"Answering the Warfighters' Needs"

Voiceover:

Good afternoon, everyone. Please take your seats now. We're about to begin. Please welcome this panel's moderator, the editor-in-chief of AFA's Air & Space Forces Magazine, Tobias Naegele.

Tobias Naegele:

Hi, good afternoon. So, our session is titled Answering the Warfighters' Needs. And our panelists, couple of very senior leaders responsible for acquiring platform systems, weapons for Airmen and Guardians, are here to talk about how they do that to maximize the warfighter advantage. Andrew Hunter, Assistant Secretary of the Air Force for Acquisition Technology and Logistics, and Major General Steve Whitney, Military Deputy of the Assistant Secretary of the Air Force for Space Acquisition and Integration.

So, one brief thought and then I'll hand it over to you. It's 40-some years since the Packard Commission said acquisition was taking too much time. The average weapons system was taking 10 years to be deployed and we're going to move a little bit faster. Well, I don't know that we're moving a whole lot faster yet. So this session is about speed. Let's hear how you're addressing that. Andrew, you want to start?

Andrew P. Hunter:

Well, thanks, and it's great to be back at AFA. I'm mindful that the last AFA session that at least I attended was with... I did a panel with General Richardson and we talked about our joint priorities. And I want to touch on that just a little bit, but spend more time talking about how we're going to go after those priorities, which will speak to how we're addressing warfighter need and how we achieve the speed and the pace that we need to achieve in the acquisition system. So just a recap briefly, the focus priority areas I discussed last time's delivering operational capability of the warfighter, shaping a vibrant integration base for strategic competition and transforming the acquisition enterprise for the 21st century. And if you had heard a speech like this or a presentation from a lot of my predecessors, I think those priorities are ones that would be pretty consistent over time. So not necessarily anything earth-shattering there.

I think what's different now is the clarity of vision that is being brought to this work by the operational imperatives work that the secretary and the chief have led. That really clarifies for us a lot of the issues that often keep us tied up in knots early on in the process. What's the capability that's really going to make a difference? When do we really need to field it in order to have the impact that we want? What's the right strategy to get there? And to my mind, the work of the operational imperatives has really clarified a lot of those questions, because we understand what we're being tasked to go acquire and why it's so important. We understand the timeline that we have to deliver to, which is meaningful military capable to be fielded as soon as possible.

And so it simplifies the mission. It gives us a very clear set of parameters to work forward. And our job is to get after it, which we are doing in the acquisition system, and I think jointly between AQ and SQ. And then the question of how, OIs also gave us kind of a steer on that, because the operational imperatives were developed with close coordination between the operational requirements communities and the acquisition community, working very closely together. And I think the key to delivering on them both in terms of delivering the right capability and delivering it at pace is going to be to continue that same degree of coordination, of integration between those of us who are carrying out the acquisition

programs with those who are going to be fielding these systems, so that we are constantly understanding how to prioritize and make trade-offs in order to deliver on time. Very similar undertaking from what I did in my last go around at the Department of Defense in the rapid acquisition world, where we were meeting command or operational needs.

I also thought, I was intrigued by the chief's comments early this morning about distinguishing function and mission. Obviously, both incredibly critical in a lot of ways. I think that is what we're talking about here because Steve and I are essentially functional advocates and run functional organizations, but we've got to tie what we're doing to the mission. And that's what the operational imperatives is helping us do. And then just lastly, in terms of opening comments, I want to say that I think the speed, the pace that we're talking about, it comes from that integration. It also comes from our approach to the industrial base and how we leverage their capabilities. And if you think of that longer timescale that we sometimes devolve into, it tends to be the case when you look at those programs that they may be competitive on the front end, but competition at some point stops. And you're left with a single provider that you're trying to work with over a long period of time.

