

A Fireside Chat with Lt. Gen. Richard Moore

April 9, 2024

Tobias Naegele:

Welcome to Air & Space Warfighters in Action. I'm Tobias Naegele. I'm the editor-in-chief of Air and Space Forces Magazine. I'm fortunate today to have Lieutenant General Rick Moore, the Air Force's Deputy Chief of Staff for plans and programs. We're going to dig into the 2025 budget and the future year's defense program plans to re-optimize, but first we should thank our sponsors. Without our sponsors, we'd be out of business. We are grateful to them for their support and for being able to do these kinds of conversations and bring your work, Rick, out into the public.

Lt. Gen. Richard Moore:

Yeah, thanks Tobias, and thanks to the folks that have sponsored this for the ability for us to tell our story directly means a great deal to us, so we really appreciate the opportunity.

Tobias Naegele:

Rick, I want to start with people. The Air Force budget itself is going up 1%. You're capped by the Budget Control Act, but the personnel budget is going up faster. You've got a four and a half percent pay raise in there. What does that do to you in 2025. Then what does it do over the long term? If it continues to grow that way, you'll get in trouble at some point.

Lt. Gen. Richard Moore:

At some point, as the cost of individual people rises faster than the rate of inflation, either you have to allow that the personnel part of the budget, military personnel, will consume an ever greater percentage of the Air Force's budget or you have to accept that at some point you'll reach a cap on the number of people in the enterprise based on their cost. There is, obviously, the other side of the equation that says we're dependent on recruiting and retention for the future of the force we have, as everyone knows in all volunteer force. People have to join and once they join they have to stay.

This is one of those places where you can't accept unlimited risk because you wind up without a force and certainly that's not a place where any of us want to find ourselves. You can, this year, see the difference quite clearly between a four and a half percent pay raise and a 1% increase in top line for inflation. That's a trade that has to come from someplace else in the budget.

Tobias Naegele:

What does that do specifically for readiness? Because that's one of those things that I think over time, you can use it as a bill payer for a year, you can use it, but you go two years out and you start eating into your flight hours, you start eating into your spares. Does that start getting worse over time or are you just eating into everything all at once?

Lt. Gen. Richard Moore:

It does get worse over time and especially in this budget. What you can see is in the budget year we did all that we could to make sure that the percentage of funding in the foundational accounts didn't decline from '24. The percentage of funding in the foundational accounts in the year '25 in this budget is actually something that we don't have to lose a whole lot of sleep over. There will be a decline at that

rate in aircraft availability, a couple of percent across the FYDP. There will be a decline in readiness, a small decline, but a decline nonetheless. We can see that flying hours fund something like seven and a half hours per pilot per month.

Consider that in the Gulf War when we went in that was something like 18 hours, not seven and a half. We have seen this decline over time. What is troubling for me is not the budget year, but the remainder of the five years in the budget horizon. WSS, Weapons, Systems Sustainment, the heavy maintenance account, it's nearly a 20 billion a year account, but it's only funded in the low seventies in terms of percent of requirements by the end of the budget horizon, by the end of the five year FYDP.

Tobias Naegele:

Low seventies, low 70 percentage.

Lt. Gen. Richard Moore:

Yes, compared to high eighties at the beginning. We have a lot of work to do in future budget cycles or we will... The phenomenon that you've described will manifest itself very quickly, not slowly over time, not a couple of percent of aircraft availability, but an amount that we actually don't know because by the end of our budget, Weapons Systems Sustainment is funded below where we were at in sequestration. We don't have data that tells us how bad aircraft availability is going to get in the event that that actually occurs. In an ideal world it doesn't because we have several budget cycles to work on that, but it will be a project that will require continued work.

Tobias Naegele:

Work means ultimately additive money or at least additive from somewhere else in the various pots that you're pulling from.

Lt. Gen. Richard Moore:

One or the other.

Tobias Naegele:

Okay, let's talk about airplanes for a moment. 250 airplanes go away in the 2025 plan against I think it's 94 airplanes to be acquired, and of course we won't have those for some time. You go below 5,000 for the first time in 2025. How long does that continue?

Lt. Gen. Richard Moore:

I see that continuing hopefully at a little bit slower rate, but I see that continuing for the remainder of the budget horizon that we can see. We're forced to make a choice between two things. We can either maintain legacy force structure and ultimately what that means is maintaining units and maintaining basing in any location that you want to pick or modernizing. Unfortunately, what's happening is we're trying to do both. We're being restricted from divesting legacy force structure. There's certainly a case to be made that that capacity is necessary, but as we're trying to divest legacy force structure so that we can modernize being restricted from divesting legacy, we're having to slow down modernization. You can see a reduction in FY'25 from last year's program of a dozen fighters, six F-35s and six F-15EXs. You can also see a reduction in MH-139s, and you can see a reduction in the foundational accounts. What's happening is in order to maintain legacy force structure and try and modernize, we're hollowing out the force.

Tobias Naegele:

If we continue, just to do the math, four more years at 250 a year takes you down below 4,000 by the end of the FYDP.

Lt. Gen. Richard Moore:

Yep. To be fair, the bulk of the retirements that are going on in the last couple of years and in the first part of this budget horizon are F-15Cs and A-10s. Not that they don't matter, but it's absolutely time for them to retire. I don't know that we're as troubled by the retirement of the A-10s as we would be by other retirements that would have to happen later in the FYDP. I don't know that that magnitude will continue, but I do see hopefully at a slower rate, but I do see divestitures outpacing procurements for the rest of this budget horizon.

Tobias Naegele:

For the rest the term. As you get smaller, each airplane becomes that much more important. But you're also telling us that when you go get smaller, you're going to have less money to keep those airplanes ready so they will be less ready and there will be fewer of them.

Lt. Gen. Richard Moore:

That's certainly not our intent. What you've seen across the last couple of budget cycles is us maintain in the budget year the funding at the same percentage as the year prior so that it doesn't continue to decline. We will continue to endeavor to do that so that the part of the five-year program that you actually spend that we can make that be something that we don't have to lose a lot of sleep over. We've been able to do that for the last couple of cycles with help from the department and with help from the Congress to be sure. We'll endeavor to continue to do that. It will get harder as time marches on because the holes are getting bigger. But we've been able to do that for the last couple of years and we will certainly endeavor... We're already deep into the '26 program build and we'll endeavor to do that again this cycle.

