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**STRENGTHENING AMERICA'S
DEFENSE INDUSTRIAL BASE,
WORKFORCE AND PRODUCTION LINES
TO DETER WAR**

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED NINETEENTH CONGRESS

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ONE HUNDRED NINETEENTH CONGRESS

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DETER WAR**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,

Washington, DC, Wednesday, February 26, 2025.

The committee met, pursuant to call, at 10:00 a.m., in room 2118, Rayburn House Office Building, Hon. Mike Rogers [Chairman of the Committee] presiding.

**OPENING STATEMENT OF HON. MIKE ROGERS, A REPRESENT-
ATIVE FROM ALABAMA, CHAIRMAN, COMMITTEE ON ARMED
SERVICES**

The CHAIRMAN. In our first hearing this Congress, we examined the complex and growing threats facing our nation. Today we are going to review the state of the defense industrial base and how we can best position it to fully support our military if conflict breaks out.

For over 200 years we have relied on the skills of the men and women working in shipyards and factories throughout America to build the tools of warfighters that warfighters need to succeed in battle. We cannot prevail in any conflict without a ready, strong, and adaptable industrial base. But over the last 30 years we have watched the industrial base atrophy.

Defense firms have consolidated, supply chains have narrowed, regulatory burdens have grown out of control, and recruitment and retention of the skilled workforce have become much more difficult. The consequences are readily apparent. Critical acquisition programs are years behind schedule and way over budget. Thousands of small businesses are choosing not to do business with the Pentagon and we are losing wargame after wargame because we can't resupply critical munitions and weapon systems in a timely manner.

While recent NDAA's [National Defense Authorization Act] have made great strides in tackling this issue, much more needs to be done. We need to expand multi-year contracts and fully fund them to provide industry with more certainty, we need to bulldoze the labyrinth of regulatory burdens that hamstringing the acquisition process, we need to end our dependency on China for critical minerals and materials, and we need to reform the arms export process to help industry work with our allies and partners to unlock greater burden sharing. Ultimately, however, we need to invest much more in workforce development, automation, and infrastructure improvements.

While our adversaries increase investments and subsidies in their defense industrial bases we have let our languish. A strong resilient and diverse industrial base is needed to restore peace through strength. Our adversaries will only be deterred if they know that the United States along with its allies can produce and sustain military forces in a protracted conflict.

I look forward to hearing from our witnesses about what resources and authorities your member companies need to revitalize the industrial base and restore American deterrence.

With that, I yield to my friend, the ranking member, for any comments he may have.

OPENING STATEMENT OF HON. ADAM SMITH, A REPRESENTATIVE FROM WASHINGTON, RANKING MEMBER, COMMITTEE ON ARMED SERVICES

Mr. SMITH. Thank you, Mr. Chairman. Thanks for holding this hearing. I think this is an important topic that we should all discuss as we get ready to see what the budget is going to look like.

Yes, our ability to get to scale and produce what we need to produce in the quantity it needs to be produced is seriously in question. Whether you are talking about shipbuilding, munitions, across the board there are considerable concerns about our ability to build what we need to build. I completely agree with your comments about the workforce. We need to do a better job of developing that workforce as we go forward and to get to that scale of production on critical items.

Another big part of it, which I know this committee has done a lot of work on, is how quickly we make decisions and are able to adapt to new technologies and buy new equipment. The process is too slow. We all know that. We have talked about that repeatedly. The Pentagon is more focused on process; less focused on results. The defense industrial base is focused on sort of gaming the requirement system to make sure that they win. And we don't make decisions quickly, and Congress of course limits the flexibility of the Pentagon to get there.

The other aspect of this though that I hope we will consider is choices. When you look at all of the areas within DOD [Department of Defense] where we want to spend more money—and you can pick a member here who has a particular interest. If you are from a shipbuilding area, you will complain that we don't have enough ships. We talk about our jet fighters. We don't have the F-35 fast enough.

And then when you look at all of the adversaries that we face and what are concerns are with China, with Russia—I think that is still a concern—with the Middle East, with various terrorist groups, and then you say well, what do we need to meet those threats? The one thing I hope everyone considers here, we cannot possibly spend the amount of money and build what is needed to meet all of the threats that we keep talking about. It is simply not possible.

So part of this needs to be thinking about what is your strategy? How do we manage the challenges that we face instead of imagining that we are somehow going to be dominant in the world and be able to deter everybody? We are not making choices in terms of

what is a realist defense strategy. We are not going to be able to dominate and overcome every single perceived adversary out there.

So I hope we have some conversation this year about how we can restructure that and make different choices. And one key part of that is something that the chairman mentioned: allies and partners. They are going to be absolutely crucial.

Now in this particular context they are crucial in terms of the industrial base. Allies and partners have capabilities. That is why I am such a huge fan of AUKUS [Australia-United Kingdom-United States], building that greater partnership with the U.K. and Australia. Yes, we will build submarines, but also the technology sharing that goes in that—into that enables us to rely on other parts of the world, other partners and allies. Now, it is important to have partners and allies who are willing to do that so we can't go around defending all of them all the time, but we are going to need those partners and allies to do that.

The last thing that I would like to hear from our witnesses about is the impact of the DOGE [Department of Government Efficiency] approach to the Pentagon. I am concerned about that. To begin with, we need skilled workers. And now we are apparently going to add the Pentagon to the list of Federal Agencies where we are simply going to randomly fire people. Okay? Now we are not going in there and saying who is good at their job? We need this particular talent, we need that particular talent. At the moment we are just saying that we are going to fire the people who have been there for less than two years. I mean, that is not quality control. That can enter chaos into the process in a very unhelpful way.

It has also become apparent that a lot of people are going to be fired based on their loyalty to the President as opposed to their ability. And trust me, that lesson will be learned by people at the Pentagon. And they will learn, okay, I don't have to be good at my job; I just have to suck up to the boss. And they will make that choice. That is not going to make us better, it is not going to make us more efficient or more effective.

And lastly, any insights anyone might have on the proposed eight percent cuts. Supposedly it is going to be cut from certain areas; I don't know where, and then added back in to, quote, "Presidential priorities." But the clarity on that process just isn't there. I mean, nobody seems to know exactly what the point of that is and yet we are talking about eight percent of the budget that is going to be moved around. A little bit of clarity on this is what we are looking for, this is where it needs to go would help. So chaos is not going to help this process.

I think we have three very, very highly-qualified witnesses here today. Look forward to hearing from you about how we can be more efficient and more effective and build what we need to meet our national security objectives. And with that, I yield back. Thank you.

The CHAIRMAN. I thank the ranking member.

Before we continue with the introduction of witnesses I want to remind those in the audience that this hearing is open to the public, but that actions to disrupt or distract will not be tolerated. The chair reserves the right to remove disruptive persons from the hearing. U.S. Capitol Police are on hand to assist with that task and I thank them for their presence.

Let me start by introducing the Honorable Eric Fanning. He is the president and CEO [Chief Executive Officer] of the Aerospace Industries Association, former HASC [House Committee on Armed Services] staffer. He served—which is what qualified him, by the way. He served as 22nd Secretary of the Army and various other senior roles for his—in his 25 years of government service.

The Honorable David Norquist is the president and CEO of the National Defense Industrial Association. Mr. Norquist previously served as the 34th Deputy Secretary of Defense from 2019 to 2021.

And Matt Paxton is the president of the Shipbuilders Council of America, a role he assumed in 2007 after a very distinguished career as a senior advisor in the Senate.

With that, Mr. Fanning, we will start with you. You are recognized for five minutes.

**STATEMENT OF ERIC FANNING, PRESIDENT AND CEO,
AEROSPACE INDUSTRIES ASSOCIATION**

Mr. FANNING. Thank you, Mr. Chairman, and my time—

The CHAIRMAN. You need to turn your microphone on.

Mr. FANNING. Thank you, Mr. Chair. My time on the HASC staff was—

The CHAIRMAN. I don't think your microphone is working. Maybe pull it closer to you, Eric.

Mr. FANNING. Thank you, Mr. Chair.

The CHAIRMAN. There you go.

Mr. FANNING. My time on the HASC staff was well before anybody on the committee was on the committee.

Chairman Rogers, Ranking Member Smith, and members of the committee, thank you for the opportunity to testify on the importance of strengthening the United States industrial base. Every morning more than 2 million Americans employed by the aerospace and defense industry go to work with one mission in mind: to enhance deterrence by increasing the lethality, survivability, and chance of victory for the warfighter. This is our industry's primary driver, to make our country safer, more secure, and more prosperous.

To do this the companies that make up the defense industrial base rely on clear demand signals from Congress and the Executive Branch, sufficient federal investment, a healthy and resilient supply chain, and a regulatory environment that promotes both innovation and adoption.

The last three years have exposed how many years of policy and funding have shaped the contours of our industry. We invest for peace rather than the deterrence necessary to sustain that peace. We optimize for efficiency rather than capacity. This was true when I testified two years ago before this committee and it remains true today. Despite an incredible amount of attention to the matter, including from this committee, and industry working against enormous economic headwinds to change this, we still have a system that increasingly can't keep pace. However we proceed we must take an all-of-the-above approach to defense acquisition recognizing that the defense industrial base is a diverse ecosystem of companies that each have an important role to play. We must ensure the system positions the whole industrial base; primes, new en-

trants, suppliers, and commercial companies of all sizes, to meet the warfighters' needs and the nation's expectations.

We can start with the complex maze of well-meaning but burdensome statutes and government policies which drive up the cost and complexities of doing business with the Federal Government. Bureaucracies are additive. We create a process to prevent the last bad thing from happening again, well-intentioned and important, but the cumulative effect of this risk mitigation has become a greater risk than the combined mitigation because it is keeping new equipment from getting to the warfighter.

Today it takes nearly 300 days on average to award prime contracts with estimated sales of more than \$100 million. For commercial companies used to working quickly the delays in awarding contracts and executing agreements are a strong disincentive to contracting with the DOD and small businesses struggle to maintain the cash flow over such a long horizon.

Congress should focus on right-sizing the regulatory regime to encourage new entrants and support companies of all sizes within the DIB [defense industrial base]. The removal of regulatory burdens also applies to strengthening domestic manufacturing and supply chains as well as for allowing closer cooperation with allies and trusted partners. These global alliances are a competitive advantage for the United States and we make it too hard for them to work with us and buy the equipment they want: ours.

Increasing domestic manufacturing and supply chain resiliency, easing technology sharing requirements, and growing our defense exports are key to a U.S. posture that effectively deters our adversaries. Rationalizing the process for arms sales has the added benefit of creating additional funding streams for the DIB.

In the 2024 fiscal year total foreign arms sales exceeded all DoD procurement and RD&T—RDT&E [research, development, testing, and evaluation] accounts combined, a necessary lifeline amid an uncertain funding environment, and federal investment must keep pace with the threats we face. While we all recognize the growing instability around the world, particularly growing threats from China, our actions have not matched our words.

Insufficient funding levels, the annual reliance on short-term funding measures, and the constant specter of government shutdowns have created deep-seated and disrupting instability for companies. This in turn jeopardizes our ability to maintain production lines, support a skilled workforce, and develop innovative new technologies that ensure our asymmetric advantage.

Lastly, guaranteeing the DIB has access to the talent pipeline to sustain its work is foundational to these efforts. Investing in STEM [science, technology, engineering, and mathematics] education, re-skilling current industry employees for new technologies, and enhancing our country's training efforts, including apprenticeship programs, on-the-job training and certification and credentialing programs, are vital to ensuring a highly-skilled dynamic future workforce.

The administration and this Congress are pursuing a policy of peace through strength. The United States defense industrial base delivers that strength. The nation needs and deserves the entire defense industrial base running full-steam.

On behalf of the Aerospace Industries Association thank you again for the opportunity to testify.

[The prepared statement of Mr. Fanning can be found in the Appendix on page 71.]

The CHAIRMAN. Thank you, Mr. Fanning.

Mr. Norquist, you are recognized.

**STATEMENT OF DAVID L. NORQUIST, PRESIDENT AND CEO,
THE NATIONAL DEFENSE INDUSTRIAL ASSOCIATION**

Mr. NORQUIST. Thank you, Chairman Rogers, Ranking Member Smith, and—oh, bring it up closer? There we go?

Chairman Rogers, Ranking Members Smith, and distinguished members of the committee, thank you for the opportunity to speak with you today on strengthening America's defense industrial base, which is essential for our national security.

I will limit myself to brief opening remarks. For a more detailed analysis the National Defense Industrial Association has just completed a report on the resilience of the U.S. defense industrial base titled, "Vital Signs 2025." And with the chair's permission I submit that report for the record.

The CHAIRMAN. [Inaudible.]

[The information referred to is retained in committee files and is available upon request.]

Mr. NORQUIST. For over 100 years NDIA [National Defense Industrial Association] has provided a forum for government and industry leaders to collaborate and address complex defense issues so that our nation maintains a strong and resilient defense industrial base. NDIA and its affiliates represent over 1,700 defense companies of all sizes and sectors and the majority are small businesses. These companies, design, manufacture, and maintain the cutting-edge technologies and systems that our Armed Forces rely upon to defend our nation.

During the last 35 years government policy and funding decisions have resourced the U.S. defense industrial base for low-intensity conflict. Critical elements of the industrial base including the manufacturing sector, skilled trade workforce, have atrophied. Industry behavior reflected the funding levels and the rules set by its customers, the Federal Government. But now the threat has changed. If we want increased capacity, speed, resilience, and innovation, then we must prioritize them in the budget, acquisition, and requirements process.

At a high level many of the issues facing the U.S. defense industrial base are well-known: sclerotic acquisition process, brittle supply chains, insufficient procurement funding, unstable budgets, increased regulation, and barriers to modernizing defense trade. The committee has been a leader in addressing these challenges.

What makes change hard is that the system is so complex that changes at one level is often offset by counter-pressures at another level. For example, we must be aware of how statutes, regulations, and policies driving compliance decisions at the program manager and contracting officer level can create incentives counter to the intent of reforms from Congress or senior department leaders. One concrete example is how current policies and regulations deter industry ramping up munitions product, and I look forward to engag-

ing with you on this topic. Likewise, new restrictions and barriers to entry are rising, including specific challenges around intellectual property and data rights as well as the Cybersecurity Maturity Model Certification requirements. While well-intentioned and in many cases very important, both of these are clear areas that discourage attracting new entrants, suppress innovation, and increase compliance costs.

In addition, as the Congress moves forward to reduce regulatory burdens and incentivize novel contracting approaches to attract and retain new companies, it is important to give traditional company—contractors access to the same streamlined system. Otherwise, we are signaling to the non-traditionals that as they succeed they will eventually graduate into the current slow, burdensome, and costly system.

This Congress and the new administration have inherited the political conditions conducive to breaking up and reforming an acquisition system that prioritizes reducing risk over speed and innovation. The good news: our nation has a defense sector that is innovative and dynamic. What is required is to shape the conditions that will allow it perform in the way we want.

NDIA appreciates the committee's leadership and focus on this strategic topic. We look forward to working with you to rebuild our defense industrial base in order to strengthen our national security. Thank you for the opportunity to testify today, and happy to answer any questions you may have.

[The prepared statement of Mr. Norquist can be found in the Appendix on page 84.]

The CHAIRMAN. Thank you, Mr. Norquist.

Mr. Paxton, you are recognized for five minutes.

**STATEMENT OF MATTHEW PAXTON, PRESIDENT,
SHIPBUILDERS COUNCIL OF AMERICA**

Mr. PAXTON. [Inaudible.]

The CHAIRMAN. Your microphone is not on.

Mr. PAXTON. [Inaudible.]

The CHAIRMAN. See if the staff can get that working.

Mr. PAXTON. Thank you.

The CHAIRMAN. There you go.

Mr. PAXTON. On behalf of the Shipbuilders Council of America I would like to thank Chairman Rogers and Ranking Member Smith, and members of the committee for the opportunity to provide testimony on strengthening the U.S. defense industrial base.

Since I last testified before this committee there have been questions from senior Navy leaders and others as to whether the U.S. shipyard industrial base has the capacity and capability to build and maintain our Navy and Coast Guard fleets. I want to state very clearly that the physical capacity of our shipyards is not a constraint to building and maintaining the fleet. In fact, industry capacity is a reflection of the demand signal of our government and commercial customers. And in ship counts that demand signal for several decades was on the lower end.

On top of this, we went through sequestration, strategic pauses in certain programs, and enduring the general volatility resulting from ever-changing or non-existent shipbuilding plans. Considering

all of these factors it is no wonder the private industry moves cautiously with capital expenditures and investment in workforce.

I am here this morning to thank the work of this committee and Congress for implementing policies and laws to assist the defense industrial base, but certainly more will need to be done to truly achieve the innovation and efficiencies needed to deliver with speed critical defense programs for our men and women in uniform.

In particular, to strengthen the shipyard industrial base we must be committed to maximizing optimization of existing private industry shipyard capacity, relentlessly seeking to reduce excessive oversight and requirements and end the sole focus on competition at the expense of partnership. It is undeniable that there has been a reduction in fleet size since the end of the Cold War. The government customer has gotten more bureaucratic and risk-averse.

Navy got out of shipbuilding role in 1971 when they determined private industry was producing ships 20 percent cheaper. Over time Navy's oversight and bureaucratic reach stymied innovation and has slowed the industry rather than sped it up.

Anecdotally, I can see this on the ground. For example, I was recently in a shipyard where the ratio of shipyard workers to government oversight was 16 to 1. And in another smaller shipyard had a 2 to 1 ratio. In any objective view this is simply not efficient and overly burdensome resulting in bureaucratic breakdowns impacting schedule and cost.

Shipyards invest significant efforts in preparing designs, conducting extensive feasibility assessments, and shaping workforce plans based on initial requirements. Even when a company wins a contract, they are still dealing with shifting requirements after contract award, pushing even most cost burden onto shipbuilders while adding delays and inefficiencies. Sailors deserve the best we can offer, however we are over-designing platforms to the point that they are not able to be manufactured, and thus sailors are asked to perform on older vessels with less capabilities. There must be some level of mission-sufficient when it comes to design.

Additionally, Navy ship repair has been scrutinized in the headlines with some going as far as to suggest that we should outsource our critical maintenance availabilities to international counterparts. Outsourcing would only exacerbate the decreasing workloads in the domestic private ship repair market. Instead, we need to address the fundamental issues impacting ship repair including increased complexity of work, available materials, and how to facilitate a reduced regulatory structure.

Lastly, I would note the current prospect that we are facing a year-long continuing resolution is agonizing to industry. It is paramount that Congress does its part and returns to passing regular appropriate bills on time before the end of each fiscal year. SCA [Shipbuilder's Council of America] would encourage the Congress to continue to support stable, realistic, and predictable budgets for the U.S. Navy and Coast Guard and we appreciate the work this committee has done to see these goals realized.

Ultimately, we need to change the behavior as we have currently—as we are currently in an adversarial environment in contracting and design, which is a lose-lose for industry and Navy. We must return to partnering—to a partnering model where the gov-

ernment customer and industry focus on continuous process improvement and joint ownership of problem resolution. We need to view industry and Navy and the Coast Guard as partners and share equally in the risks with the common goal of delivering quality ships on time and on budget.

Thank you, Chairman Rogers and Ranking Member Smith, for allowing me to testify with such witnesses, and I look forward to your questions.

[The prepared statement of Mr. Paxton can be found in the Appendix on page 94.]

The CHAIRMAN. Thank you, Mr. Paxton.

I thank all the witnesses for their time they put in to making those statements and preparing for this hearing. And I do appreciate your attendance and participation.

I recognize myself first for five minutes.

Starting with you, Mr. Paxton, tell me what the shipbuilding industry has done to strengthen its supply base. I am hearing all kind of horror stories about supply chain problems that have really been exacerbated since the COVID pandemic, but tell me what you are doing to make sure that your supply chain is not a problem.

Mr. PAXTON. Thank you, Chairman Rogers. First, I will say our shipyards are constantly taking the pulse of the health of our supply chain. It is absolutely critical that we know our sole source suppliers are and what the health of our industrial base looks like.

We are investing in the supply chain. We have—we are grateful for the work that this committee has done and that Congress has appropriated money for the submarine industrial base and the maritime industrial base. Those initiatives are having a real positive impact on the supplier base.

But overall you are correct, chairman. Since COVID, and before COVID, quite frankly, there was a consolidation in the supplier base. And we need to maintain the resilience and health of that supply chain.