You also see that a lot of these programs are high stakes decadal competitions, that it's one and done and then you're committed. And that tends to build a lot of pressures in the system that we then have to address through our process, and it slows us down. By contrast, if you look at a lot of our newer programs that we've been pursuing in recent years, and I give full credit to many of the people, many of our PEOs who developed these strategies and approaches, and also to my predecessor who put a lot of this approach in place, is continuous competition with incremental delivery of capability where you don't have this high stakes, winner takes all, once in a decade or once in multiple decades, but it is constantly ongoing, driving innovation and driving pace.

And then the last piece that I'll just mention is leveraging our digital engineering capability, which helps us acquire the technical data that we need to continue, continuous competition over time and drives the technological maturity in our design process that helps us move faster. So those are kind of the high points and I'm sure we'll get into the details and I'll pause there.

Tobias Naegele:

All right, Steve.

Maj. Gen. Steve Whitney:

Thank you, sir. First off, sir, thank you very much. I agree with your comments. But let me just start off with it's an honor to be here today to represent my boss. He's the Secretary of the Air Force for Space Acquisition and Integration, Honorable Frank Calvelli. And more importantly, to represent the men and women in the United States Space Force in the Space Acquisition Enterprise. These are truly historic times. You talk about it and we talk a lot. Those of us who wear the blue name tag talk about the standup of the Space Force and the standup of a new service. The FY20 NDAA also did something that's completely unique in our entire federal government. It created a second service acquisition executive to be focused solely on space. Nowhere else in the federal government are there two acquisition executives within the same department.

Not interior, not agriculture, not commerce, not the Navy. We actually have two confirmed individuals to help us guide our acquisition. I think that's a unique strength of where we're at. I think it allows us, as Chief Saltzman said, to have focused individuals on the specific challenges of the domain and the specific challenges that we have as we go about acquiring our space systems. Honorable Calvelli has a number of priorities, we'll get into those as we go through, and he's got some thoughts on how best to go after that. But his basic priorities are speed, resiliency and integration. How do we get capability in the hands

of the warfighter quickly? How do we get it that we know it's going to be there when it's needed? And how does we get it so that it delivers the effect it needs to for the joint war fight?

I think Honorable Hunter went down that route a little bit in the conversation about getting after the fight from China and where we're trying to see the threat going. And that's kind of our focus. The other historic time that we're seeing in space acquisition actually is in the commercial industry. There is historic unprecedented investment by our private industry in terms of where they want to go, whether it be SATCOM or launch or whatever. And that presents us a unique opportunity to try and figure out how they can do that. How do they go off? I, as a former GPS program manager used to talk about I had the largest satellite production line. I did 10 satellites over the course of 15 years. Starlink is pumping out 42 satellites a launch every other day. So that allows for a different mindset is how we go about producing these. And we start talking about what can we capitalize on that and how do we turn that into our capabilities? And I look forward to getting into the conversation as we talk about how we take advantage of those opportunities.

Tobias Naegele:

Okay. So let's come back and just focus on speed and maybe an example from each of you of where you really are accelerating the process, what you're doing differently and how you're getting there first. And Andrew, you want to go first?

Andrew P. Hunter:

Yeah, well, I'm a big believer that the ability to go fast is really building upon a solid foundation. You can't just roll out of bed one day and decide "I'm going to go acquire a complex multi-billion dollar defense capability and I'm going to do it in five years." It just simply doesn't work that way. But when you've built a solid foundation, you can move quite rapidly. So I would point to an area that the secretary talked about in his speech this morning, which is the collaborative combat aircraft, CCA. We expect to and we plan to move out very rapidly to field an initial increment of CCA. And of course, the secretary gave us a steer this morning on fielding a pretty large number as a planning factor of that capability. So that's a fast timeline and it's not just onesies and twosies, right? It's a substantial quantity.

I think, though, that we can say that we have the ability to do that because of the foundation that has been laid through the Skyborg program, through AFRL, where many of the critical enablers, the critical technologies acquired to make that a meaningful military capability, that work, a lot of it has been done, substantial risk reduction work has been done in that space. Plus industry has been investing heavily in this area. They've got in many cases relevant designs for the kind of capability we're [inaudible 00:11:15] with, that they have been flying and developing and iterating on over multiple years. So it's our ability to build on that foundation of experimentation, of investment and of technical work and risk reduction that's going to allow us to feel the CCA capability on what I think is a pretty favorable and-

Tobias Naegele:

Aggressive schedule.

