

## AA Ep. 186 – Rendezvous – June 1, 2024

**Heather "Lucky" Penney:** [00:00:00] Welcome to the Aerospace Advantage Podcast brought to you by PenFed. I'm your host, Heather "Lucky" Penney here on the Aerospace Advantage we speak with leaders in the DOD industry and other subject matter experts to explore the intersection of strategy, operational concepts, technology, and policy when it comes to air and for space power.

So, if you like learning about aerospace power, you're in the right place. To our regular listeners, welcome back. And if it's your first time here, thank you so much for joining us. As a reminder, if you like what you're hearing today, do us a favor and follow our show. Please give us a like and leave a comment so that we can keep charting the trajectories that matter the most to you.

This week, it's time for The Rendezvous, our monthly installment where the Mitchell team digs into stories you've seen in the headlines. We're going to spend most of this episode focused on the Air Force and Space Force budget submissions to Congress. But before we introduce this week's panelists, I'd like to introduce a special friend of the podcast, James Schenck, President and CEO of the PenFed Credit Union.

PenFed has long been a partner of the [00:01:00] Mitchell Institute, and we're proud to announce that they will be the official sponsor of the podcast. James, first and foremost, thanks so very much and welcome to the Aerospace Advantage.

**James Schenck:** Thank you, Heather. It's truly great to be here with you today.

**Heather "Lucky" Penney:** So James, one of the keys to Mitchell's insight and impact is that our staff is mainly comprised of operators.

The ability to know what it's like to strap into an aircraft and fly into harm's way, to execute a complex space operation, or serve in a command role is crucial given what we do. Reading about the military, that's important. But there's a level of insight that you only get through direct experience. You share a background from your military service.

You earned your officer commission from West Point and served as an army aviator in the Pentagon.

**James Schenck:** Heather, I loved every single day of my military service. From the day I graduated flight school, went over to Korea, Republic of Korea. Flew

Enhanced Black Hawks with a special mission unit. My time at Fort Rucker as an instructor pilot. Going back to graduate school, the military is so good at sending people to [00:02:00] school and then being able to work on the Army Staff.

Every day when I saw that American flag on my shoulder, I was proud to serve my nation.

**Heather "Lucky" Penney:** So what inspired you to serve?

**James Schenck:** It seems like it was just yesterday. In April of 1980, we lost eight service members in a failed rescue operation in Iran. It was in an operation known as Operation Eagle Claw in a landing zone known as Desert One.

It And to see American soldiers that had died to be paraded around the streets, really bothered me. And when I went home that day, my dad was a combat veteran, um, a Marine, fought in Chesty Puller's unit in Korea. And he says, "Don't just talk about it. Study hard, go to West Point, become an aviator, and do something about it."

So, as any good son would do, I studied hard, got good grades, went to West Point, and became an Army aviator.

**Heather "Lucky" Penney:** It's amazing how service can be inspired by tragedy, but also by victory as well. What were some of your proudest moments in uniform?

**James Schenck:** Boy, that list is long. I literally enjoyed every day as an instructor [00:03:00] pilot to see a young lieutenant graduate the program with their silver wings on their chest.

I was so proud of that. As a professor at West Point teaching economics and finance to the next generation of Army leaders, that really was meaningful to me. But truly, my time on the Army Staff, when I worked in the Deputy Chief of Staff's Office for Operations and I was responsible for the Army's flying hour program.

When you're at MACOM or a Department of the Army level, and you have an impact across the entire force, making sure every aviator had enough flying hour dollars, maintenance dollars, to train and be ready to accomplish their mission on behalf of the nation, I think that was the highlight of my career.

**Heather "Lucky" Penney:** You know, I don't really hear very often that Staff, being on the Staff is the moment that folks are most proud of. But in reality, it's a really crucial part of our service, because No Bucks, No Buck Rogers, right? You had the opportunity to impact the broader enterprise and make sure that, every man and woman in our, in uniform had the resources and the training that [00:04:00] they needed to go out into bad guy land, execute their mission successfully and come home safely.

**James Schenck:** If you control the resources and the training of an organization, you control that organization's future.

**Heather "Lucky" Penney:** Excellent. So, how did you end up joining PenFed?

**James Schenck:** When I was transitioning from the military, like 200, 000 plus individuals every year when they come out of uniform, I looked for an organization that had a similar ethos. An organization that was mission driven. That was giving back to the community. Pentagon Federal Credit Union, I left the Army and I inherited all the services by helping others financial dreams come true.

**Heather "Lucky" Penney:** So one thing that's really unique about PenFed is that, as a credit union, you have an open membership. But PenFed's ethos and values remain firmly rooted in its military heritage. Can you speak to how the military service drives PENFED culture, member service, and performance as an organization?

**James Schenck:** Absolutely. Our culture is built around teamwork. It's built around kindness and respect. Men and women from all backgrounds, all orientations, dedicated to a united [00:05:00] mission, something bigger than ourselves.

I surround myself with former veterans. My chief operating officer commanded in Al Sadr City, an engineer battalion. My head of consumer banking was a military intelligence officer in Afghanistan. I have Air Force senior officers on my IT side. General Marine officer runs all of my global fixed assets.

So, our senior leadership team and our entire 3000 plus employees are made up of a lot of men and women who serve or family members who have served.

**Heather "Lucky" Penney:** And you take that culture and those values and you drive it down into the very grassroots of your organization.

**James Schenck:** It is truly a team. It's men and women who have a mission to help others. It's that service culture of working well together, understanding we're part of a team that's going to allow others to do better.

**Heather "Lucky" Penney:** So building off that notion of mission, PenFed also has a foundation that supports veteran causes.

So thank you, I recently attended the PenFed Foundation's annual gala, and I was really impressed with the depth of PenFed's commitment to making a difference, supporting charities that range from [00:06:00] service dogs to veteran mental health, to literally saving female Afghan allies when Kabul fell.

**James Schenck:** And that was probably so meaningful to me. We had the opportunity, what my mom used to always say, "many hands make the load light." We couldn't save everybody, but we had the opportunity to bring 43 female commandos that embedded with our, special forces. These women are true snake eaters that really helped our forces take down some high value targets to bring them back home with their family members.

And get them asylum here in the United States was very meaningful to all of us at the PenFed Foundation, the entire PenFed family.