The CHAIRMAN. Well, Mr. Norquist, you talked about how current policies and regulations are making it harder for industry to ramp up munitions production. We have seen as a result of the conflict in Eastern Europe that our ability to produce munitions has really atrophied. How can we fix this?

Mr. NORQUIST. So there is a number of challenges that happen with munitions. The first is it swings more than the top line in the budget. When the budget gets tight, often the Department will ask for amounts only necessary to keep a facility open and running. And so you see this unstable demand signal that happens on the munitions. So that is one of the challenges.

I think also if you look at certainly the unclassified war games—but this committee may have access to classified ones—to ask the question whether the floor that we are building to in peace time is in fact the appropriate inventory of munitions we should have versus the requirement. There is an assumption that once the war starts all of a sudden things will be available that weren't before. I think there is a risk to that, certainly when the other team can attack.

There is also rules about when you have a profile for munition that shows a drop-off at the end. It discourages someone from open-

ing a second production line because by the time you bring in trained workers, by the time you get it up and running, you will turn around and have the production drop. And so trying to rationalize the quantities you are buying with what you want the company to do in terms of factories. Those would be sort of the three things I would start with.

The CHAIRMAN. Great. Mr. Fanning, you and I talked in my office yesterday about the effect of CRs [continuing resolutions] and cash flow and how that is effecting companies in the supply chain. Would you share with the committee today your thoughts on what these CRs are meaning in the—just the actual operational abilities of supply chain companies?

Mr. FANNING. Well, it is—certainly we have lived with CRs for many years, although we are much further into the fiscal year now than we typically are with a CR. And it is happening at a time when I think the supply chain, at least for our companies and our supply chain members are stretched thin and as fragile as we have seen in a very long time. And a lot of that has to do with cash flow following and being in an inflationary period.

There is a lag for inflation in the industrial base, and I would argue that the Pentagon still hasn't seen the full impacts of inflation. So you have companies in supply chain with really stretched cash flow problems causing them to have to move CapEx [capital expenditures] money into working account funds just to keep payroll going.

And when there is a CR and payments are cut off or are delayed, it creates that extra stress and burden for the companies inside the supply chain. They may have already lined up with their workforce, their material, their parts, and are under obligation to those contracts, but aren't seeing their work start on something new or continue on something they are working on.

The CHAIRMAN. Yes, and I just want people to understand, if you are a small business in these supply chains, it becomes very unappealing to stay in this world and work for the Defense Department and you decide instead just to go to the commercial work area. So this something that we are creating with these CRs and we have got to stop it.

With that, thank you, gentlemen. And I yield to the ranking member for any questions he may have.

Mr. SMITH. Thank you, Mr. Chairman.

Mr. Norquist, you were talking a little bit about our capacity to grow quickly, and that is sort of a bit of the trap we are in. It is the whole demand signal thing. Industry obviously would like us say for the next 10 years we are going to buy maximum amount of these things. But it is a rapidly-changing environment so we don't know for sure. And the answer to that would be build surge capacity so that you could—is there any way to do that better than we have done it currently, or is it just the case that given how complicated it is to make systems these days that factoring in some of surge capacity in your plan is just really, really difficult? Are there things we could do better to get there?

Mr. NORQUIST. So the answer first is it is really difficult because to bring in surge is to bring in the time you train and equip people. But we also don't ask for it in our contracting. So typically if you

have two bidders and one builds excess capacity, they will bid a higher price and lose. And so unless you ask for that as part of the requirements—the same thing with two suppliers: If you don't ask for two suppliers coming into a supply chain for that final product, then you will get—the bidder will be the one who does the single source.

The things you can do, for example, is typically these are—unused capacity is frowned on in the pricing and audits and in the allowable costs. So if you want somebody to have a capacity to surge, then they need to have it priced into the contract or treated as an allowable cost. But you want to be careful when you do that. You only want to do that in the things you are trying to allow because it is an extra—

Mr. SMITH. Right.

Mr. NORQUIST. —cost for the system. So as you point out, you can't have everything. You need to figure out which are the systems, which are the items that when the war starts, or before the war starts you will need to surge and how do you provide the rules for those contracts and those items to allow for surge capacity.

Mr. SMITH. Well, and that is something I really think that the DOD and this body needs to do, is make better choices about that.

Mr. NORQUIST. Yes.

Mr. SMITH. We are all in favor of everything. If everything is a priority, then nothing is a priority. And I think we need to really focus on that.

Mr. NORQUIST. Yes.

Mr. SMITH. I mean, it seems to me that drones, missiles, counter-drone, missile defense are high priorities.

Mr. NORQUIST. Yes.

Mr. SMITH. And yet we are funding a whole bunch of other things. So I think some choices need to be made.

Mr. Fanning, you were talking about the slow pace of contracts. And I am with you. We could go through any number of different stories. I mean, the JTRS [Joint Tactical Radio System] radio, God help us, the tanker. I mean, that was when it was—it was like 2004, I think, when we first said that, maybe 2003. We still don't actually have the functional tanker.

What can we do to speed up contracting?

Mr. FANNING. Well, I don't think there is unfortunately any silver bullet to this. The entire process—

Mr. SMITH. Give me a brass bullet.

[Laughter.]

Mr. FANNING. Yes.

Mr. SMITH. Just a little—

Mr. FANNING. The entire process from end to end needs to be—

Mr. SMITH. Yes.

Mr. FANNING. —needs to be rationalized. As I said before, what we see in bureaucracies is sort of a steering-by-the-wake attitude. And processes are important. And you want to prevent bad things from happening. But it just adds to the slow nature of the contracting. I think we are at a time where we need to add some thoughtful risk back into the system in order to get speed. And there are ways to do that. It requires careful oversight to make sure that the risk was well-placed. But I think it is a—that is a

larger cultural issue of taking risk to move faster, and I don't think that is what we reward in the system. It is not what we train for in the system. Any time you ask Congress for more authorities, you get the answer we just gave you authorities, which is almost always true. There are always authorities that aren't being utilized because we don't incentivize the federal workforce to use that. We incentivize them to find the problems, not necessarily get us past the problems.

Mr. SMITH. Well, and that is—

Mr. FANNING. And it is not just DOD, by the way.

Mr. SMITH. Oh—

Mr. FANNING. I mean, we see this in certification in FAA [Federal Aviation Administration]. And it is not in my view the workforce. I have worked with amazing people in the federal workforce. They are rewarded when they catch the problems. And we need to think about that. And we can target it to specific sectors of what we are trying to produce in DOD, to experiment with that and pilot it, but I think we really need to train those workers, that workforce differently and incentivize them for taking that risk and getting things to the warfighter faster.

Mr. SMITH. And I will take my last three seconds here just to restate an editorial comment about the DOGE effort and how we are going in there. What is so maddening about this is if you were to go in there and say we want to make the changes in the workforce that you just described, set the incentives differently. The DOD workforce does a pretty good job of what we are telling them to do. Okay? And we are telling them to go through a lot of process and make sure you never make a mistake. So rather than going in there and just randomly firing people, set a different culture. Change the requirements process. Free them up so they can do their job.

It is really frustrating because I know—I know what Elon Musk did at SpaceX. I know he knows better than this. So I just don't know what the hell is going on. Well, I have a suspicion, which I am not going to get into at the moment. But it is a huge missed opportunity to actually make the workforce at the Pentagon better and more efficient.

And I know people who work at the Pentagon. They are as frustrated as we are. Okay? They don't like the requirements that we put on them. They don't like the process that we force them to go through. They are smart capable people who shouldn't be being treated like this. We should use them as the asset they are and unleash that asset. So I hope we will change our approach on that going forward.

Thank you for the indulgence, Mr. Chairman. I yield back.

The CHAIRMAN. The chair now recognizes the gentleman from South Carolina, Mr. Wilson.

Mr. WILSON. Thank you very much, Mr. Chairman.

And indeed, Secretary Fanning, we are glad to have you back. We appreciate your HASC heritage and we appreciate all of you for being here today. It is so important that we have our country prepared for peace through strength, and that is what you are doing.

With that in mind, I am really grateful. I grew up in Charleston, South Carolina, and so I particularly appreciate the naval facilities that are located there and have been so important. And to me—I was a sea cadet, but most important I appreciate the Navy. My number two son, Ed, is an orthopedic surgeon, Beaufort Naval Hospital, previously Naples, Italy. So it is just—the Navy is just so important.

With that in mind, Mr. Paxton, you have mentioned that in your written testimony the Navy's addition of last-minute specification changes to parent designs. Along with the unilateral design changes that the contract is awarded is creating difficulty for shipbuilders to meet the government's requirements without massive cost overruns. How can we implement long-term contracts to provide predictability for defense contractors while also having room for the Navy to make changes to respond to constantly changing global threats as we have seen with war criminal Putin invading Ukraine and the puppets of Tehran invading Iran—Israel.

Mr. PAXTON. Thank you, congressman, for the question. And Detyens Shipyard which is—

The CHAIRMAN. You need to get your microphone on.

Mr. PAXTON. I am sorry again.

The CHAIRMAN. There you go.

Mr. PAXTON. I apologize. Detyens Shipyard is a member of the Shipbuilders Council of America and they are right there in Charleston, sir. What we have experienced with some of our shipbuilding programs that are not in the tier one shipyards—talking about surface combatants and aircraft carriers, nuclear submarines. What we see on some of the lower programs, the auxiliary programs, there is a constant churn on design.

We go out with an RFP [request for proposal]. It is one price. And the shipyards bid on this. And what they bid on ultimately is redesigned and added ship specifications and requirements that by the time they ultimately are going to build this thing there is a different price and the vessel costs dramatically more. So we got to lock those designs in, basic functional design, and go forward with the shipbuilder and the government customer working together to get it right.

Mr. WILSON. Well, we look forward to everyone working together on that.

Additionally, our surface ships are entering maintenance and domestic shipyards are continually subject to delays resulting in a negative impact on readiness in the Indo-Pacific. Department of Defense partners are telling us it is a result of workforce limitations and supply chain issues when acquiring parts. Would you say that this is an accurate representation, the reason for the delays in domestic shipyards and would this be the same for foreign shipyards? But I am very grateful that I visited of course the Guam shipyard and our tremendous territory in the middle of the Pacific that is so crucial. And in visiting I saw how dedicated they were. So what is the status?

Mr. PAXTON. Yes, sir. Workforce is the number one challenge facing the shipyard industrial base at this point in time, both in shipbuilding and in ship repair. So workforce is a challenge. Coming out of COVID what we did see was kind of a generational shift

with the aging of our workforce, with a lot of our experienced shipyard workers just retiring out of the industry post-COVID. So whereas in the mid-1990s a supervisor might have had 20 years' experience, sir, some of those supervisors have four-and-a-half years. So there is a greening of the workforce. But I can tell you this: Our shipyard industry is investing the money and the resources to ramp that workforce back up.

As for foreign shipyards, sir, they are facing similar challenges with their workforces as well. And we are—it is our number one priority to get it right.

Mr. WILSON. And indeed, foreign—the Republic of Korea to me is so important, and what an opportunity, and with the backup at the Guam shipyard.

Mr. Norquist, you have stated that—many issues about defense industrial base are being faced. And we see with war criminal Putin invading Ukraine and the attacks on Israel by the regime in Tehran its puppets we have difficulty refilling our stockpiles. What is the status of a defense contractor to be able to increase production or shift from commercial production to military production?

Mr. NORQUIST. [Inaudible] the number of—I apologize. So you have two challenges there: The first one you—the second one you mentioned is commercial moving towards working for the Department of Defense. There the challenge is the number of unusual requirements that DOD puts on a company as you enter this, which really requires them to go all-in in order to be able to make it work.

On the first one, which is ramping up, the key question is access to capital to be able to invest in facilities. The supply chain in some cases when we are ramping up one munition, it uses the same solid rocket motor line that two other munitions use. So they end up getting stuck.

And then the third one is—was mentioned before is the training of the workforce. These are very skilled individuals that are doing this work and this is not something you can pick up overnight. So making sure that we have that pipeline of capacity to be able to provide those skilled workers for those functions.

Mr. WILSON. Thank you so much. I yield back.

The CHAIRMAN. The chair now recognizes the gentleman from California, Mr. Garamendi.

Mr. GARAMENDI. Mr. Chairman and ranking member, thank you for this very, very important first hearing of the full committee. We are dealing with profoundly important issues here.

I want to focus on the maritime industry writ large. I want to thank our former member, Mike Walsh, who spent a lot of time as chairman of the Readiness Committee addressing the issue of the capacity of the United States to provide both naval vessels as well as commercial vessels, and now Mr. Trent Kelly who is picked up this issue.

The introduction last year of the SHIPS for America Act is the most comprehensive piece of legislation in recent history, perhaps in all history, about how we can address the maritime challenges that face this nation, both in the naval issues as well as the commercial.

I draw the attention of the committee to that. Mr. Chairman, I thank you for raising this in your opening remarks. And I want to basically ask the witnesses their view of the SHIPS for America Act as it applies to those members of their organizations.

So let's start with Mr. Paxton.

Mr. PAXTON. Thank you, Congressman Garamendi.

Mr. GARAMENDI. Microphone, please.

Mr. PAXTON. Thank you, Congressman Garamendi. And first of all, thank you for your leadership, sir, on the Energizing America Shipbuilding Act, which is part of the SHIPS Act, and thank you for your sponsorship of the SHIPS Act. Not since the 1970s' 1970 Merchant Marine Act have we seen a peacetime build up that the SHIPS Act would portend if we were to pass that legislation.

Having a national maritime strategy is a failure. We should have a national maritime strategy that stitches together the commercial industrial base with our Navy, with our Coast Guard, with our Merchant Marine, and the SHIPS Act does all of those things. And again, it really begs the question of do we want to be in international commerce? Do we want to have a global logistics arm with our U.S. build, U.S. flags, U.S. crude ships? And I think the answer is yes.

Mr. GARAMENDI. Thank you. So I think one of the important things about the SHIPS Act is it creates a framework for significantly enhancing the domestic shipbuilding and the repair. And one of the important things is, as we look at these challenges, many of them are industry-specific. The type of changes you would make to increase and work through the shipyard industry might be very different than some of the others. So I think when you have such a complicated process, putting that focus there is particularly valuable and I think the benefits for the maritime workforce, which is an essential part of the success of that industry, is key.

Mr. FANNING. Thank you. I don't have a whole lot to add there other than maybe I can just foot stamp on the workforce issue. It is a highly skilled issue. In the shipyards the conditions are a lot harder than other parts of aerospace and defense industry. And I think we have to address the labor rates that are allowable, particularly in shipyards.

Mr. GARAMENDI. Thank you. This piece of legislation is bicameral. Mark Kelly and Todd Young on the Senate side are the authors of it. We intend to reintroduce the bill following the chaos of March. And so we will pick it up probably in April and reintroduce it. Between now and then any issues, concerns, suggestions that any of your members would want to make to improve or modify the bill, please let us know.

I want to pick up another subject which came up, and it is the subject of investment. It has become increasingly clear that the free cash flow from the major industrial—military industrial companies is not being used for training workers. Instead it is being used to buy back stock. I think this is a major issue that we should pay attention to. And I would ask all three of you to identify the three largest organizations in—three largest companies in your organization and provide to me and the committee if those companies are using free cash flow within their company to buy back stocks or investing in the training of workers.

With that, I yield back.

The CHAIRMAN. The gentleman yields back.

The chair now recognizes the gentleman from Virginia, Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman. I would like to thank our witnesses for joining us today. We know how important our shipbuilding capacity it is, both the industrial base and the repair sector. That is going to be the key for us going forward. We know that we have an advantage in the undersea world. We know that that advantage comes from our Virginia Class submarines and also pending construction of the Columbia Class submarine.

Unfortunately, last year we saw a President's budget that came over wanting to build one submarine. So we are retiring submarines at a faster rate than we are building them. Listen, folks, I am not a mathematician, but I find it hard to figure out how we do addition by subtraction. When you are proposing to retire more ships than you are building, that is not a good path.

We know that China has 232 times the shipbuilding capacity that the United States does, and they are using it today. The one place we do have that advantage is in the undersea world. We have to get back to building 2.33 Virginia Class submarines a year to meet U.S. requirements and the requirements under AUKUS. We are not anywhere close there. We have to make sure we get our workforce back underway. That is an issue that needs to be taken up immediately. How do we reconstitute that workforce? We understand what happened post-COVID. We haven't recovered the way we need to. I tell folks the top three issues in reconstituting our shipbuilding capacity and ship repair capacity—top three issues are workforce, workforce, and workforce. That is the key.

Mr. Paxton, I wanted to ask you, what impact does a demand signal—that is the President's budget, the outcome of the National Defense Authorization Act. What impact does that have on what the industry looks towards investing in and what does that do in trying to develop the workforce in order to have what is necessary, not just now but in the future?

Mr. PAXTON. Yes, thank you, Congressman Wittman. As you know, sir, better than most, demand signal is the biggest factor in providing that predictability and the sustainability to do two things: We are obviously cap-intensive, so we need to invest in our facilities and invest in our workforce. So having that demand signal is critical.

I would also say, sir, we do need that long-term target to go towards, and having multiple or no shipbuilding plans is difficult. We should have a plan to shoot towards, and that does provide a demand signal that helps industry plan.

Mr. WITTMAN. Yes, we know that long-term certainty is really the key in that effort. I wanted to get the panel's perspective on how do we do the two critical things to make sure that we are able to increase the pace and get closer to the capacity and capability that we need? First of all, how do we decrease build times? Unfortunately, what we see is build times and also for that matter, repair times going up. Maintenance of vessels lasting long.

And how do we reduce costs? We have to do both of those because in order to prevail here we have to get more per our dollar

than the Chinese get for their yuan. And we have to increase the pace. If they can build ships at a pace of 1 to 232, we have got a long ways to go and a short time to get there. So I will go to Mr. Norquist, Mr. Fanning, and then Mr. Paxton.

Mr. NORQUIST. So let me take that on in two parts: First, to get to what you stated in the opening. When you look at the challenges, you turn to the Pacific and the Chinese anti-access environment. Undersea warfare becomes the unending demand signal. It can get inside. It creates a strategic advantage for the U.S. So the need for the U.S. for this is unambiguous. The challenge is converting that into the demand signals for industry that both causes them to be able to attract the workforce that they need as well as to expand the supply chain so there aren't delays from disruptions.

One of the things that I have seen is the Navy working with local communities on welding and others to try and create a pipeline. It is something perhaps on airplanes and Air Force and others should look to copy. But as you point out, that workforce piece is such a big part of it. And then the step down from that is the suppliers. Those are the things that I think help drive up the speed, but I would defer to my colleagues for other insights.

Mr. WITTMAN. All right. Mr. Fanning?

Mr. FANNING. I would say I want to build on that. The shipbuilding industrial base that the Navy is investing in around the country, finding areas where there are concentrated pockets in the shipbuilding industry has been very successful looking for new entrants into the supply chain, investing in them, helping them with tooling. That is a model that I think we can probably extend across the defense industrial base.

The second thing I would say on cost is making sure we are managing and keeping consistent the requirements. That adds a lot of cost and it gets more costly as you continue to mix with the program.

Third, is just a reminder to everybody that the government investment in buying something is leveraged by a lot of private capital coming into the system. And it needs that consistent demand signal that CRs and shutdowns don't provide.

Mr. WITTMAN. Very good. Thank you. I am out of time, so I will yield the balance of my time, what is not left, back to the chairman.

The CHAIRMAN. Here, here. Here, here. Thank you, Congressman Rob Wittman of Virginia.

Now we proceed to Congressman Don Norcross all the way from New Jersey.

Mr. NORCROSS. Thank you, chairman and panel for being here today. It is a fascinating conversation that we have had repeatedly year after year, but certainly in the last few years it has come to a head and we very much from an Armed Services' standpoint have looked at the submarine base.

The idea that we are going to build submarines is something that everybody knows, so from that perspective the government is sending the correct signal. But it is much bigger of a problem than that when we look across the entire base. I sit on a lot of our committees along with Rob and others, so we have seen the most impor-

tant thing is a demand signal from government that we are going to build. That is only part of the equation.

The other part of the equation is that we follow through on it. I can cite example after example where they go and put the capital into facilities saying we are going to build, and they don't build. Who makes up for that?