Tobias Naegele:

Okay. Among the planes that are marked for retirement, it's the third time I think you're trying to retire those older F-22s, the block 20 F-22s.

Lt. Gen. Richard Moore:

Yep.

Tobias Naegele:

Now, I think there's a apocryphal definition of insanity is that you keep doing the same thing over and over again with the hope that you get a different result. Why are you not crazy to be pursuing this for a third time?

Lt. Gen. Richard Moore:

We are in a situation where there's not a whole lot of choice here. Once that money is out of the budget to put it back as two and a half billion dollars across the five-year program, they're about a half a billion dollars a year, a little less that we couldn't afford them in '23. We couldn't afford them in '24 or '25. We already have a view of '26 and they're absolutely not going to be affordable in '26. They're not combat

representative and they never will be. They don't shoot our most advanced missiles. They don't have our most advanced radar, they don't have our most advanced communications, they don't have our most advanced electronic warfare and they never will. In the choice of what do we absolutely need to maintain and what hard choice could we make that might not be as hard as others, this is the one.

Unfortunately, there's a little bit of a concern from multiple places that the way to actually do this is to keep those airplanes for training so that the block 30s and 35s are completely useful for combat. We understand that argument and actually I think that it's a fair assertion. The fact of the matter is we don't have the luxury of having a fleet that is strictly for training at the cost of a half a billion dollars a year. We remind ourselves regularly that when times get tough, we have to make hard choices. This was one that was hard, but quite frankly in the prioritized list, it was lower than others and remains so.

Tobias Naegele:

Lower priority than others, in other words, in terms of your list of things to get rid of, it's near the top.

Lt. Gen. Richard Moore:

This is not where we would spend two and a half billion dollars, if we had it, which we don't.

Tobias Naegele:

Okay, so let's talk about new airplanes. In the budget plan as laid out, you mentioned this earlier, took down the F-35s by six, you took down the F-15EXs by six and closed out that program. The National Guard has put both of those back on their list as unfunded priorities, but that's not on the Air Force's priority list. What does that tell us? There's something a little perplexing about that. The Guard wants those airplanes and you don't.

Lt. Gen. Richard Moore:

Yeah, I don't know that we don't want them. I think that's actually not the case. We do want them. The message sent by the chiefs unfunded priorities list is something that has to be managed very carefully and there are some different thoughts about what the external communications from the department should look like. We think we hit that just right. We would love to have a conversation about additional F-35s or additional F-15EXs. But the fact of the matter is because of the Fiscal Responsibility Act, this year's top line is set in law. By the way, that top line was a reduction from what we had planned last year when we submitted last year's program. This is the result of a reduced top line and also reduced buying power. It's not just that the top line went down, we all like to think that Covid is over, but it's not inflation, supply chain and workforce issues remain from Covid and they further reduce our buying power.

Tobias Naegele:

The price is going up.

Lt. Gen. Richard Moore:

Absolutely. In addition, as you talked about, the major accounts, Weapons System Sustainment, operations and maintenance, military personnel, those accounts are growing faster than the rate of inflation as well. We have a reduced top line. We have workforce, supply chain, inflation issues. The fact of the matter is we have less buying power and so we have to buy fewer things.

Tobias Naegele:

What do you save by not buying those six? Do you save \$600 million or do you save actually quite a bit less than that because you never really get the full value of the savings?

Lt. Gen. Richard Moore:

No, you not only save the procurement cost, which is in the neighborhood of 600 million more or less for 600 for F-35 and 600 for F-15EX. You also save the Weapons System Sustainment and the flying hour bill that goes along with them. We did not want to save that money. We wanted to buy these airplanes, but the top line was reduced and our buying power was reduced and so we had to buy fewer things.

Tobias Naegele:

But you saved that sustainment account three or four years down the road, not now. This is in a sense, when you talk about that savings, you're buying savings now by not buying airplanes.

Lt. Gen. Richard Moore:

Right. But the goal was not to sustainment money down the road. The goal was to be able to keep the foundational accounts funded at about the same level as they were in '24. That happened in '25, and that's where those airplanes are missing. It was a requirement in order to balance and still keep the foundational accounts, flying hours, Weapons System Sustainment, military construction facility sustainment, to keep those at about the same percentage of funded requirements as the year prior. We had to make a trade between procurement and foundational accounts. In order to make that happen, we had to make some kind of a trade. This is the one we chose.

Tobias Naegele:

There's been a general understanding that you need, I think the number is 72 airplanes a year to bring down the average age and to bring the number up in terms of fighters to where you need to be. Obviously, we don't get there.

Lt. Gen. Richard Moore:

We don't, and I don't foresee us getting to 72 in this budget horizon, 72 is a number that increases our capability and reduces our average fleet age. The average age of our fleet is in the high twenties years. Compare that to before Desert Storm when it was eight. We need to bring the average fleet age down, at the same time we need to bring capability up. 72 is a number that helps a great deal with that. I don't see us being able to meet that in the budget horizon we see.

Tobias Naegele:

Both for budgetary reasons and just supply reasons because you can't buy more... I think I recall you saying you can't buy more F-35s in the short term. There's too much other demand. You're only one of the customers and if you stop building F-15EXs, that's the end of those entirely, right?

Lt. Gen. Richard Moore:

Yeah.

Tobias Naegele:

You can't get to 72.

Lt. Gen. Richard Moore:

The programmer record for F-15EXs remains 144, we're now buying 98, we could continue to buy F-15EXs. They don't fit in our program. We just have less buying power and so we have to buy fewer things.

Tobias Naegele:

You're not actually saying, "We want to cut end production of F-15EXs." You're saying, "We have to cut production."

Lt. Gen. Richard Moore:

We have made a choice to do that because we had to make a choice in order to live within the constraints that we have. Every organization has some level of fiscal constraints. I'm not complaining about our fiscal constraints. They are what they are, but they have implications. All I'm trying to do is tell you what implications are. We're not complaining and we're not saying that we're not being treated fairly or that we're being treated poorly, but we do have to live within the constraints that we have.

