill sets within our formations and I think we are well on our way to achieving that goal. So, I'm an optimist on readiness. What I see in our formations is that we are getting the leaders when we need them. Would we like them a little sooner, absolutely. Our number one challenge continues to remain personnel. It is not a capability issue, it's a capacity issue. It's making sure we have the right folks in the right numbers at the right time to accomplish a training and then go on to our deployed missions or our home station support missions.

I think it is easy to kind of wish away the readiness problem as a simple dollar figure. That briefs well, it carries a very good headline but it is much more than just a dollar figure. It is having the right people at the right time to first affect the training and then to

accomplish the mission. And then having sufficient inventory to where we don't continuously wear out the same population of soldiers and their families, frankly, over and over again. With that, I think Mike, I'll stop there in the interest of time.

MR. O'HANLON: A quick follow up from you as well, Tim. I'm very grateful for that and grateful for both the messages which I don't see as contradictory, they're just two different parts of a much bigger story.

COMMANDER KEELER: I think that's an important point. Every service is completely different and has different readiness challenges and you're going to get different answers.

MR. O'HANLON: And so, as we try to make sense of what we hear in the policy debate, I'm not going to ask you to take anybody on by name. There are people out there who say, only three army brigades are ready out of 58, if you count active and National Guard. What do they mean because you just said about a third are ready but other people who are trying to drive home a point with emphasis say it is three. How can you reconcile these two?

COLONEL HAYDEN: So, I'll speak from my experience. In the active army, total army and we speak in the total army. In the active army, we have nine armor brigade combat teams, we're building on a tenth right now. So, currently forward deployed, any given time we've got an armored brigade combat team in Korea, an armored brigade combat team in the Middle East, an armored brigade combat team in Europe. Now right now if you go back to the ARFORGEN and into the sustained readiness model, as we look at filling out our formations with the force structure and the equipment, it takes three to make one. You've got one deployed, you've got one in a train up to relieve the on station formation that is forward deployed and then you've got one that is recovering. And those personnel will go to much needed reset schools, professional development and we'll transfer some of those formations throughout the army.

What I think is key to note is that readiness is not something you can just apply a dollar figure to and you get readiness overnight. Readiness takes time to build and the conscious decision we made about two years ago to return to a decisive action focus. A sustained readiness model to fight tonight regardless of what the threat is, versus an ARFORGEN, very specific mission, specific region, specific period of time, that that has caused us to move through this kind of maturation of readiness. I think an important part also to note is the armor brigade combat teams that are deploying right now into the regional line force theaters come back better brigade combat teams. We are not consuming readiness. We are actually building readiness because for the entire time you're there, you have the opportunity to conduct decisive action training. Everything from lower level marksmanship to task force size air assaults to combined arms training shooting gunnery's. So, when we bring those formations back, we have not deployed them and consumed it and we're starting from zero again. We're bringing those formations back at a very high state of readiness. Even if some of those individuals in the formation are PCS'd or they change a duty station to another unit, what they're bringing with them is confidence. They're bringing with them experience. They're bringing with them knowledge of how to function in that kind of environment and that is one of the intangible elements of readiness. It's the confidence that you conduct your wartime mission in austere environments.

MR. O'HANLON: Thank you, very helpful. For those of you who didn't recognize the acronym, ARFORGEN, is Army Force Generation Model which is sort of a detailed way of matching units with tasks in a day to day, month to month environment as well as for the possibility of combat. So, now let me turn to Kate. Kate, you just heard from two gentlemen, each of whose service has about $150 billion dollar a year budget. I don’t think yours does. We'll take a slight break from the Department of Defense but maybe hear some similar concerns, I'm guessing. Over to you.

COMMANDER HIGGINS-BLOOM: Yes, absolutely definitely some similar concerns. Before we get started, I'm just going to have to mention that the coast guard's motto is Semper Paratus which is, Always Ready, so you can pretty much guess what my answer is going to be to this question. Prior to coming to Brookings, I was the chief of the coast guard's command center for Hampton Roads which more accurately can be described as Virginia. So, from about 200 miles offshore all the way up the Chesapeake Bay. We were the all hazards response first line. So, whether it was rescuing fisherman off the Eastern Shore or delivering a tactical boarding team for an intel queued interdiction, we did all of those things, often within a 24 hour period of each. And made sure the parade of sale was safe and accessible for all the recreational boaters.

So, a pretty complex mix of missions. One of the differences is we are not part of the Department of Defense. We are part of DHS which has enabled us to use a very unique package of authorities both as a federal law enforcement agency and a military service to prosecute some of America's interest in that gray zone. Particularly, as some of our neighbors and other countries such as China and Russia attempt to change the status quo in places like the Arctic and the South China Sea. The coast guard has a unique set of capabilities and missions that we do that enable us to operate there in a less restricted manner.

I will stick to our defense readiness posture. If I tried to talk to you about all of the different missions that the coast guard does it would be a really different session. I'm happy to talk with folks about that afterwards though if they're interested. To give a sense of scale, there is about 40,000 active duty coast guard members. Budget is about $10 billion and that's after our friends on The Hill restored some of our funding after the last round of budget. Overall, I would say that our state of readiness is decent. We can accomplish the missions that we have laid out, particularly maintaining our commitments to the combatant commanders. We have about 20 ships underway at any given time supporting PayCom, SouthCom and SedCom as

well as missions in AfriCom. So, fairly globally deployed in support of either capacity building or a lot of interdiction work. In any given year, the returns on investment are pretty huge.

Our readiness challenge really does come from unpredictability and the need to recapitalize long term. The coast guard is unique because it is both a capital aspect intensive service like the navy and a people intensive service like the army. And making that case to The Hill can sometimes be challenging because it sounds like we're talking out of both sides of our mouth and really we're not. The long term issues are really where we're most concerned about readiness. We have cutters that are 50 years old. We have ships that were old when I was in Encin which was a long time ago that are still underway and are considered to be our high end assets.

The other challenge to readiness is just that the scope of the mission continues to increase without a real conversation about what the tradeoffs are going to be. If we want to be more aggressive on the maritime boundary line with Russia, where the coast guard has been for the last 30 years, that will cost you something somewhere else. Hurricane season this year was an excellent example. We were able to deploy helicopters from Alaska and Maine and Massachusetts down to Texas to rescue 12,000 people and divert cutters that were on counter narcotics patrols to respond to Puerto Rico. The downside to that was that we also had to recategorize about 10 percent of our ACNI funding. So, the capital investment money that we need to buy new cutters next year and the year after that went to this years' response. It also meant if you were in distress off Alaska, there was one less helicopter to come out and get you.