Now there are good reasons that happens, but it doesn't help the problem. Our industry across the defense ebbs and flows. We will have surge, but in our—what we build each and every day, we don't have surge capacity. I suggest, and I have mentioned this before, that we look at a way, how can we surge? You start out with your facilities, which you say generally we have them, but they can be ready, the raw materials or the equipment to build it. And then what Rob said, and I firmly believe, the longest lead item, the hardest to get and the hardest to retain is the human side of this.

So with that being the pinch point on this, how do we look at the American workforce creating surge capacity that we don't do? You can have your core people. The one industry that does this every day is construction. They have hiring halls. When things go well, they hire. When they don't, they let go. But they always keep their core group. Why haven't we looked at that because very skilled—something you hire and lay them off when you are finished. And that is their world.

So let me go right down the list and start with you, Mr. Paxton. Surge capacity, which is a pinch point.

Mr. PAXTON. Yes, sir. We have been on a peace time footing for decades and during that time China and others—while we have done our peace time footing, China and others have massively invested in their industrial base to build up their capability, building military vessels right next to commercial vessels.

Mr. NORCROSS. So that is their surge? They can flip back and forth?

Mr. PAXTON. That is right, sir. And again they are building vessels not to the level of complexity and without even survivability as our vessels, but they are building next to commercial assets and they build a lot. Seventeen hundred ships is a big order book in a year. So that is the difference in China. And hearing surge capacity, I think of the Philly shipyard, which is up your way. That shipyard was down to 60 employees.

Mr. NORCROSS. Yes.

Mr. PAXTON. They got a contract to build a series of national multi-mission vessels, five of them. And they ramped up to close to 2,000 employees. And they got other work. And they are going to get more work. So I think when there is a demand signal you can take a shipyard that had 60 people and pretty soon you are up to 2,000.

Mr. NORCROSS. Which would just suggest the only reason that their commercial side is because of the Jones Act—

Mr. PAXTON. Yes.

Mr. NORCROSS. —which many people are looking to dismiss. We lose Jones Act, we lose the entire commercial side.

Mr. PAXTON. Yes, sir.

Mr. NORCROSS. Mr. Norquist?

Mr. NORQUIST. So I think the first part is when the contracting officer goes to the industry—if they disfavor a bidder with surge capacity because it has a higher price than the one without, you are going to get what you asked for in the contract. So you have to say I value surge capacity.

The other thing is because all of these facilities are drawing from long supply chains, you also want to move away from just-in-time inventory. You want to pay people to be able to store large parts. And this has really two advantages to U.S. for national security: One is if I want the facility to go faster and they go and they lengthen the shift, the parts are there to be able to finish. The second part is if there is a conflict and things are getting disrupted, you have the current back inventory to keep moving while you try and figure out what has happened to disrupt the supply chain.

So from a national security point of view asking for a move away from a just-in-time inventory is a national strategic interest of the U.S. Government.

Mr. NORCROSS. Excellent. With 25 seconds, Mr. Fanning?

Mr. FANNING. Yes, real quick I would just add that what we are talking about now there is a single customer. And so when that customer's demand signal ebbs and flows and the workforce goes away, they go away and it is very hard to get them back when there is that surge. And it is true with the capital facilities and the supply chains as well.

Mr. NORCROSS. Thank you. I yield back.

The CHAIRMAN. The gentleman yields back.

The chair now recognizes the gentleman from Tennessee, Dr. DesJarlais.

Dr. DESJARLAIS. Thank you, Chairman Rogers. I would like to spend a little time on defense acquisition reform and deregulation, and I will start with Mr. Fanning.

You noted that the current defense acquisition system is no longer serving key stakeholders effectively, often delaying the adoption of critical technology. What specific reforms would you recommend to streamline the acquisition process while maintaining accountability and oversight?

Mr. FANNING. Well, I think there are different categories here. One is just regulations or requirements that could be changed right away. For example, cost and pricing data, raising the threshold there. Providing costing data that has been validated for one company across the entire defense industrial base. There are lots of different things I think we can do for efficiencies.

But I think the entire system needs to be reviewed because it has been built in an additive way over many years. There is no silver bullet to fix this system. And perhaps you would want to pick some new advanced technology platforms like drones where you pilot something new for the entire industrial base to compete in and try something that moves faster with a little bit more risk in the oversight.

Dr. DESJARLAIS. You mentioned that it takes nearly 300 days on average to award prime contracts over 100 million. I am glad you highlighted this point because it is utterly insane, but sometimes it helps us when we can see practical effects of these bureaucratic hurdles. So can you provide specific examples where the contract

delays have had a direct impact on national security and military readiness to illustrate this point for us?

Mr. FANNING. Well, two things come to mind. One is just the delay of getting something into the warfighters' hands. We are not moving as fast as our incredible manufacturing and technology industries are and increasingly our adversaries are catching up with us. That is one.

The second is it has tremendous ramifications on the supply chain, which is already fragile. When it takes so long to get something under contract, smaller companies that don't have the same cash flow, cash reserves, or access to capital, especially in a time when capital is more expensive; money is not free anymore and it is being—and it is—there is less access to these small companies for it. So these delays are—make it harder to keep the supply chain whole and to keep it healthy.

Dr. DESJARLAIS. Okay. Let's shift gears a little bit and talk about the rare earth minerals and the Ukraine agreement. Earlier this month we heard from General Jack Keane about the benefits that the United States could gain from securing access to Ukraine's vast mineral resources. Shortly thereafter President Trump entered negotiations with President Zelenskyy to finalize an agreement on this issue.

Given Ukraine's significant reserves of critical minerals such as titanium, lithium, and rare earth elements, how could such an agreement bolster the U.S. defense industry and mitigate some of these supply chain vulnerabilities?

Mr. FANNING. Well, critical minerals are one of our key priorities obviously in industry and Congress to make sure that we source them better internationally. We just should be realistic also that they are expensive to mine and very difficult to process. And so it is going to take an investment to get that started so that we can source them in a smarter way for the United States.

Dr. DESJARLAIS. Yes, and that was going to be my next question. You just answered it. How do we deal with them once we get them?

The defense industrial base has seen significant consolidation over the past few decades with nearly 70 percent of the companies that once served DOD in the 1990s either merged or absorbed. As some of you have noted, the transitional primes bring scale, experience, and cash flow to the table while the smaller firms serve as powerful innovation incubators. From your perspectives has this level of consolidation successfully balanced these two interests or is there a tipping point that we may reach? And anyone can answer.

Mr. NORQUIST. So I think what you always want in the defense industrial is a dynamic where new firms are able to come in and, if they are successful, able to grow. So I think the consolidation was a reflection of what was happening with the defense budget. And as you have them the balance between the sizes of them really should be an outgrowth of firms that are successful, firms that are delivering, moving and being successful in the market. So my view is you want to see small businesses graduate. You want to see new firms entering. And the challenge is we are not seeing a lot of that right now. We are seeing small firms and others leaving, which is a risk.

Dr. DESJARLAIS. Thank you all. I yield back.

The CHAIRMAN. The chair now recognizes the gentleman from Massachusetts, Mr. Moulton.

Mr. MOULTON. Thank you very much, Mr. Chairman. The state of our defense industrial base is concerning, and there is no argument there. I don't think you are going to hear arguments from us.

But we also have a problem where there is just a fundamental lack of competition, and a great example is with the F-35. That program has been around for 24 years. Not once in 24 years have they ever delivered anything ahead of schedule. I am not sure they have ever even delivered anything on time.

Many of the delays with the F-35 we have learned on the committee have to do with the software, and it turns out that Lockheed Martin is not a software company. But, of course, America makes the best software in the world. We have a lot of firms that make software. The problem is that Lockheed won't give up the rights to that software, so there is no competition, and we are not tapping into the talent and knowledge in America when it comes to software development.

Now, I would argue that if we were on a wartime footing Lockheed would do the right thing for the country and get others in on—in competing to make software for the F-35. They are not doing that. They continue to report record earnings.

So the issue here is that we have got a few primes. They obviously have a vested interest in reducing competition, consolidating the industry. They have been doing that for a long time. And because they love earning calls, they are always going to be investing their own profits. You know, they are going to make sure they are—they are not necessarily, I should say, investing their own profits into innovation.

So, Mr. Fanning, you expressed concern in your testimony that 40 percent of small businesses have stopped working with DOD in the past decade. What can we do as an industry to actually encourage more small business competition?

Mr. FANNING. I think there are a couple of things. One, the increasing barriers to entry for small businesses. AIA members work in space, commercial aviation, and defense. Quite a few of them, especially in the supply chain, as a risk mitigation for their business strategies, are doing defense and non-defense work.

And I see all the time where they—and, by the way, all of the commercial aviation components—helicopters, airplanes, aftermarket services, are surging right now, so there is a demand on the supply chain. And when they see the burdensome requirements to work with the Department of Defense, they move over to the other side.

So one part is, as David was saying earlier, finding ways to encourage, incentivize in the contracts, recognize, and, unfortunately, pay for that diversity in the supply chain is one element. The other is competition comes from competitions, the numbers of things that we are building and competing out. The number of platforms has also shrunk over that time, which is why in some ways, you know, we have less competition. But I think—

Mr. MOULTON. Do you think if we—if we stripped out the red tape and bureaucracy, all of a sudden you would see small businesses getting a higher percentage of contracts over the primes?

Mr. FANNING. No. It is about scaling, I think. And the issue is the pyramid of the industrial base looks a little bit more like a dumbbell now for the reasons we were discussing in the earlier questions about why aren't companies able to grow from small to medium and then to large, and to compete for some of these bigger programs. I think that is what we—

Mr. MOULTON. Well, at that—

Mr. FANNING. —have to explore is that mid-tier element of the industrial base that has atrophied.

Mr. MOULTON. Mr. Paxton, you say that we have—we don't have a capacity problem in our shipyards. We just need to improve efficiency. What is your position on competition? Do you support competition?

Mr. PAXTON. I do support competition.

Mr. MOULTON. Okay. So then why, when I hear so many senior naval officers asking to be able to repair their ships overseas in allied nations like South Korea and Japan, do we not allow that?

Mr. PAXTON. Yeah. Well, we do. Certainly, in—if there is battle damage or if there is repairs that need—

Mr. MOULTON. Yeah. But we are not just dealing with battle damage, right? We have a fleet—the amphibious fleet has a cumulative 28.5 years in training and deployment time backed up because of lack of maintenance.

So we have got a problem today. You are telling us to be on a wartime footage. I have been a constant critic of Congress and we need to do more to modernize, but what can you do? You support competition. Naval officers want to repair their ships closer to the fight, increase competition, more capacity, get them done sooner.

Mr. PAXTON. Yes, sir.

Mr. MOULTON. And you are against that.

Mr. PAXTON. No, sir. If there is emerging ship repair issues, we are all about get it done there. We—in the fleet concentration areas, we have private businesses that are investing in our facilities to repair the non-nuclear surface ships, and we have large investments in those home ports at a time where the fleet shrinking and those workloads and those home ports are going down.

We don't believe we should send more work overseas when that work should be coming home and quality of life is—

Mr. MOULTON. I will tell you what, Mr. Chairman. I think we should do what is right for the Navy—

Mr. PAXTON. Yes, sir. I agree.

Mr. MOULTON. —for the fight.

Mr. PAXTON. I agree.

Mr. MOULTON. So thank you for that.

I yield back.

The CHAIRMAN. I thank the gentleman.

The chair now recognizes the gentleman from Indiana, Mr. Messmer for five minutes.

Mr. MESSMER. Thank you, Mr. Chairman.

Mr. Fanning, spectrum is a valuable, finite resource, and there is those in Congress who want to require the DOD to vacate its spectrum allocations, which I believe would weaken the DOD's ability to protect the homeland and cause other operational harms. It would cost taxpayers billions of dollars to do that.

The defense industrial base is a critical partner in that spectrum for the—and if the DOD was to require to vacate the spectrum, such as the lower 3 band or the 7/8 band, what would the cost and effect of that relocation have on our natural security platforms? What would the cost be to the taxpayer? And what kind of time would that take to reallocate those to other locations?

Mr. FANNING. Thanks for that question. Spectrum is a long-standing, very important issue, and we have all—we all benefit by having more entities like telecoms in the spectrum. We benefit in many ways.

But when it impacts the Department of Defense, we have to be extra cautious about it. We didn't imagine when we were allocating spectrum, and then building for it in the Department of Defense, that there would be so much demand for it at this point, and that other things would be adjacent so close to the parts of spectrum that DOD has.

So we didn't test or build or understand at the time what "interference" might mean, and so we need to understand that very carefully if we are thinking about adding new things to the spectrum, especially if it butts up against the Department of Defense.

We can learn from recent experience in civil aviation, and because our members went through that as well, and hopefully won't repeat those mistakes. One is, get the sides talking. Commercial aviation and telecoms are now collaborating very closely, and mostly that is because we get the engineers in a room together who understand this stuff, and we get the engineers of the new spectrum owners and the manufacturers.

So it wasn't just the airlines. We had to get the manufacturers in there to figure out the interference. That cost—the airlines, the manufacturers, and ultimately the flying public—a lot of money. We had to retrofit 15,000 aircraft when we did that. So there will be a tremendous expense, even more so, with the Department of Defense, and that will be a taxpayer expense that we need to take into account and should come out of any auction proceeds that come from selling that spectrum.

So I would caution that we do this very carefully. Smart people come up with smart solutions. But just like civil aviation, the risk tolerance for the Department of Defense is higher than any other industry that is going to be in spectrum.

Mr. MESSMER. I would imagine that the other allocations we have done, we would call that the low-hanging fruit, and the cost would be, you know, billions to relocate those spectrums now.

Mr. Norquist, pivoting slightly, if the DOD was asked to share spectrum, what are the considerations that the defense industrial base would have to do to do that?

Mr. NORQUIST. So I think when it comes to the defense industrial base, and with the DOD looking at spectrum, each of these are very fact-specific. And part of the challenge when you are looking at it from the outside is, how many of them deal with either classified programs or aspects that are classified?

So I think you would have to look first at the cost, which systems are affected, how much would you have to retrofit. You have to look at the mission impact. Does it even function well if it is moved to a different spectrum, if their controls are put upon it?

So I think I would urge somebody to approach this with caution to make sure they fully understood, from both an unclassified and a classified side, both the mission impact and the cost and the timeline that is involved if you are trying to convert legacy systems over to a new technology.

Mr. MESSMER. Okay. Either one of you can answer this. You know, what kind of systems are supported in the lower 3 and the 7/8 bands?

Mr. FANNING. Well, some very critical things—ballistic missile earning warning—are in these bands. And so it is not just the Department of Defense. They have some of their critical programs in those bands.

And so, again, what we learned on the civil side is it is not just about who is in the band. It is about the interference of putting things nearby, which wasn't anticipated, and, therefore, built into the requirements or built into the programs. It has to be understood very carefully before you make a change.

Mr. MESSMER. Mr. Chairman, I yield back my time.

The CHAIRMAN. I thank the gentleman.

Mr. Fanning, I want to make sure I heard you correctly. Did you say these words, "The risk tolerance at the DoD is higher"?

Mr. FANNING. No. The opposite.

The CHAIRMAN. Okay. I—

Mr. FANNING. For civil aviation—

The CHAIRMAN. —was going to say, I have never heard that phrase with the DOD.

Mr. FANNING. I don't—you know, telecoms, that was part of the issue on the civil aviation side is risk to them was a little bit different. If they encountered interference, they would find a way to fix it operationally. For civil aviation and for defense, for the military, we need to know that the risk is zero before we make a change.

The CHAIRMAN. Okay. Thank you.

The chair now recognizes the gentleman from California, Mr. Carbajal.

Mr. CARBAJAL. Thank you, Mr. Chairman. And thank you to the witnesses for being here today.

Mr. Fanning, good to see you again. As you know, I have had the privilege of interacting with AIA through my role as co-chair of the House Aerospace Caucus. Companies in my district have told me time and time again that there is a need to change the way we allow research and development activities to be expensed.

Can you speak about what changes are needed to address this R&D [research and development] expensing issue and how making this change will benefit the industrial base?

Mr. FANNING. In the previous round of tax reform, they switched the—or I should say sunsetted the R&D tax amortization where if you spent \$1 in a year you got to deduct that in that year to a 5-year amortization cycle, so you got 20 percent of your investment.

At the same time, China doubled it. They gave you a 2 percent—200 percent deduction for every investment you made in R&D in real time. That affects not just big companies that get the attention

because that aggregates into a lot of money, but very small companies as well that are doing R&D that have to stop doing it.

With the cash flow problems that small companies, like, in your district are facing, they can't afford what becomes the luxury of R&D investments, and that is not good for our—for our economy, for our country, for our national security, because they are doing some of the most interesting, cutting edge innovation and research, but they can't afford it because they have cash flow problems by not getting that deduction in the year they spend it.

Mr. CARBAJAL. Thank you for shedding light on that. Something I have heard from the space industry over and over again is that they are facing a shortfall of skilled workers. I have no doubt that this is—this isn't unique to the space industry.

Mr. Fanning, Mr. Paxton, and Mr. Norquist, do your organizations have any programs or are you working on ideas to develop a talent pipeline to develop this skilled workforce? And do you see Congress playing a role in developing this pipeline?

Mr. FANNING. Our companies are doing a number of things. They have recognized they have got to step in, work with local community colleges, local high schools, even earlier than that, for example. But there is certainly a role for Congress and the government in terms of STEM education and vocational education in our public education system.

We are not producing the same numbers of people in those two categories as we did when I—when I went to school. And so we are just not feeding into the system the, you know, students ready to go into what is a highly skilled industry that pays well. So I think that there are things on both sides we should be doing.

We have a number of proposals for things that we would like to see from government, and this has to start early. AIA runs the world's largest student rocketry challenge, which is middle schoolers and high schoolers, over 1,000 schools' teams competing this year alone, just to keep that STEM pipeline pumped, because what we find is, if you don't keep kids engaged in STEM education, they will go into something else.

And so you have got to keep them from elementary school to middle school, middle school to high school, high school to college. But what we see is just the numbers keep dropping. It is—you know, one in six high school graduates is prepared to study STEM in college, and fewer than 50 percent who start actually finish and get a STEM degree.

Mr. CARBAJAL. Thank you.

Mr. Norquist?

Mr. NORQUIST. So two things. First of all, as an association, we do scholarships for students wanting to study STEM to be able to put that into—if they are coming into the defense.

When we survey our membership, though, what we see is on STEM skills about 20 percent say they don't have enough. On trade skills, it is closer to 30 percent. And then you see a similar 30 percent when you look at cleared, and each one of those they highlight the difficulty and the challenge in recruiting. So this workforce challenge, as has been mentioned before, is extensive, and it pervades the point.

I just also wanted to jump back, the majority of our members are small businesses, and that R&D tax credit is very important to them. So I know you had brought that up earlier, but the effect on small businesses is significant as well.

Mr. CARBAJAL. Thank you.

Mr. Paxton?

Mr. PAXTON. Yeah. Thank you for the question, sir. The Shipbuilders Council of America is a facilitator for the talent pipeline programs that we have around the nation. We have a program in Danville, Virginia—not SCA, it is funded by the Navy—but where we, you know, teach world-class welding and pipefitting and machine work and electricity work. And so we are doing it. We are investing in the next generation workforce.

Mr. CARBAJAL. Thank you.

I have limited time, Mr. Fanning. I am going to submit this question. If you could answer it later on, I would really appreciate it.

With that, Mr. Chairman, I am out of time. I will yield back.

The CHAIRMAN. I thank the gentleman from California.

The chair now recognizes the gentleman from Virginia, Mr. McGuire, for five minutes.

Mr. MCGUIRE. Thank you, Mr. Chairman, members of the committee.

After being inspired by Ronald Reagan to join the Navy, he talked about building a 600-ship navy. He talked about American exceptionalism. He talked about peace through strength. I was inspired to join the Navy and served as a Naval SEAL. And this was a time when the United States Armed Forces was at the peak of their strength since World War II.

It saddens me that we have allowed our readiness and investment in defense industrial base to decline in the 35 years since the end of the Cold War. I think you guys used the term earlier “atrophied” in every way.

According to the most recent data, the Chinese navy consists of over 400 ships, 225 armed Chinese coast guard vessels of 500 tons or more, and vast numbers in the inventory of their maritime militia. The United States’ 7th Fleet has between 50 and 70 ships near the China and South China Sea. We must work together to ensure that our Armed Forces and Navy can overcome this threat posed by the CCP [Chinese Communist Party].

Mr. Paxton, thank you for appearing here today before the committee. The challenges facing the defense industrial base, specifically the submarine industrial base, are concerning and must be addressed immediately. The challenges facing the defense industrial base, specifically the submarine industrial base, are timely.

