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STRENGTHENING AIR AND SPACE POWER:

A CONVERSATION WITH UNDERSECRETARY OF THE AIR FORCE MELISSA DALTON

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UNCORRECTED TRANSCRIPT

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O'HANLON: Good afternoon, everyone. Welcome to Brookings. I'm Mike O'Hanlon with the Foreign Policy program. It's really nice to see you here on a hot late July summer day when a lot of people are headed to the beach. But you want to talk Air Force. And so do we. I'm thrilled to have my good friend Melissa Dalton here, the undersecretary of the Air Force. She's had a distinguished career already in Washington and elsewhere. I was reviewing her biography and had I'd forgotten and was reminded that she spent a year in Syria in 2006 teaching English. So that was part of her broader exposure and experience with the Middle East, where she began her career working at the Defense Intelligence Agency on Middle Eastern issues. Since that time, she's also become a civil servant in the government. At one stage of her career, worked for both the Bush and Obama administrations in that role with various kinds of jobs at the Pentagon, including assistant to the undersecretary of defense for policy. She has now had several important jobs in the Biden administration, including the assistant secretary of defense for homeland security and Western Hemispheric affairs. And now, in the last few months of President Biden's term in office has taken on the very important job of undersecretary of the Air Force. So why don't we just take a moment and celebrate where we are in this debate and thank Secretary Dalton for joining us here at Brookings. And I wanted to ask you if I could just to tell us your first impressions. Obviously, you've been around the Air Force a long time, and you've been working in the Biden Pentagon throughout. But this is now since Memorial Day or so, the first time you've been working directly for the Department of the Air Force, which, as you well know, includes both the Air Force and the Space Force, both within the Department of the Air Force, the same way the Marines and the Navy are both in the Department of the Navy. But what are your first impressions on the job?

DALTON: Well, first of all, Mike, thank you so much for the kind of hospitality and invitation to join you here at Brookings. I've had a long appreciation for the contributions this institution makes to the foreign policy and national security debate and certainly your your scholarship. So it's an honor to be able to to join you all here today and be up on stage with with Mike. I have been struck, by the sense of urgency that the Department of the Air Force is moving out on addressing the People's Republic of China pacing challenge, which, of course, is called for in, the National Defense Strategy, which came out in 2022. And overall, the Department of Defense has has been quite focused on the last couple of years. But from an organized train and equip perspective, it really is remarkable how much progress has been made, in the last couple of years to really drive those changes through both the Air Force and the Space Force, although still considerable work to, to come. You all have may have heard, Secretary Kendall and the two chiefs talk about re optimizing for great power competition and, the Air Force and of course, the Space Force ones being a part of, of the Air Force until about five years ago, for a long time had been, roughly 30 years focused on efficiencies, focused on

how to support enabling operations in, in places like the Middle East and Afghanistan for our counterterrorism and counterinsurgency campaigns. Now we're quite focused on aligning our organizational structures, our policies, our management approaches, our patterns of behavior for effectiveness to ensure that we're ready to meet the PRC pacing challenge. The Department of the Air Force has also charted out seven operational imperatives to ensure that, from a technical standpoint, we're ready to meet the moment and ensure we have the right capabilities that we're investing in for both the Air Force and the Space Force. And really looking forward to, delving into some of that with you here today.

O'HANLON: Good for sure. So we'll talk Space Force and satellites, definitely nuclear modernization, definitely basing in the Pacific with, General Brown's concept of agile combat, employment that he, you know, proposed and pushed as chief of the Air Force before becoming chairman. And then all the conventional technologies that you're modernizing for precision strike in the region. So but let's begin also, if we could with people and I know that's a concern of yours as well in this job. And you've got about 500,000 active duty airmen and women within the National Guard, active and in reserve. You've got about another 10,000 in the far smaller but still important Space Force. How would you describe the state of readiness, the state at the state of morale, recruiting, retention, just the people side of things before we get into the hardware?

DALTON: Absolutely. So, we have to get, the taking care of people quotient. Right. In order to be able to meet any of our operational objectives. That really is job number one, to ensure that our airmen and our guardians have the capabilities, the equipment, the training that they need to be able to meet the PRC pacing challenge. What I can tell you is that, when I've had an opportunity to get out, to, to the field, to meet with some of our airmen and guardians, even just in the last couple of months and have been struck by, again, that that sense of urgency in terms of this moment that we are in, that the PRC pacing challenges is a today problem, not not a future problem. And real time, I think our airmen and guardians are thinking about how do they need to reorient the way that they are operating day to day? How are they training? How do they use the equipment that they have today? Even as we are modernizing, to be able to be ready, whether it's in 2027 or 2035. There are also very specific initiatives that we have underway, under our great power competition re optimization efforts to develop our people. We're standing up, for example, an Airman Development command. We have re initiated the warrant officers, line, technical track, in the Air Force, particularly for cyber in it. And we are also building out specific career paths, for our guardians as well. In, in certain technical areas. So I would say, you know, there is a sense that, we need to be driving forward, that

we need to deliver, modernized capabilities to our airmen and guardians. But that mindset shift is already occurring and taking hold.