So, that is really our readiness model. There is no bench. It is something that I don't think is very clearly communicated to the public. I know we're going to talk more about solutions so I'll end here on gloom and doom. I think there is a lot of really good things we can do in the future to improve our readiness. Right now, we're able to do the mission that's in front of us but most of us have concerns about the future.

MR. O'HANLON: Thank you Kate, excellent. I think you really drove home a point that probably I should have made in my introduction but let me make it now. When we're talking about readiness, we're largely looking at unit by unit preparedness. Not really assessing whether the overall force structure is adequate to the plausible tasks at hand. Dan sort of hinted at this as well with the question, ready for what. Readiness as we have been discussing it so far is primarily a unit by unit thing. You could have good individual unit readiness but have a military that is simply too small or improperly structured for the tasks that it may wind up having to confront. I think one of the things I heard you say, Kate, when you talked about the modest size of the coast guard which, frankly, isn't much bigger than it was before 9/11.

COMMANDER HIGGINS-BLOOM: It's actually at its pre-9/11 size. We had a slight peak.

MR. O'HANLON: And we all know that we're concerned about whether the coast guard and navy have enough ice breaker assets and things like that. I don't take your assessment when you say it is decent readiness in the coast guard, you weren't necessarily commenting on whether the coast guard is big enough or large enough or broad enough in its capabilities right?

COMMADNER HIGGINS-BLOOM: Correct. My frank personal assessment, speaking for myself and the United States Coast Guard, although I think they would generally agree, is that we need more coast guard and we need more coast guard pretty much everywhere. Particularly things like the Arctic and the Pacific where we just don't have the capacity. When we work for the CoComs, the Pacific area commander routinely calls the (inaudible) of the coast guard asking for more coast guard but we don't have any more to give. One other point I'd like to associate myself very strongly with Tim's remarks, the more we do our job, the better we get at our job. Coast guard cutters are underway about 200 to 220 days a year. During the course of a patrol, you will start out qualified but not maybe as confident as

you could be. After a few interdictions and a few rescues, that skill level goes up. That is something that you cannot simulate, you can't train it in in a classroom, it is really something that we get by being out on the water and doing our job.

COLONEL HAYDEN: That point, I think, needs to be reinforced. We talk about size of force structure, regardless of service, it doesn't matter. To get bigger in any service to grow the force structure, requires leaders who are very capable and competent in training that next generation. So, the ability to get better at your job, the more you learn, the faster you learn, the faster you're getting that return on investment. So, whether we're at the right end strength right now or not could be debated ad nausea. It's really about priorities and resources. But what we have to be because we owe it to you as citizens and we owe it to the country is we have to be very, very good at our jobs with the resources that we're provided. I think that's one thing you'll see consistently across the services that regardless of funding levels, regardless of time, each one of those leaders, soldiers, sailors, airmen, marines and coast guard will do their very best to give you the absolute best return on your readiness dollar.

MR. O'HANLON: Thank you. Now, Mara, if I could go to you. Among your jobs in the Obama administration, you had to help right the 2014 quadrennial events review which was wrestling with all the tradeoffs within defense, a finite budget, finite amounts of time and energy for top policy makers and military leaders. You had to think about readiness, not only on its own terms but in this broader context with possible tradeoffs. How would you assess readiness today and compare it to other defense needs more generally.

MS. KARLIN: Thanks so much Mike, it's really a pleasure to be here especially with such terrific fellow panelists. So, when I think about readiness, I start off with three questions. Ready for what, ready for one, and what is everyone else doing? So, let me walk through those for a moment. Ready for what. Are we talking about a counter insurgency fight, are we talking about a high end conventional fight, are we talking about presence around

different regions, are we talking about an actual conflict and actual war fight. Are we talking about the Middle East or are we talking about Europe or are we talking about the Asia Pacific. Oh, by the way, there is also the western hemisphere and Africa. What do mean when we say, ready for what. What is the type of conflict we are thinking about or the type of challenge we're thinking about that we need the U.S. military to deploy and deal and with.

So, ready for when. Effectively, this is near term, long term. Is there a conflict happening tonight, is there a presence mission that's needed tonight or is this a longer term conflict that one needs to worry about. And then finally, what about everyone else. We generally do things jointly so what is everyone else bringing to this challenge and how might you think about them in a substitutive or a complimentary manner. As you're thinking about readiness, it's important to remember two key principles. The U.S. military likes to fight away games and likes to have unfair advantages. We put those two principles on ourselves. You do not see that necessarily with military's around the world.

So, the U.S. military has been at war for 16 years. And a lot has happened in those 16 years. You've had profound personnel costs, you've had real wear and tear, to put it lightly, on the materiel, and there's been an opportunity cost. When you look at the types of conflicts that the U.S. military has engaged in and compared to what the U.S. military might need to engage in, in the future.

The readiness story today is really complicated. And you cannot look at it without understanding what's happened and what we've inherited from these last 16 years. It also differs profoundly by service as folks were saying earlier. So, instead of walking through each service, I think what I would emphasize is the two areas that worry me the most, aviation and munitions. And the stories on those differ a little bit. So, aviation, marine aviation should worry you a lot right now if you have been following what's happening with the Marines over the last year or two. The air force. You know, what's interesting about the air force is that the readiness

challenge doesn't start in 2001 or 2003 the way it does for the rest of the military. It actually starts way back in the 90s. Remember operations Northern Watch and Southern Watch? So, for the air force, 9/11, '03 (inaudible) et cetera was just building on an already challenging aviation environment. And then munitions, of course. The types of munitions that we need for future conflicts are probably a little bit different for current conflicts and, oh by the way, no one ever gets excited about munitions. No one ever sees it in their interest to step forward to Congress and say, I want to advocate for more munitions. They want to advocate for end strength, they want to advocate for more ships but because munitions are a largely joint asset, they end up not being invested in to the degree we need. And you cannot surge them effectively. Why don't I wrap there, thanks.

MR. O'HANLON: Super, thanks. On aviation, just to make sure that I understood one of your points, thank you for the very excellent specificity. You mentioned the Marines, in particular, then you also talked about air force problems. Do you see them in a relatively common acuteness or do you think the Marine aviation problem is even more serious.

MS. KARLIN: It's a really good question. Part of it depends on what you want from each of those services. For the Marines, the challenge is that as they've become the first with F-35, they've invariably have had to take some risk on other parts of aviation. The Marines also have this wonderful tendency to say, we'll duct tape up the challenge and figure it out. Which, I think, you could argue is pretty unique to the Marines compared to the other services. So, for them, there was inevitably going to be a little bit of imbalance as they went to F-35 and were the first to do so. But making sure the other parts of the aviation portfolio were balanced was really important.