As I am sure you know, the overall capacity of our shipbuilding industrial base has significantly degraded since the Cold War. Over the last 30 years, thousands of businesses have left the shipbuilding supplier base, limiting the Navy’s options. I am particularly concerned about this, especially as we look forward to the future with near-peer competitors such as the CCP who are aggressively growing their fleet and our own need to recapitalize our fleet and surface ships and submarines.

Do you agree that this lack of competition is unsustainable and needs attention?

Mr. PAXTON. I believe, Congressman, there is competition to build the platforms, the fleet mix, that we have, that our shipyards have the physical capacity to do this, and I will just give you a reference point. In the 1980s, we were building 4.2 attack submarines a year, 2.5 DDGs a year. I don't think the difference in capacity was different. I think what was different was the experience in the workforce.

We had veteran workforce that was building those assets and building them at scale and building them in series construction. We got away from that demand signal, and the subsequent workforce has suffered. And we have had consolidation, as you know, sir, in this—

Mr. MCGUIRE. That is why I am glad to hear us talk about CT. So also—so I am also aware of the recent congressional investments to develop the future workforce within the defense industrial base, in part through the creation of regional training centers such as the Advanced Training and Defense Manufacturing, ATDM, Program, which we have right there in Danville, Virginia, in my district.

I toured that last week, and it is amazing how they are preparing these young folks, and they basically are creating a maritime training pipeline in several other locations in the United States. Do you agree that it is imperative to regenerate and grow the shipbuilding and ship repair workforce throughout the company—or country?

Mr. PAXTON. Congressman, absolutely. We are in a generational point, and I do think we are seeing the demand signal from, again, the maritime industrial base program that was set up, and the work that is going on in Danville. These are programs that are being replicated around the country, and I think we are going to hire and build the next generation workforce.

Mr. MCGUIRE. I am not a welder, but they don't just qualify welders. They qualify welders to do just about anything you would need for submarines. It is amazing. And not everybody is meant to go to college. And some of these folks, they complete this course and they are making six figures right out of the gate.

Mr. PAXTON. Yes, sir.

Mr. MCGUIRE. And a lot of them are doing such a good job that they are putting them to work on submarines and everywhere right away.

Mr. PAXTON. Yes, sir.

Mr. MCGUIRE. As a freshman member of the committee, I, too, support continued investment in the people, facilities, and suppliers at naval shipbuilding and ship repair in our country. So, Mr. Paxton, what can members of this committee do to provide for this critical national capacity—capability? And what does the industry need? What more should the Navy be doing?

Mr. PAXTON. Well, sir, I commend this committee for all of the things they have done. We have a demand signal that the shipyard industry is building towards. The industry reflects that demand signal. If it is going to keep going up, which we hope it does, we will ramp up that workforce to meet it. It will take some time and challenges, but the work of this committee to authorize multi-year

contracts, those type of things, provide the stability that the industry needs.

Mr. MCGUIRE. All right. One last question for everyone, if you have something to say. I just talked to some folks in Israel, and they said, "Perfect is the enemy of good enough," and sometimes they get a program in the field quickly and it is battle tested, because time is an issue and we are taking so long. And if you all had any comments on that.

Mr. NORQUIST. That is correct. That is the challenge. I recognize the time is short, but you are correct. That is the challenge.

Mr. MCGUIRE. I thank everyone for participating.

The CHAIRMAN. The gentleman yields back.

The chair now recognizes the gentleman from Massachusetts, Mr. Keating, for five minutes.

Mr. KEATING. Thank you, Mr. Chairman. And I thank the members of the committee, and I thank our witnesses for dealing with this important discussion and going back and forth on it.

But I feel like I am sitting here at this moment in time, in this place, a little like—with this hearing a little like Mrs. Lincoln, who was questioned, "Other than that, Mrs. Lincoln, how did you enjoy the theater?"

We are sitting here now, just in the last few weeks, where the President of the United States has stated that Russia is not the aggressor in Ukraine. That, indeed, Ukraine was responsible for the war. That the duly elected democratic leader of Ukraine is a dictator. In a time period where they had a meeting, our administration, in Saudi Arabia with someone that they have sanctioned—our country has sanctioned and representing a war criminal to the exclusion of the Ukrainians, to the exclusion of our NATO [North Atlantic Treaty Organization] allies and our European allies.

The same period where a shameful act in the United Nations occurred for our country with the President's leadership, where they sided with Russia and China and Belarus and Hungary, to the exclusion of our European allies.

So we are here talking about, as the title of this committee goes, our industrial base. Well, when we tell Europe and the rest of the world, "You are on your own," we are sitting here worried about strengthening our industrial base, they are going to be creating their own, to the exclusion of the U.S.'s industrial base, with U.S. assets, U.S. training, and they are going to gain influence around the world and that includes our adversaries and our enemies like China that will be advantaged the most of this. We are giving them a green light.

So we are talking about this hearing with a concern on deterring war while we are sitting there making sure we are giving a green light to everyone else in the future. That is where we are right now.

So when we have these hearings and we are talking about what we should do, we better put it in perspective and realize what is going on in our own country.

I yield back.

The CHAIRMAN. The gentleman yields back.

The chair now recognizes Mr. Hamadeh of Arizona for five minutes.

Mr. HAMADEH. Thank you, Mr. Chairman, and thank you, gentlemen, for being here today.

As we look at ways of strengthening our defense industrial base, one thing is clear: a backlog of unfulfilled foreign military sales is not just a paperwork issue. It is a national security problem.

I faced these challenges during my time as an Army Reserve intelligence officer facilitating our military sales in Saudi Arabia. Delays in delivering critical defense systems or allies undermine our ability to deter enemies, strengthen partnerships, and sustain our own domestic defense industry.

At the same time, adversaries like China have streamlined their arms export processes, leveraging speed and influence to expand their global footprint. The U.S. must do better. We cannot afford bottlenecks and bureaucratic inertia in an era of strategic competition.

I look forward to hearing from our witnesses today on how we can accelerate our production, cut red tape, and ensure a defense industrial base is not just responsive but proactive in meeting both the United States and our allied defense needs.

Now my first question is for Mr. Fanning. My understanding is that after the cancellation of the Future Attack Reconnaissance Aircraft Program, we did not divert resources to continue Apache acquisitions. Is that correct?

Mr. FANNING. That is correct.

Mr. HAMADEH. Do you know why that was?

Mr. FANNING. I don't.

Mr. HAMADEH. Now, Boeing's Apache production is at—in Arizona is at risk. If the DOD doesn't commit to a minimum order of 12 or so helicopters, the production line could be shut down, putting 5,000 Phoenix area jobs on the line. Now that is not just bad for Arizona's economy, it sends the wrong message to our allies, and our foreign partners won't invest in a platform if they think the U.S. military is moving on from that platform.

Now, how do we ensure our domestic acquisition policies stay consistent, both with our long-term defense plans and the needs of our allies to rely on these systems?

Mr. FANNING. Congressman, thanks for that question. That sort of hits at the crux of I think what we are—what we are talking about today, which is sending not just a clear sign to our allies but to the industrial base, so that it invests its money in the facilities, in the workforce, in the supply chain, so that it can meet the needs of the Department of Defense.

And so that—if I had one single headline for what we need for the defense industrial base, it is that clear, consistent, and sufficient demand signal, so that the industrial base and the private capital that supports it can line up for DOD requirements.

Mr. HAMADEH. And how do delays in the foreign military sales impact your members' companies?

Mr. FANNING. Well, it is a frustration all the way around. I mean, as I said in my oral statement, last year for the first time foreign military sales and direct military sales exceeded what the Department of Defense spends on military equipment and RDT&E. That is American jobs, that brings down the price for the Depart-

ment of Defense, that is interoperability, that binds our allies closer with us over a longer period of time.

We want to make sure that the wrong people aren't getting our stuff, and you, with the—with the Administration, decides that. But if the answer is yes, we want to get there quickly, where our allies want to buy our kit, our stuff, and we make it as hard as can be for them to do that. If the answer is no, we should get there quickly as well.

So we—one of our top priorities at AIA is trying to reform and streamline that system, so it meets the intent of making sure bad actors in the world don't get the stuff that we produce, but we ought to be bringing our allies along faster and making sure that we are not disincentivizing them in anything we do to buy someplace else.

Oftentimes I see people—you know, it is a pocket veto system. We have to switch the default to yes, people make their case or they don't make their case and move forward, because there are other places that countries can go to buy hardware.

Mr. HAMADEH. Mr. Norquist, do you have anything to add?

Mr. NORQUIST. Oh, yes, sir. A couple of things. First of all, in our membership surveys, 55 percent said foreign military sales and commercial sales were either very or extremely important to the company, creates jobs in the U.S., but it also empowers our allies to defend themselves.

You asked for recommendations on change. I will give you three. First of all, Defense and State had looked at FMS [Foreign Military Sales] performance, but they haven't finalized or been executing on that. So getting them to execute—finalize those FMS reforms and then begin to execute them would be essential, and then reporting back.

There is also an issue with the ability to switch to commercial sales. In many cases, direct commercial sales can go faster, and that is actually within the control of the Department to say, "This should move as an FMS case." As it moves as a commercial sale, that will go faster.

And then last is to build on what Eric said. There have been reviews about the interagency process. It is very slow and sequential, and trying to accelerate that, and that was per Section 918 of your NDAA. Pushing them to bring that to closure is very helpful. So those are three ones to talk—what you talked about.

Mr. HAMADEH. Thank you, Mr. Norquist. I am sure my staff will be in communication with you to tackle this problem that I see as really pressing, especially when our allies now are no longer purchasing our equipment and seeking elsewhere. Thank you.

Chairman, I yield back.

The CHAIRMAN. The gentleman yields back.

The chair now recognizes the gentlelady from Pennsylvania, Ms. Houlahan.

Ms. HOULAHAN. Thank you, Mr. Chair, and thank you, gentlemen, for your testimony today. I have found it very interesting, and it, as a result of your testimony, has had me change my questions just a little bit.

Our job here on the HASC is, I believe, to ensure that our defense industrial base is resilient and responsive and that it is

ready. Interestingly enough, just yesterday, the House passed a \$100 billion increase in defense spending in the DOD, and also, concurrently and curiously, Secretary Hegseth has asked for an eight percent annual decrease, and these things are schizophrenic and confusing in my mind, and we can kind of put that to the side.

But the bottom line is, we have a responsibility to the taxpayers and to our constituents to be responsible for their resources and for their money, and to understand how to be as—optimize as much as possible our expenses for workforce, for production lines, for the industrial base as well.

Mr. Norquist, you said something really intriguing about just-in-time manufacturing. My background is in industrial engineering. My master's degree thesis was in JIT [just-in-time] manufacturing for the airframe industry, defense airframe industry. Back in the day, that was the "thing." We really wanted to streamline manufacturing in that way, and I am intrigued by the fact that JIT probably has become passe as a result of the shocks to our supply chain from COVID and other things.

Can you dive a little bit deeper in what it would look like and whether we have actually done some studies and whether there has been some conclusions, real conclusions, about what the defense industrial base would look like if we actually did carry inventory, and what kind of inventory would it be, and would it be stockpiled, and would it be additive manufacturing, and all of those kinds of things. The devil is in the details.

Can you kind of drill down on whether that is a good investment to carry inventory?

Mr. NORQUIST. Sure. And I think there is—there is three levels at which you can do it, and I think the nature of the product you are trying to buy drives it. So the first one is you can stockpile the final product. You can stockpile the munitions in anticipation of a war requirement. Most people are familiar with that, but we should relook whether that is right.

The second one is the parts coming into the supply chain. So you have somebody who assembles. They may have inventory doing just-in-time arrival that is cheap, that is efficient, that private sector has refined that. But that doesn't allow you to surge, and that creates real risks in wartime.

Knowing which of those products that you are willing to say to the vendor, "We would like you to hold 30, 60 days' worth of parts," so a disruption to your subcontractor, those would be very essential. You would have to do some analysis on, what are those things you are most vulnerable?

The third one is one where we have seen studies out of the Defense, which looks at even stockpiling raw materials, which is, if we are not worried about a disruption to a U.S. vendor, but actually overseas supplier, can we buy enough of that material and keep it here to be able to be refined and produced so other countries can shut it off.

So I think there is three levels at which people look at that.

Ms. HOULAHAN. And I appreciate that, and in the interest of time would love to follow up with you about how to look at that through the NDAA and be a little bit more thoughtful on that.

Transitioning now to the other way that we can be responsible is with workforce, and a lot of your conversation today has focused on that. We have seen through the DOGE, haphazard in my opinion, laying off of people who are provisional employees, that to me, you know, smacks of getting rid of our youngest and newest people in many cases. We also had a long conversation with you all about STEM professionals and STEM education.

I myself, as I mentioned, am an engineer, and we have 51 percent of our workforce presumably who are women, and yet we are in the process of devaluing, you know, making sure we emphasize the fact that women can be STEM professionals as well, particularly in the defense industry.

You, as the defense industry and the defense industrial base, if you could each comment a little bit on what you feel is happening now that we are saying effectively that 51 percent of our workforce doesn't need to be paid attention to.

Mr. NORQUIST. Well, I think it is—it is imperative, and our companies feel that way, there should be recruiting from the broadest population of—that the United States has to offer. And in some ways if—if your workforce doesn't reflect the United States, it may be that you are not recruiting in a smart and comprehensive way. So that is important to us. Workforce is the number one strategic risk, concern, priority of our industry.

Ms. HOULAHAN. Would I ask, could I ask, of industry that you put some pressure on those of us who are sitting across here to tell us that this is indeed important? Mr. Norquist and Mr. Paxton, with the 17 seconds I have left, I would love to hear if you have any input in that area.

Mr. PAXTON. Just we need to be strategic in how we do this, and we value all our workers.

Ms. HOULAHAN. Thank you.

Mr. NORQUIST. Yes. You need to pull from the entire population of the workforce to be able to take advantage of the skillsets and the technologies. And so, as Eric pointed out, you have got to make sure you are—you are recruiting from everyone, so you can bring the best and the brightest.

Ms. HOULAHAN. Thank you. I appreciate it, and I yield back.

The CHAIRMAN. The chair now recognizes the gentleman from the strategically important territory of Guam, Mr. Moylan, for five minutes.

Mr. MOYLAN. Thank you, Mr. Chairman. Now, Guam remains a vital strategic asset in the Indo-Pacific. As we look to safeguard the defense of our Nation, its location makes it a critical logistical hub for the moment—movement of personnel and supplies crucial to maintaining our presence in the region.

And as a Nation, we face challenges in the defense industry base, especially regarding shipyards and shipbuilding. The ship repair facility in Guam was closed in 1997 as part of the Base Realignment and Closure process. The facility was shut down with the equipment remaining in place, and it is still there today.

Now, with the growing threats and tensions in the Indo-Pacific, we must prioritize improving our readiness capabilities. This includes ensuring that we have the infrastructure to support our

Navy ships and submarines, which serve as the backbone for deterrence and protection in the Indo-Pacific region.

Now, as we prepare for potential future conflicts, it is vital that we make full use of every available resource, including boosting maintenance and repair capabilities. We cannot ignore Guam's potential to provide and expand the capability and support needed to keep our military assets ready and operational in this critical region.

So my question for Mr. Paxton, as I stated earlier, the ship repair facility in Apra Harbor, Guam, was closed in 1997. The facility is still owned by the Navy and is available for leasing to a shipyard company, offering potential for ship repair and maintenance services, and to provide an insight into the advantages of restoring the Guam shipyard as a domestic repair facility.

Mr. PAXTON. Congressman, I think to the extent that we can have strategic capacity and we can have it available to us, we should—we should absolutely be looking at that and finding ways to utilize it the best way possible.

Mr. MOYLAN. Is time an issue? Do we have serious time constraints on our hands with our Indo-Pacific region?

Mr. PAXTON. For sure. I mean, we need that area to be very strategic. We need it to be capable. And so to the extent that, you know, there is private industry out there that wants to try to do something with that facility, we would support private industry taking that on.

Mr. MOYLAN. How important—rate it, one through five, one being the best.

Mr. PAXTON. Very important.

Mr. MOYLAN. All right. Well, thank you.

Next question is for Mr. Norquist. What steps can be taken to improve the resilience in the defense industry base against potential disruptions, such as natural disasters, especially in our area?

Mr. NORQUIST. So, as you point out, there are multiple challenges to it. You have everything from natural disasters that can disrupt a supplier, and one thing that people forget is the product may be made in one location, but the parts may be made in another. And so, therefore, if the storm hits one area, you can—you can have an effect.

The same thing is with a cyber-attack, right? You can have an attack on a supplier, and at the end of the day you can't finalize assembly until you have all of those pieces. So you have to look at a number of things. One is, making places more resilient, you know, in storm damage against other items. Same thing as on cyber protection.

And then the third is figuring out how to have supplies moving through, so that there is always some capacity. So a short-term disruption while you get a facility up and running doesn't stop everything downstream from the supply chain from it.

Mr. MOYLAN. With our strategic location and our distance being an issue, what do you think about Guam? Are we prepared with what you just said?

Mr. NORQUIST. So I think the challenge is when you look at the Pacific, Guam is so central to the strategy, right? There is multiple things, whether it is air ranges, repairing on location, movement of

supplies, it is—it is the hub for many of those, which brings you both the question of protecting it as well as which of the things that you want to prioritize using in that space. Is it pre-positioning? Is it facility and production? Is it repair? But when you look at—it is often hard. People have to get them a globe and rotate and say, “Look at the Pacific. All right. And some places you can’t see either ends, but in the middle you can see there is Guam.”

So trying to just understand the sheer scale of distance in the Pacific and how much that challenges U.S. logistics operations, and, therefore, understanding the role of Guam in those types of operations. That is key.

Mr. MOYLAN. Thank you to the panel.

Mr. Chairman, thank you. I yield back.

The CHAIRMAN. The gentleman yields back.

The chair now recognizes the gentlelady from California, Ms. Jacobs.

Ms. JACOBS. Thank you, Mr. Chairman, and thank you to our panelists.

We have talked a lot about workforce today and the importance of workforce. I am really proud to represent San Diego, one of our major shipbuilding hubs. But I have noticed that one of the things we haven’t talked about workforce is actually the role immigration plays. And it struck me that many of my colleagues who are worried about workforce are the same ones who are saying we should restrict immigration, restrict legal immigration.

So I guess, Mr. Fanning, could you talk about how restricting immigration would have an impact on these defense industrial base industries that we really need?

Mr. FANNING. So all aspects of workforce need to be on the table and discussed, including immigration. A lot of our workers are cleared, highly skilled, take years to train, but no workforce exists in isolation. And so if any industry is having problems with its workforce, it could have problems—it could create problems for ours, including driving up wages.

So I do think we need to discuss that, making sure if we can’t organically fill the workplace needs in our country, how we go about an immigration policy that helps with that.

Ms. JACOBS. Thank you. And, you know, we have talked a lot today also about these, like, big, exquisite capabilities, right? F-35s, ships. But I think one of the lessons of Ukraine is that military dominance isn’t just about how much money we spend and how many big things we have, right? It is about agility, adaptability, cost effective innovation.

And one of the things that frustrates me about these conversations sometimes is we keep hearing demand signal, demand signal, demand signal. Well, the demand for munitions, like 155 rounds, couldn’t be clearer. The demand for things like Patriots couldn’t be clearer, and yet we are still having them not be produced at the rate that we need them.

So I guess, Mr. Norquist, can you talk about some of these other capabilities and why we aren’t seeing the defense industrial production that we need for munitions, for, you know, these kinds of things?

Mr. NORQUIST. Right. So typically what you have is you have something in a munition where either the demand signal wasn't there, or if you think of something like the GMLRS [Guided Multiple Launch Rocket System], it—the demand signal was there and the CRs blocked the ramp up of production. So you ended up with fewer than you wanted.

Then you have an event like Ukraine where all of a sudden there is a surge in demand. Industry starts to see the signal and starts to respond, but in some cases the government says, "And, by the way, as soon as this is resolved, the demand is going to go to zero."

And then industry says, "Well, okay. Then I will expand my current team as fast as I can, but I am not going to do a new or second or third line, because by the time they are on board, you may have stopped the purchase." So when people talk about the stability, one of the concerns is—and it is not irrational—the government has an increase in demand. And when something passes, it drops, and yet that swing has the very disruptive effect on the capacity.