O'HANLON: So these different areas of modernization and, you know, emphasis on China and the Indo-Pacific that you've been working on in your previous jobs, but certainly in this one, is there one area where you would say progress has been most impressive and any area where you would say without necessarily casting blame, that just technology and other factors mean that we still have the biggest job ahead of us.

DALTON: Yeah, I mean, I would say it's it's a bit of a mixed picture. While there are clear imperatives to be able to, to drive forward. Right now we're, we're facing, some pretty significant resourcing, challenges that, that we can also get into. But but to answer your question, I think, some of the most promising steps forward that we've been taking, albeit still a lot of progress to be made, is in the space domain. And to enable our space Force to have the capabilities that, that they need. Really the value of a separate service. The Space Force being created, five, five years ago. Previously we had been focused on, on functions in space, like, our, our GPS constellations performing well. And we've made a shift to focus on missions, actually, for both, Space Force and Air Force and for the Space Force focused on space superiority. Working with allies and partners, working with industry partners. How do we ensure that, for all of us, given our dependencies on space, those of you that have mobile devices in your hand. When you think about day to day driving in your car and using your navigation systems, agriculture or commercial endeavors, transportation, human exploration, we have so many dependencies and opportunities in space. But at the same time, space is increasingly congested and contested. And so some of the, really, I think important contributions that the Space Force is making right now to ensure, that, space can continue to be a free and open global commons is by ensuring that the United States, working with its allies and partners and industry partners, can maintain, space superiority or superiority in the face of an increasingly contested domain. So how are we doing that? One example is, through the Space Development Agency. The development of a proliferated warfighter space architecture, whereby, in the next couple of years, we're looking to launch hundreds of satellites up in, into Leo, to build a resilient constellation of, of satellites. We have a number of demonstrations underway to that end. And we'll have more in, in the next couple of years. And why are we doing this? It's to help, remove the prospect of a first mover advantage in space. When you see, with the PRC and the Russians are doing in terms of developing their counter space capabilities. It's really quite provocative and destabilizing, potentially given all the dependencies that we have in space. And so in, in leaning into more of a proliferated model, of hundreds of satellites, not just a few exquisite ones, we take

away that first mover advantage and we build out the resiliency of our interconnectedness in, in space. And this is really a way, you know, back to the mention of the National Defense Strategy of us realizing the objectives of integrated deterrence. Through that measure of resilience.

O'HANLON: So in addition to trying to make satellite fleets more resilient, more duplicative and redundant, are we also trying to plan for a possible combat environment in which the satellites are not available to us, where maybe there have been nuclear detonations in space? To take an extreme example, and a lot of the satellites have been destroyed, even though we tried very hard to create a more dispersed target set. Are we trying to build air breathing linkages such that we could sustain forces and operations in the Western Pacific, even without satellites?

DALTON: Yeah, absolutely. Mike. You know, some of the, discussions we have underway right now, for example, on the, on the E7, I think demonstrate the commitment that we have to a mix of both air and space capabilities to ensure that we have, domain awareness and are able to operate through, through disruption in some of these scenarios that that you are painting. But but there is a lot of promise in, in space and in, in leaning into as I was describing that proliferated approach, it just makes it that much harder for the likes of the PRC or Russia to be able to take out everything, because there are so many.

O'HANLON: So I want to come back to Indo-Pacific matters in a little bit and talk about basing and pre-positioning of munitions and all that set of issues. But I wanted to give you a chance first, to summarize where we stand with nuclear force modernization. I know that's been very important for the department, again, for the Trump and Biden administration's, both their number of interesting elements of continuity, even as we see such discord at our highest levels of political debate. If you go from Obama to Trump to Biden. So a lot of continuity on a lot of these issues. I wondered if you could just give us an update on where we stand with nuclear modernization.

DALTON: Absolutely. And I'm really glad you mentioned that, that bipartisan focus. Just, you know, briefly back on the National Defense Strategy, which came out at the same time as the last Nuclear Posture Review to, you know, a lot of common through lines from the prior. And, yes, and NPR, in terms of that emphasis on the PRC pacing challenge followed by Russia, there really is a strong bipartisan consensus in Washington on, the urgency of, of the matter, when it comes to, to nuclear modernization, you know, we have seen over multiple Republican and Democratic administration and affirmation of the importance of the triad. And for the