For the air force, it's probably a little bit more complicated. Part of it is just that you had, starting in the 90s onward, this endless use of air assets. You also, frankly, have had a whole lot of examples where the air force is using the wrong asset for the wrong fight. So, F-

22s, F-35s against ISIS, probably not. You probably would want to think about the type of platform you were using, and I understand obviously there are parochial reasons these are used, there are political reasons these are used, all sorts of discomfiting things. But at the end of the day, those are really expensive to operate. And to the extent you could have a low end platform that you're using in these types of fights, you are not only probably going to be as effective but you're also going to be in line with the resources that we need.

MR. O'HANLON: Thank you. Sandy, please feel free to comment on how you see readiness today but also I'm hoping we can now start the second phase of the conversation and invite you to begin that for us on how to make sense of all that we've heard and march forward. So, to the extent that we have challenges within the Department of Defense some of them constrained resources. Some of them, perhaps, wasteful spending on DOD infrastructure, basis installations. What kinds of reforms might allow us within a given amount of defense budget to be more focused on the training and readiness challenges because we're wasting less. So, I think you're a great person to complete the snapshot of readiness but also then launch into that policy discussion going forward please.

MR. APGAR: We'll have to pick up that headline of wasting less. That's the first time I've heard anyone formulate part of the problem in that. First because no one else has mentioned it and it has been my hatch for quite a while, the message is to you all, infrastructure matters to readiness. What do we mean by infrastructure? Defense has a different definition from the civilian world and economy. In civilian life, we think of infrastructure as sewers, roads, trains and utilities. In the Defense Department and the defense budget, infrastructure is centrally the physical environment that supports the war fighter and increasingly, the electronic systems which enable that physical environment to work. It is a very broad definition. So broad, that in budget terms, it represents somewhere between 40 and 50 percent of the entire defense budget. But if you think of it in those terms, there are many levers to pull in both policy and

operational terms.

So, three key points to take that forward. First, this physical environment accommodates people operations training but it also enables service members to perform their roles wherever it may be. In pure management terms, there are two classes of infrastructure in defense in the military which are critical to keep in mind. One is mobile that as people move around, units move, and they in effect, carry their infrastructure with them wherever they go. We have made an enormous mistake in the last 50 years, in my personal view, in treating the mobile force as if it were permanent and then applying a fixed infrastructure set of engineering and management and construction. Results to that with the result that we do have and have consistently had for at least since the 1980s, 20 to 30 percent more infrastructure then we need. You've all heard the multiple appeals of successive secretaries of defense and the Department in trying to persuade Congress to enable further BRAX. The reason it is so critical is because without those authorities, the services are very limited in tailoring their infrastructure to their needs but also to the different environments in which we now face.

We have an industrial age, industrial era infrastructure for an electronic information driven age and all that goes with those. Second point is that as eluded to earlier for other parts of this readiness picture, installations are almost always the bill payers when there isn't any other money around. It is very easy to mortgage the future in real estate in general, your own personal house and also defense infrastructure and that happens every budget cycle. Both those that I was involved in trying to negotiate and those that I witnessed before and since. That is no way to run this business. At best, infrastructure can be an annual mobile result, literally knock down buildings and put permanent tents up. But in general, these are 10 to 20 year if not 30 to 50 year investments. If you approach them on a purely annual budgeting basis, you don't recognize the long term assets, you use them as bill payers because you're mortgaging them for the future, you're bound to have too much of the wrong thing in the wrong

place at the wrong time.

That is the critical contrast between how the defense establishment at large and American and global business works. Businesses are much more effective in tailoring their infrastructure needs and they are significant as well to the realities of their business, their competition, their operations. And that actually is the segue to the third point which I think does begin to reach, Mike, to your pivot to conclusions.

That is that the private sector has much more to contribute than the current budget and policy structure allows. Now, what do I mean by that. We all know that this economy is built on private enterprise, we believe in it. Not everyone else in the world does but we do. We also believe in and understand the capabilities, the ingenuity, as well as the technical manufacturing and operational capabilities of business. When defense looks at the business community, it tends to see means of execution but it does not see the strategic conceptual redefinition of how business is done that mark the best businesses of all types and all industries. That has been boasted by career. And the contrast that I see, if not every day, frequently, is that the best managed parts of DOD and the services are those which recognize that they're in partnerships with the business community, their business partners and actually treat them as partners. Not a them and us relationship but a we relationship. That is, believe it or not, very hard to execute in the military establishment as a whole. Eisenhower did forecast this problem, we live it. So, I think I'll close there.

MR. O'HANLONG: Excellent, thank you. So, now I think what we'll do is work back towards me and ask each person to give a specific example or two of where you think that readiness problems, as you see them today, could be best addressed. So, whether it is specifically within your service, whether it is on a concrete tailored fix like Dan's previous reference to an injection of additional money or Tim's already made the point as has Kate, about how you develop expertise and readiness and then grow a force is that's needed. Whether it is

in terms of a larger force structure, whether it is in terms of more resources for flying or training or maintenance or anything else that is on your mind. In terms of personnel, trying to find ways to attract and retain more people of excellent capabilities into the service. I'd just like to invite each person to give an example or two for the most serious problems that they've identified of the most practical fixes that we might consider as a country. Starting with you, Sandy.

MR. APGAR: There is one specific follow on to, how in the army, a personnel crisis in the 70s was faced and surmounted and actually has now provided a lasting result and that is military housing. That is family housing in barracks, was in dire straits with a $16 billion budget shortfall, no apparent source of funding and poor quality results. It became a readiness issue because people were leaving because of poor housing. Believe it or not, that was the primary reason in both recruiting and retention. So, that led to congressional interest and part of my appointment was to somehow fix that problem. And the fix three years later was to essentially privatize all of army family housing and now lodging under the same legislative authority. And in doing so achieved three results. One, completely clear that $16 billion backlog of deferred maintenance. That was the mortgaging the future strategy of the day. Second, improve quality to the point where people want to enter these houses and it now represents 98 percent of the army's total family housing stock and now that reaches other types of property. The third outcome is roughly a six to one budget multiplier. For every public dollar invested there is six private dollars and that has therefore leveraged the budget considerably.

The point of this is that the lessons from that experiment now are well-known, well documented. But the Department has not accepted the potential for adapting both the principles and the practices into other types of infrastructure. It could and in the civilian economy, that is being done as we speak in almost every new infrastructure project, some form of public private partnership but it is the same principle.

MR. O'HANLON: Thank you. Mara.