Tobias Naegele:

In February, Air Force rolled out very ambitious program, re-optimized for great power competition, lots of focus on '24 different items, new commands change, new warrant officers, but also a lot of focus on readiness, raise readiness, be more ready to compete with, fight and win against China or a peer if necessary.

Lt. Gen. Richard Moore:

Yep.

Tobias Naegele:

That's not reflected in this really, right? That comes out after the '25 budget bill was made.

Lt. Gen. Richard Moore:

That's accurate, yep. Doesn't mean we're not working on readiness.

Tobias Naegele:

Right.

Lt. Gen. Richard Moore:

The foundational accounts being funded properly in the budget year or at least being funded to the level that we're able to, that has an impact on readiness. It's not that we're not working on readiness, but there is a lot more work to be done. I think you look at a multifaceted thing here. First of all, is making Airmen that can become ready. You have to develop the proper Airmen so that they're able to accept the readiness training that we have. You have to conduct that training and then you have to do it to some end.

Ready for what? Ready for what over the last 30 years has been to essentially fly around the desert in very expensive airplanes and shoot 1.5 million missiles at one-off people on mopeds. It's obviously not that simple, but a counterinsurgency scenario is vastly different than a peer competition. Ready for what

matters. You can already see our readiness training changing as we gain more insight into what we think may happen in the event that crisis becomes conflict. We do not view conflict with China as inevitable. We do not view it as desirable, but if called on we want to win. That's where this comes in. There's a lot more work to be done and you'll see the implications of reoptimization for global power competition. You'll see those shine through a lot more prominently in the '26 program than in '25.

Tobias Naegele:

I'm not asking you to do a great big reveal, but give us a little hint. What do these changes do to your five-year outlook?

Lt. Gen. Richard Moore:

I think there's a great deal of positive impact that can come from this and the one that I would point to that I think is probably has the chance of being the most impactful is the standup of integrated capabilities command. As the chief says, we have some parts of our Air Force that have become fractionalized over the years and the whole goal of this is to bring those fractionalized pieces back together. Integrated capabilities command, to me, is probably the most poignant example where we can conduct requirements work and where we can conduct capability development work across the Air Force but in a single place so that the next most important thing for the enterprise that gets presented to the resources for budgeting is truly the next most important thing for the Air Force and not for the individual portions of it as has the case over the last several years.

I think there's a lot of work to do to make that real and I think that we can do it and when we do, I think we're going to see a strongly positive impact on the resourcing outlook of the Air Force. At the same time, if you really want a better outlook, you really have to have more money. Within the top line that we have, I think there are some things that we can do to use that better and I think integrated capabilities command is probably the forefront of that.

Tobias Naegele:

Okay. But you're also going to have some significant expenses if you start doing large-scale, do-it-now kinds of exercises, that's not free. If you start fully manning your combat wings to overcome the optimization for efficiency that defined the past 20 years, that's not going to be free. As we discussed, people are the most expensive thing. Has anybody begun yet to look at what that will cost? Is that a billion dollar program or problem? Is it a \$5 billion problem?

Lt. Gen. Richard Moore:

It is an expensive problem. Your assertion is correct. A couple of things I'd say, we already have that expensive problem now. What we're doing is looking at that problem in a different way. We missed our recruiting goal last year for the first time in a very long time. The challenge that gives us is you could put more money in for military personnel, but that doesn't mean they appear. We already have this problem. The question is how do we tackle it? I think what you'll see is a much more organized focus and a more intense focus on fixing the things that absolutely are foundational and imperative if we want to be able to compete and win. As I said, war is not inevitable, but if called on we want to win. I think that's what you'll see as the changes that are proposed as a part of reoptimization. That, I think, is what you'll see and we're excited about that.

Tobias Naegele:

If you had not... I don't know if this is even a fair question, but if you had not had the Budget Control Act hold your budget down, where would you be? What did that cost you in terms of top line, in your view?

Lt. Gen. Richard Moore:

Yeah. Well, we know the answer to this across the five-year program, it was \$13.2 billion.

Tobias Naegele:

In '25 alone?

Lt. Gen. Richard Moore:

In 25 alone, it was roughly evenly shaped across the FYDP. It was 3.1, 3.2 billion.

Tobias Naegele:

If I gave you 3.1 billion-

Lt. Gen. Richard Moore:

Actually, I think it was 2.8, I'm doing math in public, a bad idea.

Tobias Naegele:

Yeah, that's never a good idea. All right, so let's say I give you \$2.8 billion, what would you have added?

Lt. Gen. Richard Moore:

The first thing we would do is look to the chief's unfunded priorities list. That is the first place where we would apply additional dollars and that's what it is supposed to be. Then beyond that, I would say we would have a great discussion to be had about what to do with 2.8 billion. I think it's reasonable to say that we might have chosen differently than reducing aircraft procurement, helicopters, fighters. I think there are a variety of things where we could apply that, but I would say the first priority would be the chief's unfunded priorities list and as is known it was about three and a half billion dollars, so you can go through that amount of money fairly quickly.

Tobias Naegele:

Let's take a look now at... If you have 3 billion, you've got another 11 and a half billion dollars or so over the remaining four years, same answer? Or do those answers actually start changing because of rising personnel costs or other changes that are out there and what you'll be able to buy three or four years from now versus what you can buy today?

Lt. Gen. Richard Moore:

Yeah. There become more options as you go further out. As I mentioned the foundational accounts, there is a hole in those as we get further out in the budget horizon that we would, really no kidding, want to take a look at. There are holes in procurement. There are some things that we're doing now for the operational imperatives that are not properly resourced for procurement. We hope that that money will come. In the event that it does, the development has to be done in order to procure. We're working to make sure that development happens and then we'll see what happens when we get there. When we get there, if we have the money that you're talking about procurement of high-end capabilities that we can put in the hands of our Airmen at that time, that will become important.

I think also, you have to think about what the world condition might be then. I don't know that we know that, but what I do know is the kinds of things that we're buying now, there are things that we need to buy at much greater scale. One thing we saw in the Ukraine war is after that kicked off, Ukraine asked for a large amount of munitions. We asked the defense industrial base to surge for munitions and they said, "Yes, four years, maybe three." They've done exactly what we've asked. They've consolidated, they've gotten lean, they've gotten as efficient as they can. What that means is there's little capability to surge. By the time you get three or four years out, you have the ability to create that surge capacity and then buy off of it.