**Heather "Lucky" Penney:** And that truly is keeping the promise, not only to the servicemen and women, that serve today, but also to our partners and our allies. I remember that time when Kabul fell and it was chaotic.

And so you are keeping the promise that we've made, to our servicemen and women, and those who have supported them in their operations.

**James Schenck:** Absolutely.

**Heather "Lucky" Penney:** So, PenFed's commitment to our military veterans and your membership is second to none. You're making a positive impact [00:07:00] across all of PenFed and really embodying the core values that shaped everyone's service.

So one reason why I'm proud that PenFed has chosen to support the Mitchell Institute for Aerospace Studies and this podcast is because we share that ethos. But what interested you and motivated PenFed to support the work that we do here at Mitchell?

**James Schenck:** You have assembled a team of operators here at the Mitchell Institute, (who) knows what democracy means, and every one of you, and every young woman who's raised their hand to serve as a volunteer, our armed forces, every young man that grew up to serve, that's what the Mitchell Institute represents.

And to be able to have the right analytics. To convince our senior military decision leaders and congressional leaders, the importance of airpower and the importance of air superiority and space superiority. That's why PenFed is so proud to serve everyone like you and General Deptula and your entire staff.

**Heather "Lucky" Penney:** Thank you. You know, you nailed it when you said resources, equipment, and training. If you provide that to the force that they will deliver on the mission and you're helping us advocate for that. So James, [00:08:00] on behalf of the entire Mitchell Institute team, I want to offer most sincere thanks for the partnership.

**James Schenck:** Great to be here. And thank you and your entire team. We're proud to be partners.

**Heather "Lucky" Penney:** So with that, I'd like to introduce the Mitchell Institute Dean, Lieutenant General Dave Deptula.

**Lt Gen David Deptula, USAF (Ret.):** Great to be here.

**Heather "Lucky" Penney:** And we've also got Anthony "Lazer" Lazarski, one of our Washington experts.

**Anthony "Lazer" Lazarski:** Great to be back.

**Heather "Lucky" Penney:** Thanks Lazer. And we've got Todd "Sledge" Harmer with us.

**Todd "Sledge" Harmer:** As always, great to be here. Thank you.

**Heather "Lucky" Penney:** And next is Jeff Rowilson. Just as Sledge and Lazer helped bring awesome insights regarding what's happening in Washington from an airpower perspective, Jeff is a space power expert.

**Jeff Rowilson:** Hey, Thanks for having me.

**Heather "Lucky" Penney:** And we've also got Jen "Boots" Reeves, one of our senior fellows for space power.

**Jen "Boots" Reeves:** Glad to be here.

**Heather "Lucky" Penney:** Okay, Sledge. So we're still in congressional hearing season. Any particular ones regarding the Air Force that you want to highlight?

**Todd "Sledge" Harmer:** Well, we're in the homestretch in terms of the posture hearings. The House is pretty much complete. The House Armed Services Committee has already marked up their NDAA, and I know we're going to talk a little bit more about that later on.[00:09:00]

The Appropriations Committee has completed the MilCon VA bill. That will go to the House floor on the 3rd of June. And then the uh, defense bill will get its subcommittee mark on the 5th of June, go to the full committee on the 13th of June, and then the last week of June, um, defense appropriations bill should be on the House floor.

So they're wrapping up there, in the Senate close behind, but there are a couple of hearings of interest there. I think really, two that are important to talk about. The first one was the SASC, the Senate Armed Services Committee had a uh, two panel hearing on nuclear programs and then the SACD had a hearing on selective acquisition programs, I think that were worth highlighting. The theme out of both of them, at least for the Air Force, was the Sentinel ICBM program. I think everybody is aware there's a Nunn McCurdy breach. OSD is working through the certification of that program there and it certainly is driving a lot of congressional scrutiny and oversight there.

There's also a lot of talk about the other, the rest of the [00:10:00] nuclear enterprise in both the SASC and SACD hearings there. I think really four big trends that we're seeing from the hearings on the Senate side.

The first is, a review of acquisition authorities, whether they be for rapid prototyping or fielding. Mid tier acquisition authorities. OTAs, etc. Whatever it takes to field capabilities more quickly.

The second trend, there was a lot of chatter on the health of the defense industrial base and how we're going to invest to increase the production of capabilities.

Also kind of hand in glove with that is a lot of discussion on workforce development. Not only in terms of the skilled labor that we have out there in the defense workforce, but the contracting experts that are required to get the capabilities on contract and then deliver to the war fighter.

And then finally, I thought was an interesting, there was a lot of discussion in the Senate about the cost exchange ratio. A great example that was used was the cost that it takes to shoot down a, uh, a UAS, launched by [00:11:00] the Houthis. If you've got a 20, 000 drone and you're shooting it down with a 3 million missile.

Doesn't take long before you get behind the cost curve on that, and there was a lot of discussion on that. But I think really, for this group here, probably the most important thing, and Secretary LaPlante really did a nice job reminding Congress that, nuclear deterrence is the foundation of national security.

The fact that we have a nuclear triad, is still the bedrock of our deterrent policy. In fact, he even quoted the Strategic Posture Commission that was established by the FY 22 Defense Authorization Act. Reported in late 2023, and revalidated the fact that we have to have a nuclear triad.

And then Secretary LePlante he flat out said " nuclear modernization, the entire enterprise is DOD's number one priority." So that was really what struck me. And I think the takeaways for the Air Force Space Force group out there, again, the Sentinel ICBM program, but I think people understand the missile, the weapon system is on track.

It's the civil works or the infrastructure [00:12:00] that goes with it, that's going to be the problem. Fighter inventory is woefully inadequate. And I know laser will probably talk a little bit later on about, Senator Wickers, \$55 billion infusion, to get after the problem of the death spiral that the uh, fighter forces in.

But Senator Murkowski in particular, was really adamant that we need to up the F 35 and F 15EX buys to take care of that. And then Secretary Hunter really hitting back to that cost exchange ratio calculation. Hit a lot on the collaborative combat aircraft and how that will be used to augment manned aircraft to solve some of those problems.

And we'll see how it plays out, but that's kind of where we stand right now.

**Heather "Lucky" Penney:** Thank you very much. Excellent summary. And I really think that the four themes that you outlined are important considerations.