MS. KARLIN: I'd offer two thoughts about what we do. Number one is the lexicon. We actually have to figure out what we're all talking about and I think that was pretty clear just in our conversation over the last 45 minutes or so. This is a squishy concept and there are very high barriers to entry. Even for those of us who spend a lot of time thinking about it. So, instead when you open up the newspaper and hear shrill commentary about readiness being apocalyptic, you really need to actually dig down about three layers. Readiness for whom, for what, what's everyone else doing. All of these really important questions which aren't necessarily in the interest of those who are probably making the argument. Because these invariably have resource implications. I suspect my fellow panelists in their list of solutions and no doubt one of those will be hey, we want more money. So, one is just the lexicon, what are we actually talking about.

The second is really forcing a conversation on opportunity costs. So, former Deputy Secretary of Defense, Bob Work, had a great comment in his speech at Johns Hopkins across the street last week. He said, Secretary Jim Mattis sat down with his leadership team across the department and said, I want all of you to think that we're going to war next week. Now, if you were a combatant commander, that's a little bit discomfiting. Because you want everything and you want it all now and that's very natural. If a conflict breaks out, in your area of operations, you want to make sure you have hedged against risks as much as possible. Makes a ton of sense. Now, the challenge, of course, for the Secretary of Defense is to sort of weigh what the opportunity costs are and then decide, is this more important or is that more important.

So, what I would really like is each week when Secretary of Defense Mattis looks at special deployment orders and thinks through, hey what should we send and where, I would really like for an important conversation to happen where he says, okay what's the opportunity cost. What can't I do. If that conflict next week happens, what does this mean and what are the

implications.

MR. O'HANLON: Thank you, excellent.

COMMANDER HIGGINS-BLOOM: I actually do have three specific things. The first is almost very tactical, kind of we're facing a bit of an existential budget threat this coming year mostly because the White House has not decided whether or not to fund the coast guard as a military service or as a civilian agency. It has created a great deal, not only of uncertainty but just real long term impact as far as our readiness. So, just simply acknowledging the coast guard as a military service in its entirety, not simply saying well, it's 20 percent military and funding it that way, sort of a camel by committee's situation. Largely because the readiness that we build at home doing our jobs is the same thing that we bring to bear overseas as part of those DOD combatant command.

A good example is I spent a year in the Persian Gulf as the captain of the ship. Our boarding team pretty much came straight from Gloucester, Massachusetts. They had been doing boarding's for three years off of New Bedford and they were by far, the best boarding team in the Persian Gulf. Because they could get on board a fishing boat and talk to fisherman about fish. They knew what they were looking for. We were able to get on and off the boats easily without falling overboard which sometimes happens when you're (inaudible). So, the whole coast guard is part of that capacity that we bring to bear at these other combatant commands. So, it's not a partial thing, it's a whole thing.

Then the second part is really breaking out of what we call the curse of Semper Paradis. We had a comodon about 15 years ago who pointed out, it sounds like the Marines have the same problem, where that can do attitude really gets you in trouble. Where we continue to accept mission creep and risk without really communicating it to the public. About 15 years ago, the coast guard essentially tied up all of its counter narcotics missions and left the boats at the pier for three months because we had run out of money. I find it hard to believe

that we would ever do that again. But that is sort of the level of risk that we're taking on right now and it is not really being communicated.

And to do that, I think the coast guard really needs to try to get some consolidated oversight over sight from Congress. Because we are military and law enforcement and regulatory and part of the intel community, we have something like 15 different committees in Congress that own a piece of the coast guard. And this is a DHS problem at large as well but as a result, we are a joint problem. Mara had mentioned munitions. If something is joint, everybody appreciates the benefits but they are very hesitant to really make that the issue that they're going to go to bat for. So, the coast guard needs somebody to go to bat for it whether it's on The Hill or even inside the executive branch sometimes. So, that's what we need to do.

MR. O'HANLON: Thank you. Tim.

COLONEL HAYDEN: First, Mara, I agree completely, words do matter. We need to have a common definition. This is a very difficult field to define a common definition for every user. I think you need to remember that we've been a service at war for 16 years, an all-volunteer force, who routinely responds to global humanitarian crises across the globe. All services suffer from what Kate just described as a bias for action. We don't know how to say no very well and sometimes I don't know that it's our job to say no. I think we have to lay out risk, resources and priorities and just make sure that we're articulating back. I think we're doing that. I think we've got that capability.

You've heard General Mills testimony. He clearly recognizes the challenge in front of the army specifically as a service to build readiness and to sustain readiness for a commitment as the national command authority sees fit. We saw the reversal and this is the first solution. We saw a reversal in force reductions bringing us back to 476 this past year to allow us to man the force to the appropriate manning levels. And then we'll have to see what the future holds based upon priorities established in the defense planning guidance and the

national military strategy. Do we have the force structure designed to meet future demands. If we don't then a decision must be made. Once an informed decision is made based upon risk then we execute.

I think one of the benefits of growing the force, it allows the recovery periods between our workouts allows us to not burn out the force as fast. So, we have a little bit more flexibility in how we apply military forces. I think we need to use our forces for their intended purpose. You've seen that in the army's new effort as we grow our security forces systems brigades to free up the coin of the realm for the United States Army, that's the brigade combat team. To send a brigade combat team part and parcel to accomplish a mission that the new Sfabs could achieve kind of cuts both ways. So, we lose the capability of a brigade combat team and we also erode readiness. I think we've reversed that. I think we have a good plan in the future.

That structure also allows us to grow the force in a faster fashion should the future environment require that. I think ultimately, and I know this is a very popular topic, it fills the hallways routinely Monday through Friday here is, the continuing resolutions have to stop. They have to stop because we have to be able to make the long bet. We've got to be able to invest in future modernization and strategy and not bankroll the army. As I was thinking of a metaphor today, there are people that will fill up their gas tank $5 at a time. They know they can get to the next gas station and there are people that can fill up the entire tank and they know they can go quite a bit of distance. So, we can make a long bet on the future of our army as we modernize, as we look to program dollars over multiple fiscal years when we have a budget that is passed without continuing resolutions. I think that is critical. It will restore confidence all the way from the youngest wrench turner on a tank who doesn't know if he should work his best because somebody is not going to be there. He is going because he is intrinsically motivated to do his best but he wants to know that somebody is going to be there when he orders the part.

All the way up to our long term contracts that we have to let so we can modernize and we can grow the army to the appropriate size.

MR. O'HANLON: Excellent, thank you. Dan.