United States to deliver a safe, secure and effective nuclear deterrent. The reality is, because of our focus over the last 30 years on counterterrorism and counterinsurgency in the Middle East and Afghanistan. For all the understandable reasons. But we have unfortunately mortgaged, our, our investment in, in nuclear modernization. And we frankly, can't afford to do that any longer. Given the threat landscape, given the fact that particularly as we move into the 2030s, we face the prospect of two near pure nuclear competitors. For the first time in in our history. And our, our nuclear triad, while while capable and effective today, you know, when we look out, decades to come, will we be in a position to be able to provide that safe, secure, and effective nuclear deterrent? Given the capabilities we have, the answer is no. So we have to move forward with modernization. Now, the Department of the Air Force is responsible for stewarding two legs of the nuclear triad, our intercontinental ballistic missile, which is currently, serviced by the Minuteman three. It's been in service since the 1960s. I had an opportunity to travel out to to F.E. Warren, in early July, and, was truly impressed by our airmen that are that are keeping the Minuteman three in service. And again, you know, if we had to go tonight, they they would be ready to go. But they are having to, you know, manage through supply chain issues. Maintenance issues for an aging platform. Which really raises that imperative of moving forward with the Sentinel program, of course. We have just been through. The Nunn McCurdy review with the Department of Defense. And we are committed to driving forward, in a holistic, responsible, and cost effective approach, for the Sentinel program. I mention holistically because, when we think about, what it's going to take to modernize the, the ICBM leg it really is a project that has no other comparison, in the Department of Defense in terms of its size, its scale, its its complexity. When you think about the ground infrastructure across five states, massive geographic area to cover, our, our airmen, our maintainers are defenders, prepared with the training and equipment, to be able to, to make that transition, building the new missiles and systems, that need to be interconnected not only with the nuclear enterprise, but all these other capabilities, that, that we're building. And then, of course, in light of, physical and cyber threats that we may face, certainly today and into the future, we really need a holistic approach, for how we, we are going to address this, the other, leg of the triad that the Air Force is responsible for is, of course, the bomber, the, stealth bomber. The B-21 is moving forward on on track, and the nuclear capable, B-21, will serve as as the backbone to incrementally replace the B1 and B2 over, over time. So we are in good shape on in that regard. At the end of the day, our nuclear deterrence, these two legs contributing to, to the triad are really the backbone of our nation's defense, and serve, to ensure that we are prepared to deliver on our extended deterrence commitments to our allies, in Europe and Asia. So it's vitally important we get this right.

O'HANLON: When we think about the Sentinel program and the replacement to the Minuteman. Do you think of that program primarily as essentially keeping our capabilities fairly steady, but just replacing an aging system? So that's fundamentally about reliability and about dependability. Or do you think there are new capabilities with the Sentinel? I mean, I don't we're not modernizing the warhead per se. Right. So we're not looking for a greater or lesser explosive yield. We're trying to make sure we have an ICBM that will last indefinitely into the future. But you also mentioned so that's a question. But you also mentioned cyber. And I wonder if that's an area where you're trying to modernize the Sentinel compared to the Minuteman, so that it's more resilient against cyber threats. So that two part question.

DALTON: So what I would say is that everything that we do, whether it's on the nuclear front or the conventional front, is, is threatened, formed. And that is a moving picture in terms of the level of sophistication and speed at which the PRC in particular, is modernizing its own military. And so we have to continually be stress testing our assumptions about the capabilities that that we are developing to ensure, that they can continue to be effective in the decades to come. The Sentinel program will be designed to deliver the ICBM capability through the 2070s. And so we have to design it in such a way that is going to be effective not only against the threats of today, but the threats out until the 2070. So I would say, you know, without getting into specifics here, that it is going to be a more capable system, than the Minuteman three. And then certainly when it comes to cyber threats, they exist today. We have the assurance that we can deliver a safe, secure and effective nuclear capability today. But we have to be building in resilience, to, to the types of cyber attacks that we know, the PRC and the Russians and others, will, will attempt to, to throw at us.

O'HANLON: It's still pretty early days and thinking about this new world where China is modernizing its forces and expanding them quite a bit. And I expect the next administration, whoever it is, will have to confront that question a little more directly. But I wondered if you can share any initial thoughts people may have, because, of course, historically we've just tried to negotiate ceilings with the Soviet Union or Russia. And there are a couple of problems with that. One, we can't really talk to Russia very easily about most things these days, but even if we could, we have to factor in the China dimension at a time when we're thinking China may wind up with 1500 warheads by 2035. Are there any initial ideas within DoD that conversations have at least begun to broach about how we can address this complicated new world, where Russia and China are not really allies with each other, but they're certainly aligned with each other. And China's given up the minimal deterrent, and that wants to get closer to where Russia and the US have been.

Are we thinking that we need to have a bigger arsenal? Are we thinking we need more missile defense to counter with defense what we. Might otherwise feel the need to do with offense. Are we going to ask Britain and France to build up their arsenals? I know I'm being a little facetious with that one, but just what's the range of options as as you look out five and ten years into the future?