Andrew P. Hunter:

Aggressive timeline.

Tobias Naegele:

But there's another piece to that, too, is that because you've had that industry competition, you've had a lot more potential players-

Andrew P. Hunter:

We do.

Tobias Naegele:

... building those aircraft than conventional fighters. So on the space side you've done similarly, you are building on the rapid proliferation of satellites in space.

Maj. Gen. Steve Whitney:

We are. And so, I mean as Honorable Hunter said, it's important to know where you're headed, otherwise you're going to end up getting pulled off first base and getting picked off. So you got to be careful to make sure you've got the strategy down to where you're headed to know what's going on. And I think our '24 president's budget will lay out some of those steps for folks. Honorable Calvelli has what he calls a formula, if you will, for helping program managers in Space go after this. And I just want to take a moment and walk you through that. First off is to build smaller systems. Building a satellite system that's going to last for 15 years requires you to put a certain level of testing and a certain level of requirements into it. Building a large structure requires you to reinforce it and so forth.

If you build a smaller satellite, you're going faster, you're doing the upfront engineering to try and get it to fit. And so that helps you go faster, step one. The second thing is to try and reduce, if not eliminate, non-recurring engineering. Too often we spend a lot of time trying to figure out how I can get just 5% or 2% more performance out of a sensor, and we'll spend 10, 15 years to get that 2%. Whereas if we would've just put and flown what we had, then we could've iterated a couple of times. Now, that doesn't mean we don't want to do experiments in NRE, we just don't want to do them in our baseline programs. We want to work with the lab, with the AFRL, with General Pringle's team, to be able to work those experiments. We want to work with industry as they do their [inaudible 00:13:25].

The third thing he wants to do in his formula is to try and drive the time from initiation to launch to less than three years. I think what we're seeing in the commercial world right now, we're seeing quite often that the teams that are successful can actually go from the start of a design to launch in about 24 months. And so how do we do that? And so to try and get us to into a tempo and try to do it. And then the third thing he wants to try and utilize is fixed-price contracts. And that step is really about budget stability. As a six-time Pentagon veteran, our Pentagon loves to talk about a five-year fight up and a one-year budget. And so if you're on a fixed-price contract, you kind of put some stability into that.

So those four things are ways that we see this playing out. And the example I give you is our missile-warning missile-track pivot that we've been doing. And we've got two different groups going after that. We've got the Space Development Agency, and we've got SSC. Space Development Agency is doing the LEO missile-warning missile-track and trying to get out there and they're coming up on their first launch here in a few weeks. And then we've got the SSC team, which is building after the MEO layer, or the medium earth orbit layer. And so our design has the two of them playing together, but they're both using these four tenets or four steps in the formula to try and get after it. And at the same time, utilizing what Honorable Hunter was saying with competition, and how do I invigorate companies to want to play? And so all that is the tools we have, and so how do we use them?

The last tool I'd bring out is we've changed space acquisition from a place where we had a single PEO, we had a single three-star that made all the decisions, and we've pushed that decision making down. And now depending upon how you count, we've got five PEOs at Space Systems Command. We've got a

space rapid capabilities office. The Space Development Agency is a PEO. We're working with DAF RCO. We're working with AFRL. And all those entities are producing capabilities for us. We're pushing that decision making down as the last step, I'd say.

Tobias Naegele:

So software is the thing that makes these nice little devices so effective. And the wonderful thing is you can roll that out and you can change it and iterate. And that's, in a sense, the secret sauce to adding capability faster. What are we doing to make that more possible and to do it more rapidly with things that are already fielded?