COMMANDER KEELER: Thanks Tim, you stole my thunder. I cannot overestimate how bad CR's are. It just pumps inefficiency into an already inefficient system. So, if you want to eliminate waste, just please pass a budget on time. It makes everything harder. That was Testino's testimony a couple of months ago. BCA is terrible in the sense that it took money away from us. Everyone on this panel would say, we want more money. But I'll take whatever level you're going to give me if you just tell me when and then you keep your promise.

Currently, my peers that are working across the river in the Pentagon are trying to figure out or guess how much money we're going to have on December 9th. There is no, I'm pessimistic after watching Congress for the last decade, that they will do what they say the will and pass a budget on time to replace the CR on December 8th. That means we're back to guessing. That means no new contracts. So, army and navy a little bit different. navy relies a lot on stuff. That means things in the shipyards. That means shipyard workers are going to go on furlough. They're not going to be able to start new contracts. Maintenance availabilities are going to go over and that is going to cost more and we're going to lose dollars because Congress can't pass a budget on time.

So, how would I fix our problem, the navy's problem? Pass budgets on time. Just do what the Constitution says you're supposed to do. Then let us be efficient and we'll get things done. In recent testimony there was some ridiculous number of ship availabilities have gone over budget. Part of that, you can point fingers back to the service but a lot of it is just we've had eight straight years of CR's and they've had to interrupt work and stop and that's very wasteful. It costs my service peers days of training when a ship doesn't come out of an availability on time, so CR's.

BCA hurts. Giving us less money also hurts. We do need to repair the 277 ships that we have before you buy me 70 more and get me to 350. I would really just like to get to 277 good ones that are fully manned, trained and equipped and ready to go. That would be nice. And then to get to Mara's point, ready for what. How about we just release our national security strategy, that would be nice. So, what do you want your navy to do? Do you want us to do forward presence, okay then we'll build a navy to do that and we'll deploy it in that way. Do you want us to do forward presence and be ready for a major conflict, okay we'll do that. So, right now we're kind of in this uncertain place where we have a national military strategy signed by General Dempsey, a national security strategy from the last administration and then a lot of talk where you have folks that want to maintain the strategic guidance that really we've been running since World War II. Hey, we're the champions of democracy, we're out there to ensure that that message is being carried across or are we going to retrench which you hear the other side discuss. I don't know which one is right.

I can tell you, Congress is voting with their pen or lack thereof, they want us to retrench based on how they're not passing budgets. It is a default answer. That's how I would fix it. If you want me to build a bench, if you want pilots to fly more than 10 to 12 hours a month when they're not getting ready to deploy, we need predictable funding streams. The first thing to go is infrastructure and the bench. That's the first thing my bosses are going to cut if we're going to have to deploy like we've been deploying then the bench is going to get cut, infrastructure is going to get cut and then it is just going to be harder to build those units back up when it's their turn.

MR. O'HANLON: Thank you, Dan. Let's please include some of your thoughts and questions now. Please wait for a microphone. We'll take two or three at a time. We'll begin with the woman in the green dress and also Harlan on the first round and then we'll see where we stand.

MS. LUCAS: Thank you very much. I wanted to add a little bit to the conversation and that is when we're talking readiness we cannot overlook the role of the Guard and Reserve. What's happened is, we have increased the role of the Guard and Reserve to work with what is missing out of active duty. Part of what we're seeing right now is there is a lot of drain of experience going on in active duty because we have been on such a constant road of surge. I mean, surge now is our normal routine.

MR. O'HANLON: Could you identify yourself.

MS. LUCAS: Sure, I'm sorry. Susan Lucas, Reserve Officer Association. So, we can't overlook that role and the unfunded requirements which is growing and you've talked about that. But particularly with the CR, I want to make a point and then ask a question. So, the CR, we don't want a CR, we want the budget but the CR is staying. And whether we get the CR or the budget, we can't overlook that apportionment is a critical part of it. Because now we have a CR that has taken us through the end of December which is the end of the first quarter. If we're lucky, we get a budget then. Guess what, the services and everybody doesn't get their money right away. It has to portion from Treasury to the agencies, DOD gets it, then they apportion it to the services. The Pentagon gets it then they sit on it a while, apportion it to the commands, they sit on it a while and portion it to the units.

So, the point is, is that even with the CR passing in December, there is a good chance that the money won't actually get to the units until the end of the second quarter. So, then what happens is, the money isn't spent and then Congress takes it back. So, my question is, if we look at things continuing the way they are, as a reform and answer, if we go to a biennial budget and I realize that it will never be across the board because of power issues. But if we go to a biennial perspective, what account out of the budget for DOD do you think would best serve the biennial funding from O and N, RDTNE. From the panel where would we place our money if we were able to go biennial, in other words.

MR. O'HANLON: Thank you. Harlon.

MR. ULMAN: I'm Harlon Ulman. I'd like to thank the panel. An observation and a question for Commander Keeler and one for Colonel Hayden. It seems to me the two largest threats facing the Department of Defense today are first, uncontrolled, internal, real cost growth about 5 to 7 percent a year which is beyond the Department's ability. This goes to everything from people to pencils to precision systems. Unless we spend an additional $30 to 40 to 50 billion a year, we can't even stay even.

Second, you discussed a budgetary regulatory political process that had to be invented by the KGB because it is so onerous and destructive that I marvel that the Department of Defense really functions as well as it does. I don't see any chance right now of that changing baring a crisis. So, I think the situation is going to get worse. Having said that, for Commander Keeler, I speak as a former swift boat and destroyer skipper. Having read the Davidson report, to say that I was astounded is an understatement. The incompetence and lack of professionalism was extreme. And having to go down to Norfolk to various retirements and changes of command, my sense on the waterfront is that may be much more widespread than we think. I just wanted to know how bad the situation may well be in the navy. That may not be yours to answer but I would be interested.

For Colonel Hayden, I know what your answer is going to be but I'm sure with your team, you've envisioned how you might have to take on the equivalent Russian brigade maneuver group who out gun you, out range you, probably have better EW then you have EMP weapons that we don't have, so forth and so on. How do you get ready for that?

MR. O'HANLON: Okay, why don’t we just work down the row starting with Dan? We'll see where the biennial question is addressed along the way.

MR. KEELER: Right. So, on the biennial issue, obviously I would agree, well above my pay grade to fix. In the navy, the Reserve issue is a little less apparent, it is more of

an army air guard. Obviously, in the navy, we augment with Reserve but we don't have full Reserve units with the exception of a couple of squadrons. I would agree, the more we lean on them, the more they get used up and it is another readiness issue.