I think our munitions portfolio, we spend about \$7 billion a year, \$35 billion across the five-year program. That's a lot of money for munitions. It does not meet the requirements of large-scale competition with a peer adversary. I think that's a place where we would look as well. Then there are always people, programs that rightfully deserve their place in the conversation. The list goes on.

Tobias Naegele:

Are you funding the ability now to buy capacity later for munitions?

Lt. Gen. Richard Moore:

Largely the facilitation, the development of capacity, largely what we're building now we intend to fully procure from. It hasn't resonated particularly well with the department or with the Congress, but I would assert that having seen what we saw in Ukraine building facilities that we don't necessarily have an immediate plan to procure from, that makes sense to me because when you find yourself there and you need to surge, if you haven't already done it won't be there. It's like finding yourself with money to buy things, but you didn't do the research and development and now it's not ready to go. That is not an argument that seems to resonate outside the Air Force. I may be on an island in the Air Force, but I don't think so. What we're facilitating now, we intend to procure from.

Tobias Naegele:

Okay, so in a sense the same problem is likely to be a problem again in three years and five years and six years because we'll never really have that extra capacity?

Lt. Gen. Richard Moore:

We won't have capacity beyond what we intend to procure from, but we are facilitating so that we can procure more.

Tobias Naegele:

So you can procure more.

Lt. Gen. Richard Moore:

Yes, and we intend to.

Tobias Naegele:

You got a lot of competing priorities. We've talked about that, but a lot of this is stuff that you have to buy, Sentinel, B-21, NGAD, CCAs, you mentioned the Secretary's priorities, so JADC2 capabilities that are actually, I guess. Beginning to see some real things.

Lt. Gen. Richard Moore:

We are.

Tobias Naegele:

T-7 trainer. In most of history, the Air Force has not been able to buy all that at once. We saw a little bit of that I think in the eighties, the Reagan years, and you can argue that built the greatest Air Force in the world's history and made possible the Gulf War victory and beyond. But mostly it's like a decade for fighters, a decade for this, a decade for that. You're trying to do everything at once. How is that even possible?

Lt. Gen. Richard Moore:

What you see in our program in '25 is it's not possible. There are some of these things that are policy, as you said, whether or not we have a land leg to the nuclear triad or whether we have a nuclear triad at all. That's a policy issue. That's an administration-level policy issue and that decision is made. We are going to have a land leg of the triad, how we choose to do that? There's some leeway there, but the fact of the matter is that the triad is going to exist and so is the land leg. Those things have to fit. That one in particular is interesting because we had thought across the Air Force and the Navy, most of the nuclear enterprise including nuclear command control and communications of which we have between two-thirds and three-quarters of, it all has to be modernized at the same time.

We thought that that bow wave was going to peak in FY'27. Now as we've gotten further into Sentinel and we find out how challenging the civil works side of the Sentinel program is, it is not going to peak in '27 and it may not even peak within the FYDP. The plan that we had to start on the back side of that peak with additional procurement and development and foundational support in the conventional portfolio, that's going to be pushed out because the peak of the nuclear enterprise is going to push to the right. It may push outside the FYDP, but I think we for sure see it going to '29 or '30 and then we'll have to see what happens afterwards.

There will be some things that we thought we would be able to commit to that we're not going to be able to because that's going to come first. Sentinel, of course, is in the Nunn-McCurdy process. OSD is running that and we're in support. What comes out of that process from a resourcing perspective will be very important to us as we look to see when this peak occurs. But the fact of the matter is whether or not we have a land leg is not up for discussion.

Tobias Naegele:

Right. The fact that you now have a multi-billion dollar bill or a bill that's multi-billion dollars more than anticipated, you were already anticipating a huge bill, right? How much is Sentinel over the five years?

Lt. Gen. Richard Moore:

We started... Well, Sentinel's expensive over the five years. The program for 30 years is about a hundred billion dollars and now we expect that something like 30 billion additional will be required. Much of that will not be in this five-year horizon. We'll have to see when the Nunn-McCurdy process concludes what the new resource profile looks like, it could be that all or most of that additional cost will be beyond the five-year program. It doesn't mean those costs aren't going to come home. When they do, they're going to hurt. But it may not be that we have to fully support all of that in this particular budget cycle.

Tobias Naegele:

If that money was somehow magically walled off and OSD said, "You know what, Air Force, this is totally unfair. You got too much on your plate, we'll take that from you." Not that that'll happen, but if it did, what would that do to the rest of your program? Would that solve all your problems or not really?

Lt. Gen. Richard Moore:

I've been in this business for almost 20 years. There have been 20 years of opportunity for that to happen and it hasn't happened. I don't see that changing in the next couple. Certainly, the amount of money in the nuclear enterprise is profound. When it peaks, we believe it will be just over a third of the investment portfolio of the Air Force. Could we do good with that? Of course. But it is a national imperative and so that has its own kind of goodness and it's not up to us. There is going to be a triad and it's going to have a land leg.

Tobias Naegele:

All right, so let's not talk triad. Let's talk CCAs. When we were talking earlier and you were talking about fighters, if you don't buy the fighters today and you're trying to build capacity later, the CCA is the most efficient to do that, theoretically, right? NGAD's going to cost a lot more than F-35s, you're not going to buy that many of those. But the CCA is be more in the \$25 million range, let's say. How long before we can actually start buying those and buying that capability, which is a three-for-one or even four-for-one deal.

Lt. Gen. Richard Moore:

Your assertion is correct. Remember, the genesis of the CCA program was to build affordable mass. If you think about the size of the AOR that we might have to fight in creating mass across an AOR that size takes quite a substantial force. If you try to do that with F-35 and B-21 in NGAD, you're going to find out really quickly that it's simply unaffordable. CCAs were intended to build affordable mass. That's still where we're headed and that's still the fundamental premise of the program. They will start finding their way into the Air Force here in the next several years and I think that they will serve that purpose well.