Andrew P. Hunter:

Yeah, I think Steve and I may have very similar answers to this question because I don't think there's any fundamental difference to how we do it on our side versus on their side. But a lot of it is building into the software development process. First of all, setting up the process so it doesn't take years. So you have to design a process that delivers capability in sprints, in days-

Tobias Naegele:

You have to change the requirements process.

Andrew P. Hunter:

... months, not years timeframe. So you're right, the government has to bring its side of the equation of saying, we can actually provide you with a needs statement that you can work to and then give you another one in six months' time, or less, actually preferably less, in order to drive that pace. But it's also building in, if it's an aircraft system and the software you're doing addresses some element of flight safety, it's building in the ability to do an airworthiness process as you write, not as a big bang at the end, or on, again, a multi-year timeframe. And the other certifications that are required for that software to actually be fielded. And I think we've come a long way in engineering our processes around that. We still do have a ways to go. There's still some things that we can do better. And then automating the test, where we can do automated test, and where we can't do automated test, real-life test. Schedule it and turn around the results rapidly so we can respond to them.

Maj. Gen. Steve Whitney:

Right, sir, I'd agree with you. I've seen it work well when we do incremental capabilities and they're on a regularly scheduled tempo. I've seen it struggle when we try to do the big bang approach. I've got my OCX scars abound. But the things that I would tell you is the short timelines, the small capabilities, the incremental capability builds are important. I think, sir, your point about testing, and testing isn't just deploy it to the ops arena and test it there. It's every night that I rewrite code to test it that night against the dev system and then come in the morning and figure out what worked, what didn't, and get on it.

The last piece that's really key, and I'm sure we'll talk more about this, but this is a team sport. This isn't a acquisition system or acquisition career field problem. This is a team sport. We need operator involvement to tell us what it is you want, to help us set the requirements, to help us with that testing, to help us get that capability delivered and to help us work through when is it good enough to just start going versus the full up, "I've got to go through operational acceptance, which is a 15-month process, blah, blah, blah, blah, blah." Well, maybe the tool that I'm building you is good enough to use now.

Tobias Naegele:

So operational testing, and the combination of the testing and the DevOps approach, DevOps being a software approach, but it's kind of what you're doing with the B-21. You've got operators out there and they are working every level of that program. Is that happening enough in other places? Are we doing that across the board, or is that a kind of an unusual circumstance and not typical?

Andrew P. Hunter:

It's a best practice. I'd say we're doing more and more of it. It's absolutely my goal that we do significantly more of it. And we were. I think the B-21 program has pioneered some of how this is done really well. And we've been fortunate that with a really great relationship with Global Strike that they gave us access to a continuous set of folks from there, from units, real operators to work with us through that. It's not always possible to do that, I know, and some of our parts of the force are really stressed. But where it is possible, it's been incredibly helpful, and we are doing it in more programs beyond B-21.

Tobias Naegele:

In Space, too?

Maj. Gen. Steve Whitney:

I agree, sir. I think the biggest challenge is keeping it small and incremental so that as I work and build a relationship with my operator brethren, I have that relationship. When I do the big bang approach and I turn to you and get the requirements, three, four program managers later, there's going to be three, four different operators and you're going to have different opinions and so forth. And so going short, going fast, that relationship is key and we've got to work that really hard.

Andrew P. Hunter:

And if I could just, sorry, just give one more example that I should have given, which is on E-7, which is a new capability that we're going to acquire. We have the opportunity because Congress has agreed to let us divest some of the AWACS in this calendar year to actually take a unit. And because there are E-7s already flying and operating in the wild, with our partners in Australia, they have an opportunity to go.

Tobias Naegele:

It's the Outback, not the wild.

Andrew P. Hunter:

Well, it seemed a little wild to me, I was just there. But yes, I think you're right. But we have the opportunity to team with our partners and leverage that. And then those same folks will come back and inform our acquisition program.

Tobias Naegele:

So, we got a room full of Airmen and Guardians, and I suspect that everyone has had the experience of why did they design it this way? Whose idea was this and why didn't they ask me? And we're kind of getting at this, but I think that probably in the back of everybody's mind is what is it that I'm supposed to take away from this? What can we tell, what can you tell Airmen and Guardians that will help them understand some of that why did they do this to me and why didn't they ask?