On your comment on the surface navy, so a lot of helicopter pilots actually end up spending a tour in ships company. I have an OD letter. I've been a ship driver for two years. The concerns that were raised in that report are frustrating to people like me who cross over and work with the surface navy. Because we've been pointing these things out and the surface navy has very good examples in the line in aviation and in submarines about how to grow officers in a very specific and tailored way to ensure you get professionalism very early. You get your wings, you're the best commercial pilot you're ever going to be. You study so hard for two years. We've been asking the service navy to consider that for a long time. So, unfortunately not a surprise and I would agree with you that there are some issues. If you read the same articles I do you've heard this efficiency over effectiveness.

So, we became very budget conscious as a navy from 2001 through about 2010. (Inaudible) the CD Rom training, way too much over alliance in on the job training. And that's just part of the surface navy's culture. Different culture in aviation so I didn't agree with it. I think you'll see that change now. So, that's very clear in Admiral Davidson's report that they're going in that direction. Yes, I think you have a generation of (inaudible) officers who did not get the training that I think the public thinks is happening and it was a budgetary efficiency decision. Now we're going to say, oh they started correcting it in 2010. They got rid of the CD ROMS, they brought back the classroom stuff but I think you'll see it grow. I share your concerns.

MR. O'HANLON: Tim.

COMMANDER HAYDEN: So, no easy questions today. I agree, the uncontrolled costs and there is nothing I can do about it. The technological challenges that we see in peer competitors, it's not the first time we've been here. Maybe in the technological but in

the volume. So, under the army that I watched growing up as a kid in Europe, the old air land battle, fight outnumbered and win. So, the reason why we had our big five systems developed was to fight outnumbered and win. The M1A1 tank at the time, or M1 tank would be able to absorb frontal haul shots and defeat a superior, not necessarily technology but number of Russian tanks in the (inaudible).

So, I think what we do is start by, we've been here before, number one. We were able to achieve the readiness and the training proficiency that we have and the confidence that we can do our mission. Second, we've got to study history. There is not an armor officer, there's not a mechanized leader or a light infantryman that is not studying what's going on in the Ukraine right now. We're studying this intimately. We've transitioned from airline battle as the old way that we would fight, outnumber to win, to the army operating concept win in a complex world that allows us to redefine the fight and now we're embracing multi demand battle. Bringing all of our systems to bear. There is a lot of technology that has to work, you mentioned DNP. If a light switch goes off and everything doesn't work, at the end of the day what I can control is that my infantrymen, my tankers or my sustainers, they're masters of their craft. So, we know how to disperse, we know how to execute good mission type orders. We're far more lethal and we are more honed in our tradecraft because we've practiced it more.

So, effectively, we've got to be faster, we've got to be leaner, we've got to me more lethal in everything we do to achieve that position of relative advantage. And then appreciate the fact, and this is one of the components of the armor operating concept is that that position of advantage is only relative for a very short period of time. If we sit on our laurels and we don't recognize the shifts, then we're going to be caught short. But if we can continue to watch and learn and adapt, then I think we've got what we need to accomplish what you just described. There is a technology solution to it but it's not the only solution and there is no silver bullet.

MR. O'HANLON: Does anybody at the end of the panel want to take the biennial question or should we just move on to the next round?

MS. KARLIN: Sure, I'll offer quick comments on both. First of all, on your points on the Guard and Reserve, General Millie gets real credit, I think, because he consistently says total force. Today's U.S. Army is bigger than one million soldiers. And that is a comment you hear from him time and time again and that is really important. The air force has done very well in terms of integration. As you no doubt know, army, I think, is making important steps.

On the biennial, I love the idea as a wonk, it's just never going to happen. I don't see any evidence why Congress would actually ever permit it which is so unfortunate. It gets at the issue that I think Dan was making a few minutes ago. Almost any of us in the defense world would take a smaller budget on time. That's nice in theory, it's also not what we're being handed.

And finally, just on the Russia piece, Tim is spot on. We are spending a ton of time focused on it. I used to joke that I would know we were doing better when people didn't accidently say Soviet each week then Russian. I think we are starting to make some important progress on that. It's important to note that the U.S. defense world has spent time thinking about what a potential conflict with China would look like and there is actually more complementarity to a Russia fight than not. So, we have a lot to think about but we're not as far behind as one might assume.

MR. O'HANLON: Before we go to the next round in the room, I wanted to give our Marine aviator in the audience a chance to quickly respond on the state of Marine aviation. He's another one of our military fellows. We're saving him for a future event on stage but I think he may have an important voice to add here. So, Sniper, over to you. His nickname is Sniper but he's actually a helicopter pilot.

SPEAKER: To your point about Marine aviation, General Rudder just spoke on

The Hill on Thursday. Marine aviation has had its challenges over the last couple of years. However, we're also going through a massive transition as you know. We're moving all of our airframes to a new airframe. Part of the challenge we had especially with the B-22 is a very popular airframe but brought it into to service, immediately deployed with it. Talk about the 53 echo, workhorse of the Marine Corps. Trying to reset that again. There is a perception that although we're no longer an OIF or OEF, our op tempo has not slowed down, especially in Marine aviation. So, we continue to have guys come home and Tim kind of talked about deployment time to dwell time. We're at a 1 to 2.6 which means as opposed to being 6 months deployed 12 months home, now we're 15 months home which is a little bit better but the same challenges persist.

I think coming out of General Rudder's comments, things are getting better but it is going to take massive amounts of time. As everyone has already stated it is going to take a predictable, on time budget and then to your point about infrastructure, the comodon has made the same statement that he looks at infrastructure has a strategic platform for projection of power. I think we're trying to get our hands around that with respect to have the correct size of infrastructure support the force. We are in the process but it does in the process of improving and getting better, to meet today's challenges and to look at tomorrow's challenges. All of that is going to take time and money, predictable money. I'll stop there.

MR. O'HANLON: Thank you. I'm also going to ask Ivory, he's our air force fellow, may want to speak very briefly about his services readiness since that has also been a topic of discussion today.

SPEAKER: Thanks Mike. I'm a cyber guy in the air force so I've been in the air force for about 27 years. To your readiness point about how the air force sees it, readiness is something that we've been dealing with for years and years. We've got a pilot shortage and we're continuing to battle that. We're doing various things to try to bring retired pilots back to

the air force to kind of deal with that readiness issue that we have so that's a huge problem for us today.

To your point about the total force, the air force, Secretary Wilson and General Goldfein are totally dialed in on the total force. So, that total piece is a key cog for the air force to do what we do going forward. We have recognized that the active force cannot be as effective as we used to be in the past. We have got to include our Guard and Reserve friends so we've been able to that very successfully at the squadron group and the wing level at all of our bases and our strategy definitely includes it. None of our strategy is written such that the active force can do the job, we have to include the total force. That is a huge part of what the air force does. Readiness is something we have been dealing with for a very long time. What is starting to manifest now is something that the air force has known for a while. Readiness is getting better but it will take a whole lot longer, I think, for the air force to get there then I think some of the other services. Thank you.