There are things we can do. There is abilities to help with companies in terms of getting—being able to qualify access to capital, to be able to do expansions, be able to draw on the workforce, and looking at choke points in the supply chain.

So I think those are all key, and sometimes it is the least glamorous stuff that is the most important.

Ms. JACOBS. Thank you.

And, Mr. Paxton, I just want to ask you, the Shipyard Infrastructure Optimization Program, it was intended to be a generational investment, right, to bring our public yards into the 21st century and yet what we have seen is that costs have ballooned, timelines have slipped, and we still don't have a full cost estimate for the program.

We have seen the industry benefit from significant government support, including long-term contracts and subsidies and infrastructure funding. And some might argue that this has actually reduced the incentive for the private sector to invest in shipyard modernization, leaving the government to foot the bill for these upgrades.

So how would—how should we strike the balance between the necessary public investments but also ensuring that the private sector is making their own meaningful contributions to our domestic shipbuilding base?

Mr. PAXTON. Yeah. Thank you for the question, Congresswoman. For sure, the SIOP [Shipyard Infrastructure Optimization Program] is critically important for our four public shipyards. We need those. Those are critical assets in the inventory of our shipyard industrial base. They obviously do all of the nuclear propulsion systems.

But private shipyard investment, we have been spending in the order of billions in our facilities, in our workforce, on the private side of things. And when we see that demand signal, to Mr. Norquist's comments, we respond, but it does take time. It does take time to ramp that workforce up, but the investments are being made.

Ms. JACOBS. Thank you. I have just got to say, I am so frustrated by the whole concept of demand signal, because I just feel like this committee couldn't have been clearer, for the four years I have been on it so far, about the kinds of things we want to see. And so, like, I think we have got to get away from just saying we need more money, less oversight, and get to some real solutions.

And, with that, Mr. Chairman, I yield back.

The CHAIRMAN. The gentlelady yields back.

The chair now recognizes the gentlelady from Virginia, Mrs. Kiggans, for five minutes.

Mrs. KIGGANS. Thank you, Mr. Chair. And thank you very much to our panelists for joining us.

I have the privilege of representing Hampton Roads areas, so home to a lot of our ship repair businesses, and just defense industry in general, large and small businesses. And I hear them time and time again when we do visits, when we have meetings with them, about their frustration with our budget process and passing continuing resolutions. And I know that they are disproportionately impacted by these continuing resolutions that we continue to pass.

We passed one, and then we passed another, and now we are facing another deadline where we perhaps may pass one that will lead to a full-year CR. And, as a person who is newer to Congress, in my second term, it continues to frustrate me as a person who wants to be an advocate for our defense industry, who wants to make sure that you all understand how much money you all have to work with.

So, Mr. Fanning, I know you touched on it earlier, but could you just for the record tell us what the impact of a full, long CR would be for your industry?

Mr. FANNING. A year-long CR is particularly disruptive, especially if it has limited anomalies. New programs don't start. I mean, I think this is what people don't understand is that a CR is just saying continue with the last year's plan. And so if there is a new start baked into it and companies have invested in it all up and down the supply chain, lined up the workforce, lined up the materials, the parts, to get ready to go, and it doesn't happen, it is a tremendous financial hit on them, again, especially on small companies, ones that I think you are talking to in your district that don't have the cash flow or the access to capital to withstand that type of a delay.

And this is what, you know, sort of feeds into having that consistent signal from the government, so that all of that that is required to line up to produce what the government needs when it needs it, takes place in a way that it causes not just a disruption in building those supply chains, it causes a disruption in trust for the companies—large, small in between—to lean forward and invest to be ready, because they do that. They want to do that.

They are all doing risk and strategy assessments every year. Where am I going to put my money, so hopefully it lines up with what the government needs at that point? And a CR that doesn't have anomalies in it is basically skipping a year for that change, that growth, that increase in quantity orders, or what have you.

And, again, it causes industry to react conservatively to what they are hearing from government, because they have got to see that there is something at the end of their investment.

Mrs. KIGGANS. Thank you very much. I just wanted that to be made very clear.

Let's see, so also, in my district with ship repair, the ship repair industry that we have there, we are seeing, because of the CR, a lot of them have to lose staff. They are having just to change how they do business. I know we have heard our colleagues talk about the number of ships we don't have in the U.S. Navy right now, so perhaps not enough business for ship repair.

We are seeing them do things that are a little bit outside the box, you know, participate in some of the modular build programs, working with Huntington Ingalls, and we have close proximity, so we can build modular components and ship them up the—up the river to Huntington Ingalls. We have a wind turbine project off the coast of Virginia Beach that we are seeing some ship repair even being involved with staging and some manufacturing.

So they are trying to do some things, which I applaud them for, to compensate for these—the budgetary issues that we are facing.

But, Mr. Paxton, do you see these kind of thinking outside the box, you know, options that my local ship repair industry is pursuing as good alternatives to ways that we can just keep that skilled workforce in place, so that they don't have to shift around so much?

Mr. PAXTON. For sure. We are having a constant internal discussion about commercial ship repair. A lot of your yards down your way, while they do amazing Navy maintenance and modernization, used to have a lot more commercial ship repair work. For a lot of reasons, that commercial ship repair has gone overseas. We should be clawing that back and doing more of that.

I will say Virginia leads the way—Virginia Ship Repair Association—in educating the local communities down there on the just patriotic jobs that are in our shipyards. So, Bill Crow does an amazing job.

Mrs. KIGGANS. They are great. We appreciate them.

Mr. Norquist, do you have anything to add on that?

Mr. NORQUIST. So I was just going to come back to the point you had on CRs. I think there is—we have had over 1,900 days—over 1,900 days—of CRs in the last 16 years, equivalent to five full years.

And each of those is telling Defense and companies and the military that whatever you need next, don't do it, go back to the—do the things that we would have told you to stop doing, and that becomes incredibly disruptive, and people think, well, they can just do the same as last year.

You passed a pay raise. A CR doesn't accommodate the pay raise that you would have to figure—you know, there is a series of changes that this committee and others have voted on to say, "We need DOD in a different direction."

A CR says, "Never mind. Do the old plan."

I can understand why it is very appealing for China for us to keep doing these. I don't understand why it is—it is in our interest, and I think it is a real challenge for our membership to have to

deal with. I know that you guys are more frustrated in this, as much as anybody else, but to—and the shipbuilding is all a new start. So every one of these is a big setback, and so I would be very concerned on the effect of a long-term CR.

Mrs. KIGGANS. Thank you. I share your frustration.

I am out of time. I yield back. Thank you.

The CHAIRMAN. Well, as a very senior member of the Congress, I can tell you most of the members who tolerate CRs as an acceptable option are just ignorant of the impact of those resolutions.

With that, I recognize the gentleman from New York for five minutes.

Mr. RYAN. Thank you, Mr. Chairman. Thank you all for being here.

I think we have the right three people here and your membership. You represent collectively basically the entire defense—at least the traditional defense industry, between the five big primes—Lockheed, Boeing, Northrop, GD [General Dynamics], and RTX—over \$200 billion in defense revenue last year alone. Rough math, that is about 130 billion from contracts from DOD, 15 percent of our entire defense budget.

And since that is really discretionary spending, that essentially means one in \$12 we are spending as a country went to these five companies, and we thank you and the employees that are doing that work.

Given that context, though, and you may have seen or heard a little bit in the news about—government efficiency has been certainly a topic in the first month or so while the Trump Administration has found time to fire 6,000 veterans, to fire thousands just Friday night at the DOD, they haven't yet found time to highlight any specific examples of the supposed waste, fraud, and abuse at the Department of Defense which constitutes, as I said, a huge part of our spending, and I agree.

So could each of you just name one program, could be major, could be minor, one thing that we need to—that we should cut. Mr. Fanning, start with you.

Mr. FANNING. I think a lot of things are being conflated.

Mr. RYAN. Just one—what is one thing?

Mr. FANNING. I think, you know, every program is there for a reason. It doesn't—

Mr. RYAN. Okay.

Mr. FANNING. —mean it can't be more efficient. But I don't—

Mr. RYAN. Mr. Norquist—

Mr. FANNING. You know, we—industry—

Mr. RYAN. —will you point to one thing?

Mr. NORQUIST. Yeah.

Mr. RYAN. I only have a few minutes.

Mr. NORQUIST. So I will just say, when I was in the Department, we did a defense-wide review, and we proposed \$5 billion worth of reductions. So there are people who are constantly producing recommendations. The challenge is, one person's offset is another's essential requirement, and you have to work through the—both the politics and the mission impact to—

Mr. RYAN. What would you say, given your expertise, is the number one thing?

Mr. NORQUIST. The number one thing I would do is I would actually change the requirements process, because I think it has—

Mr. RYAN. What is the one program that you would eliminate?

Mr. NORQUIST. I think I—

Mr. RYAN. In our entire—

Mr. NORQUIST. Well, I can give you a copy of the report that we produced.

Mr. RYAN. I would love to follow up on that.

Mr. NORQUIST. Yeah. I would be happy to.

Mr. RYAN. Mr. Paxton?

Mr. PAXTON. Again, I echo my colleagues' comments on this. I think the sheer volume of the DFARs [Defense Federal Acquisition Regulation] is— needs to be contracted.

Mr. RYAN. And I agree. And I know I am being—

Mr. PAXTON. Yep.

Mr. RYAN. —somewhat provocative here, but it is incredibly frustrating to me that we are in high-level agreement on—and there has been incessant talk of the need for efficiency, and you all are the experts, and your members, and we would love to work with you. I would love to work with you, and I think there are a lot of members that know there are legacy things that we are out there from—I am 42—that have been out there, you know, in the ether from before I was alive that we—that even services are saying we don't need.

So I do think it would be helpful to not speak at the up-in-clouds-level, but we need to be specific and have those details.

To that end, my second question, we have talked a lot about hardware-focused programs, which are of course a huge driver of our budget, but I want to talk about some of the legacy software programs across the Department of Defense that are ridiculously over budget, archaic, and largely, in many cases, simply don't work, but are still programs of record because of the broken acquisition system, largely, thanks to cost-plus contracts, hardware-first primes win software-centric contracts, and they just cannot deliver the necessary capability on an appropriate timeline, yet they are rewarded for increasing their business expenses, unnecessary auditing, excessive accounting.

I was in INDOPACOM [United States Indo-Pacific Command] last week. We were hearing directly from senior leaders that the major Army C2 [command and control] program they are literally not even using. It is sitting there, and they are locked in because of, you know, a program office's contracts.

So, and this is going back to my time in the Army, has the Department not learned anything, in your opinion, from going back to the D.C. GSA [General Services Administration] fight with Palantir that hardware-centric primes shouldn't be building software?

Mr. FANNING. I think, because I live—I lived through that, a couple of things I would say is, first of all, you know, the issue with Palantir at that time I think, and even SpaceX earlier, was about competition and the nature of competition and setting up a competition that allowed new entrants to show what they could offer instead of suboptimizing them.

It is hard for us I think to pick a program, because it probably is being met—it is probably one of our companies. I will say that the industry—

Mr. RYAN. That was my not-so-subtle point.

Mr. FANNING. Yeah. The industry is ready to surge, though. If somebody loses a contract, and that money goes to another investment, then there are winners and losers. That is competition. The industry stands ready to support the decisions Congress and the administration make about which programs to keep, which programs to end.

The CHAIRMAN. The gentleman's time has expired.

The chair now recognizes—

Mr. RYAN. Thank you, Mr. Chair.

The CHAIRMAN. —the gentlelady from New Hampshire, Ms. Goodlander.

Ms. GOODLANDER. Thank you, Mr. Chairman. And thanks to our witnesses for being here today.

I have just come from the Small Business Committee where we had an opportunity to hear from some of the real innovators in our defense industrial base who are the smaller players. And I wanted to give an opportunity to our witnesses to talk about the programs that you have seen work well, including the SBA [Small Business Administration] SBIR/STTR [Small Business Innovation Research/Small Business Technology Transfer] programs, which I very much appreciate you have included in this—in this very helpful and thick handout.

But if you could speak a little bit more about the smaller—Mr. Fanning, I know you represent family-owned small businesses—the challenges that the small businesses face in our defense industrial base and what you would encourage Congress to prioritize in our support for those important companies.

Mr. FANNING. I guess small businesses in particular are operating on tighter margins and with fewer resources and tools to get them over perturbations in the system. And we have had a number that are non-government—COVID, for example, inflation—but anything that we can do to be consistent in our timelines and how we deliver on programs and how we deliver on the contracts, to include payments, helps those small businesses.

They are in a real crunch right now. Many of them are still delivering on contracts written pre-inflation, but having to buy their materials at post-inflation prices. So they are just being squeezed in a number of different ways, and anything that government can do to stay consistent on timelines is a lifetime for small businesses.

Mr. NORQUIST. So we have over 1,000 small businesses as members of our associations. The majority of our organization—I think our small business chair may have been, in fact, one of your witnesses. So if I contradict ML, ML Mackey is right, and I am wrong.

The first thing, of course, is the permanent reauthorization of SBIR/STTR. I think that is very essential for the small businesses. That is a great pipeline to bring the—I think this needs some emphasis on the conversion side.

Another one to look at is it is very important to have cyber security, the CMMC [Cybersecurity Maturity Model Certification]

standards are part of that, but having either guaranteed loans or tax credits for small businesses who have to carry the load of getting compliance would be a particular help to them.

And it was mentioned earlier about software. For those of them who are software-focused, the reciprocity of authority to operate, they get authority to operate in one place, but then it doesn't carry over to the other. Large firms can manage that. Small firms end up getting trapped with a product they would like to sell on scale, but they are—they are only getting clearance in one place, and there is a cost for that.

So I think those are a couple of things that can be done to help small businesses. But, again, I appreciate your interest and your emphasis on them.

Ms. GOODLANDER. Well, thank you. I wanted to ask our witnesses if you could say a few words about the National Defense Industrial Strategy that was introduced just a year ago and how you see the implementation of that strategy. I know there has been a follow-on implementation plan. What is your advice to this committee about the content of that strategy and our progress on implementation.

Mr. FANNING. I am happy to start. I think there are two things that stood out to me sort of in a strategic way on the—on the strategy. One is it recognized private capital as a stakeholder, which I hadn't seen in a document before.

The other is that it explicitly recognized that the National Defense Industrial Base is shaped by a single customer. We have learned a lot in Ukraine, a lot of conversation about surge and about demand signals, but it was years of demand signals that got the industrial base to where it was when the war kicked off.

And it is not an easy thing to counter, and that is partly because industrial policy, munitions which, you know, you can take a 20 percent risk on munitions year after year after year after year after year, and the industrial base will shape around that. You can't buy 80 percent of an aircraft carrier.

And so I think those—you know, the problem with surge, the problem with stockpiles, and the problem with industrial policy is in the end game of the budget, they don't compete well to things that you can actually park at a pier or put on a ramp.

And that is what I would just remind—the ranking member talked about choices. In the end game, it is all about choices, and what you can actually have in your inventory tends to win over these types of investments that we think are critical, because capacity is a capability and it does deter.

Mr. NORQUIST. So, first of all, it is very helpful that the Department produced the first National Defense Industrial Strategy. It was a clear recognition of the challenge that—facing how the challenge came about over time through government policy. I would encourage the new administration to look at that. They are, of course, going to have their own version, but the industrial base has been a priority for them, so to be able to use and draw from that what they value, but I think that is something that the recognition of the effect of certain policies on it, the recognition of rare earth metals, the recognition—I mean, they did a relatively across-the-board

look, and so I think that is a great place for someone to start and to build on.

And so I encourage the committee to look at it and to—and the implementation plan, and then recognize some of those have costs associated with them. And so you just have to pay attention to that.

Ms. GOODLANDER. Well, I thank you, and I yield back, Mr. Chairman. I will be submitting some more questions for the record. I appreciate the time of the witnesses.

Mr. MOYLAN. [Presiding.] The chair now recognizes Mr. Mills from Florida.

Mr. MILLS. Thank you very much, Mr. Chairman. Thanks so much for being here, gentlemen. Mr. Norquist, great to see you again.

Mr. Norquist, I would like to pivot to another critical concern related to our industrial base, namely supply chain integrity and transparency. I don't think I need to rehash the issues that we have in regards to our reliance on adversarial nations for critical components, but even more certain is the critical minerals that we have banned DOD and commercial partners from sourcing from adversarial nations.

These restrictions are often too waived for, you know, these individual program managers or, you know, these adversarial trading proxies and minority ownerships from taking advantage of these thresholds.

So my question I guess is that knowing that the responsibility of both DoD and the industrial partners to ensure the United States abides by these responsible acquisition practices, what is the industry doing to ensure transparency in the supply chains?

Mr. NORQUIST. So each of the companies in industry is working that, and there are companies that are helping produce tools to let you map your supply chain and be able to understand what is coming from where. This is both a supply interruption risk, even if it is a domestic company, or it is an item that could be compromised along the way. And so you need to know that ship or whatever is coming from a trusted supplier.

The same thing actually somewhat comes in place with trusted capital and knowing that the investors and the people you are playing with are worthwhile. So that has been a part of it. Now this is—these are relatively complicated supply chains, and there is risks involved when you go to—overseas. So there are certain things that can be done with regard to promote domestic mining or refining capabilities. There is either the 45X tax credit was used. It is not available for mining. But if you are trying to get after the rare earth metal issue, that would be one of the uses on it.

When we talk to our membership, one of the things they bring up is, in the last three years, 28 percent lost a critical supplier; 30 percent lost a sole source supplier. So mapping is not just—it has multiple values, security, understanding, and then recognizing your vulnerabilities and your choke point, so you can start to build resilience.

Mr. MILLS. Yeah. As a business owner, one of the things you always look at is your single point of failure. Obviously, one of those

key and critical areas is the 92 percent of microchips and semiconductor capabilities that is within Taiwan.

That is why building up INDOPACOM's capabilities, ensuring that we diffuse some of the increased adversarial kind of nature of both ourselves and China, knowing they are the greater aggressor, looking at ways of coastal defense, and other things like that, should these things take, but also working with other committees such as Ways and Means with Chairman Smith, to eliminate the double taxation on Taiwan, which would allow them to invest in the industrial base here in America to ensure that we have the ability to go forward and create those semiconductors and microchips ourselves.

You know, one of the key things that I have been concerned with for a very long time is that America still adopts the idea that warfare is built on kinetic only. The supply chain, the resource capability, the electronic, the IO/IW [information operations/ information warfare] space, that is really a concern for me as we advance to what real warfare looks like.

I mean, if you think about China, Russia, Iran, and North Korea's geopolitical alignment, this is not meant to just involve themselves in a kinetic element, yet proxies from the Iranians will actually help to be a distraction as we saw with the Houthis, who disrupted 12 percent of global trade through the Red Sea when the last Administration delisted them as a terrorist organization.

But China's aggression has been mostly not just expanding out the Belt and Road Initiative, but utilizing Russia to expand the European, like, eastern front, taking Oceania, taking the 15 of 16 rare earth mineral mines in Africa, and doing what we claim to do on paper which is, oh, we are sanctioning you, they are doing it from a geopolitical stance where they are actually moving the football by cutting off western hemisphere supply chains, the Red Sea, the Persian Gulf, the Black Sea, the Horn of Africa, while using economic coercion on Panama and Honduras to try and influence trade, tariff, taxation, and capabilities through the canal. That is really actually cutting off America and our supply chain capabilities.

You know, the thing that has worried me is that we have to get proper procurement reform in place. The DSP-83/DSP-5s that are sometimes held up for political purposes, that is not restricted by USML-151 or things like this are not meeting the 90-day threshold of the Directorate of Defense Trade Controls, is putting us really far behind our adversaries with supplying our allies the necessary tools.

But I am committed to continuing to support the industrial base to have American-built components, American-built products, that allows our economy to thrive and stop adversarial reliance, which allows us to build the economics of another nation who is out to destroy us.

Thank you for your support. Thank you for all you guys do. And we are here to give our best to try and make sure America continues to build back strong.

With that, I yield back.

Mr. MESSMER. [Presiding.] Thank you. Does the gentleman from North Carolina have any questions?

Mr. DAVIS. Yes.

Mr. MESSMER. Recognize the gentleman from North Carolina.

Mr. DAVIS. Well, let me say as our military faces increasingly challenges with budgetary constraints, prioritizing our defense industrial base is of even greater significance. So, with that, thank you all for being here today.