DALTON: Yeah. So, you know, I can tell you that this was a challenge we wrestled with in the National Defense Strategy Strategy, the Nuclear Posture Review in the Missile Defense Review a couple of years ago when, you know, we really started to see some of that emerging, cooperation between the PRC and Russia. And I think, you know, what we ended up settling on was, of the two actors, People's Republic of China comprehensively posed a bigger challenge to the United States over the long haul. And that's why we, from a military perspective, chose to make that the pacing challenge. That's not to say that that Russia itself, or in combination with the PRC, could provide, some unique, you know, threatening, elements that that might drive certain decisions, in, in force development or force design, particularly as we look out over, over the long term. But we were principally going to focus on, on the PRC. I think there will be an opportunity, you know, regardless of what administration is, is in power come January to take stock of how the security environment has evolved, how we see, you know, unfortunately, further examples of the PRC and the Russians, you know, partnering in certain areas. I know there was the, the flight, in international waters, but in, in close proximity to the United States. Recently as, as an example. And this is gruesome. So what does this mean to your, to your point, in terms of how we need to be thinking about our force planning construct and where we put the weight of relative capability development and force structure, given, that, that specter, but, you know, for now, we, we are still anchored to, the, the NDS and, and the PRC pacing challenge.

O'HANLON: Yeah. I mean, nuclear forces are obviously in a different category because these are things we all, heaven forbid, would ever have to think about using them. But we also need to think of some way of planning that doesn't give Moscow and Beijing the sense they have the upper hand, either individually or collectively, and if they are increasingly in cahoots on strategic issues, raises this question of whether it's enough for us just to equal Russia. But let me ask you about the defense budget and then come back to the Indo-Pacific, if I could. So you made the point that we've got a lot of big challenges ahead of us. We have a huge defense budget, but it may not be big enough. Right. And about 850 billion a year including Department of Energy nuclear activities. And that's been absolute dollar terms, much bigger than the Cold War average as a percent of GDP. It's much less. And in terms of politics, it seems like, you know, the McCarthy Biden deal of a year and a half ago seems like forever, but but, agreed that defense spending would more or less

stay flat for the next couple of years. But if we go back to a lot of the a lot of the views of the Jim Mattis National Defense Strategy, the independent commission that followed, and many of our fellow Democrats, I'm a Democrat, too, even though not in the administration, but a lot of people, a lot 3 to 5% annual real growth in the defense budget. And we have not been delivering that. I'm not sure that's the right number myself, but I wondered if you think there's enough money, at flat budgets, you know, inflation adjusted, but no more to really get all these things done.

DALTON: So what I would say is for the great power competition re optimization efforts that we have underway, because they're about organizational change and structures and policies and mindset shifts. It doesn't require a tremendous amount of resourcing. However, the modernization efforts that we really need to be pushing forward on, and we are in certain areas require additional funding. And right now we we do not have enough for the Air Force and the Space Force to meet our aims and to be able to meet the PRC pacing challenge. Now, you know, we're working with Congress, to advocate for our priorities to be included in the National Defense Authorization Act. And they have enabled us in certain areas to divest of certain legacy platforms, such as the A-10. That helps us then recoup, those, those dollars to be able to invest in, in our modernization, priorities. But that is an ongoing dialog. And, and, you know, we basically face the choice of otherwise having an obsolete force that is not going to be able to be competitive with the PRC, over the long haul. Or. Were, you know, being able to drive forward in the ways that that we need to. Under the Fiscal Responsibility Act. For FY 25, we have proposed \$217 billion, for the Department of the Air Force overall, for both the Air Force and the Space Force. And that funds us at the minimal acceptable level, to ensure we have a ready force across the full spectrum of operations that we were required to fill today. Everything from meeting the PRC pacing challenge to, current operations in the Middle East and in support of Ukraine. And but also, you know, investing in some modern capabilities as, as the nation requires, to be clear, we're ready to deter and prevail in, in today's security environment. But we have to increase our resourcing in order to be able to move the Air Force and Space Force forward to maintain our competitive edge vis-a-vis the PRC. And, you know, we make those recommendations on modernization based on what we see in the threat environment where we are not, inventing, the need for this. It's because, we are losing our competitive advantage. Recently, the PRC in worrisome ways. If we do not, take the initiative and get the full backing of, of Congress to be able to drive forward. I will also note, you know, the unfortunate gridlock that we have experienced over the last few years in terms of passing timely appropriations, continuing resolutions, cede the time to be able to pace to the PRC challenge. That cannot be bought back. And it's also worth thinking about what those impacts have, more broadly for defense industry. The Department of Defense, including

the Department of the Air Force, as a reliable partner for defense industry, if industry cannot count on the Department of Defense and to be a good partner, in being able to move forward with contracts because we don't have on time, appropriations. Think of the jobs, in defense industry, the skill sets, that are loss and atrophy. So this is a much bigger, problem for, the United States, when when we don't have on time budgets.

O'HANLON: We could stay on that issue of supply chains for a moment. This is obviously been a concern that we've been thinking harder about in the aftermath of the Covid pandemic and then the Ukraine crisis and conflict. And we've realized as a department, as a nation, that we have allowed ourselves to develop certain dependencies, and bottlenecks in how we acquire components for weapons. How is the department doing the Department of the Air Force as well as DoD, from your vantage point in trying to address this? I mean, some of the initial effort was just to try to understand it better, right? Get more transparency on the subcontractor base. That's not necessarily, you know, widely discussed in official DoD documents, but have you noticed any trend lines now that were three and a half years into this administration, and how we're able to try to make our supply chains more resilient and robust?