MR. O'HANLON: Thank you. Okay, to you all, other questions.

SPEAKER: My name is (inaudible) I'm with the congressional budget office. The question I have I think relates to the budget but let me start by saying that assuming we are talking about near term readiness of the units to do what their mission is. I know the army, you are doing the sustained readiness model now and before you used to do the ARFORGEN model. With the navy, you guys have your deployment system. From the point of view of the public, those units have a identified mission that they are set up for and that they are trained for. If you look at the budget of the DOD, for the last several years, the base budget total has been going up and also the training budget hasn't really declined. So, it is difficult for a general public person to understand why there are claims of readiness problems given the fact that your training budget hasn't gone down. Maybe it's a definitional issue as well but the specific question I have for you is that are other things, namely maybe an implementation issue with the

services, that makes near term unit readiness difficult to achieve. Thank you.

MR. BEAR: Hi, my name is John Bear. I'm conducting research here in Washington concerning Russian grand strategy and potentially United States responses to that grand strategy. I have a question really for all of the panelists regarding civilian military relations. Particularly, I really appreciated your comments regarding the public and private sectors and the relations with the military. It seems to me that it is extremely difficult to really make these issues resonate with the public and particularly with our leaders in such a way that we can overcome these political issues and partisan problems with regards to funding our military properly and making sure that our readiness is no longer a monetary issue. I just would like it if any of the panelists could offer their thoughts regarding what we can do to break down these political barriers and really just make this a universal non-issue.

MR. O'HANLON: And there was one final question and then we'll wrap up here on stage.

MS. ROKE: My name is Ashley Roke and I'm with Shephard Media. Just a quick question about your thoughts on the army's new modernization command. How that could possibly help moving forward and if the other services could glean lessons for that if it comes to fruition.

MR. O'HANLON: Great. Okay, so we're just going to work our way down the row. I'm just going to offer one very brief point to my CBO brethren because I used to work there too. When I was there, one of our colleagues wrote this amazing study. It didn't have a particularly glitzy or glamorous title but it is still one of my favorite defense publications of all time. I think it was called, Measuring Military Readiness, Trends in Selected Indicators 1980 to 1994. You can actually Google this. It was written recently enough that it made it onto the web.

When she wrote it, the reason she stopped in 1994, I believe, and the reason there has been no sequel of quite the same level of detail is because a lot of the information has

subsequently been classified which I consider unnecessary classification in almost all instances. There may be occasional moments when there is some crucial system that you have a particular short fall of or particular maintenance breakdown about and you just don't want the enemy to know. But in general, this information is much more usefully seen as grist for a broader debate about readiness and where to make specific fixes and where things actually aren't so bad. And therefore, this kind of data at sort of the unit by unit and also the category of equipment by category level, I think, should be declassified.

When the services just come out and say, oh this unit is broken or we only have 3 out of 58 brigades that are ready and they sort of cherry pick data, they fall into the trap that Columbia Professor Richard Betts warned about in his book on military readiness when he had chapter 6, I think, the title is, Lies, Damned Lies and Readiness Statistics. It is just too easy to play games political and otherwise with this kind of information unless we have it all out there.

Also, one last thing in my little tirade and then I'll be done for the day. C ratings are almost useless. C rating is the comprehensive subjective commander's indicator of what he thinks his unit is, 1, 2, 3 or 4. There is so much subjectivity and lack of transparency into how those indicators are constructed that it raises more questions than it answers ultimately for me. Thank you for your patience on that and now we'll work our way down the row.

COMMANDER KEELER: We don't make them up but we are allowed to provide input at the end. So, there are some very numbers based data and then we can make our commander's assessment. The CVO question, thank you sir. I've been reading your reports for two months or your offices along with JO and they are really a public treasure so thank you to you and your peers for everything that you do. The question about how can the training line stay the same and then we come back and say well, we're not getting our same bang for our buck. Some of it goes to what the gentleman up here talked about where our cost for everything, I'm still not exactly sure why but they're growing faster than the pace of inflation. So,

my dollar in defense does not buy the same dollar that you have out in the public sector. That is one problem.

The second problem is we've been playing this shell game that I kind of described before. We've been robbing from maintenance to pay for operations and training. What happens is, October of this year, only half of the total inventory of the 542 strike fighters or Super Hornets, were fully mission capable, that means they could fly. So, you only have half of your Super Hornets that can fly. Most of those Super Hornets are going to deployed units. We're robbing them from the training squadrons and the at home units to deploy them. That means the unit at home only has one or two jets to train with. They can't even execute their training budget because they don't have anything to train with. That's been going on for a while. So, when you steel spare parts and mechanics and you cannibalize your bench to deploy them, your bench can't train anymore. Not because they don't want to or they don't have the money to in some cases, but they don't have the assets. They don't have the mechanics.

On Friday at the (inaudible) testified and this is new, this wasn't happening even when I was there. We have strike fighter squadrons in Lamour that are only operating one maintenance shift. Normally there are two maintenance shifts. You can run maintenance for about 18 to 20 hours in a day. Lamour has stolen so many mechanics from their non-deployed units to deploy that they can't do that anymore. As a former CO of a squadron, that would ground you to a halt like that. You couldn't do the phase maintenance on your fighters, you just couldn't do it. You would not be able to execute your training budget even if you wanted to. So, that's a big problem and aviation wise, that's probably why you'll see -- I was asking for more money. It's not for the training, it's to feed the maintenance shell game that we've been playing for eight years.

MR. O'HANLON: Thank you. Tim, for whichever question specifically to you.

COMMANDER HAYDEN: I'd like to quickly touch both questions. Sir, your

question is exceptional. How do we communicate to our constituents on why we have a budget but then we continue to ask for more? If you train a brigade combat team to do its war fighting mission, its five directed mission essential tasks and then you take that brigade combat team and you send it somewhere else where it only touches some of them or does not get the opportunity to continue to hone those skills. There is a cost imposed because as you bring those soldiers back, they really have to, in some regards, relearn. As a young officer, our non-commissioned officers would routinely have 20 to 30 gunneries under their belt. That is about twice a year, three times a year. Now in some of the formations as far back as three or four years ago, some of our mid-grade leaders would just have a handful. In my particular case where, as a battalion commander, brigade commander, when I had more gunneries then our seasoned non-commissioned officers who stayed in the trenches their entire career, there was a mismatch.