I think what we will have a little bit of difficulty with is getting past the fact that if it's a three or four-to-one monetary ratio, that doesn't mean that there will be three or four nosewheels on a ramp to count. We'll have to work through the affinity that we have for things that we can see, and touch, and hear flying in the sky every day. We will work through that. But the premise of that program remains unchanged. It is to build affordable mass and that's where it's headed.

Tobias Naegele:

T-7s won't give you affordable mass, but it will allow you to train your future pilots more quickly or more reliably. At least those airplanes are as old as... The T-38s are as old as I am, so they're even older than you. You're going to retire. They seem to just keep going and going. How long before we start to actually get T-7 that are operationally capable and able to train new pilots?

Lt. Gen. Richard Moore:

Yeah. There are a couple of things with the T-7. It's not just to replace the T-38, the T-seven is a lot more capable than the T-38 is. What that should allow us to do is bring some syllabus training requirements that now have to happen in fourth or fifth gen or eventually sixth gen aircraft to bring those requirements back into the training enterprise where they happen in a \$20 million airplane instead of a hundred million airplane or more with the associated cost of the flying hours.

Tobias Naegele:

Much less expensive flight hours.

Lt. Gen. Richard Moore:

Absolutely. Absolutely. It brings your overall training burden down substantially. There is procurement in the '25 budget. It's in the year '25. The first airplanes we think will be here in '26. We're anxious to get along with that because as you mentioned, the second order impact of the T-7 running late is we're having to continue to invest in the T-38 fleet to make sure that it lasts long enough to shake hands with the T-7s when they get here. We would love to get out from under the T-38s. It's time. We're anxious to get to the T-7 because it has a lot more capability. We can conduct a lot more training in it and it will be fantastic when this transition occurs. Unfortunately, it's running a little late, but the T-7 is in flight test now and the first procurement money is in '25 for deliveries in '26.

Tobias Naegele:

Then you anticipate a rapid increase in procurement over a short period of time or will that be a slow trickle, more-

Lt. Gen. Richard Moore:

I don't think it'll be a slow... I think it'll be something in between. I don't think it'll be either a rapid increase or a slow trickle, but something in between. I'll tell you we will, as best we can and as best we're able to afford, we'll get the T-7 in the fleet as quickly as we can because we want to move on from the T-38.

Tobias Naegele:

The F-35 is now finally cleared for a full-rate production. One of the hang-ups had been simulations, the ability to integrate into the enterprise simulation system. I'm forgetting the precise name.

Lt. Gen. Richard Moore:

Joint Simulation Environment, JSC. Yeah.

Tobias Naegele:

JSC, right. What's the status of JSC? Where is that going and how soon will we really see... That's a lot of money, right? That's another billion dollar program.

Lt. Gen. Richard Moore:

We added about a billion and a quarter to that program in the five-year program in 25. JSC is doing well. The JSC already exists at the Texan River. It will soon exist at Nellis as well. JSC is one of these really cool digital age transitions. It has been in the past that we needed too much training equipment to be able to afford the quality of equipment that you test with. Tests couldn't really be done with the training equipment because it wasn't high enough fidelity. Now, for the first time in the digital environment, JSC was designed as the test bed for F-35 to test some of the things that we would not care to test in open air.

It is going to become the training environment, not just for the F-35, but for all of the night one flyers. We've finally gotten to the point that test and training can be the same and we're really excited about that. It doesn't mean it's cheap, it is expensive. As you pointed out, it is an expensive program and just

the ad in the '25 program was about a billion and a quarter dollars, but it is training that we can't conduct any other way and it will be training for more than just the F-35 community as I mentioned. We're excited to get on with that and we'll build that enterprise out as quickly as we can.

Tobias Naegele:

Does that and will that have an impact on your flight hour program?

Lt. Gen. Richard Moore:

I think in a perfect world, it would. I think we would say that we could move flying hours from the airplane to the joint simulation environment. Unfortunately, as I mentioned before, the flying hour program, the flying hour program is to the point now that I don't know that there's a whole lot left to take out of it. At some point you still have to put Airmen in the air so that they can gain airmanship and there are things that need to be done in the air at the level of the flying hour program right now, I don't believe that there would be consensus around that trade. If we were still at 16 or 18 or 19 hours like we were before Desert Storm, then that would probably be a perfectly fair trade. I think the flying hour program, I have enough concern about the flying hour program, that is not a place that I would look to for resourcing for JSC, unfortunately. We're always looking for sources. I don't think that's one in this case.

Tobias Naegele:

All right, so let's take some audience questions if we can. I think the first question to Chris Gordon at Air & Space Forces Magazine, because he's my colleague.

Chris Gordon:

Thanks, Tobias, and thank you, sir, for doing this. What is the solution to affordable mass? Are CCAs the best, if imperfect answer, or will something like Replicator impact the Air Force budget long term, if at all?

Lt. Gen. Richard Moore:

I don't know that there's a single solution here. I don't know that there's one thing that you could point to that's a silver bullet. That's part of the challenge. If there were one silver bullet, this puzzle would be much simpler to solve. I don't think that's where we find ourselves. I think we find ourselves requiring a range of capabilities and that implies a range of platforms. In this case, I do see Replicator having a place in the Air Force budget. I see a lot of goodness that can come from that, but I don't see us... Replicator and CCA don't fill the same niche. Replicator is something that is expendable and can be built very quickly, single use.

That's not what we're envisioning for CCAs. What we're envisioning for CCAs is something that can be a part of a formation of aircraft and bring down the average cost per tail but still perform at the high end. In order to do that, it will be expensive enough depending on what that turns out to be that we'll want to bring it back and use it again. I don't see those things as the same, but I do see that they can both impact this problem set.

Chris Gordon:

You identified this as a challenge, but it sounds like you're still working on it as a solution on what programs might fill that gap?

Lt. Gen. Richard Moore:

I think there's a lot of work yet to do here. The one that is advancing right now at speed is CCA. I think Replicator could be very shortly behind it, but for right now, the one that we've focused on is CCAs. The part of CCAs, there are multiple things that you could do with an airframe like that. The one that we're going to focus on first is the ability to augment the shooters and to add additional rails to the formations that we send forward. That'll be our focus. There are other things like electronic warfare, or ISR, or even tanking. There are a lot of things that you could move to. That's not our focus. Our focus right now is on increasing the number of weapons in a formation.