Newport News Shipbuilding in Virginia employs North Carolinians over the state border in my congressional district in North Carolina's First, in the northeastern portion of the state, and is currently hiring North Carolinians, the shipyard. This is my question, Mr. Paxton:

What efforts are being done when we talk about taking advantage of entire populations, a particular workforce, all the conversations about workforce, what efforts are being taken to strategically and being intentional about bringing in rural areas in particular in these workforce conversations?

And then not just rural areas but, for instance, in North Carolina they are right there, and many are going into Virginia to then entice states to collaborate more with each other?

Mr. PAXTON. Thank you, Congressman, for the question.

First of all, I think the goodness of the shipbuilding industry, and ship repair industry, is oftentimes they are the economic engine of some communities that aren't in major city locations. And so, the initiatives, I know Newport News and other shipyards do for their apprenticeship programs are world class. And they attract the best of the best. And they want to hire up those people who maybe didn't go to college, who just got their high school degree and want to have a career.

One of the great things about the shipyard industry is you can have that career. And I know Newport News does an exceptional job bringing in the next talent in our shipyard industrial base.

Mr. DAVIS. Is there anything specific that you would suggest as a priority that would focus specifically in helping to cultivate workforce in rural communities across America?

Mr. PAXTON. You know, Congressman, to the extent that we are trying to raise the awareness of the shipyard industrial base that we are a great family wage, career destination, and you have seen some of that with the shipyard industrial base promotions and where they, those promotions go, so I do think there is outreach to rural areas to, to make them aware of our industrial base and that, again, these are career jobs.

Mr. DAVIS. What was interesting this week, we had educators that came into the office from Chowan County. And we had a principal from Chowan Middle School. We also had the STEM coordinator.

My question is, could you just speak briefly when we talk about cultivating workforce, because they were sharing with me their vision of extending STEM within schools within the county, how important is STEM?

Mr. PAXTON. STEM, and I am sure my colleague will have some opinions on this as well, is absolutely the most critical thing we need right now. And, and our shipyards are going into elementary schools now to talk about STEM and talk about careers in the shipyard industry as well.

Mr. DAVIS. Yeah, I think what you want to do is you want to give individuals exposure to the industry so they can develop a passion for it.

You know, many people they get, because one of their parents worked in a field. If your parents aren't involved in these, if you are at a school where you have the exposure to work either electrical bonding, I mean, there is a range of technical trade skills and there is a range of STEM topics that people start to develop an interest for when they are young.

And then that passion they discover there is a whole career field attached with that that allows you to work with those skills in that area.

So, I think the ability of introducing that—and we have chapters of NDA all around who work with local schools, do different programs, in order to expose them to the range of career fields that are out there. And then from that they look around and say, oh, there is a shipyard nearby, or I can drive this distance to get there. But trying to show them these are some interesting things to do that there are entire careers behind that you can make a living doing.

And let me say this: North Carolina's First Congressional District, we are one of the most economically distressed.

Mr. PAXTON. Uh-huh.

Mr. DAVIS. And we have to look at these areas that are experiencing distress, and especially rural communities, and really begin to go to the core. And that is building the future through our workforce.

Mr. PAXTON. Right.

Mr. DAVIS. Thank you so much.

And I yield back the balance of my time.

Mr. MESSMER. Thank you.

I now recognize the gentleman from Illinois.

Mr. SORENSEN. Thank you, Mr. Chairman.

Good morning to everyone. Thank you so much for your time, sharing your expertise.

Strengthening the defense industrial base is such a critical issue, especially for my neighbors in central and northwestern Illinois. I am so glad that we are taking the time to delve into that today. Our defense industrial base fosters innovation, it creates jobs, it helps our allies around the world, and keeps our adversaries at bay.

I am so proud that my district is home to the historic Rock Island Arsenal that back in the 1830s there were decisions that were made here in Washington to put one of our most strategic places on an island in the Mississippi River. And still to this day men and women back home go there to do this important work. And it is my job to make sure that we are making sure that the Arsenal will meet the needs into the future.

So, we know back home firsthand how important the organic industrial base is.

So, Mr. Fanning, I will begin with you. Has the Department of Defense in your opinion done a good enough job leveraging the organic industrial base in areas where the private sector is not there?

Mr. FANNING. I think the Department does do a good job, prodded by Congress to make sure that they do that.

Where I think perhaps there is a problem is the investment in that organic industrial base in the arsenals. I think much like surge capacity is generally a bill payer in the end, most installation investments I think are a bill payer in the end. But I do think the Department does a good job, again because they know Congress is watching, at leveraging that organic industrial base.

Mr. SORENSEN. Thank you. The Rock Island Arsenal is also home to the Army's Center for Excellence for Advanced and Additive Manufacturing, which has pushed the boundaries of innovation through the surrounding defense industry all around eastern Iowa and western Illinois where I represent. The story of advanced and additive manufacturing at Rock Island, it shows how investing in our modernization improves the readiness and strengthens our national security posture.

So, Mr. Norquist, to what extent do you see additive manufacturing playing a role in the future of the defense industrial base?

Mr. NORQUIST. So, I see two particular areas that I will focus on. There are many, but let me just dwell on two.

One of them is in places that do maintenance repair and others, the ability to get an old piece of equipment working by, by additive manufacturing saves you.

The other part is when you have either deployed or at home a spare part you don't have access to, deployed may be because of a supply disruption, but at home because it is an old item and the vendor went out of business.

Mr. SORENSEN. Right.

Mr. NORQUIST. The ability of additive manufacturing to say we can produce that for you without the traditional cost of tooling and running a production line and then doing a run of 20, which is incredibly inefficient, provides real opportunities for the Department in terms of rationalizing its supply, its parts, and its production.

So, I think there is a lot of great opportunity. And I think this is one of those areas we have seen progress and succeed as it has moved into new and different fields.

Mr. SORENSEN. How important is that, especially as this Administration seems to go at cost-cutting measures and efficiency, how important is that?

Mr. NORQUIST. Oh, it's a major cost savings. See, think about, think of all the systems we have that were built 20, 30 years ago.

Mr. SORENSEN. Uh-huh.

Mr. NORQUIST. Many of those suppliers are gone. So, the cost of trying to build those the traditional way is both financially expensive, but operationally such a long lead time.

Additive manufacturing says we can do that faster, and less, and let you keep things up and running. So, I really see that as one of the key items for, for speed and cost savings in the Department.

Mr. SORENSEN. Right. Glad that we could be a part of that in my district.

Mr. NORQUIST. Uh-huh.

Mr. SORENSEN. And, also, the congresswoman across the aisle, Congresswoman Kiggans, she had asked about, you know, the ef-

fect that it has on this when we look at short-term CRs. And I know she had asked that to you, Mr. Fanning.

Mr. NORQUIST or Mr. Paxton, would you like to answer that?

Mr. PAXTON. Yeah. The one thing I would add is in ship repair, if we go much longer we are going to be talking about work stoppages. And that is no one wants that. We don't want to issue warn notices. We don't want to do that.

So, that is the severity of the CR: it is going to be hard on the, on the shipyard industrial base.

Mr. SORENSEN. Mr. Norquist?

Mr. NORQUIST. On the CRs? I think one—

Mr. SORENSEN. Right.

Mr. NORQUIST. —one of the things that people tend to misunderstand on CRs is a regular appropriation bill can have the top line go up or down. The only thing that is different is a CR tells you don't do the stuff you think you need to do next, do the stuff you used to do a year ago, even if it was something you recommended stopping. It is incredibly inefficient. And then it creates cascading effects down through the system.

One is instead of awarding a single contract, a contract is doing multiple iterations which creates instability and uncertainty.

And then the other part is funds just aren't aligned in the right place.

Mr. SORENSEN. Right.

Mr. NORQUIST. And so, we have had companies get stop work orders because they were under a CR and the Government didn't know how much O&M [operations and maintenance] they would have, how much maintenance money. So, they said—and that company just laid off its workforce. And then two months later they said, hey, we think we are in a better shape, can you find them again?

And so, they try and find them from wherever they were—

Mr. SORENSEN. And they are gone.

Mr. NORQUIST. —and bring them back.

It is unnecessary, it is just you are putting on the breaks and then at your end you are going to hit the accelerator; right? And then you are going to pay the consequences. It is incredibly inefficient.

Mr. SORENSEN. Yeah. Thank you for all three of you.

And, Mr. Chairman, I yield back.

Mr. MESSMER. Thank you.

I recognize the gentleman from Louisiana.

Mr. HIGGINS. Thank you, Mr. Chairman.

Gentlemen, thank you for appearing before us today.

Mr. Paxton, I am going to be directing my questions at you. Would you concur, good sir, that small shipyards are an important part of the industrial base that our nation requires as we look at the future of shipbuilding and our responsibility to provide vessels for the United States Navy?

Mr. PAXTON. Absolutely, sir.

Mr. HIGGINS. Okay. So, workforce availability is challenging across the spectrum of shipbuilding in America. Is that an, is that an accurate statement, generally speaking?

Mr. PAXTON. Our number one challenge, sir.

Mr. HIGGINS. Number one challenge. There you go.

So, if smaller shipyards for our republic, and by extension may I say not only for the defense of the United States of America but for the, for the prosperity and security of the entire world relies upon the United States Navy, and we agree that small shipyards are vital and significant parts of any foreseeable shipbuilding future for the United States of America, and should be recognized as such.

So, workforce stoppages, a job, when you pause a job, the impact of that for a smaller shipyard is far greater than on your larger shipyards. They just move those guys. They can keep their welders, their fitters, their machinists, their supervisors, et cetera, they can shift them, you know, to another, another project within that larger shipyard.

But a smaller shipyard can't do that. They have to bear the cost of even a shutdown for a few weeks can mean they have to let these guys go. And then that workforce leaves. And these welders and fitters and machinists, they are going to get other jobs. And it is difficult to replace that workforce for your smaller shipyards.

So, how would you, how would you address that? And I yield to the, I yield to the gentleman. Is the Pentagon paying attention is my—the cornerstone question here?

Mr. PAXTON. I think, Congressman, you raise a very important point. We should be opening the aperture in DoO contracts for smaller shipyards that can do some of the work the Navy needs to get done.

For instance, a shipyard in your state got a contract to build berthing barges. That should not have been a complex contract. And it became very complex for that shipyard.

And we should, we should try to—

Mr. HIGGINS. You are talking about the YRBM [Yard Repair, Berthing, and Maintenance] and Conrad?

Mr. PAXTON. Yes, sir.

Mr. HIGGINS. Yeah.

Mr. PAXTON. What we were trying to achieve there, sir, is open that aperture for a shipyard like that that cuts its teeth commercial work and makes, you know, does really great things, employs a lot of people. They shouldn't have been punished for, for getting a government contract.

Mr. HIGGINS. Precisely.

Mr. PAXTON. Yes.

Mr. HIGGINS. So, you concur that this has to be—this consideration is part of the totality of circumstance that, that the DOD, the Pentagon, our Navy commanders, and the Executive Branch, must keep in mind when we are, when we are, we are laying out plans for what shipbuilding looks like in America and how we are going to actually perform.

Mr. Chairman, I would like unanimous consent to submit for the record a letter that I submitted to the Executive Branch on February 24th regarding this topic, the importance of workforce and the impact of shutting down programs even temporarily. I would like unanimous consent to enter it into the record, please, sir.

Mr. MESSMER. Hearing no objection.

[The information referred to can be found in the Appendix on page ?.]

Mr. HIGGINS. Thank you.

Mr. Paxton, I have one specific question I would like to get to.

Your testimony cites excessive oversight and frequent design changes by the Navy as causing delays. And I am saying that those delays may be, may be manageable by your larger shipyards, but they can cause significant economic injury to our smaller shipyards. And I yield to the gentleman to respond to that position.

Mr. PAXTON. Yes, sir. I think we should be clear-eyed about once we have a functional baseline design on that ship we, we have to be rigid in not having requirements creep and ship specifications continually to increase because that drives up cost, that drives down the schedule, and it ultimately hurts smaller shipyards.

Mr. HIGGINS. Thank you, sir.

Mr. Chairman, thank you for convening this hearing. And my time has expired. I yield.

Mr. MESSMER. Thank you.

I recognize Mr. Vindman.

Mr. VINDMAN. Thank you, Mr. Chairman.

So, my first question is for Mr. Fanning.

Sir, you served as the secretary when I worked in the headquarters at the Pentagon. And so, you are very familiar with the Pentagon and the Army bureaucracy. And you stated in your testimony that the defense industrial base is largely shaped by a single customer, the Federal Government; that the defense industrial base relies on federal investment to ensure the overall health of the industry.

And I agree that it is critical that we support our defense industrial base in a way that supports new technology at reasonable costs and delivery timelines, especially in response to the prevalence of weapons such as cheap and easily-acquirable drones.

So, I have been thinking about the modern battlefield and what we see developing in Ukraine, these small inexpensive systems that have really been a game changer. The Ukrainians are looking at establishing basically a 15-kilometer kill zone that is largely unmanned.

How do we maintain the speed of innovation, you know, smarter, faster development of systems, when we have a acquisition system that is antiquated, that it takes years to develop?

Give you a chance to answer that first.

Mr. FANNING. Sure. Thanks.

Mr. VINDMAN. Simple question.

Mr. FANNING. Well, I think what we are learning in Ukraine is you need high-end and low-end. How they combined volume is attributable. And what is interesting about that part of, of your production plan, of your acquisition plan is there is the opportunity for a lot of competition there.

You know, you are not going to have a lot of competition in legacy platforms that you keep that are fairly mature and way too expensive for, for some new company to come in and try and compete. But you can get a lot of competition here to bring new entrants into the industrial base.

I think the issue on the acquisition side, David and I served on the PPBE Reform Commission. There are some great ideas in there, I would say. One is a way how do you create some more competition and speed inside the Department? One is portfolio management. Give the program managers, the PEOs [Program Executive Officers], the ability to, to think of pots of money differently and move things around inside of them.

It requires a lot more transparency with Congress so you can complete your oversight responsibilities.

But you can try to reform the entire acquisition program or you can take the parts where you really need that speed the most and focus on those. And I think of some of this new technology that we are seeing coming in.

Mr. VINDMAN. And there are some decent models out there for special operations authorities that can move much faster than the typical system. Is there, do you see any major issue with actually just applying or dropping that model in that Special Operations Forces use onto regular acquisitions?

Mr. FANNING. I think—well, I, what I would argue is it is the risk reassessment to turn too far in the anti-risk reaction. And I would, if someone wants to take risk I would applaud it so long as there is transparency and it can be monitored.

What is nice about the Special Operations authorities is they have been tested over a long period of time, and so we have some confidence in them. But the question would be just be careful which ones can scale and which ones can't scale. There are lots of rapid authorities and rapid offices in the Department of Defense that are designed as work-arounds that wouldn't scale very well.

But I think what Special Operations has done has proven to be a good model, and I think you could apply it to other things very quickly.

Mr. VINDMAN. Thank you for that.

And so, I think getting the right balance between the exquisite expensive systems and the cheap dual-use systems is going to be critically important.

So, Mr. Norquist, without giving you too much of a preamble because I only have less than a minute left, you know, production of the magazines, so to speak, that we need, the artillery, missiles and such, is way behind where we are producing right now.

So, as the U.S. doubled its production capacity we are still struggling to produce artillery shells, for example. So, how do we address that issue?

Mr. NORQUIST. So, I think there are a couple of things. The first is to recognize part of the way we got here was the wild swings in munitions.

So, I think one of the first steps is working with the Department to have much clearer floors for munitions inventory. That way the vendor understands there is going to be a quantity. The Department warfighters know that in the event of a conflict they will have access to greater volume.

There are things you can do with the, the vendor in terms of helping them set up new facilities and being able to do some production. But that assumes that the demand signal is going to be long enough. It takes several years to get it back up and running.

And sometimes with these, the signal is actually going to drop on the other side, and that creates a problem.

Mr. VINDMAN. Thank you.

I yield back.

Mr. MESSMER. Thank you.

I recognize the gentleman from Colorado.

Mr. CRANK. Thank you, Mr. Chairman.

Mr. Fanning, in your written testimony you touched on how rapid inflation caused by the Biden administration weakened the defense industrial base. And I just yesterday meet with Axellio, which is in my district, about that very thing.

Talked about the inflation crisis and how it was especially harmful for the small businesses in the industrial base. You know, these mom-and-pop shops effectively had their fixed price contracts renegotiated to slash their revenue by 20 percent, through no fault of their own. And for many companies this means laying off staff, or closing their doors.

What flexibility does the DOD have to support small contractors during extreme situations like the inflation crisis that we have had? And how can Congress assist them?

Mr. FANNING. Well, first, I think recognizing the impact of inflation. My observation in this job, having been in government before, is that industry is the shock absorber of inflation.

The Pentagon seemed to think that it had managed through inflation because it hadn't hit it yet. When the next round of contracts, or economic order quantities, or competitions take place that inflation that has been absorbed by industry is going to show up and the Government is going to have to deal with it.

And I think the way that what Government can do in real time, which is hard, is pay for it. The contracts, most of the contracts that are directly with the Government have adjustment clauses in them. But it doesn't matter if there is no money to pay for those adjustment clauses.

And that is what caused, you know, the primes, anyone who has a direct contract with the Government, to absorb it and then pass it down through the supply chain. And what you are seeing now is small businesses that are locked into contracts to their customer pre-inflation, that are now buying materials and parts in post-inflation and their margins are just getting squeezed.

Mr. CRANK. Yes.

Mr. FANNING. And, I am sorry, and we can chase them out of the defense industrial base because they can adjust to inflation much more quickly on the non-defense side of the work that they are doing.

Mr. CRANK. Right. Okay, thank you.

Mr. Norquist, in your written testimony you talk about the burden of regulatory compliance that contractors are forced to bear in order to support our national defense. For small contractors who can't afford to devote an entire position or department to compliance, the regulatory burden is crippling.

Do you have any sort of estimates as to how much time or money the average small contractor is forced to commit in order to meet federal requirements?

And, you know, it seemed to me like Congress would want those resources to be focused on supporting the warfighter instead of checking the box for DOD.

Mr. NORQUIST. So, we don't have estimates in the aggregate. But individual things like the CMMC standard, how many, you know, hundred thousand, two hundred thousand are they going to have to spend to get them, or just for the annual inspections. Each of those we tend to, you know, for some of them we don't have estimates.

But as you point out, those are all significant burdens for the small business. And it makes moving into, the barrier to moving into the Government sector or staying there very high.

Mr. CRANK. Well, and it also takes money away from the warfighter; right?

Mr. NORQUIST. Correct.

Mr. CRANK. When they are spending it on compliance—

Mr. NORQUIST. Correct.

Mr. CRANK. —instead of. Right.

Mr. NORQUIST. Right.

Mr. CRANK. Okay. Thank you.

I would yield back, Mr. Chair.

Mr. MESSMER. Thank you.

I recognize the gentleman from Missouri.

Mr. BELL. Thank you, Mr. Chair.

Thank you, members, Mr. Fanning, Mr. Norquist, and Mr. Paxton. Thank you for being here today.

Mr. Norquist, I want to start with a question for you.

I think you mentioned or identified brittle supply chains as one of the key vulnerabilities facing America's defense industrial base. Often our defense critical supply chain, chains can be dependent on products and materials sourced from other strategic competitors and adversaries, including China.

And my district in the St. Louis region is home to numerous contractors and subcontractors that are part of the crucial backbone of our country's, nation's defense, including the aerospace industry.

Given recent efforts to increase our leverage and involvement of small and medium sized defense contractors, what steps are you aware of that the Department of Defense is taking to ensure these entities have the necessary support and resources to meet the demands of our national defense strategy?

Mr. NORQUIST. So, I think you bring up the critical challenge, which is mapping the supply chain, understanding where you are either vulnerable because it is, it is offside, or you are vulnerable because of the fragility of your supply chain.

I know the Department has been looking at different choke points. Solid rocket motors is one of the most obvious ones where there was not a capacity to meet it. But they have. And I think some of it may be covered in their national defense industrial strategy where they go through and they work backwards and say, "Where are the common choke points?"

And that is a common project you often do with, with industry to map, to understand where the overlaps are.

Sometimes competitors who are bidding against each other and build different products are actually buying from the same supplier

for the part. And so, being able to be aware that that part, disruption there would affect several, then the question goes to the Government about what is the best way to deal with it?

You know, one of the old techniques is Defense Production Act. You go to the supplier and you help them increase their capacity. That works well.