I mean, the, these are major issues that we need to be able to come to terms with. And also, thank you for pointing out what Secretary LaPlante said regarding the Sentinel.

I mean, that is, that nuclear deterrence is absolutely key.

Lazer, so we talked about the defense capsule, but do you [00:13:00] think they're going to stick? Do we have any hope of relief? Because I think, well, I don't think, I know that we are seeing glass break.

**Anthony "Lazer" Lazarski:** I hate going out on a limb and looking into that foggy political crystal ball, but, I'll go out and I'll say "yes."

And again, listening to House, Senate, Republicans, Democrats, you know, defense hawks, dead hawks, I do think there's going to be an increase in defense caps. However, we're not going to know how much it will be until after the November elections. We've talked about that before. Because we need to know which party is going to control the White House, the Senate and the House.

And that's going to determine how much defense increase, how much non defense increase we see out there. Right now House Armed Services Committee marked up their bill to the debt ceiling agreement. You know, to that limit and then the House Appropriations Subcommittee on Defense also plans to mark up their bill to 9 billion above that debt ceiling limit.

But what they did is they offset by getting taking some money out of non defense. So they still [00:14:00] meet the agreement that was done on the debt ceiling. The Senate Appropriations Committee, however, hasn't started moving. It hasn't announced any of their top line numbers. Or the spending caps for their subcommittees, but I would expect that they will follow the president's budget requests and they will also stay within the caps.

The real outlier is the Senate Armed Services Committee and Sledge talked about it. So we've got Senator Wicker, which has been outspoken, but he just released his defense plan and he's calling for, you know, not just increased defense spending, but looking at our gross domestic percentage of our gross domestic product and moving it from 3% up to 5%.

So what I think is gonna happen, and we've seen this before, and he's gonna be talking with, Chairman Jack Reed on the Senate Armed Services Committee. Is potentially an amendment during markup or an amendment on the floor that will increase the authorization of appropriations. But there's still a disagreement

between Democrats, Republicans, disagreements on [00:15:00] how much or should defense increase?

and then how does non defense, because you know, is it equal? It's a dollar for dollar. And then how is it paid for by Congress? Because you've got the debt Hawks out there. So it's not going to be easy to achieve and there's going to be a lot of consternation. I don't know if we're going to get this done by the end of the calendar year, or we have to kick it into the next year, which none of us want to do.

But if you go and Sledge also talked about, if you look at Chairman, the, you know, Senate Appropriations Committee Chair, John Tester, Vice Chair, Susan Collins for defense. Chairman Tom Cole came out Mike Rogers, you know, everyone has come out and they're talking about the defense top line is failing to keep pace with inflation and failure to keep pace with the global threat environment.

So again, I expect it, to go up. I'm hoping for the end of the calendar year, but we will, we just have to wait till after the elections.

**Heather "Lucky" Penney:** Absolutely. As they [00:16:00] say, "No bucks, no Buck Rogers." And the Air Force and the Space Force have been underfunded and have deferred recapitalization.

Part of the reason why we're seeing this nuclear crisis across the triad, as well as a fighter crisis and other capabilities. So let's spin it back to Jeff. What about any hearings involving the Space Force over the past month? What key updates do you have for us regarding what the senior leaders that are saying?

**Jeff Rowison:** Yes, so interesting nuclear themes come through the comments so far. One of the most interesting hearings of the last month and one that has caused a bit of a stir and concern was the HASC hearing on their 25 budget request for National Security Space Programs. Then Assistant Secretary of Defense for Space Policy, (Dr.) John Plumb said in his opening statement, and I'll quote it because it's getting a lot of news.

He said, "Russia is also developing a concerning anti satellite capability related to a new satellite carrying a nuclear device that Russia is developing. This capability could pose a threat to all [00:17:00] satellites operated by countries and companies around the globe, as well as to the vital communications, scientific, meteorological, agricultural commercial and national security services we all depend on." Unquote.

Um, you know, Plumb then deferred on a lot of questions related to the weapons, launch, readiness, relaying that details would be addressed in a classified session following the open hearing. Now that all comes on the heel of the Space Force budget request, um, going down a bit and the budget caps that Lazer described and the effects that is having across all of force readiness.

And I think, um, what we're seeing across the Space Force, is a real desire to leverage additional capabilities. You'll see that in the markup discussion from commercial and international partners. So I think the concern of, our nuclear triad and the sustainability of that also affects the space community. So I'm really looking forward to the rest of the discussion as we talk [00:18:00] about some of the implications coming out of some of the markup cycles.

**Heather "Lucky" Penney:** Absolutely.

So Lazer and Sledge, the House met last week to advance their version of the National Defense Authorization Act. What were some of the key air force provisions that you'd like to talk about?

**Anthony "Lazer" Lazarski:** Yeah, I'll touch on just a few and then let Sledge cover the rest.

So, the House Armed Services Committee released their modified or marked up version of their National Defense Bill. They released the bill on the 13th, passed it on the 22nd, and Sledge will attest to this, it's the quickest markup I have ever seen on the House Armed Services Committee. And it was bipartisan support, 57 to 1, they voted it out of committee.

And they had over 900 amendments. And you guys talked about some of the amendments out there and, you know, thank goodness, some of them failed. But first the title of the bill really highlights the priority of the bill. It's called the Service Member Quality of Life Improvement National Defense Authorization Act.

It focuses on our service members. That force readiness starts with [00:19:00] take care of our warfighters and their families. So just real quick. I mean, okay, so it's at the Fiscal Responsibility Act agreed upon limit. That's a bad thing because it's 1 percent increase, which is below, not just inflation, but as well as defense inflation.

So we're already behind the power curve. Then we have a positive 4.5 percent pay increase for all service members. And an additional 15 percent pay increase

for junior enlisted. E4 and below. Great thing, but that funding is coming out of other areas of the bill. Also restores basic allowance for housing from 95 percent to 100 percent to make sure that they're in good housing.

They're looking at, basic needs allowance up to 200%. There's just a lot of good provisions in this bill to take care of our service members. They're even looking at barracks at housing. Um, but, and then we start coming in and I know we're going to talk about F 35s but it cuts you know, 10 F 35s.

It takes that funding, that [00:20:00] savings, and then tries to put it back into the program to try to resolve the issues. There's a divestment of 250 aircraft that includes 56 A 10s, but then there's a prohibition on some of the retirements. You know, the F 22s, F 15Es that they're not, there's also KC 135s, and then there's a procurement of F 15EXs, and some money for advanced procurement. Fully supports to B 21, um, their support for the Sentinel program.