Tobias Naegele:

By that you really mean mass, right? You're massing weapons.

Lt. Gen. Richard Moore:

Absolutely.

Tobias Naegele:

Okay.

Lt. Gen. Richard Moore:

Thanks, Chris.

Tobias Naegele:

I had a question back here.

Audience:

Hey, sir. With the Outpost. As we look at the future capability development and you're saying we need to do the R&D work for that right now, we're seeing that hey, there's a consistent late delivery on the Sentinel program and these other major programs. What lessons are we taking from programs like SpaceX or Amazon's ability to develop warehouses and logistics and they're able to iterate so quickly and do, for example, with the Falcon 9, they quadrupled its performance within an eight-year period and the deployment of that rocket. How are we deploying our funds in a way that allows for iterative development on these new capabilities that we're trying to bring into our fight?

Lt. Gen. Richard Moore:

Yeah, so Falcon 9 is actually a great example. One of my son's favorite jokes is, "How do you make a small fortune in the rocket business? You start with a large fortune." I think what you see is the level of risk that SpaceX is willing to tolerate is higher than we're willing to tolerate. I think if we want to be able to do what they do, we have to change our risk profile. I think I'll leave it there before this anyway. We are not particularly risk accepting. We tend to be fairly risk-averse. I think that's fair. I think the big gains in a place like that are in acceptance of risk, not acceptance of risk with human life. You saw a lot of test flights before we got there, but the other thing that I think you see is absolute maniacal devotion to cost control. I don't know, what do you think?

Audience:

Isn't that risk just put on us anyways because we're delaying the development of these capabilities by five to seven years anyways?

Lt. Gen. Richard Moore:

You have a couple of different kinds of risk. You can accept the risk of procurement failure, you can accept schedule risk or you can accept risk to mission. As you said, there is risk no matter what you do. Right now the kind of risk that we're accepting is schedule risk. We're holding ourselves to a low risk operational profile and between cost, performance and schedule, you can't have all three at the glorious level. The place where we're accepting risk is in cost and schedule.

Tobias Naegele:

Secretary Kendall, when he was rolling--

Lt. Gen. Richard Moore:

I'm not sure that's a... I'm not sure that's a... I think we can see that if we look at what's happening, I don't know that that's a deliberate decision that's being made, but that seems to be what's in the defense DNA, I guess.

Tobias Naegele:

I think what I was going to say was that Secretary Kendall has talked about he would like to see the industry take on more risk and be willing to do a little more independent R&D. Traditionally or in recent times, a lot of that risk did fall on DOD. Obviously, the argument there is if you can shift some of that, if industry is willing to make the bets on that they should be able to reap the rewards. Is there a way to change the reward system for somebody who takes more risk?

Lt. Gen. Richard Moore:

I think what you see is there are some... First of all, we would be nowhere without our industry. We need to be really careful about casting aspersions on industry. There were 83 primes before Desert Storm. There are five primes now. And industry has done, as I mentioned, with the defense industrial base for munitions, they've done this across the remainder of the defense industrial base, exactly what we've asked. They've consolidated for efficiency, they've gotten really lean in order to try and be on the right side of the cost curve and to be competitive. I think we need to be really careful before we start throwing spears here. I'm not in the spear chucking business in this case.

Tobias Naegele:

But I wasn't trying to throw spears, yeah.

Lt. Gen. Richard Moore:

I understand. That said, I think this is a partnership and I think the partners-- there is give and take on both sides. I think there is a way to change it, but I think it's really hard. It doesn't mean we shouldn't do it, but I think we have to just be always respectful of the fact that this is a true partnership and both sides have to be a part of that. This is outside the eight's purview. This is more in the AQ lane, so I'll leave the rest of it to them. But anyway, that's my thoughts.

Tobias Naegele:

Okay, fair enough. Over here.

George Nicholson:

Sir. Excellent presentation. George Nicholson, the Washington liaison, Global Special Operations Forces Foundation. Two full combat tours in Vietnam flying C-123s and flying 130s. I flew C-5s. I flew 141s, I helped stand up SOCOM. I was involved in the Iranian Hostage Rescue Mission. One of the problems we've got right now is manpower, Air Force flying helicopters. I look at the decision the Air Force has made recently about re-addressing the use of warrant officers. You look at an organization like the 160th Special Operations Aviation Regiment, their helicopters are far more qualified technically. They've got a mission capable rate or 92%. They've got less of a retention problem because like talking to the commander there, he says, "I'm not grooming my helicopter pilots at the 160th to be the next chief of staff of the Army or anything else."

Looking at what the Air Force is doing right now, the cost, what it costs for pilot training. When I went through pilot training, I'm sure you went through, flew the T-41, then flew the T-37, then flew the T-38, and then went on. I can understand we've gone to a two-track thing. What's the problem going ahead and looking and having warrant officers in the Air Force go ahead and being flying helicopters now?

Lt. Gen. Richard Moore:

Yeah, so I think it's a fair question. First of all, we've gone to what we call UHT Next. Our helicopter pilots go through flight screening and then they go straight to Fort Rucker. They don't go through fixed wing pilot training anymore. Warrant officers are an interesting question. As a part of optimizing for great power competition, we're going to explore that. We're going to create some warrant officers in the cyber career field, a small cadre of them and see how that works. If it works well, I think there could be applicability elsewhere. The Air Force and the Army just have different models on this and I don't know that either one is right or wrong, but I do know that we're going to look at what warrant officers mean in the cyber world and then see if it might be applicable elsewhere.

At the same time we're looking at a tech track that will allow, I don't know that it's warrant officer light. I don't think that's the right sentiment, but we'll allow people that do highly technical things to continue to do that for their careers and not be peeled off for other things. The sentiment that you're expressing, I think the Air Force understands that we're making steps to explore ways to get after it. I think it's going to happen fairly slowly, which I think most of us are, in this particular case, okay with. I think if it proves successful in the cyber world, we could see that transitions to other parts of the Air Force. Sir?

Stuart Wagner:

Hey. Stuart Wagner.

Tobias Naegele:

Could you just hold on, wait for a mic please.