We've reversed a good bit of that. We've corrected a lot of our training resource models to allow us to forecast that. The opportunity to go and continue to hone our skills while deployed in the armor community and the (inaudible) community particular sense is incredible. I'm optimistic, I think we'll kind of see a narrowing of that gap and that will allow us to accurately communicate the narrative. But I think we all owe it to be able to answer that question. It easier to maintain a level of readiness even if it's some number less than 100 if we want to use 100 as a top scale, then to do a cycle of violence to go up and down. It actually takes more resources to get back to an acceptable level of readiness. Thank you for your question.

The Modernization Command. I think it's brilliant. I think the fact that you put command, and words matter, you hold someone accountable for making sure we've got a leader who is touching the problem, who is looking and who is asking the hard questions, is absolutely critical. I know that one of the army's top four, at least two of them are touching that problem daily. They are personally shepherding this modernization command that is coming up.

They've got the portfolios, the six portfolios where they're doing a one end analysis so we can correctly frame the problem. Now, what the army has to do is we have to make sure that we tell our narrative correctly. You can listen to any testimony and the first thing that will come out is, well we've got future combat system, we've got the command chief.

So, we have not necessarily covered ourselves in glory in the past decades on army acquisition. But I think we've addressed it. I think, from my perspective, having listened to it communicated to me, it makes perfect sense. I think what we'll see is our ability to clearly articulate our emerging requirements back to the defense industry, back to Congress and more importantly, this is partnership with Congress. I know the army leadership has gone to Congress early on this. There are going to be no surprises here because nobody likes surprises on The Hill. So, there is support for this process as we move forward. They have assigned the right senior leaders to own these portfolios and they owe feedback to the Chief of Staff of the army just after the New Year on where are we at and how we should continue to move forward.

Again, to summarize, clearly articulate our requirements, hold a commander responsible for those requirements and then communicate early and often and don't allow ourselves to go too far down the road of something we may or may not need in the future.

MR. O'HANLON: Thank you. Kate.

COMMANDER HIGGINS-BLOOM: All excellent questions but I'm going to stick with a little bit of the training and then mostly civ mill which is where the coast guard lives, to be honest with you. As far as training goes, coast guard has a very different training model. I can say that the CR piece, which I know Dan has really written about at length, is a big thing. It's not just how much it's when. So, if you don't have that money at the beginning of the year, what happens is people who need the training don't get it because training money will essentially be slashed until we know how much we have. At the end of the year, suddenly people are going to maybe high end tactical classes that they don't really need but they might need later and you

miss out on some of the basics. That is just yet another impact of the CR.

Civ mill, is something that the coast guard really has baked into its DNA. A lot of national security professionals have talked about economic readiness and economic strength as the bedrock for our Defense Department and our national security enterprise. So, the coast guard partners very closely with our international partners. Things like shipping companies like Maersk, the port operators of Virginia, international ports. We have folks who are attached to embassy's in China, places where there really aren't even any other DOD personnel who are actively engaged with the civilian commercial enterprise. Supporting $4 trillion a year in economic activity in the United States that is driven through these ports and keeping that safe and secure so it can fund this really impressive national security enterprise. But also as a source of information and partnership.

The other place where we really do engage are international forums. So, the coast guard is American's representative at the IMO, the International Maritime Organization, as well as engaging with things like the Arctic Council, the Pacific Coast Guard Council, which is really a working level way for us to engage with the Chinese Coast Guard, the Chinese navy, the Russian maritime forces. We're not naïve about it, we don't think we're going to best friends but it is an outlet that gives us an opportunity to engage. And then the entire western hemisphere is a place where we engage very heavily with civilian governments to try to produce stability and rule of law to try and decrease the flow coming towards the United States. As far as we're concerned, the border is about 1500 miles away. That's where we try to start.

MR. O'HANLON: Thank you. Mara.

MS. KARLIN: I'll take the last two questions in opposite order. So, army Modernization Command, I am so curious to see what happens with this. The big question will be, does it affect the money. If it does, Army Modernization Command will have succeeded. If it doesn't it will have been just a show. I think there are opportunity costs and a very superficial

way of thinking about it is balancing among capability, capacity and readiness. That is flawed and imperfect but it is what it is. The army's capacity probably would need to go down a little bit for there to be more serious investment in capability and in modernization. I think there's a lot of us who would really like to see that. So, let's see what happens. Let's see what happens with the next budget submission. If we see a real focus, an army leadership that is ready to seriously consider what those future conflicts look like by modernizing the force which it really needs after the last 15 years in all sorts of ways, hey that's terrific. I think there will be a lot of advocates there.

On the civil mill question, if you haven't read it you need to read, *Warriors and Citizens*, the Corey Shockey Secretary of Defense Jim Mattis book about this gap between the American public and the U.S. military. We've never had so few people serving for so long with so little attention and effectively disinterest at home. Until we find a way in America to start having that conversation, again I think all of our comments, all of our screeching on The Hill saying, we need more money and here's why et cetera, I think it will all be for not.

MR. O'HANLON: And Sandy.

MR. APGAR: Thank you and thank you for being here and your attention. There are three specific changes that affect the way in which both the budget and, I think, the institution enterprise run that would make a profound difference, all of which have been implemented in the private sector in the last 30 years. First, that every investment in a infrastructure installation facility be measured on a life cycle basis not an annual or simply construction basis. We don’t do that and when you do do it and it is best practice in the private sector, when it's done, it changes the decision more often than not because it proves how much worse there is going to be in that commitment.

Second, for every cost there is a value. We, that is institutionally, don't reveal those values. CBO doesn't do it, GAO doesn't do it, the Department doesn't do it. When it is

done and people begin to understand both on The Hill and generally, that this is a trillion and a half dollar portfolio. That is the infrastructure part of defense and it may be twice that, we simply don't know. That covers about 60 percent of the assets that have been counted. When market value is introduced to a cost equation then that at least sheds light on whether the cost is worth it or not. It provokes a debate which is now rarely had.

Finally, the word requirement in terms of lexicon, to me, is one of the most dangerous words in the entire vocabulary. Because by its nature and by definition, it implies just that. We require you, the contract with the private sector or anyone else, to meet our definition of the problem and the need. As opposed to the market economy which never starts with requirements, always starts with needs and definitions of needs, measures of needs and then works back to what is required to meet those needs. It is not simply a semantic difference in my view, it is a profound philosophical difference. So, change three words and we may change the institution.

MR. O'HANLON: Fantastic. Well, thank you all for being here and please join me in thanking the panelists.

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