So overall, I mean, there's a lot of good, but the funding is not up at the level that we need to have for the threat environment that we're at. But once the House eventually passes this bill, then it's going to have to get reconciled with the Senate.

So nothing is going to survive on contact and it needs to be negotiated. We don't expect that to get done again until after the election. But the other thing is it's an authorization bill. So all this money that I just talked about as an [00:21:00] authorization for appropriations, and we have to really see what the appropriators do with the money.

**Todd "Sledge" Harmer:** No, Lazer that's a great recap. Um, and I think again back to your point about it being the shortest markup in history. That's the value of electronic voting and the fact that the committee leadership really hit their caucus hard not to put a lot of the poison pill personnel policies in that would really get into a contentious debate and make it an issue there.

But, two things that I really wanted to hit on, Lazer, I think, has both addressed. And he's absolutely right to talk about the zero sum game. That if you increase the personnel dollars that you're spending, that's a dollar you can't spend elsewhere, and that's going to be felt in the readiness account. So the procurement and the the O& M account.

The big thing, really, to me, was the the plan to reduce the, number of F 35 tails by 10. To plow that money back into the program, so you can accelerate the delivery. There were few things the Secretary of Defense has to do before, he'll

be allowed to buy more airplanes and [00:22:00] to accept delivery of those airplanes.

You know they've got to get an... they've got to have some more test infrastructure and assets there, and they've got to build out another MSIL, so the mission software integration lab. So they can do concurrent testing on the TR 2 and TR 3 aircraft. To get things back on track so when they do buy more airplanes, they can be delivered quickly.

But what I wanted to highlight was not what's in the bill, but what wasn't in the bill. And again, this goes to the F 35 program. Both Congressman Moulton from Massachusetts and Gates from Florida were unsuccessful in getting, amendments into the bill during a committee markup that would allow them, the government, to basically to confiscate intellectual property from Lockheed Martin on the F 35 program.

And I think that's important for two reasons. First, it's Congress, basically venting their frustration with the program and their frustration with Lockheed Martin and telling them to get their act together. And the second thing it's telling the Department of Defense is to get their act together when it comes to [00:23:00] negotiating government purchase rights or intellectual property rights for major defense acquisition programs.

And again, this bill is going to go to the House floor on the week of the 10th of June. So, we'll see how it gets larded up with amendments and then goes off to conference where it will sit until after the election.

**Heather "Lucky" Penney:** No, thank you gentlemen so much for that. General Deptula, I'd like to get your reaction to a few of these items, but specifically let's start with the F 35.

What did you think about the cut to the buy and the investment of the overarching enterprise? I mean, you released an op ed on this Forbes and we'll include that in the show notes.

**Lt Gen David Deptula, USAF (Ret.):** Yeah. No, thanks very much. Um, the investment in the enterprise is essential, as Sledge just elaborated on. We do need more testing capacity, investment in the cooperative avionics test bed or cat bird, the simulation environment and more test coded aircraft, will be very helpful to increase the rate at which we can accrued more test points, um, at all phases of the effort.

Now all that [00:24:00] said cutting more F 35 aircraft is simply not viable. The Air Force is literally in a four structure capacity nosedive. Spending caps means the money needs to come from somewhere, but coming from operational combat aircraft is not smart. We're already under the fighter aircraft minimums necessary to execute our National Defense Strategy and we're rapidly getting smaller.

Look, joint operations don't work without the missions that fighter aircraft perform. Furthermore, to survive in the modern air defense environment, stealth is an absolute prerequisite. If the United States doesn't want to risk getting itself into a Ukraine like trench warfare situation, we need to get F 35s into the force as rapidly as possible and increase the emphasis on delivering Next Generation [00:25:00] Air Dominance as soon as possible.

These affected jets are going to be coming off the line with TR 3 Block 4 and we'll be hitting their marks. So the F 35 is not the right place to be cutting right now.

**Heather "Lucky" Penney:** I totally agree. This is really a, this is budget driven, right? I think that their desire to invest in the test enterprise is right.

And that's the best thing to do. We do need to have the Catbird. We do need to have the software integration laboratory. We do need to have that simulation environment, but cutting production capacity is not the thing to do right now. These jets will roll off the line in two years. They should have those problems and issues fixed by then, and we cannot afford to continue to exacerbate the fighter gap here.

Does anyone else have thoughts on this?

**Lt Gen David Deptula, USAF (Ret.):** Yeah, let me add one more. Because it is very worrisome that there's another resurgence of talk coming out of the Pentagon about stealth being vulnerable [00:26:00] and not worth the investment anymore. Now, um, that's being spread by analysts and engineers with no war fighting experience or not understanding that stealth is not binary.

Yes, there are technologies that can reduce the effectiveness of stealth. But there are degrees of low observability and regardless of detection capability, given that all the detectors happen to be in the right locations or looking in the right segments and are uninhibited in their operations. Low observability increases the probability of survival and penetration relative to no stealth at all.

Don't forget, low observability also does not just affect the probability of acquisition, but it also reduces the probability of acquisition to track transfer. It reduces the probability of tracking and it reduces the probability of fusing. When you [00:27:00] combine all of these things, that significantly reduces the probability of successful engagement while increasing the probability of survivability and getting to your target and getting back home at once.

Um, if you want an example of where stealth would make an enormous difference, imagine if Ukraine had F 35s today. They wouldn't be facing the challenges that they currently are.

**Heather "Lucky" Penney:** It just blows my mind that we would want to complicate the adversary's problem sets in every axis. I mean, that's one of the major values of stealth.

In addition to what you described regarding degrading the probability of success at each step of the kill chain.

**Anthony "Lazer" Lazarski:** Your point that you made is this cut is FY 25 money, which is not going to come out till next year. Next year is when we're going to have this issue fixed.

Those jets don't roll off for another year. So we're taking a near term hit on the production of aircraft that we need [00:28:00] in the out years and they're not going to be impacted. So I don't understand the cut.

**Heather "Lucky" Penney:** So, General Deptula, what about the members of the Hask who are taking a run against the nuclear triad modernization efforts? I mean, Ranking Member Smith wrote an op ed challenging Sentinel and Representative Garamondi offered his standard amendments trying to curtail the triad modernization efforts.