Andrew P. Hunter:

Yeah. Well, I love the way Steve put it, that acquisition is a team sport. So we're not going to do good designs if we aren't closely integrating throughout the acquisition process with the user community, with the customer. So I guess my message is if there is an acquisition effort that is relevant to the work that you do on a daily basis, either you or someone who wears the same uniform and does the same job, we need those folks to be our partners and to engage with us. And like I said, it's tricky. How do you do that in a way that makes sense, that doesn't take away from mission, but that allows us to get that feedback into the acquisition process? When I was a young congressional staffer and I had stars in my eyes and I thought, "Well, we just pass a law to fix things," which apparently is not how it works.

Tobias Naegele:

We can dream.

Andrew P. Hunter:

Yeah, we can dream. Tried to put a provision in the defense authorization bill that said for every major acquisition program, there should be an operational unit that is teamed and paired with that acquisition program to be the representative of the user. Well, we're doing something not totally unlike that in some of our acquisition programs now.

Tobias Naegele:

That's cool.

Maj. Gen. Steve Whitney:

Agree, sir. As I said, team sport, that's not to discount, to say that the operator has nothing else to do. The operator has a very important mission to do. I need some time and some cycles from them as well to help me make sure I'm giving them what they need. Part of that too comes in how you set requirements and what you set those requirements at. So I'll just pick on one set of requirements, requirements need to be bound in something that's operationally relevant. We have a requirement we've been debating for the better part of 12 years with regards to our handheld GPS units. And the requirement that's up for debate is that to be able to use your handheld GPS unit, 100% power on for 19 consecutive hours on two AA batteries.

And physics doesn't allow you to do that, but it's not operationally relevant because nobody's going to walk around with a light shining on their face as they go through the fight. "Let me highlight my target for you." And so help us set operationally relevant requirements. Help us take advantage of what commercial is. If that's good enough to get us started, help us do that. Don't set up requirements such as we have to go down to military development. Sometimes 30% of requirement is better than 100% of nothing. And so that's something we need to think about as we work our way through that.

Tobias Naegele:

So, in the fall I was out at SSC and they had all these banners. And I can't remember exactly what they said, but something along the lines of "Remember the threat," or "Don't forget the threat." "The threat is real," maybe. And so I asked people, I said, "Well, you don't put up a sign like that if you don't think that it's an issue." And so I'd like to hear your take on the acquisition workforce and what has to happen to evolve the acquisition workforce to understand the threat as seen by the warfighters.

Maj. Gen. Steve Whitney:

Great question, sir. I would say that I think for too long our acquisition workforce got enamored with the system they were building and not the reason why it existed. As a GPS guy, it was real easy to get into the mission and talk about it and get everybody excited about it, but some of the other ones were a little bit more difficult. I think there's been a lot of work to make sure we're educating folks, because the other part was, "Hey, well, there's a threat, but I can't tell you, it's classified." And so it started back in the 2017 timeframe when we started doing unclassified threat briefs for everybody at the center at the time and getting the entire workforce. Honorable Calvelli is using that though as he goes forward in his messages with industry to share with them as well what we're seeing as the threat, so that they can know where to think about investing their dollars and capabilities for what capabilities they might have on the shelf to help us out.

Andrew P. Hunter:

Yeah, no, I think that piece of being threat informed is absolutely critical. And you have to structure that into a program, either early on or if you have to backwards engineer it, then you do that. Because the threat is moving incredibly fast.

Maj. Gen. Steve Whitney:

It is.

Andrew P. Hunter:

And when I talk about operational imperatives, I say, we have a pacing threat and the pace is quick. It's a daily challenge to keep up, so we have to be mindful of that. And the acquisition system, there've been areas in the past, more traditional programs where they say, "Hey, you're moving the goal post on me. I had a Milestone B, they told me what threat I was trying to address." Now, that was 15 years ago and it turns out things have happened in the last 15 years. So we have to get away from thinking about that. And I think the approaches that we're taking with more rapid increments, again, less high stakes, you're not loading the ability to address every possible future threat onto one design, one iteration of what you're trying to do.