Stuart Wagner:

Thanks. Hey, Stuart Wagner. Thanks for the presentation. General Slife recently during an AFA presentation, actually, discussed two critical war fighting problems. One is learning from the F-35 data. The second is over classification with data. If you look at UCOMM for example, you see the electronic warfare playing out and the need to learn and adapt from weapon system data. You also see this in

CENTCOM as well. I'm curious what investments the Air Force is making into learning and adapting from war fighter data.

Lt. Gen. Richard Moore:

Yeah. This is a tough puzzle and the Ukrainian battlefield changes about every 90 days. It's a completely different campaign than it was 90 days ago. It changes that quickly. From the F-35 perspective, last year... I think last year stood up the Spectrum Warfare Wing. The purpose of the Spectrum Warfare Wing is to be able to generate F-35 mission data files at the speed of relevance. Let's not get too carried away about what the actual numbers are, but suffice it to say it's a fraction when Spectrum Warfare Wing becomes fully operational of what it takes today to turn out an F-35 mission data file that understands that something has changed in the EMSO, in the electromagnetic spectrum world. We are working on that. We've got a lot of work to do before that. It's fully operational and before it's able to do what we envision.

But we do understand the need and so I think we're headed that direction. Over classification of data is something that has plagued us for a long, long time. A couple of things on this. First of all, we have just shared the F-35 mission data file with our partners. That was a huge step and it goes a long ways towards number one, building their trust and confidence and showing that we have that in them and also information sharing. We also think that we may have found an AI application that can do foreign disclosure. It would change dramatically the ability to release information to allies and partners. It doesn't fix the over-classification problem, but what it does is keep Foreign Disclosure Operations, FDO, from being the limiting factor as it is right now.

There has been a campaign by the DepSecDef over the last couple of years to reduce the number of programs that are SAP to try and get after over-classification and it has helped. I don't know that we would say it solved this problem, but it certainly has helped. But this one is really challenging and I'll tell you if you think navigating our SAP structure to get information release is tough, some of our allies are even tougher. We're not the worst offenders here. That's not an excuse, but this is a tough problem. We're not the only ones that have it.

Tobias Naegele:

Okay. Greg Hadley.

Greg Hadley:

Yeah, Greg Hadley, Air & Space Forces Magazine. The Fiscal Responsibility Act set your caps for '24 and '25. But obviously that lapsed after that. When you look at '26 and beyond, what assumptions are you making about budget growth or budget decline and how does that inform your risk profile that we've talked so much about?

Lt. Gen. Richard Moore:

Yeah, so a couple of things. People believe that sequestration is a thing of the past. The Fiscal Responsibility Act has a sequestration clause in '25. Now, that all the approach bills have passed, we're past that. But the same... Sorry for '24, the same thing exists for '25. We will be in exactly the same situation next spring as we were this spring, waiting to see if approach bills are going to pass or if we're going to go into sequestration. The sequestration number for this year for the Air Force, for the US Air Force, not including the Space Force, was \$8.8 billion. Next year, it's \$4.4 billion, so the risk is half. Nevertheless, \$4.4 billion in the gear of execution is a substantial change to our buying power and to our ability to execute. Fiscal Responsibility Act isn't over. There is remaining a sequestration clause for FY'25.

We have our fiscal guidance from the department. For FY'26, it looks remarkably like FY'25. The fact of the matter is though, buying power will be reduced because workforce, supply chain, inflation, large accounts grow faster than the rate of inflation. All of that, what that means is when we open the books across the five-year planning, five-year budget horizon we'll be something like 10 to 12 billion in debt. We will have to find a way to retire that debt. It will largely come at the expense of programs that we believed in last year and we believe in this year, but they will not be in the program because we had to balance. Balance is not a crime. Balance is something that's a requirement. It's not like we balance because we don't have any self-control and we can't contain ourselves. It's actually a requirement. That's where we're at.

Tobias Naegele:

Can we come over here? I think you had had a question, if I recall.

Jamie Bowerman:

I'll save it. I think I'm getting my answers.

Tobias Naegele:

All right, very good. Let me follow that. When you say one of the things you were really worried about this year was that 8.4 billion might've actually had to be solved in the last five months of the year.

Lt. Gen. Richard Moore:

Yep.

Tobias Naegele:

There's two pieces to this. The first is having finally gotten a budget, can you spend that money intelligently in the balance of the year or will there be a rush to use it or lose it and maybe some inevitable waste in the process. Secondly, as you look forward and you see that that potential could happen again, do you have to build that into your planning now?

Lt. Gen. Richard Moore:

We build it... We've been building this into our plan for years. Of the last 12 years, we've spent four of them in a continuing resolution. Since 1977, we've gotten two budgets on time, two. We will be able to spend money intelligently. I think the rush to the finish line, I'm not sure that's as powerful a phenomenon as others think. However, what does happen, I said we've planned for this for years. We don't plan to award acquisition contracts in the first quarter of the year. In many cases we don't plan for the second quarter. We give up a quarter to a half of every year from a business perspective, because we just expect that we'll be in a continuing resolution. It is a horrible way to resource any enterprise, much less one the size of the Department of Defense. I'll call attention to the fact, by the way, that the Fiscal Responsibility Act, it didn't require that the approach bills be passed on time.

It required that they only be passed one quarter late. To me, that's a standard that we probably ought to hold ourselves to a higher standard than that. We lose buying power when we're in a continuing resolution. The Department of Defense for every month that we're in a continuing resolution loses 12 billion of buying power and much of that doesn't come back. Yes, we'll be able to spend money intelligently in the last two quarters of the year. But the first two quarters that buying power that's gone, much of it won't come back.

Tobias Naegele:

It'll cost you.

Lt. Gen. Richard Moore:

Absolutely. It is one of the most powerful negative influences we have in the resourcing world.

Tobias Naegele:

Okay.

Jamie Bowerman:

Maybe I will ask that question. Hi, Jamie Bowerman with Bowerbags. I think you've answered this, and this is not a spear chuck on the part of a small, small business that's worked with the Air Force because I'm keenly aware of the constraints and the financial difficulties that you're speaking on, and super appreciate the candor in your conversation. We're more on the R&D side, work on the lab side of things. With some changes to the program bringing on Space Force, it's great, super supportive. Of course, obviously you're having budget constraints, I totally appreciate that. With some changes in the StratFi, the TacFi program, at least for us, we were one of those small businesses that the shortening of the window while we were in the window became very detrimental.