So, what are your thoughts on that?

**Lt Gen David Deptula, USAF (Ret.):** Well, the entire point of the nuclear triad is to deter adversaries, reassure our allies, and preserve stability through a credible capability. You know, summarized that's peace through strength. So it's difficult how responsible leaders can oppose sustaining a credible nuclear deterrent capability.

Look, China, Russia, Iran, and North Korea routinely demonstrate that they have little regard for peace. And that's not just hyperbole. Look, Russia

invading Ukraine, that's deterrence failed. [00:29:00] Same with Iran's aggression in the Middle East, and China and North Korea intimidating adjacent territories in the Pacific.

They only respond to hard power. The U. S. must continue to operate a modern, viable, incredible nuclear deterrent against these aggressive actors. The bottom line is the U. S. triad is incredibly old and fragile, with key parts dating back to the Eisenhower and Kennedy administrations. So they need to be replaced.

Further modernization of ancient equipment is simply not viable, nor is it responsible. Now our lack of investment in our triad for too many years has made the situation even worse, and it's time to correct that neglect. So decreasing investment in the triad risks opportunism by the alliance of evil and being victim of a nuclear strike. It's that simple.

So we've got to live with the world that it [00:30:00] is, not imagine it for what we wish it would be.

**Heather "Lucky" Penney:** So Boots, you were in the missile world for a while. What's your perspective on this?

**Jen "Boots" Reeves:** Well, I am 100 percent on board that we absolutely have to modernize the triad. We simply can't live without it.

Um, and I wanted to share a quick little story because I don't think people understand exactly what it entails. We talked about the missiles, for example, having to be updated, but also absolutely that infrastructure has to be updated. Those missile silos are so old and they are falling apart.

Now I don't want anyone to think that we are not maintaining our nuclear deterrence because we are, and you should sleep well at night knowing it. But it's like an old classic car. It gets older and takes so much more maintenance and so much more money to keep it running. And that's what's going on.

And what I wanted to share, that may have had something to do with the Nunn McCurdy and the, um, the increase in costs that were happening. And I think most people wouldn't even think about this. But know that those nuclear orders are safe, because [00:31:00] there is a dedicated network that gets the command out to those operators.

And then from the operators to, the missiles themselves for launching and for checking and testing and whatnot. It's called, the HIC system, the Hardened

Interconnect Cable system. Now here's the issue. It is 8,000 miles of dedicated lines.

**Heather "Lucky" Penney:** 8,000?

**Jen "Boots" Reeves:** 8,000 miles of dedicated lines and they all have to be replaced.

So...

**Heather "Lucky" Penney:** It's hard enough to just get my internet fixed at my house.

**Jen "Boots" Reeves:** 100%. And so, exactly. So, it's a big task and I'm not sure that people are actually able to understand the complexity and the enormity of this task to actually, just with the Sentinel system, just with replacing the ICBM system to get after it.

Wildly important.

**Heather "Lucky" Penney:** Yeah. And this is, as you mentioned, not just about the missile. It's about the command and control. It's about the actual silos that are holes in the ground. So it's also a real estate program as well as a foundation program. So there, this is one of the most complex programs that, that has ever [00:32:00] been done by the DOD, by the military.

So this is, people should not, get too excited about this.

**Jen "Boots" Reeves:** I agree with you wholeheartedly. I think your assertion is correct. It is probably the most complicated acquisition and sort of refurb um, redo of a system that we've ever had. And then on top of that, doing it in the modern, acquisition, conditions that we have of today, it makes it incredibly challenging. So, um, yeah, let's take it one step at a time.

**Heather "Lucky" Penney:** So let's talk about another uh, crisis that the air force is facing. General Deptula, the HASC is allowing the Air Force to retire A-10s, but is making the service keep the block 20 F 22s and F 15E, so the Strike Eagles. This really is all about the fighter enterprise.

What are your thoughts on that?

**Lt Gen David Deptula, USAF (Ret.):** Well, Heather, first and foremost, as everyone in this room is well aware, the Air Force has a significant fighter capacity gap, and it's just getting worse given all the Reagan era aircraft are on the verge of retirement. Simply [00:33:00] put, we're not buying new fighters fast enough.

And it's not just for the Air Force, it's for the entire set of joint force operations that our combatant commanders are responsible for being prepared for. Global demand for U. S. Air Force fighters is growing not decreasing. Now, the A 10s are incredibly old and their utility is limited, so it makes sense to allow for reinvestment in new aircraft and allow the associated maintenance force, that's, been supporting the A 10s to shift to the F 35.

With respect to the F 22s, they must be protected and modernized at all costs. It's still the world's most advanced fighter. We need these, all of them, and that's non negotiable.

The 33 Block 20s are, yes, less capable. Then the operational Block 30 35s, however, they can be upgraded if demand [00:34:00] dictates, which, frankly, is the least expensive way for the Air Force to acquire a desperately needed additional squadron of 5th generation combat aircraft. If the Air Force retires the Block 20s, the Block 30 35s pick up the entire load and that will grind that inventory into the ground.

This is predictable and it's what broke the B 1 inventory years ago. With respect to F 15Es, they're not young. And they need to be replaced. However, that needs to happen on a one for one basis. And until that happens, those aircraft should be retained because the Air Force needs the capacity. It's also important to recognize that this is about sustaining the entire airpower enterprise.

Pilots, maintainers, depots, air traffic controllers, and the entire associated support infrastructure. The Air Force can't do that if it retires too much and gets too small.

**Heather "Lucky" Penney:** You're absolutely right. I mean, in the [00:35:00] 1980s during the Reagan era defense buildup, it actually didn't build, he didn't build up the military, he transitioned the military from a century series force that was primarily procured in the 1950s and 60s into a modern force.

And he was buying 200 to 300 fighters a year. So that gives people an idea of the rate at which we need to procure fighters again, to be able to sustain a one for one replacement rate. Which is crucial given the global threats that we face

today. And it's not just about the hardware. It's about the people and the entire support enterprise.

So thank you, sir.