And be willing to say, "Yeah, no, we're going to fill that increment and it's going to do what we said it was going to do, but we're already posturing for future increments and we're already working with industry to understand what can they do that we can plug in. And it won't count, if you will, against our acquisition program baseline for increment one, but we will be in a position to field it rapidly going forward." And so that, I think, balances operational risk. It's that balance of operational risk and acquisition risk that I think we're able to using those kinds of approaches that we can do better.

Maj. Gen. Steve Whitney:

And I think, sir, if I could just use a quick example for everybody. Everyone's got their own cell phone, right? And every six months, or every three, four, six months, you see a new phone come out. It's not that that program took six months to do. It was that they have multiple programs running with incremental improvements along the way. That's really what we're talking about here for our capabilities. How do we build systems for space and for air that take advantage of those incremental capabilities?

Tobias Naegele:

So that every satellite that goes up over a eight-year period isn't the same?

Maj. Gen. Steve Whitney:
Correct.

Tobias Naegele:
You can incrementally improve-

Maj. Gen. Steve Whitney:
Incrementally improve it, it's got new capabilities, it's got a new software. Or maybe if I build a string of 10 and they're up and ready to go at one launch, it's the next string type of a deal. And I think we've seen that again in our missile-warning missile-track between SDA and SSC.

Tobias Naegele:
So you've talked, Andrew, several times you've mentioned risk. And I think in the time that I've covered stories about acquisition, risk is always at the heart of it. But one of the problems is the risk aversion of the acquisition professionals. Nobody wants to be the guy who might go to jail for breaking the rules or might get in trouble because that was protested or they don't want to risk a protest. How do you build in, what are you doing to help them understand that risk is okay, as the chiefs have indicated and that failure is okay sometimes? Sometimes.

Andrew P. Hunter:
Right. And true statements, right? Failure is okay at times. We need to structure the way we approach risk so that we don't have failures that take down decades worth of effort or billions of dollars worth of effort. So we got to be judicious in how we posture ourselves for risk, but we have to take risk. And in some cases, I talked about that balance between acquisition risk and operational risk. And the secretary earlier today commented on, if you look at collaborative combat aircraft, we have to understand the art of the possible on the near term and go for that.

And I think we'll see substantially increased operational capability with fielding those capabilities in the near term. So we are actually reducing operational risk by the way that we're going to pursue that program, but we're not dealing with an excessive acquisition risk. And then as we iterate and as we go into additional increments and generations of capability, we'll buy down even more operational risk. And it's keeping that balance going forward and keeping it well-balanced, which is where we in the acquisition side, we can't figure that out on our own. That's where that integration with the operational community is so essential.

Maj. Gen. Steve Whitney:
I would agree, sir. I'd say failing forward is an interesting concept. We've got to get in that mentality that this is a learning experience. When you do smaller increments, you have more opportunities to see it all the way through a life cycle or all the way from the start to the finish. And so our program managers and our engineers get a chance to, for lack of a better word, build scar tissue as they take on challenges and they learn from mistakes, or they learn from things that didn't go exactly like they thought. And what we're looking for is how do they work that into the next iteration to not make the same mistake twice? I think that's the real challenge. And I think, again, going small allows you to get those faster cycles to get

through that. And then eventually, you'll build up the bench of acquisition program managers who have experiences and will be able to move rapidly at scale.

Tobias Naegele:

Let's talk for a moment then about the industry piece of this. It's a team sport. You can't acquire if they're not willing to play ball with you. And that industrial base is not always as large and as vibrant as you might like. So what are you doing to expand the industrial base, and to ensure that you've got the competition in all the different places that you need it?