DALTON: I would say that we're still seeing the ripple effects, across of certain areas. I was mentioning, my my visit to F.E. Warren, to our, Minuteman three, you know, installation. And in talking with our, our, maintainers. The difficulties that they have in terms of not only due to, minimum three being an aging system, but because of the, Covid second and third order effects, and impacts on the defense industrial base have really slow down, the ability in certain areas, to be able to, to get parts in, in a timely fashion. So, you know, even a few years on, we are still seeing those, those ripple effects. But I will say, you know, overall, DoD, has really taken some strides in the last couple of years. To look comprehensively at, our industrial base strategy. And the supply chain resiliency issues, learning from the Covid example. Coming out with an industrial base, strategy and, some specific supply chain initiatives that I'll defer to my OSD, colleagues on in acquisition and sustainment, but would point to you, as, as a public facing reference of some of the ways, that that we've sought to to strengthen our approach on supply chains.

O'HANLON: I think one of the dimensions of that, I realize you don't want to get into too much detail, and we should have, build a plant or someone here as well.

DALTON: Absolutely, I'm sure you'd love to.

O'HANLON: But, but but I just, you mentioned the strategy, and I think the strategy included, among other things, up to several hundred million dollars, more or less in direct subsidies for the subcontractor bases that one of the key instruments we're trying to apply.

DALTON: I believe so again. I would defer to to Bill and other colleagues on on some of the specific initiatives. But, you know, in any of our partnerships looking for the right mix of incentives, to ensure that that we're able to meet cost, schedule and performance, certainly for, for DoD objectives, but also in ways that are going to incentivize industry partners to continue to work with us.

O'HANLON: So if I could now come back to the Indo-Pacific and this will be my last major line of questioning, and then we can look forward to all of your thoughts and questions as well as we go up to 3:00. I wanted to just ask for a status report, if I could, on what the Air Force has been doing to focus on the China challenge and the Indo-Pacific region more generally. And just to tick off a couple of the things that we've all heard the Air Force trying to do more with. Again, there was General Brownes agile combat employment construct with the, contingency access in the Philippines and elsewhere, I think Papua New Guinea also, and Palau and other places where we at least could use existing infrastructure of allied or partner nations. I don't know, however, how far we've actually gotten towards improving any of the infrastructure pre stationing, munitions, building, underground fuel storage facilities, all the things you would really need to do if you were planning on. No kidding. Fighting out there. And I also don't know to what extent the Air Force feels it's diversified away from a dependance, maybe even an over dependance on Kadena Airfield in Okinawa, which of course is within missile range of a lot of China's cruise and ballistic missiles. And I don't know that our missile defense systems, as good as they are, as well as they've been performing in Ukraine, if they're really up to the task of fending off a barrage attack from dozens or even more Chinese missiles. So have we diversified away from dependance on Kadena? Not just for, you know, not just for sort of these contingency access places to land an airplane or for airplanes, but places to fight or prolonged conflict. How does that look to you as you're starting to put eyes on that problem from an Air Force perspective?

DALTON: Yeah, great. Great question. And I would say the answer is is really multifaceted. It relates to the specific capabilities that that we are building, some of which we've hit on. Just to mention another one really quickly is, tactically, responsive space, systems that allow us to if, for example, a satellite goes down within five days, get, you know, a repair package up into orbit, to rapidly be able to, to repair that, that capability.

That is something that we are demoing, real, real time. And I think is, is going to provide a really effective demonstration effect, to the likes of, of the PRC. So, you know, in terms of the capabilities we are building that that's one line of effort. You mentioned, agile combat employment. Right now we are building out what that concept is going to look like. But it also involves, ensuring that, we've got our wings ready to go, as the operational unit of action, to be able to, to support that type of concept of operation, it's not something that we can immediately, pivot to. There's there's a lot of training and organization, that, that underlies that. And then, as you mentioned, Mike, there's also the infrastructure and resilient basing, one of our other operational imperatives on that. I would say, you know, as before, we really lean into the Ace approach. We need to ensure that we're able to defend, that that distributed footprint. And when we look at the E2 AD capabilities, the missile development, in particular of, of the PRC, keeping track of, of what that threat landscape is going to entail, ensuring that we have the right, air base defense, capabilities coming online. That requires us to work very closely with the Department of the Army, for example, which we are, working quite closely with them on, to ensure that we've got the right coverage, so that as we move into more of a distributed model, those those areas are going to be covered. And you know how all this, knits together, in terms of how overall, we're optimizing for great power competition. We've hit on a number of these in terms of developing capabilities, in terms of projecting power, in terms of developing our people. Also how we're generating readiness, so that we're ready to go. It's really across those four lines of effort, that, that we're focused on across 24, initiatives. And, you know, as, as we talked about at the beginning, I've really been struck by how much of this vision but also specific actions, have taken hold. Our. Both the Air Force and the Space Force, and it gives me the confidence, that, you know, regardless of, which administration might be in charge, come, come January, that there there's a commitment, to meeting the moment and ensuring that our Air Force and Space Force are ready to go, whether it's in 2027 or beyond.