**Lt Gen David Deptula, USAF (Ret.):** Yeah. So how many are we procuring this year?

**Heather "Lucky" Penney:** Not enough.

**Lt Gen David Deptula, USAF (Ret.):** 50 some, okay? While we're retiring approximately 300. And we've been doing this for years now, and that's what the program plan is. It's simply unsustainable, and we're going to see our Air Force wither away if action's not taken to reverse the nosedive that the Air Force four structure is in.

**Heather "Lucky" Penney:** And it's not like we get to save [00:36:00] that money and spend it in the future.

**Lt Gen David Deptula, USAF (Ret.):** Yep, no, that's great. That's another point that people miss is the monies that we save in one budget are not earmarked for the Air Force in future budgets. And guess what? The folks who make the decisions in OSD and in Congress have short memories and when the Air Force goes back to say, "well, wait a second, we saved this amount of money" they go, "hey, I wasn't around back then."

**Heather "Lucky" Penney:** And while I fully support the research and development enterprise, because we need to continue to invest in those asymmetric capabilities that will provide our warfighters that combat edge. We have a terrible track record of transitioning from R& D into a program of record. I mean, just take a look at the programs that are in production today.

We are not buying them at the rate or to the quantities at which we need to be able to make a difference in an operational conflict.

**Lt Gen David Deptula, USAF (Ret.):** Spot on.

**Heather "Lucky" Penney:** So, Jeff, what about the Space Forces portion of the HASC's bill? What do we need to know there?

**Jeff Rowison:** So a lot of interesting initiatives coming out of [00:37:00] this version of the HASC, right?

And, um, a couple, you know, we've got a laundry list that I'll kind of describe just to give folks an idea of what was in the bill. But, and we'll talk about the first one, that's the transfer to the Space Force of covered space functions of the Air National Guard to the Space Force and I think we're going to get into that a little bit later. But that's been a huge, um, personnel issue that's been, contentious to say the least and through the process, of the full committee hearing. There was an amendment offered that struck some language that would bypass federal laws requiring governor's consent before the Pentagon transferred any of those Air National Guard units to the Space Force. And then there's a requirement to within that amendment to provide an annual report on that transfer status, but getting into some of the other strategic forces, mark up there was an establishment of the Commercial Augmentation Space Reserve..

That's the CASR effort [00:38:00] that Colonel Richard Kniseley with the Commercial Space Office is really leading up and Congress is having, um, the Space Force study and report regarding commercial insurance, adequacy of authorities options for government provided insurance. And really providing, looking at providing, the right authorities and support for that CASR augmentation effort to really form into something actionable for industry going forward.

The STRAT Forces also had an annual briefing on the Commercial Space Strategy of the Space Force by which the, interestingly, the CSO and SAFSQ , Honorable Calvelli are to provide a comprehensive briefing no later than 10 days after each budget submission through 20 to 29 on the implementation of the Commercial Space Strategy.

Additionally, one of the other bill efforts was a pilot program to demonstrate a hybrid space architecture. And that directs SSC to carry out a pilot program to demonstrate that architecture. Interestingly, the [00:39:00] committee noted that DIU's effort to lead this up, you know, it has been fantastic, but direct SSC to take on that effort and then some other items of special interest.

Um, there's a commercial satellite support for the Department of Defense needs and that's related to commercial remote sensing and direct COCOM support perspectives. And I think we've talked about in the past, the FY 24 appropriations bill allocated 50 million for TAC SRT efforts by the Space Force and the committee is really looking at directing NGA to provide some perspectives on that direct to COCOM support. Some other areas or federal re entry range coordination by which the SECAF has to report the current status of the MOA with FAA related to commercial launch and re entry activities.

Listeners may recall that VARDA, had some issues with FAA. Air Force and Space Force on some of their re entry, um, coordination efforts.

And this is really you know, I think the [00:40:00] committee recognizing that we need to mature those equities and efforts. There's also some ground infrastructure for space LIDAR capability. High capacity, multi orbit satellite constellations, hybrids satellite comm terminals. Launch site diversity for the NSSL program and, um, you know, so forth. Some interesting amendments that came out of the markup cycle that we've discussed are a plan for improvement of the Space Force Satellite Control Network.

The SCN is one of the oldest ground architectures around. And so the Congress is looking at how that system can be improved. Also they're looking at an amendment on briefing on space related waveform and data link capabilities. And one report on in space servicing access assembly and manufacturing capabilities.

So really what you see through the space side of the congressional marks or, you know, actions through the NDAA, are real commitment(s) towards our commercial [00:41:00] partners. As well as some of the authorities that the Space Force needs to create and develop a more hybrid architecture. As the budgets continue to be challenged, we continue to face a requirement to really leverage every available resource and we need the assurances that when.

The flag goes up, if you will in combat that our contracts are appropriately structured to give us the ability to surge into capability.

**Heather "Lucky" Penney:** That's a lot of really great stuff. And especially when it comes to the commercial capability and the need to be able to access that throughout the spectrum of conflict.

Um, so thank you.

Boots, I'd like to ask you a different spin on this question because there was so much content in that bill. But what wasn't that should have been? We've seen Space Force leaders be very vocal about the risks that they're seeing.

**Jen "Boots" Reeves:** So I think what I'd like to amplify is that the service is just, it's looking for more that [00:42:00] it can manage in time to just deal with the situation that we find ourselves in. Right? Um, if you look from a perspective of space situational awareness and then following on to offensive and defensive capabilities, know that we are dealing with an environment of

massively increased congestion in the orbital regime. Which brings with it inherent dangers already.

Um, and that doesn't even talk to any of our spacefaring nations who might be up to any sort of nefarious activities up in space to then make things further challenging. So, I think, and a number of them, of course, get into the classified realm, which we can't discuss. But I think the relationship, between the service and working with Congress to continue to move the ball forward, understanding that it's not very well known what's happening up in space.

So, just more. Is the answer right there. Thanks.

**Heather "Lucky" Penney:** [00:43:00] Yes, absolutely more. And we know that, you know, the Space Force needs to have additional funding. We are asking for a major step function in capability and mission area for the Space Force. And they are not funded to the level that they need to be able to get to where they need to go and what, where our nation needs them to go.

**Jen "Boots" Reeves:** Absolutely. And by an order of magnitude, the smallest service out there and one that underpins everybody else.

**Heather "Lucky" Penney:** If you don't have a Department of the Air Force, you can't have a joint force. And when I say department, I include the Space Force because even the air component relies so much on space.