Andrew P. Hunter:

Well, let me give an example because I've been talking about it a lot in the last couple days, which is on our next generation refueling system, the NCAS program that the secretary talked about this morning, and we've had several days of dialogue on it. My intention with that program is to leverage an approach that we've pioneered on other programs, that it's harder to talk in detail about because they're classified, but it-

Tobias Naegele:

We won't tell anybody.

Andrew P. Hunter:

Just among us. It's to leverage vendor pools. So relatively broad vendor pools. What I've talked about with NCAS is that we would want to have in a vendor pool for NCAS, airframe providers, mission system providers, a wide range and a wide swath of industry. So you don't get into, again, this sort of high stakes decadal competition, where all the mission systems are defined early on, they're aligned with a prime with whom they're sort of locked to that team and everyone else is locked on another team. And then those locks, we can't unlock them as we go on. And then we can't come back later and say, "Well, okay, it turns out the key mission system is something that I was doing a little work on, but I didn't necessarily have prioritized exactly right when we did the first chalk line of what we thought this was going to look like."

So that approach, having a vendor pool, a wide variety of providers, working with them as we go through an analysis of alternatives for NCAS, so that we understand what's really out there, how do these things, mission systems, airframes, actually, in a family of systems approach actually come together and work together to create an integrated capability that's going to meet the needs of the joint force? And it's continuous. No one is ever out of the game. They always have an opportunity at that next shot to be in the game again.

Tobias Naegele:

So are you building a dream team in that scenario, or are you-

Andrew P. Hunter:

I might have to incorporate that term.

Tobias Naegele:

Are you the assembler of these different pieces?

Andrew P. Hunter:

Yeah, so I mean, obviously we're still talking about contracts here. So there is a process. So when it comes to formulating a vendor pool, you have to go out and people have to provide offerings and explain why they have something they bring to the table that's worth having, that's relevant to the game. And you select, you select folks into the vendor pool. But it's not one and done. You can select additional providers into the vendor pool over time. So you're never foreclosing the opportunity of finding someone who has something you need that wasn't on the team before. You can bring them on to the team later on. But you do have a process that tells you who's got game and who doesn't.

Tobias Naegele:

And I'm assuming you got to have open systems, you've got to own a lot of the IP or it's not going to work.

Andrew P. Hunter:

That's right.

Tobias Naegele:

So, can you do the same thing?

Maj. Gen. Steve Whitney:

We can. And what we're seeing on the Space side, again, is we build small and we're seeing, I'll use missile-warning missile-track as another example again. We're seeing awards of satellite builds to multiple contractors in a tranche or in an epoch. And then we're being very clear with industry that the next round will be an open competition again so that you're not locked out if you didn't get it. And so we're being very clear, we don't want to fake anybody out like Lonnie Smith running to second base in the '91 World Series. So we want to make sure that we're really clear in where we're going so that industry understands. And I think that comes through honest and open conversations at industry days and so forth, as we meet with the industry team and let them share what we're seeing and what our plans are to the best of our abilities.

Tobias Naegele:

Do you have enough open interaction with industry that's not at risk of compromising programs? Do you get to have open meetings frequently enough? Do you have enough contact?

Andrew P. Hunter:

I would say by and large, when I talk to our PMs, our material leaders and our PEOs, generally the answer is yes. There may be areas where we could do better and we could bring on a wider swath. And I know from the industry side, the smaller the company or the more non-traditional their approach, the harder it is to get in the door or to get through that barrier. I think that's something we're constantly working on and we have to keep constantly working on, because it's not just the same old usual suspects who always have the right answer. And I think some of these techniques that honestly, as I came into this job, it's been about a year now, in the Air Force, I wasn't aware of all the innovative work that had happened in Air Force acquisition to set up these vendor pools and to make it a very broad, open conversation. So I think it's a real step forward, but for sure we can continue to expand that and to do better.