The other one is in future contracts you incentivize the winning firm to develop a second supplier as part of their contract. And so, they will then grow a second subcontractor who will be able to provide that.

Both of those are useful. And I think it is really a matter of understanding where the choke points are versus what you don't want to do is do that where you actually already have capacity and there are other firms willing to bid, and if you just found them they would come right on in.

Mr. BELL. Thank you.

And, Mr. Fanning, as industry continues to drive innovation in military and civilian aviation, how do you see Missouri-based contractors contributing to the development of next generation technologies?

Mr. FANNING. Well, I think our industry has a footprint in every state in the country. And so—

Mr. BELL. Which is great. But I am—

Mr. FANNING. I know. You are talking about Missouri, which is fantastic.

We, we—Missouri-specific, I would have to get back to you on that and we can have a conversation. Because as we said earlier, workforce is the critical component here. There are shortages. And if we, if there are regions or states in the country that want to work with aerospace and defense, that is an easy partnership to develop.

Mr. BELL. Thank you, Mr. Fanning.

Mr. Norquist, I want to continue the discussion on supply chain resilience and security. While it is essential to reduce reliance on parts, and products, and strategic competitors, it is also critical to strengthen cooperation and expand industrial supply chains with our allies.

Can you speak to the importance of fostering robust partnerships and trade within the industrial base, particularly with our NATO allies and other multilateral security partners?

And are there any specific programs or initiatives that you believe are particularly effective in this regard?

Mr. NORQUIST. So, I think one of the things that give incentives, with our formal allies we have over 50 percent of the world's GDP. So, there is an amount of economic capability there. These countries are both suppliers of parts to us and, if they are allies, then they are friendly suppliers, as well as buyers of the products we make which create jobs here.

So, there is a value in having that working relationship with them.

There has been work in AUKUS with U.K. and Australia to be able to expand our ability to trade. There are certain companies in Europe that are absolutely essential for certain systems that we build where they are the best suppliers.

So, I think it behooves us to take advantage of allies when they are useful. And it is useful to be able to have allies take advantage of and buy from the U.S. And I think that that reciprocity is part of what makes it effective.

Mr. MESSMER. The gentleman's time has expired.

Mr. BELL. I think that is my time. I yield back.

Mr. MESSMER. Thank you.

Recognize Mr. Cisneros.

Mr. CISNEROS. Thank you, Mr. Chairman.

Mr. Norquist, good to see you again.

You know, as a former Comptroller, former Deputy Secretary of Defense I think you are well aware of the cause of what a continuing resolution and how it impacts, you know, defense building and the industrial base. But I am actually going to ask you about the, the workforce.

So, would you say developing the workforce, given production shortfalls, is a priority?

You know, companies, like, in your association continue to invest in higher education and engineering degrees, but we still need manual labor, the wrench turners, the guys who actually build the things. We need that to create the work—we need to create the workforce for tomorrow.

So, what role do your industries have in expanding all of our future workforce, and not just recruiting engineers and STEM degrees, but actually building, the guys who are putting hands on the product and building it?

Mr. NORQUIST. So, I think first of all it is important to understand the value, you can use the expression blue collar worker, but they are skilled labor. And many of these skills are very complicated skills: an advanced electrician, a welder working on an aluminum inside. Those are very complicated processes.

And so, with industry what you want to be able to do is recruit people, and train them, and then retain them. Because it is the years of experience and that training. And so, I think industry is very keen on that. It understands the risk of disruption.

There are things that we can do to help. You know, when there is a break in production, the incentives financially are to get the industry to lay people off. There is not an incentive to try and retain them. That is not in the Government's long-term interest.

There are opportunities to encourage training of people coming in before they are onboard. That can be, if that was an allowable cost, that would bridge it.

But I think it is really important as we, as we see how many of these places the value of that skilled labor and their ability to produce a quality product is essential to our national security. And often it is the shortage there that is holding back a number of industries.

Mr. CISNEROS. And that is the thing, right, is how do we get people? I don't think anybody really kind of knows or thinks growing up is, like, hey, I want to be a welder, but not only a welder, I want to be a skilled welder in this industry. And we don't realize actually what a good career that could be.

But how do we work to recruit people into these industries and to become those skilled laborers—

Mr. NORQUIST. Right.

Mr. CISNEROS. —to go, and to retain them, as you say?

Mr. NORQUIST. So, there was a time when we started to shift and started emphasizing college and the liberal arts degree as a solution for everyone. And we saw that both in things being done in the Department of Education. We saw that even in the military when, when people are leaving the military that was sort of the theme.

The answer is that many of these career fields, the skilled labor, are much better paying and have much more stability and a more interesting career field. And so, I think we need to, both inside the Department and as a country, right-size the recognition of both the value of that labor and making it clear to people the potential to have a real career, that this isn't something you interim, you can make this a long-term career and be, have a very successful life in a very positive environment.

Mr. CISNEROS. Thank you.

Mr. Fanning, I want to ask you around the same lines really. You know, what are some of the biggest challenges you see in the aerospace and defense industry in attracting and retaining these skilled workers?

Mr. FANNING. I think I would just be adding to what David said. We, we pivoted in this country away from vocational and technical training to community college investments. And I think we, not only did we move the needle too far in the other direction, but David mentioned the value of this work. We sent a message about the value of this work, the worth of this work to, to our country.

And I think we know we have jobs that pay 50 percent more than the national average. We pay well. We have to pay well: we need that technical workforce.

And so, I have got a company in Kansas that actually recruits on farms because they can at least find people who have worked, who work with big equipment. We need to have that pipeline and it has to start early, that feeds into STEM that can be this type of high-skilled labor you talked about.

Mr. CISNEROS. Right.

Mr. FANNING. Again, you know, what we want to do is hire people in and not just retain them, recruit them, but grow them and move them into those higher-skilled jobs that are on the floor.

Mr. CISNEROS. You know, I think this is something we need to look at; right? And I know the Department of Defense, and I am sure you all know this, right, you know, we have got fifth graders, going in to get them interested in science, and physics, and becoming engineers. But I think we need to start getting not only the Government, but industry as well, focused on and making investments to have, building that skilled labor so that we have that workforce for tomorrow, especially as these weapons get more technical and difficult to build.

So, anything we can do to partner with industry to kind of make that happen, I am here to help and support that.

And with that, Mr. Chairman, I yield back.

Mr. MESSMER. Thank you.

Recognize Mr. Tran.

Mr. TRAN. Thank you, Mr. Chairman, Ranking Member.

Thank you, gentlemen, for being here.

I am deeply concerned about our dependence on components and materials sourced from the People's Republic of China and the implications of our supply chain. China is already levying new export restrictions against the United States. And I have no expectations that tensions between our two countries will be alleviating any time soon.

The question is, for any of the witnesses, what are the most critical supply chain vulnerabilities in the defense sector? And how can we better mitigate China's influence on U.S. supply chains?

Mr. NORQUIST. So, I will just start with a few and they can jump in.

I think one of the places we see this is energy storage and batteries and the materials needed to produce those. That has effect across a wide range of technologies. And many of those also depend on rare earth metals for development, either not produced here or not refined here.

And so, that would be one where you would need to look to both improve you either stockpiling your development and your processing, or make mining either here or through an ally.

You will also see this, this came up with micro-electronics; right? And that one is not just a interrupt the supply, for the Department of Defense it is how do I know the integrity of the chips that I am using have not been compromised?

So, I think those, those two.

I think raw materials, we have talked about extensively in this one, and feeds into both of those two questions. So, I would start there as the ones I would highlight.

Mr. TRAN. And I would maybe expand the focus a little bit to add capital, watching very carefully where China is moving its manufacturing to make sure that we are not getting it through a secondary source.

And then a recognition, this is a, this decades-long whipsaws. You know, it was our strategic focus to partner closer with China over time. And so some of these things will take time if they are left to their, on their own to right themselves. So, there is investment requirement there if we want to get speed.

Mr. PAXTON. Yeah, just my comment here would just be, while we are down to single-source suppliers in our shipyard industrial base supply chain, we have got to make sure the health of the industrial base is such that, you know, when we continue to ramp up—and that signal might be coming that we are going to do that—that we have a supply chain that can be resilient and answer that call.

Mr. TRAN. Thank you. You will hear me talk a lot about our people. After all, our people are our military's greatest asset. In this case, I would like to know more about recruiting and retaining the skilled workers needed to meet production demands.

What are the key workforce shortages affecting the defense industrial base?

And what specific partnership will be necessary to ensure industry can identify and recruit enough talent to meet our strategic requirements?

I know we talked a little bit with Rep. Cisneros. But specific partnerships is what I am looking for.

Any of you gentleman.

Mr. NORQUIST. So, I will just start. The key ones are skilled labor, STEM, and also people who can get clearances because that becomes a choke point as well.

Some of the most important partnerships are with the local communities through their high schools and other programs so that employees get exposed, or students get exposed to the technologies, the STEM, the trade skills. And that creates a pipeline, as well as them being aware of what industry opportunities are available in the area.

So, I think those are some of the starting points.

I think the Navy has done a good job with this. I think the Air Force is looking at doing this as well, to be able to bring people in and let them know that this exists; right? There is an opportunity here.

So, I will pause there and let the others weigh in. But that is where I would start.

Mr. FANNING. I think, absolutely, local communities and educational institutions, and expanding so that the educational systems and the state and local governments can see what will help these students get jobs like this. And it backs up further than, than high school.

I mean, if you want to do some of these jobs you have to start taking, and understanding, and studying math in elementary school. And so, that is a long pipeline that is important.

But I would say that the importance of retaining, because you brought that up as well. And one of the hardest things that undercuts retention is inconsistency, surging, and coming down off of a surge.

And, you know, we have talked about it in terms of demand signal and investment. But, but these companies never want to lose their workers; they will go someplace else and it will be very hard to get them back.

And we saw that in COVID, again the shared supply chain, it hit the commercial aviation side so hard. And that was the focus: how do we keep those workers? Because we won't get them back; they are in demand, they will go someplace else.

And so, that consistency that industry can have so they can plan around retaining that workforce is very important.

Mr. TRAN. Thank you so much, Mr. Chair. I yield back.

Mr. MESSMER. Thank you. And the chair wants to announce we will have a hard stop at 1:00 o'clock.

And with that, I recognize Ms. Elfrehth.

Ms. ELFRETH. Thank you very much, Mr. Chair. Fully recognizing I am batting clean-up, so I just have one question for everybody. And it is kind of a natural evolution of some of the questions that we just heard.

But I appreciate there are multiple variables that contribute to what we are discussing today: obviously, workforce that we have discussed, supply chain issues. Continuing resolutions aren't helping any of this.

But I would like to specifically drill down on the threat of this administration's tariffs on our allies and our adversaries, both on the raw materials that you utilize, from copper and aluminum to lumber, but also a lot of the process materials and the products we have also discussed today.

So, I just wanted a greater appreciation from any of the witnesses as to the potential impact the tariffs that have been announced could have on exacerbating this challenge?

Mr. FANNING. Aerospace and defense is the largest net exporting manufacturing industry in the country. And we have had the longest running export surplus of any industry in the country, so our market is all over the world.

And a part of that is also having a supply chain that is all over the world. And we have been doing a lot of work to rationalize that supply chain, get it out of China, take the lessons we learned from COVID and move it where we need it to follow successive administrations' guidance on this.

But buying American involves getting a part of the economic benefit of that purchase. Companies that buy airplanes, for example, they also want some economic benefit from doing that. And so there are incentives to buy American, to invest and to move your supply chain internationally.

So, you know, we are watching this very closely. When we went through this before the defense industry, in particular, was given very careful consideration for exemptions, recognizing that any tariffs that are impacting what the Government is buying essentially go back to the taxpayer because of the economic adjustments that are in the contracts.

Mr. NORQUIST. So, I think in multiple ways the Government gets revenue, each one of them has an effect on how it takes it and the incentives it creates. And so, I think with a tariff you have to be what is it on, and what products? And then you have to work through the supply chain to figure out what is disrupted. And remember the second or the fact, which I may not be buying overseas, I may be buying from a U.S. supplier who is, right, so there are consequences to that.

And trying to understand the effect on defense and making sure that those are taken into account so you don't harm national security would be an essential step.

Mr. PAXTON. I will just say as a general matter on the commercial side of things we are—it is much because we have global supply chains on, you know, commercial shipbuilding there are some real near-term impacts on what that could mean cost-wise.

But like my two colleagues have said, there is still a lot of kind of analysis of what is going on here that we are going to do.

Ms. ELFRETH. Thank you very much.

And I think it is clear that there are, again, multiple variables here. But adding an additional stressor, the effects are still unclear as to our preparedness, our readiness, all of those things. And so I do hope this committee continues to ask these questions and have these challenging conversations.

And with that, Mr. Chair, I will yield the remainder of my time.

Mr. MESSMER. Thank you.

And we recognize, the chair recognizes Mr. Scott from Georgia.

Mr. SCOTT. Thank you, Mr. Chairman. I will be brief. I am sorry that I have been running in and out of other meetings with people from the Department of Defense.

Not taking care of the supply chain just a few years ago put our country in a position where if we wanted to launch a rocket we actually had to buy that rocket from Russia, if I am not mistaken. Correct? And I think that, obviously, if we had not gotten ourselves out of that position we would be in, we would be in dire straits right now.

And I am afraid maybe that we haven't, haven't necessarily learned our lessons.

Certainly, Buy American makes sense. And a lot of things, Mr. Paxton, and then we will come back to you, Mr. Fanning, one of the areas that I have the hardest time with, though, I understand that shipbuilders need a consistent flow to, to get decent pricing for us and reasonable margins for them. But I don't understand why we only buy one ship or one part of a ship at a time. I don't understand why we don't do block purchases.

And the thing that I have the hardest time with, though, with the shipbuilding is, like just buying roll off/roll off—roll on/roll off containers for TRANSCOM [United States Transportation Command]. I would prefer to have the U.S. shipbuilding industry focus on more specialized products, and we could buy roll on/roll offs from Singapore or South Korea.

But are we only contracting for one ship at a time? Is that—why does it cost so much more in America?

Mr. PAXTON. Well, certainly we, we are subject to the appropriation process where these ships are bought in, you know, a single appropriation year. But certainly we have advocated for block buys.

The recent amphib bundle down at Ingalls was exactly the right thing to do. Putting ships together in groups like that gives the shipyard everything they need for predictability and sustainability.

The other thing I would say, this committee authorized a 10-ship buy of ConRos [Container RoRo], ROROs for the national defense reserve fleet. And that was very smart. Appropriations were funded for that, and we still had the Maritime Administration sitting on putting that, that out to contract.

In that case, Congressman, we would be using commercial best practices to build those ships.

Mr. SCOTT. Oh, okay. But it is cheaper to buy the roll on/roll offs from?

Mr. PAXTON. You know, Congressman, I think the reality is when we buy in ones, and twos, and threes here, it is more expensive. If you buy an order of 10, it is going to be much more affordable.

I will say, if you are buying in orders instead of—

Mr. SCOTT. Thank you.

Mr. PAXTON. Yes.

Mr. SCOTT. Just we got to work through this.

Mr. PAXTON. Yes, sir.

Mr. SCOTT. We can't, we can't pay as much as we are for the equipment we need, and it can't take this long.

Secretary Fanning, I am going to come to you because you were Air Force before you were Army; right?

Mr. FANNING. Yes. Navy before that.

Mr. SCOTT. Okay. Well, I was trying to give you credit without demerits.

[Laughter.]

Mr. SCOTT. The data on the F-35. We listened yesterday. I am very concerned about the contracting.

When we, when the United States taxpayer pays for the development of a weapons system, and then we turn around and because of poor lawyer contracting we end up not owning data or systems that we paid for, do we own the data on the F-35?

Mr. FANNING. Congressman, I actually don't know the answer to that question. We don't work on individual programs at AI.

Mr. SCOTT. Okay. I thought maybe from your time at Air Force.

Mr. FANNING. I don't recall specifically. I do know that data rights is a complex issue. It does come down to what is in the, what is in the contract. But I don't know the answer to your specific question.

Mr. SCOTT. So, the guy from the private sector, I don't think it is that complex in the private sector. If a private company pays to develop something, they own what they paid to develop. And so I want our defense contractors to be successful. And being successful means you have a reasonable margin, just as being responsible to the taxpayers. When the U.S. taxpayers' funds are used to develop a system, the U.S. taxpayer should not have to pay to license that system back.

And that is something that the U.S. Government has got to do a better job of.

I appreciate all of you. Sorry that I have been running from meeting to meeting. I'm sorry, Mr. Norquist. I could have asked you a trigonometry question or something.

Thank you.

Mr. MESSMER. The chair recognizes Mr. Khanna.

Mr. KHANNA. Thank you, Mr. Chair.

Mr. Paxton, I found your testimony very, very helpful and on point, especially as you pointed out that our shipbuilders are competing with state-owned enterprises. That it is not a fair competition. I mean, China, South Korea, Japan basically have been financing their ship industry for decades. And we have not done that with our ship industry.

Now, others have pointed out that China is making 1,700 ships a year in the commercial sector, and we are making about five. I am a co-sponsor on Mr. Garamendi's excellent SHIPS bill, which is bipartisan. But my understanding is that would take us from making five ships to 25 ships a year, 250 ships in 10 years. I mean, we are still orders of magnitude less than China.

And I guess my question is, you know, the bill, as I understand it, is about \$250 million of investment a year, but if we are serious about this shouldn't we be putting in more money and financing a shipbuilding industry in this country like we did in World War II with Roosevelt, and actually making the investment that is required to catch up, if we can, to China, or at least add some capacity?

Mr. PAXTON. Yeah. Thank you, Congressman, for the question. I don't think we are ever going to catch up to China. I think what we want to try to achieve, and I think what the SHIPS Act is try-

ing to achieve, is having that national maritime strategy, a 250 commercial strategic fleet that balances out the fact that we don't have any logistics globally in the maritime space beyond the Maritime Security Program, which is about 65 ships.

So, I think this legislation gets us down the path, sir. And I think, you know, the legislation thinks about stuff like a cost differential subsidy, which we let go in 1981. And is that something that we are serious about implementing again? And if we are, you know, what is that demand side of the signal for what these ships are going to go and do?

I think it is undeniable, though, the Ready Reserve fleet is aging out. We need to recapitalize our auxiliaries. We should be building two auxiliaries a year in perpetuity. And I think the SHIPS Act gets at that logistical lack of logistics that we have.

Mr. KHANNA. Mr. Paxton, how much can the federal financing solve this? I mean, with generous investment tax credits and generous financing. I understand there is need for regulatory reform. And I get your point—

Mr. PAXTON. Yes, sir.

Mr. KHANNA. —you don't want, you know, one inspector for two ship workers. Fine.

Mr. PAXTON. Uh-huh.

Mr. KHANNA. But, you know, that is—I am not saying that is the easy part. But let's say we have a consensus on that, if Congress said tomorrow we are going to put a billion dollars into this or serious more money, will that solve it? I mean, is that really the biggest variable?

Mr. PAXTON. I don't think it is just money is the variable. I think what you have been hearing a lot today is that demand signal. Are we serious about this or is this going to be a five-year initiative that then goes away?

I think if we were serious about this and you could see out on a horizon of 10 to 15 to 20 years, absolutely this industry is so capable that they will invest in their facilities and continue to grow, and can be serious about building.

Mr. KHANNA. And would the Government have to give the demand signal even for the commercial fleet? Or would it be a purchase tax credit for American consumers or American businesses that use American fleets?

Mr. PAXTON. Yeah, I think there has to be a demand side to this. I think the Energizing American Shipbuilding Act which looks at prioritizing a certain amount of our petroleum and LNG to go on preferenced U.S.-built LNG [liquefied natural gas] carriers or U.S.-built tankers is how you get at this.

And so, I think you have got to have a demand side of it of what we are going to do with these ships.

Mr. KHANNA. Well, I appreciate it. I really appreciated your testimony. And look forward to working in a bipartisan way to support shipbuilding.

Mr. PAXTON. Thank you, Congressman.

Mr. KHANNA. Appreciate it.

Thank you, Mr. Chair.

Mr. MESSMER. The chair recognizes Mr. Van Orden.

Mr. VAN ORDEN. Thank you, Mr. Chairman.

Mr. Paxton, I chair a subcommittee on Veterans' Affairs Committee. It is great. Economic Opportunity. And I have learned something. I have been in Congress for two years and five minutes. This is what I figured out: an agency, a department, or an office is not a person. And the only way to get stuff done is to identify the person. And then, unfortunately, sometimes humiliate them on public television. And that is not my account with you, sir.