O'HANLON: Last question on the same line. I realize you'll have to dance around this one a little bit because of classification concerns, but when you look at munitions that have been, I know, a priority for Secretary Kendall and where we've seen people like retired General Deptula talk about a dearth of munitions and the fact that we would run out in seven days in certain scenarios. How are we doing at improving our stockpile of both offensive and defensive weapons? And by the way, sometimes people worry when they when they do these calculations or make these arguments, they worry about anti-ship missiles. I do worry about that. But there's only so many ships to shoot at, and so I'm a little less worried about that than I am about defensive interceptors, where China could keep shooting at us for a long time. And air to air capability where we could be trying to maintain a patrol, you know, break a blockade, otherwise operate at something less than an

invasion scenario for May, maybe weeks or months on end. So how do the munitions inventories look from your vantage point?

DALTON: What I can say is, it is an area that we are closely examining. We're also learning a lot, from places like Ukraine and Israel. You know, as we are enabling our partners in, in those specific theaters in terms of what is the right mix of, of munitions that's going to be effective in these types of contested environments. So that's going to be a continued area of focus for us.

O'HANLON: Awesome. Well, let's please open it up. Please wait for a microphone. Identify yourself. And go ahead and post your question. We'll start here in the front row, please.

AUDIENCE QUESTION: I thank you, Chris Gordon. Air and Space Forces Magazine. So this morning, vice chief of staff, Jim's life, noted that he was working with your office on air base. Air defense. You just noted it as well. So that brings me to my question. That's supposed to be an Army mission. Should the Army be doing more to protect forward bases, or should the Air Force be doing more? And when you're having these discussions, with the Army, how is that relationship going to look like in the future? And how are you going to delineate who does what? Especially with resourcing being a concern.

DALTON: Great quote, Chris, it's great to see you. Thanks for the great question. In general, life and I are, working this real time with the Department of the Army. I would say that it is an Army mission. And, you know, in terms of what the Department of Defense overall is endeavoring to do in theater together is to ensure, that we are able to project power forward, in these types of contested environments. And so it is going to require, rolling forward together, and defining, the specific requirements, and timing and sequencing of how we're going to pull those, those pieces together. And I'm sure we're going to be able to share more in the months to come as I take shape.

O'HANLON: Others. Ma'am, here in the fourth row.

AUDIENCE QUESTION: Hi I'm Maeve, I'm with the Perry Center for Hemispheric Defense Studies, and I was just wondering, you spoke a lot about the proliferation of satellites in space technology. Are you worried at all about the security dilemma? Like, if Russia and China see that we're kind of sending a lot, and then

trying to fill space with their own technology and potentially littering space with old technology that we can't use anymore.

DALTON: Thank you. A great, great questions. What I would say is that, the United States with our allies and partners, we are committed to being a responsible actor in, in space. You know, we observe and uphold norms and international law and policy. When it comes to the space, domain, unfortunately, we have seen, both, Russia and China operate in ways, that violate international norms. Including, sending up their, anti-satellite, weapons, testing that, that have, exploded, tens of thousands of pieces of debris, into orbit in very destabilizing ways. So I think that that contrast is, is important as, as we move forward. And, you know, in, in terms of, the approach to a proliferated, Leo constellation, it really is about, raising the cost, for that type of behavior by actors that are not committed, to, you know, responsible actions in, in space, that they will have to think twice, whether it's, attacking a US based, constellation or one that is interconnected, with our allies or with industry partners. And so it's, it's that, signaling and measure of deterrence that, that we are endeavoring to, to build.

O'HANLON: Follow up on that. You may remember better than I do, but so I hope so because, I think China conducted an ASAT test 15 years ago and Russia much more recently. Is that still the state of play, or has China done something else recently that.

DALTON: No, those are the two that that I was referencing. Both are developing counter space capabilities that are deeply concerning. You know, Russia just in May of launched into, coplanar orbit with one of our, satellites, capability that that is deeply concerning in close proximity to a U.S. government satellite. And then, of course, as has been discussed, publicly, the potential Russian intention to launch a nuclear capable, satellite into orbit as well, which would be deeply destabilizing.

O'HANLON: We have no reason to think they've already done that.

DALTON: Correct.

O'HANLON: Other questions. Place here in the front row.

AUDIENCE QUESTION: Hi. John Brown from a AFWERX portfolio company called, Poncho. You mentioned people, and the role it plays in the broader strategy. Could you speak a little bit about the, personnel and readiness components about enabling that strategy, such as quality of life, retention readiness, or financial readiness?