My question is this, and it could just be a wait and see, would you have any suggestions or steers, perhaps, for a company that was in that place doing all the things that was asked of them from the Air Force? Is it just... As an organization, you've been incredible partners in the innovation space, incredible partners and everything, would you have anything to offer whether it's, "Hey, look to another department, stay the course," maybe for small businesses that work with the Air Force and trying to find that next way either to move to acquisitions or work with the Air Force, again, might I say due to some the budget constraints?

Lt. Gen. Richard Moore:

Yeah, sure. Without knowing the specifics of the particular product and the business model you're trying to execute, I could give you a couple of thoughts on this. We know that we're really difficult to do business with. This is why we've gone to the AFWERX model where we do one-page contracts in one day so that we can be respectful of what small businesses have to offer. A lot of the small businesses that we deal with, they truly have the potential to be disruptive. Many of them that have been through the StratFi, TacFi, AFWERX SBIR process, whichever part of that they went through, they've become very successful, not all. I can't give you specific advice in this case, but I would say the potential still exists. We believe that we have done a lot to create the potential for small businesses to compete successfully in a world that really, until AFWERX and some of these programs came along, the deck was completely, totally stacked against anybody that had the potential to be disruptive because they were just too small and we're too hard to deal with.

It takes deep pockets to sometimes get past things like continuing resolutions, unfortunately. But that opportunity is still there. I would hope that if you have disruptive technology or you have the ability to provide help, that you'll stick with us despite the fact that we maybe are making this difficult, stick with us. We need the things that small businesses are offering. That's why we have an AFWERX office in downtown Las Vegas. It's not behind the fence, it's not behind the doors of the Pentagon. It's someplace that people can walk into and have a conversation about disruptive technologies.

Jamie Bowerman:

Thank you, sir.

Tobias Naegele:

We've got four minutes left. Let's do a little bit of a lightning round and I want to ask you about some things that we haven't gotten. Mobility we haven't built, developed. We've got the C-130J as the new... Is new in a sense, but really C-17 was developed 30 years ago. Future there, and do you see investment in those accounts, next generation tanker and so forth?

Lt. Gen. Richard Moore:

Yeah. First of all, the KC-46 is funded to get to the end of its contract. There is funding as well to continue recapitalizing the KC-135, the youngest one-thirty-five we own was made in 1964. The number one priority in that portfolio is continuous recapitalization of KC-135s. Many of our C-17s from a fatigue and a stress perspective have already exceeded one lifetime. It is probably... I don't view it as realistic to see a next gen tanker or a next gen airlifter in gas or in GAL until after the nuclear bow wave. As that nuclear bow wave pushes out, I think there's a possibility just from a reality perspective, that it will push recapitalization of the remainder of the mobility fleet out. We'll have to see what happens and any number of adjustments to the top line will happen between now and then. But the outlook right now is I don't see those things realistically fitting in the program until after the nuclear bow wave.

Tobias Naegele:

Does that mean you need a service life extension program for C-17 or you give up that capability?

Lt. Gen. Richard Moore:

No, we can't give up that capability and service life extension happens a little bit at a time. We may come to the point that we need a no kidding long downtime service life extension program, but right now it's being kept up as we go. The mobility program offices have a really deep understanding of what it means for big airplanes to fly over long periods of time. That's why we have 135s that were made before 1964 that are still flying and doing a great job of it. There's a lot of expertise here. We'll keep after it. But realistically, I think that we've got to get past the bow wave in nuclear recapitalization before we can start talking about a whole new scratch designed anything.

Tobias Naegele:

Cyber, AFCYBER is being elevated as a direct report to the chief. It's maybe on its way to becoming a MAJCOM if we're still allowed to use the word MAJCOM. Investment there and is it sufficient?

Lt. Gen. Richard Moore:

There is investment in the cyber portfolio alongside the cyber portfolio has to come the enterprise IT portfolio, because that's where most of our cyber capability gets its infrastructure. Investment in that portfolio as well. Is it enough? It's not even close.

Tobias Naegele:

10%, 20%, 80%?

Lt. Gen. Richard Moore:

I think what we were able to do in '25 is put something, high single digit numbers of percentage of requirements is what we were able to make an impact on. The enterprise IT portfolio in particular, there's a lot of debt that's accumulated in that portfolio and it will take us a long time to burn it off.

Tobias Naegele:

Okay.

Lt. Gen. Richard Moore:

We did put over a billion dollars into that portfolio though. It's not like we're doing nothing.

Tobias Naegele:

But it needs a hundred billion dollars?

Lt. Gen. Richard Moore:

It may not need that much, but it needs low double digits.

Tobias Naegele:

Okay. Soft special forces. We've got Armed Overwatch. You've got some V-22s that have struggled a little bit. Are you healthy there?

Lt. Gen. Richard Moore:

I'm not aware of a V-22 that's only struggled a little bit. I think we're reasonably healthy there. I think both from a manpower and an equipment standpoint. We're finishing out the C-130J fleet that will replace the E's and the H's that the special operators were flying. Armed Overwatch will be, that's a SOCOM program, by the way, not an Air Force program. But nevertheless, I think that'll be a good addition to the portfolio. The special ops community I think has done a remarkable job of refocusing themselves for great power competition. I think we'll find that there may be some investments there, but I think for the most part, they're in relatively good shape, largely because they've made themselves be so.

Tobias Naegele:

Well, Rick, we are at the end of our time. You've been terrific and patient with pestering questions and I appreciate it. Before we go, I just want to remind people who are here and listening, the next Air & Space Forces Warfighters in Action is April 24th. It is the Space Force's electronic warfare expert, Colonel Nicole Petrucci, commander of Space Delta 3. You can go to the QR code there and register, or you can go to our website, AFA.org, search for events, and it'll be there

Lt. Gen. Richard Moore:

If you're comparing her to this, it's going to be a dramatic upgrade.

Tobias Naegele:

I'll leave it there. Okay. Thank you very much. Appreciate it.

Lt. Gen. Richard Moore:

Thanks, Tobias.