**Jen "Boots" Reeves:** Absolutely.

**Heather "Lucky" Penney:** So Boots, bring us up to speed on the Space Force and the Guard. That's been a very contentious issue. What's going on there?

**Jen "Boots" Reeves:** It really has been. And so what I think I'm going to do is I'm going to lay out what the situation is and we'll continue to just have a conversation with that.

So, what's going on, now in my mind there are two separate issues going on and I'm going to address them both. The first one is that there are 578 positions in six states in the Air Guard that actually are doing [00:44:00] pure space missions. Now, there are some, so what has happened is, there was a proposal then, by the Department of the Air Force that we would simply move those billets over to the U. S. Space Force, and not actually have a discussion about whether or not they should be in the Guard, or create a new Space Guard, to of course, augment and be partners with the Space Force. So what happened, well

the situation is that, more about these billets. It is truly a small number of billets in the context of the Air Guard.

It's less than half a percent of the 106,000 Air Guard members. And really when we get down to the brass tacks, frankly, only about, Actually, about a third of those are AGR positions and what that means is that they're federal only missions as well. So, we're really talking about 300 to 350 billets, that are available for state missions.

So, I do think that this has become a big issue, but I think it's for a different reason. I'm going to [00:45:00] talk about that in just a second. So, there was a poll that was actually done, many months ago that said approximately 80 percent of those members would not want to come into the Space Force.

However, that poll was done before a piece of legislation was enacted, and that is, the Space Force Personnel Management Act. Which authorizes, for the first time ever in the military, part time- active duty members. And so, the Space Force is working out what that looks like, and without that being available, it looks like most of the Guard members said, "well, no, I don't want to be part of the Space Force."

But now that is an opportunity that exists for the Guardsmen, and we will see what happens. So, the Space Force is saying that this is a small enough number of people and billets that they will be able to manage individually, each one of them, and what their situations are to make sure that, um, well that everyone is taken care of. And that, as well, the [00:46:00] governors, if there's anything due back to them, that will be taken care of as well.

So speaking of the governors, I think that's what the second issue is, and mainly, kind of the main issue, right? I mean, in the end, we're talking about several hundred people here, but the main issue, I believe, is that the Department didn't coordinate with the governors as prescribed in Title 10 of U. S. Code, and, um, that's what's being described as the slippery slope, right?

If the DAF is allowed to do this, what next? And I believe there's some merit here. I don't think that there's anything in particular that anyone's service is trying to do to get one, get something over on everyone. But, I think there is, relevance to what's being discussed, and I think that the new legislation, the proposed legislation is actually going to cover that.

These issues tend to get emotional, and um, when we stick to the facts, I think we can actually get to a reasonable solution way ahead.

**Heather "Lucky" Penney:** Jeff, what are your thoughts?

**Jeff Rowilson:** Yeah I think, as we talked about it, I think this gets contentious because it [00:47:00] gets emotional. There's 50 different state perspectives, um, that are rolling into this. And I think there are also, you know, really profound equities from folks that have grown up in the Air National Guard. And so I think as the Space Force, you know, decides and coordinates appropriately how they want to manage these folks and like we talked about the 576, the NDAA alots 580. Right?

And so there's some room here for a really pragmatic, smart discussion of how we manage these personnel to their own benefit and to the benefit of the DAF. So I think there's a ways to go here, but I think Congress has weighed in very smartly and now it's time to, you know, kind of figure out where the real balance is over.

**Jen "Boots" Reeves:** Well, so Heather, as a member, a former member of the Guard what are things you think the Space Force needs to consider as they work to absorb these folks?

**Heather "Lucky" Penney:** I think the [00:48:00] devil is going to be in the details and this is really where it needs to be broken out. I think right now we're speeding.

In terms of trying to make a decision about what happens to these space professionals that are currently Guardsmen and whether or not they get absorbed into the Space Force and become Guardians because I think that there's a lot of issues regarding pay status, legal status, are they Title 10 or are they, you know, Title 32, Title 50? What about promotability?

So how do you do the career field progression and what's the competitive nature of promotion? What's the control of the of the individual, the part timer over their career, over their domicile, over their basing. And then finally, I know right now they're small, but will they be able to scale?

So this might be an argument where you can, you know, sure, they're small enough to be able to manage right now on a, on an individual face by face basis. But that's not going to be sustainable for a force that is growing, because I do believe that space will continue to grow. [00:49:00] Now, if it was a Space Guard, would you suddenly have 50 Space units?

I doubt that. We don't have 50 fighter units throughout the Air National Guard. I think that it'll be organic growth, but space needs to grow writ large. So how would they potentially be able to do that? I think it's too early in the game to be able to weigh one way or the other. I think we need, there, there needs to be more conversations between how the Space Force intends and what their vision is, and do they fully understand all of the thorny elements of managing a part time force?

Because right now, most of those people have been full timers in the active duty their entire life. They do not understand the part time force. And then also conversations with the governors and with the Guardians.

**Jen "Boots" Reeves:** I think you're right. And actually, I think everyone's lucky because the reserve will be, um, the test case as the PMA actually gets rolled out and the Space Force figures out how to manage, no kidding, the systems and the rules and the policies, et cetera.

[00:50:00] The reserve component is going to be the test case and that opens up just this summer.

**Heather "Lucky" Penney:** Okay, Boots. So, Lieutenant General Garrant visited us last week and said two more mission areas would become integrated mission deltas this August. When the missile warning and space domain awareness will become IMDs like space electronic warfare and PNT, position navigation timing.

So, help us understand what that means.

**Jen "Boots" Reeves:** So, it's actually a pretty basic concept and it's pretty simple. It's pretty cool. So essentially they're going to put four things under the same Delta commander. Four functions: personnel, training, equipping, and sustainment. Um, it's really about unity of effort across the operational lifetime of a weapons system.

And all the way from the command level down to the the company grade officers, um, those youngsters are going to be shoulder to shoulder with pros who are operations focused or pros who are, [00:51:00] um, sustainment materiel type leaders focused, um, because we know that our operators are in the trenches and they understand and know about the continuous need for modernization and upkeep and maintenance, et cetera. Sustainment, right? And they will be shoulder to shoulder with the material leaders who will then be able to make it happen. So, additionally, right, that's going to be on the operations

side. Additionally, over on the SSC side, on the sustainment delta side, there will be a similar construct.