DALTON: Absolutely. Thank you. And again, you know, we can talk all day about the exquisite, capabilities and proliferated approaches that we're taking. But, if we don't get the people aspect, right, we're not going to get very far. And we have a solemn obligation, certainly, to ensure our airmen and our guardians have everything that they need to, to succeed. I can tell you on the recruitment front, we are trending. Well, for, for this, fiscal year and hopefully more, more to follow, in the coming months. In terms of, some of the new initiatives, that we've had underway, as I mentioned, you know, building out, the technical tracks, for our warrant officers, specific, career fields and skill sets for, for our guardians, so that they, have a clear path to connect to this GPC re optimization effort. There's also a great deal of emphasis on quality of life, quality of service, programs, for both of services as well. A lot of emphasis on, on housing, childcare. You know, keeping a close watch, as well, in terms of, some of the stressors of food security in certain areas of the country. So we really are looking at holistically, how do we ensure that our airmen, guardians and their families, are supported day to day and are also ready, to be able to deter and prevail in conflict if called upon?

O'HANLON: Let me interject one more there. Two if I could, because you've talked about people now appropriately and modernization. The in-between category is sort of the maintenance of existing equipment and ongoing training. Have you been struck, as you've probably delved into some of the numbers in more detail than you previously had at trend lines within the Air Force on availability and mission capable rates for major air platforms, and also the amount of training we're giving our airmen and air women. And finally, safety. What are trends in safety as a result of whether they're getting the right kind of training in adequate amounts?

DALTON: Yeah. I would say that, we we are giving this quite a bit of emphasis. You know, in having to make some difficult choices under budgetary constraints over the last few years. In both, 25 and, you know, as we are working through 26, right now, ensuring that we are taking care of our foundational accounts, to include, weapons sustainment, basing, and other, you know, kind of bread and butter, elements of keeping the force going. Is, is a great deal of focus right now.

O'HANLON: Other questions. Backdrop, please.

AUDIENCE QUESTION: Hi, Ronen Wenderfer A University of California's Political Violence lab. You've talked about, Eastern Europe and the Indo-Pacific. And I was just wondering if you could touch a bit on, what you see as the Air Force's role in South America and Africa.

DALTON: Great question. Thank you. We are a globally, globally engaged Air Force and Space Force. I would say that on those two continents, it's principally about enabling our partners in security cooperation. Relationships, you know, is they're interested in pursuing, specific airframes, or, space cooperation, opportunities perhaps in some cases. You know, I will note, I know this has been, in the public domain, one area that we are, closely watching as, as a government is, you know, the Pierce's, space cooperation, in, in certain parts of, of, South America and other, parts of the world in terms of their associates, and some of the, private sector and university collaboration that that might have dual use. That is concerning. From, from a Space Force and broader DoD perspective.

O'HANLON: Back here. Yes. Yes, sir.

AUDIENCE QUESTION: Good afternoon. My name is Kevin Sun with, Global Taiwan Institute. I have, spent quite a lot of time in Kadena as well. I'm very curious, you know, in the Air Force Initiative thing, you know, building a joint, joint combat initiative with, with, you say other branches, Marine Corps or the Navy, because there's very little, presence of the Army there. What what would you, kind of suggest or any increase in joint operations with the other two branches or just kind of leaving Kadena be by itself?

DALTON: I what I would say is, we're very open to the possibility of working jointly, with, with any of the services, where the, you know, where there are specific requirements to do so and where it can enhance, our ability to operate with, with our allies and achieve our overall deterrence objectives. If that's helpful. We talked about earlier, you know, the efforts with the department, the Army on, on, airbase defense as, as one particular example. We also have, other joint bases in the Indo-Pacific, that they're quite important, particularly with, with the Navy. When you think about Guam, when you think about, Hawaii. So I think, there are a number of examples, for us to, to draw upon in terms of how we could collaborate together with, with different services.

O'HANLON: I might follow up on that one again. And if I could please and just ask, sort of an open ended brainstorming question about the kinds of new capabilities we might consider that I've seen raised in various debates, especially because it's going to be very hard to protect and protect the cadenas of the world going forward, I think. And so some people have advocated for more B20 B-29s on the grounds that these don't have to be based. Kadena another argument is, let's put tilt rotor aircraft on Okinawa and put sensors and anti-ship missiles on them, and they can operate from, you know, the forest, on the island and not have to rely on a fixed known air base. A third idea along those lines would be to have unmanned aircraft that could be essentially launched like artillery and recovered by parachute. Dave automatic at round is advocated for this. Any of these kinds of sort of interesting and out of the box ideas being I realize it's the fourth year of an administration, so it's hard to come in with just a whole bucket load of new ideas and initiatives and financial constraints would prevent that anyway. But are these kinds of ideas at least being conceptualized and discussed within the Air Force?