Maj. Gen. Steve Whitney:

I agree, sir. You can always communicate better, you can always have more conversations. But I think we've tried to do very open and frank conversations. I know our SSC team has done what they call reverse industry days where they'll put out a statement of a problem and then they'll have a conversation for two days with industry, listening to how they would handle that. I know that SDA does industry days all the time, trying to understand the latest in technology and where it's going. So I think that's a very valid mechanism. But too often industry days are tied to there's a contract. We've got to get into this conversation where it's about, "Hey, this is the problem we're facing and I want to know what you have to help me fight this."

Andrew P. Hunter:

And this is, if I could just add on to what I said earlier, this is an area where I think if you talk to the community and say, "Who does this well?" people will point to SOCOM. Their special operations community is always out there for the technology areas they're interested in, going out, talking to people, finding providers. They have the advantage of scale, small scale in this case, and being nimble. But AFWERX has been that engine for the Air Force of being able to constantly be out with small businesses, with non-traditional providers, putting out problem sets for them, or just having open calls for them to submit their good ideas and processing through that and essentially scouting the technology that's out there.

Tobias Naegele:

So one thing that I think some of us at AFA have recognized is that you do have contact with executives, who are often subject matter experts who graduated from the services. You don't necessarily have working-level Airmen and Guardians meeting working-level engineers, who might actually be able to solve problems in twice the speed if they didn't have to go through so many layers of conversation. How do we accelerate that kind of conversation? I mean, this kind of gathering can be that, but what else could be done to accelerate that interaction at that working level?

Andrew P. Hunter:

Yeah. Well, I mean, I thought the awardees this morning that got that General Larry Spencer Award, I mean, what a phenomenal example, and eye-watering what they were able to do and how much money they were able to save us over what I'm sure will be an extended period of time through AFWERX Sparks, which is that effort to get out into the units and to really solicit and to find ideas at that level and then implement them. And I know that's something the vice chief has been instrumental and really passionate about, and I think it's a great approach.

Maj. Gen. Steve Whitney:

Agree, sir. I think it's been a fantastic tool.

Tobias Naegele:

Okay, so we got two minutes left, which means that you got each, you've got one minute. I have a brief question and then you can say anything else you want in your minute. Each of you has a major flight program coming, so when does B-21 fly and whatever else you want to say? 60 seconds, you're on.

Andrew P. Hunter:

Well, I said this earlier today and I got a chuckle. I said, "B-21's going to fly when we're ready." And I got a chuckle from our media colleagues.

Tobias Naegele:

I think that was a groan.

Andrew P. Hunter:

That's a non-answer, but actually there's something to that, right? Because with a lot of these decisions, the question, then there's a second order question, which is what is it that we need to be ready? What do we need to know? And I think too often when people think about acquisition, they think, well, there's a date on a sheet somewhere that says, this milestone will happen at this point in time.

No, it's going to happen when we're ready, and we have to understand what we need to know to be ready. And by the way, if we're ready, and maybe it's before we had penciled it in on our calendar, that's okay, we can move forward. Or maybe half of it's ready and half of it's not. Well, if we can separate those things and say we're ready to make this decision, not ready to make this decision, then we're going to make the one we're ready for and we're going to defer the one we're not. So I think there's actually, if I could say so, there's more in that answer than meets the eye. But we are looking to have flight in 2023.

Tobias Naegele:

All right. We're standing by. You, sir.

Maj. Gen. Steve Whitney:

All right. So the Vulcan, real simple. We have a contract with ULA for a launch sometime this fall. And in our agreements, they are required to produce two certification flights prior to that launch. They are in their efforts to take care of that and I would defer that question to them as far as with the first flight. But we're going to hold them to that contract of two cert flights, and our team stands ready to review the data when it's available.

Tobias Naegele:

Well, okay. So we're out of time. Thank you so much. I found it interesting. I hope everybody else here did.

Voiceover:

Thank you. And now, ladies and gentlemen, we invite you to join us in the exhibit hall for an afternoon coffee break. We will resume our panel discussions in one hour. Please be back in your seat at 15:30. Until then, enjoy your break and the exhibits. We'll see you soon.