And, what's interesting is, Um, there will be, in each of these deltas, right?

There will be a leader who is one flavor and the deputy leader who's the other flavor. In other words, you'll have an operators, the commander, and then a, um, senior material leader who's the deputy. And then on the SSC side, it will be flipped.

So there will be that level of integration to allow for, um... the point of it is to really have better readiness of our weapon systems and our personnel.

[00:52:00] And it started last fall, um, with, as you mentioned, the first two deltas. And they've seen great success of that, measurable success. And so they're pressing on to roll the next two deltas our missile warning and our space domain awareness focus deltas, into the same construct.

**Heather "Lucky" Penney:** Excellent. Very cool. All right, folks. So the Air Force release of first official photos of the B 21 in flight. Very exciting. And these pictures were awesome to see. So, um, as we look towards the future of the B 21, what are the key considerations we should be thinking about as the program progresses through its test points?

**Lt Gen David Deptula, USAF (Ret.):** Well, um, Heather, first and foremost, it shows that the aircraft is real and it's making progress. And that's hugely important to reveal. Both to our allies and to our adversaries. Now, like the fighter force, the Air Force is taking far too much risk at present with respect to bomber capacity. We need actors [00:53:00] around the world to recognize that this is going to change with the fielding of the B 21.

What I mean is we need to build the capacity necessary to meet the demands of the National Defense Strategy. I mean, that's not unreasonable. And the fact of the matter is the number is beyond the 100 minimum that's been articulated in the media. The number is closer to twice that given current real world demand.

Now all that said, in reality, a final number doesn't need to be determined today, except for producing the production capacity, should be built in anticipation of the actual demand that we're going to need. And we also need to factor in for attrition. Good example, look at the B 2 they're writing off due to a landing [00:54:00] accident.

We simply don't have any backfill for that aircraft. So, the B 21 is going to need to have far greater inventory to pull from to offset attrition, particularly over the multiple decades that it is going to be our primary bomber. Because attrition is going to happen, that's just simply reality. Now, while testing remains highly classified, um, defense leaders and congressional leaders alike remain positive in their public statements.

And that's a good indicator for just how well the B 21 program is progressing.

**Heather "Lucky" Penney:** Sir, I'm really glad you mentioned the notion of a small fleet and how we have to plan for attrition, not just in combat, but also during training. We need to have capacity numbers matter. There's no such thing as immaculate training and there's no such thing as immaculate warfare.

And if we've seen anything with small fleets, like the F 22 is problematic when you don't have [00:55:00] enough of those aircraft.

**Lt Gen David Deptula, USAF (Ret.):** Spot on.

**Heather "Lucky" Penney:** So, sir, you just got back from Ukraine. Can you share with our audience what you were doing there and what your key takeaways were?

**Lt Gen David Deptula, USAF (Ret.):** Um, well, do you have another hour?

**Heather "Lucky" Penney:** I think we'll actually have another episode on this, but let's give folks a little taste.

**Lt Gen David Deptula, USAF (Ret.):** Yeah, no, it's going to take a long time to go through that, but I was asked to meet with the Ministry of Defense, their general staff and their Air Force, um, to help them think through strategies and operational concepts to optimize use of air power. Um, I have several major takeaways, um, but here are my top two.

First, Ukraine is limited in taking major actions to achieve military advantage simply due to the restrictions on the use of U. S. provided weapons. Now, look, this is a complex issue, but the sanctuary these provide for Russian forces affords them a major advantage and needs to be removed. [00:56:00] Summarizing one Ukrainian Air Force comment, Air Force officer commented to me, quote, "we have a pistol and the Russians have a rifle."

Second, the general perspective in Ukraine is that the U. S. is more concerned about the potential fallout of Russia losing than with Ukraine winning. Right or wrong, that's the perspective and therefore the U. S. needs to change its narrative. Um, it's clear that the calculus needs to change or the challenges for Ukraine will mount.

Ukraine's in a fight for its life with the outcome of enormous strategic significance for Europe, NATO, and the United States. The Russians invaded without cause, have conducted unspeakable crimes against innocent people, and maliciously destroyed property for no military purpose. Without more sensible policy on the use of U. S. provided weapons, those weapons will [00:57:00] merely prolong this conflict. They won't end it.

They need to be used to gain the air superiority that Ukraine desperately needs. To provide freedom from attack as well as a freedom to attack in times and places of his choosing. This I'd tell you is the number one issue to resolve if the U. S. wants to effectively assist Ukraine in freeing its Russian occupied territory, reducing Putin's capability for further aggression in Europe and minimizing the risk of extended trench warfare, exhausting Ukraine. And oh, by the way, how we respond has global implications, and China is watching our every move.

**Heather "Lucky" Penney:** Absolutely. Russia has deterred the US to the point where we have put constraints and handcuffs on Ukraine such that they are not able to use the weapons that we've provided them and that our allies have provided them to execute a combat strategy, a campaign strategy that could [00:58:00] allow them to win.

**Lt Gen David Deptula, USAF (Ret.):** Well said.

**Heather "Lucky" Penney:** Everyone, thank you so much for your time today. General Deptula,, Jeff, Boots, Lazer, Sledge, it's always fabulous to catch up.

I always learn so much from you and thank you for your partnership over the last four years.

**Lt Gen David Deptula, USAF (Ret.):** You bet, Heather. Have a great aerospace power kind of day.

**Jen "Boots" Reeves:** Super glad to be here. Thanks.

**Todd "Sledge" Harmer:** Always a pleasure. See you next time.

**Anthony "Lazer" Lazarski:** Thanks so much.

**Jeff Rowilson:** Lucky, great job. Thanks a lot for having me on again. Everybody have a great week.

**Heather "Lucky" Penney:** With that, I'd like to extend a big thank you to our guests for joining in today's discussion. I'd also like to extend a big thank you to you, our listeners for your continued support and for tuning into today's show. If you like what you heard today, don't forget to hit that like button and follow or subscribe to the aerospace advantage.

You can also leave a comment to let us know what you think about our show or areas you would like us to explore further. As always, you can join in on the conversation by following the Mitchell Institute on Twitter, Instagram, Facebook, or LinkedIn. And you can [00:59:00] always find us at Mitchell aerospace power. org. Thanks again for joining us and have a great aerospace power kind of day. See you next time.