DALTON: What I what I would say is that, we we definitely have the door open to thinking about innovative ways, to be effective, as, as a stand in force and as a standoff force. And the combination of those two that are probably going to be necessary, in a, in a PRC, Taiwan war fight potentially or other contingencies in the Indo-Pacific. One area that, we actually didn't have an opportunity to hit on, but to target of opportunity here is is a way of thinking that I think is increasingly taking hold across, the Department of Defense and certainly in the Department of Air Force. And that's this idea of, cost effective mass, you know, for the part of the Air Force in particular, historically, we've focused on building, you know, discreet scent of exquisite platforms, with an emphasis on quality, less on, on quantity. But quantity can have a quality of its own. When you're thinking about how to be able to penetrate through or to be able to disrupt the type of contested environments, that, that certainly we would find ourselves in, in these types of scenarios. So one initiative, that that we have underway, right now is a a collaborative combat aircraft or CCAs, that are envisioned to be able to as unmanned platforms, to be able to team with manned aircraft, to provide us with that cost effective mass. In a potential, PRC, scenario, we've already, awarded two contracts for increment one of, of the CCAs and our, in the development of the requirements for increment two, we're really excited about moving forward with this initiative because we do think it's it's a mindset shift. It's a different way of operating. And I see, you know, across the DoD, this way of thinking about, mass as, as an advantage, in, in these types of scenarios taking hold.

O'HANLON: By the way, question from the audience that came in earlier. Do we have enough space launch vehicles and enough ability to ramp up production if need be, depending on scenario, depending on attrition.

DALTON: How do you so that what I would say is that, we have been building out our industry partners, to, to enable space space launch. And you know now have have three providers on online to do that. Far more needs to be done on, on that score. But we've made quite a lot of progress in the last couple of years, so.

O'HANLON: We're getting near the end. But any final question or two? Yes, ma'am. Here in the back.

AUDIENCE QUESTION: Hi. Thank you so much for speaking with us today. This has been a fantastic opportunity. I'm Carol Cornworse, I'm a research intern at the Institute of World Politics. We've spoken a lot about PRC, er threats, and I'm mostly curious about the Middle East. With Iranian proxy forces, expanding, er, missile capabilities, especially through the use of drones. Do you foresee any future cooperation between the United States and Gulf countries to combat both Iranian proxy forces as well as Iran directly.

DALTON: Thanks for the question. I mean, you know, and this is the the conflict that, that we're living through in addition to, to Ukraine right now. I would say the answer is absolutely yes. For collaboration with, with our Gulf partners, there is already substantial cooperation that is already underway. Certainly, to build their, their air force and their air defense, capabilities. I think there's a lot of learning that's occurring in terms of the use of UAS, and, other unmanned systems, both in the conflict in the Middle East. vis-a-vis. The, the who sees what we saw, happened with, with Israel and Iran. Certainly what we're also actually seeing in Ukraine, that is going to be relevant, for, as we think about the changing character of warfare, you know, everything from, you know, speaking of mass, you know, hundreds of drones, that could overwhelm, any one side, to, you know, thinking about, the unique capability that a B-21 bomber, can, can bring. We really have to think about the full spectrum of of how, both sides of a conflict are going to approach it, what capabilities they're going to bring, that mix of capabilities and how we're going to be prepared to, to meet it.

O'HANLON: You know, we don't always celebrate the accomplishments of American defense industry and technology, but it was amazing how well the April attack was dealt with. It just blows the mind away. And I was as a defense analyst who's been around this a long time, very surprised at how well we could do. And there's been a lot of impressive performance in Ukraine as well, even though quite often they've been short on this. So when they've had them, they've done pretty well. So, any final question. Last one, in the back.

AUDIENCE QUESTION: I'm curious to hear the new design for the, the jet zero, wing body tanker there. And, I'm just wondering, will there be issues, if if there are issues with, I guess if they want for cargo or something like that. If there are issues, with, pressurization and egress and banking left and right, things like that is can I use, you know, B-2 B-21 versions as an alternative to the tanker? If they have an issue, will it be cheaper than possibly, developing this new jet serial design for the blended wing body for the tanker? I'm. I'm just throwing that out there. Or if you were looking for stealth tanker design. Thanks.

DALTON: Thank you. I what I can tell you is that, we are taking a hard look at, what tanker capability we are going to need, to be able to sustain the type of distributed operations that we talked about, here today. And to be able to support the new capabilities, as you referenced, that are coming online, such as, as the B-21, our current, fifth gen, fighters and, you know, future systems that, that we may build going, going forward. That that is a the mobility and tanker piece of the equation sometimes can be under, under looked. But it is absolutely essential to be able to enable, our distributed, operations across the vast space that, that is the Indo-Pacific.

O'HANLON: Before I ask you to join me in thanking Secretary Dalton, if you don't mind, I'm going to take a brief moment of personal privilege to honor Martin Indyk, who was a distinguished Brookings scholar and, founder of our Saban Center, Vice President of our Foreign Policy Program. Number two, in our whole institution under Strobe Talbott just passed away last week. And in addition to being a great friend of all of ours and a great scholar and a great builder of institutional capability, he was a champion of Israeli-Palestinian peace until the very end in a way that, you know, if I'm going to tear up now, it's going to be as much thinking about that role that he played even as he was ailing. So I know that all of us at Brookings will want to send a note of appreciation and admiration to him. And Melissa was nice enough to have said the same thing when she arrived today. So, thank you for letting me do that. I realize most of you didn't know Martin, but I thought it was important to say that. And, to thank you all for coming as well. But please join me now in thanking Secretary Dalton.