[Laughter.]

Mr. VAN ORDEN. So, I guess that was a little sketchy there for a second, wasn't it?

So, who by name, like, by name is the person that is responsible for setting out these standards that are so exquisite for these, these ships that we are physically incapable of building them? Who is that?

Mr. PAXTON. First, first of all, Congressman, great question. We work with our Navy partners, industry, private industry does. And we really do have a relationship where we want to get better. There is a lot of—

Mr. VAN ORDEN. Mr. Paxton.

Mr. PAXTON. Yes?

Mr. VAN ORDEN. That is not a person, is it?

Mr. PAXTON. Yeah, that is not a person.

We, we work very closely with NAVSEA [Naval Sea Systems Command]. And a lot of the folks at NAVSEA work on some of these.

Mr. VAN ORDEN. Will you do me a favor?

Mr. PAXTON. Yes, sir.

Mr. VAN ORDEN. I want to talk to you. We can do it in private if you want.

Mr. PAXTON. Uh-huh.

Mr. VAN ORDEN. But I want to find the person, and I want to figure out why we are setting these standards that are crucially high. Are you familiar with Liberty ships?

Mr. PAXTON. Yes, sir, I am.

Mr. VAN ORDEN. Okay. So, the Liberty ship, we realized we didn't have enough maritime transport during World War II, so they developed a thing called a Liberty ship.

Mr. PAXTON. Uh-huh.

Mr. VAN ORDEN. Unfortunately, they had some issues with the welding and they broke in half. Do you know? Do you know what I am talking about?

Mr. PAXTON. Yes.

Mr. VAN ORDEN. If they get torpedoed they break in half because they didn't do the welding job. Anyway, they fixed that. And then we were producing a ship a day. The United States of America was producing a ship a day. And then was it Himmler figured that out? Oh, no, Goering figured that out, and it was like we have just lost the war.

So, Nazi Germany realized they lost the war when we could produce a ship a day. And those Liberty ships are very simple. So, maybe we need to get back to that basic concept.

Mr. PAXTON. Yes, sir.

Mr. VAN ORDEN. Mr. Fanning, how are you doing there?

Mr. FANNING. Well, thank you.

Mr. VAN ORDEN. You have repeatedly stated that these continuing resolutions are not helpful and it is having a detrimental effect on national security.

Is that correct?

Mr. FANNING. It is.

Mr. VAN ORDEN. Okay. So, could we maybe think that some other folks in my party and in my other party, or the other party here, could be cloaking themselves behind patriotism and fiscal conservatism, and they are actually having a detrimental effect on our budget and the security of the United States? Would you say that is an accurate statement?

Mr. FANNING. I will say that I agree CRs are detrimental to our nation's security and the industrial base, yes.

Mr. VAN ORDEN. Okay. Well, then I will just say it. There are some people in my party and the guys across the aisle who are cloaking themselves in patriotism and fiscal conservatism, and they are actually making us spend more money and making the world and our nation less safe for political purposes. And that has got to stop.

National security should never be political. And our budget, believe it or not, should not be political either.

So, when we do have some folks that are complaining about this DOGE thing, which I am a very strong supporter of, they don't understand that a smaller, more nimble force is more accurate and more lethal.

And so, I think there is room for both sides to come together and put the American flag over their political T-shirt.

Mr. FANNING. Yeah, the top line is a separate issue. This is about operating as efficiently and effectively as possible with what you spend.

Mr. VAN ORDEN. Correct.

Mr. FANNING. And it is an enormously complex industrial base making simple things up to enormously complex things that nobody else in the world can make. And the fits and starts of how it is funded and what is allowed is extremely costly and costs time.

Mr. VAN ORDEN. Would you say, Mr. Fanning, would you say that even if we had the, if we had the manufacturing capacity to produce everything we possibly wanted, that we still wouldn't be able to get it to the troops because our acquisitions process simply sucks?

That is a term of art. I really didn't want to say that.

[Laughter.]

Mr. FANNING. If we had the resources to build everything we wanted, yes, we would still be getting things to the troops late.

Mr. VAN ORDEN. Okay.

Mr. FANNING. And it is not just a question of resource. In fact, resource is probably covering up some of the problems in the system and buying down—

Mr. VAN ORDEN. Would you say it is an issue of process, not product?

Mr. FANNING. Yeah, I would. I mean, we are building the most complicated things. You know, we have been talking quantities of ships and those types of things, but nobody can match the, the effect of what we build. And so, I do think it is a process issue.

It is an investment issue, it is a political issue, it is a process issue.

Mr. VAN ORDEN. Okay.

Mr. FANNING. We are not unleashing the full strength of our industrial base.

Mr. VAN ORDEN. Thank you, Mr. Fanning. My time has expired and I yield back.

Mr. MESSMER. Thank you.

Mr. Fallon is recognized.

Mr. FALLON. Thank you, Mr. Chairman. And I will be brief. I know we have a hard stop at 1:00, so I want to thank all the witnesses for coming. And thank you for your great line of questioning. I like your industry terms.

Mr. Fanning, how can the procurement process in the defense industrial base become more agile and enhance adaptability and cost efficiency?

Mr. FANNING. In the industrial base or in the?

Mr. FALLON. The defense industrial base.

Mr. FANNING. In the defense. Well, I think the defense industrial base will respond to whatever process the customer puts in place. There, it is not like—I liken it to—it is a simple analogy, a hardware store. You know, there is only one customer buying hammers. And if you stop buying hammers, or if you want to buy hammers in a different way or different color, the hardware store is going to respond to that.

So, I think the change has to come from the Department of Defense and the processes there. And industry will, will fold around that. And whoever figures it out the best is going to be the one that wins.

And if we emphasize speed, nimbleness, and the metric of getting something to the troops, the companies that do that will win.

Mr. FALLON. And then if I could ask, and this is just to touch on this, I just came from a DOGE, the DOGE Subcommittee. So, I was DOGEing. All right, that is the first time we used that as a verb. But, you know, how do you all think the DoD can reform the acquisitions process to accelerate innovation, to deploy critical technologies and, really, honestly, just become far more efficient and give the taxpayers more bang for the buck?

If you want to start, Mr. Paxton, and go to your right it would be great. Thank you.

Mr. PAXTON. Well, if we are going to look at acquisition reform, which I think we should do, I think this committee is all about that, and we have some proposals, both the House and the Senate, we really have got to get serious about the level of oversight, the volume of our contracts.

You know, when we are building something relatively simple, we are still dealing with 4,000- or 5,000-page contracts. And I don't know if that is efficient. I do know that is not efficient. We should be streamlining our acquisition and contracting process extensively.

Mr. FALLON. Mr. Norquist?

Mr. NORQUIST. So, one of the things I would point out is, you know, we have had studies on the acquisition, we have had studies on the budget. Where we haven't focused is requirements.

One of the challenges is if I write—and this is the case in the Department—very specific requirements, you are going to have to build to that solution.

And as the United States, we have a very innovative population, defense industrial base, so trying to use central planning and be better communists than the Chinese is not going to get us to the solution we want.

The place you get disrupting, big savings is when somebody says, I don't need this widget. I have this problem: I need to sink a ship at sea from a distance. I need to—come tell me how you might do this. Right? Because otherwise you get very incremental changes, you get cost-plus, you know, new contracts. And the person who comes in with something that cuts the cost in half, well, that is not a very welcome solution because it doesn't generate revenue for you, it doesn't meet the, the contract.

So, you want to really open up to disruptive, innovative ideas. And we have seen this is what happens in the private sector. Somebody comes in and finds a way that does something, that others do, for half the price. And they just do it differently altogether. And then all of a sudden that takes off, other companies enter, and then the price comes, comes down. But we really have to be careful in our requirements process not to handcuff the solution, but to open up where you can.

There are some parts it has got to be a widget, it has got to fit exactly on here. That's fine. But if you are trying to open up defense, what is the problem you are trying to solve, and let people bring you some very radical solutions.

Mr. FALLON. Great. Thank you.

Mr. Fanning, do you want to bring us home?

Mr. FANNING. I agree it starts with the requirements. Bring industry in as early as possible. And bring the warfighter in as early as possible, the one who is actually going to use it.

You know, field things, it gets improved more and faster when you get it into the hands of the warfighter earlier and let them figure out how to make it work.

The second is it is not rocket science. It is not easy, though. It is every part of the process needs a review. It is an additive process where things were put in because something wrong happened and you want some mechanism to prevent it. There is no countervailing process to clear the brush of this.

And I would give more control, it comes with more oversight, to program managers to be able to move money around to who the winners and losers are, in coordination with the combatant commanders who are actually fielding the, fielding the weaponry.

But you want—you know, winners and losers, as they present themselves, as you bring them in early you want to be able to reward them quicker.

Mr. FALLON. Uh-huh. To be practical, fill a need, and live within the bounds of reality it sounds like, you know what I am saying.

Thank you very much. And thank you, Chairman. I appreciate it. I yield back.

Mr. MESSMER. I thank our witnesses for being here and our members for their participation.

The committee stands adjourned.

[Whereupon, at 1:08 p.m., the committee was adjourned.]

A P P E N D I X

FEBRUARY 26, 2025

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

FEBRUARY 26, 2025

**The Honorable Eric Fanning
President and Chief Executive Officer
Aerospace Industries Association**

“Strengthening America’s Defense Industrial Base, Workforce, and
Production Lines to Deter War”
House Armed Services Committee
Wednesday, February 26, 2025 – 10:00 AM EST

Chairman Rogers, Ranking Member Smith, and members of the committee, thank you for the opportunity to testify before you today. My name is Eric Fanning, and I serve as the President and CEO of the Aerospace Industries Association (AIA). For over 100 years, AIA has advocated for America’s aerospace and defense (A&D) companies and the more than two million men and women who are the backbone of our industry. AIA serves as a bipartisan convener, bringing people together to find consensus on important topics like effective federal investments and strategic policy frameworks that will unleash the full potential of our defense industrial base (DIB) for the 21st century and beyond.

Who We Are

Today, AIA represents nearly 300 American A&D companies ranging from family-run businesses to multinational corporations, operating up and down the supply chain. Our membership includes aircraft and engine manufacturers and companies that design and build cutting-edge military and dual-use technology. Our members have a worldwide reputation for global technological leadership rooted in a world-class workforce that is unparalleled in its imagination and ingenuity.

Every morning, more than two million Americans employed by the shared aerospace and defense industry, go to work with one mission in mind: increase the lethality, survivability, and chance of victory for the warfighter. It is our primary driver and provides for the defense and prosperity of our great nation. The industry supports jobs representing approximately 1.4 percent of the nation’s total employment base. More than 58.7 percent of employment comes from the shared A&D supply chain, which is an extensive network of suppliers composed of thousands of small and medium-sized businesses located in all 50 states. Importantly, because of the nature of our work, the average salary in our industry is 50 percent above the comparable national average, providing well-paying jobs to millions of Americans and bolstering the U.S. economy.

Despite inflationary pressure, the industry’s workforce generated \$955 billion in sales in 2023, a 7.1 percent increase from the prior year. These economic contributions have an outsized impact on the U.S. economy – contributing 1.6 percent to U.S. Gross Domestic Product (GDP) in 2023.

America’s A&D workforce and the larger industrial base are key strategic advantages for our warfighters and our nation, but the role and composition of both assets is often misunderstood. The DIB is not monolithic and has changed in size and scope since the “Peace Dividend” era following the collapse of the Soviet Union. Today, it is a diverse ecosystem, with companies of all sizes, each with its own part to play in enabling our national security. While small companies can be innovation incubators by virtue of their size and ability to speed decisions, prime contractors bring scalability, advanced capability, and cash flow, as well as a large talent pool

with extensive experience. Primes can also afford to maintain a workforce in ready state to meet evolving or sudden needs, which benefits the entire ecosystem.

To understand how best to strengthen the defense industrial base, it is crucial first to understand our industry and the drivers of its overall health. The defense industrial base is largely shaped by a single customer: the federal government. This is what differentiates the DIB from the commercial marketplace – which has more customers and growth opportunities – and has an outsized impact on its products, people, and performance. The DIB depends on federal investment to help ensure the overall health and resilience of the industry. This means that the number of programs prescribed by the Pentagon has a direct correlation to the contours of the industry. For advanced fighters, bombers, and aircraft carriers, there simply aren't enough opportunities in the marketplace to support the scope of competition that existed when Pentagon budgets were 5 to 8.5 percent of GDP.

The U.S. defense industrial base is more relevant today than it has been, perhaps, since World War II. The wars in Ukraine and the Middle East have shown not only the complex security situation facing the United States and its allies, but also the asymmetric challenges posed by a constantly evolving class of cheap, easily acquired weapons, from rockets to drones. While American-made weapons remain effective, these conflicts have shined a light on the fragility of supply chains, which are still recovering from pandemic-driven disruptions and other economic challenges. These are challenges that only grow when you broaden the security lens through which we must view the future: an increasingly at-risk free and open Indo-Pacific, threatened by the adversarial and hegemonic aims of countries like China.

Therefore, it is incumbent on the Trump Administration and Congress to not just support but prioritize the defense industrial base. We need an all-of-the-above defense strategy, harnessing the traditional with the new, to fully outpace the threat. To meet this mandate, leaders must pull every lever available to ensure the United States has the skill and capacity to support both today's demands and the demands of tomorrow.

The Urgent Need for Reform and an All-of-the-Above Strategy

The defense industrial base is a diverse ecosystem of established primes, essential suppliers, and commercial companies adopting new patriotic missions, and innovative new entrants. America's national security depends on all of these companies and their ability to deliver decisive advantage to the warfighter. The U.S. government must adopt an all-of-the-above approach to the industrial base. The current defense acquisition system is not optimized to deliver that advantage.

This committee has devoted more oversight and legislative energy to this system over the last decade than perhaps any other national security issue, and it should be commended for its work so far to try to make it work better for the Pentagon, the warfighter, the DIB, the taxpayer, and the American people it's trying to protect. But now, members must confront the harsh reality facing the current acquisition system. Despite the best efforts of many involved, including industry, this system no longer seems to serve any of these key stakeholders. It no longer supports adoption of critical technology for the warfighter in a timely manner. It is not designed to serve the taxpayer by keeping costs down. It does not enable rapid innovation. It forces companies into irrational and counterproductive business models. Every member on this

committee has heard from constituents who could be doing more, faster, and at a lower cost were it not for the requirements imposed by the current system.

It is time to acknowledge publicly what every member of this committee knows to be true: The current system has serious, potentially insurmountable flaws, and we must consider new solutions to improve the process.

As we do, we must ensure the system positions the whole industrial base – primes, new entrants, suppliers, and commercial companies of all sizes – to meet the warfighter’s needs and the nation’s expectations. By elevating the entire ecosystem, we will be better able to meet the threats facing us today – to move at speed, to expand production capacity, and to build the infrastructure, including the supply chain and the workforce, that underpins it all. This system should not create fast lanes for some companies while leaving others to suffer in gridlock. The nation needs and deserves the entire defense industrial base running full steam in defense of the country. That means we need an acquisition system that supports the ecosystem as a whole, not just the shiniest parts of it.

The Cost of Doing Business with the Department of Defense (DOD)

The aerospace and defense industry and the 2.2 million men and women it employs share the U.S. government’s national security goals: to keep America safe, secure and prosperous, and to support the world’s most lethal and superior military, ready to deter and, if necessary, defeat any enemy it encounters. To fulfill our mission, the DIB needs clear demand signals from Congress and the Executive Branch, sufficient federal investment, a healthy and resilient supply chain, and a regulatory environment that promotes both innovation and adoption.

The environment in which our industry operates today is one of the most challenging in U.S. history. During the last five years, we have seen supply chains break, company and DOD purchasing power eroded by record inflation, and significant increases in labor cost, which harms the recruitment and retention of qualified workers, while major wars in the Middle East and Europe are consuming stocks at alarming rates. The ever-increasing geopolitical threat posed by China compounds these challenges, revealing the shallowness of our stockpiles and straining our ability to replenish them.

Industry works incredibly hard to persevere through these challenges, but the contours of the DIB and its ability to meet the government’s requirements are hindered by federal policy and funding decisions made years ago. While consecutive administrations and Congresses correctly recognized China’s growing threat and the increasing instability around the world, our actions have never matched our rhetoric.

The levels of appropriated federal dollars, the annual reliance on short-term funding measures, and the constant specter of government shutdowns have created deep-seated and disruptive uncertainty in which few companies could operate successfully. These delays have prevented capabilities from getting to the warfighter quickly and have driven companies to stop participating in the DIB in favor of other commercial industries. Over the past 10 years, more than 40 percent of the small businesses in the DIB have stopped selling to the DOD. The result is reduced competition, lost manufacturing capacity, and hampered innovation.

The companies remaining in the DIB, particularly small and medium-sized businesses whose primary output is contributions to America's manufacturing base, are often hamstrung by regulations and requirements, inhibiting modernization and resiliency. This means our military can no longer access the full range of innovative solutions to meet the growing, geographically diverse, and evolving mission-set positioned against a backdrop of increasing global instability.

Furthermore, well-meaning but burdensome statutes and government policies drive up the cost and complexities of doing business with the federal government. Today, it takes close to 300 days on average to award prime contracts with estimated sales of more than \$100 million. For commercial companies used to working quickly, the delays in awarding contracts and executing agreements are a strong disincentive to contracting with the DOD. In particular, small businesses simply cannot maintain sufficient cash flow over such a long horizon, causing them to exit the DIB altogether.

Retaining a qualified workforce amid these challenges is another struggle. To meet the growing demands on both delivery and innovation within the DIB, there is a systemic need to address workforce challenges, creating and sustaining a skilled talent pipeline on an ongoing basis.

Impacts of External Factors on the DIB

The stop-and-go cycle of congressional appropriations for the DIB makes sales of U.S. military equipment to partners and allies critical, providing reliable revenue streams that allow companies to maintain manufacturing production capacity when U.S. funding is in doubt. The recent Department of State announcement that fiscal year 2024 total arms sales and transfers (Foreign Military Sales and Direct Commercial Sales) is proof of the this — the first time in history that this total has exceeded \$300 billion.

In fiscal year 2024, total arms sales to approved and trusted trade partners exceeded all of the DOD procurement and RDT&E accounts combined. Moreover, the total value of all open Foreign Military Sales cases nearly equals the entire DOD budget. Arms sales to allies and trusted partners have become a lifeline for American defense manufacturers, and we must continue to work with Congress to find ways to expedite those sales through the bureaucracy to offset funding challenges here at home.

Arms sales are not only a source of revenue for American defense manufacturers, but they also serve as a strategic tool to advance U.S. security interests abroad. The United States is experiencing threats from adversarial countries across multiple theaters, threats we cannot face alone. Our allies and trusted partners look to the U.S. DIB to buy best-in-class defense products and to bolster their contribution to collective security. Without U.S. leadership, we risk foreign partners turning to adversarial sources for their security needs which ultimately degrades U.S. interoperability and global influence. We must maintain a strong, secure, and robust DIB that allows U.S. manufacturers and their supply chains to be responsive to ally and partner need and to ensure the U.S. continues to be the partner of choice.

While federal investment is critical to the health of the DIB, companies also leverage outside investment to drive innovation, recruit the best talent, and reinvest in our national defense.

Obtaining outside investment requires a business model that demonstrates profitability. However, profit margins for most aerospace and defense companies are significantly lower than other industries such as oil and gas, technology, and utilities, which operate at profit margins double or even triple that of the A&D industry. These margins put our industry on a similar level to staple industries like food and healthcare, a situation that causes challenges when competing for talent in other sectors of our economy or when trying to attract commercial suppliers.

As a major U.S. manufacturing sector with supply chains that include both domestic and global sources, changes in U.S. trade and tariff policy could potentially impact our ability to provide the best value to the U.S. taxpayer. Unlike most U.S. manufacturing sectors, the DIB is not a consumer industry delivering goods to a private sector market. The primary customer for DIB products is the DOD, with the militaries of our partners and allies following closely behind. This makes the trade and tariff's changes unique to our industry, since the only "customers" are governments, including our own.

The DIB is also a "downstream" industry. We rely on other economic sectors for materials, parts and components – like titanium, aluminum, and steel – that come from "upstream" in the value chain. Changes in the "upstream," whether through a pandemic, a global conflict, or even a change in tariff policy, has an impact on the "downstream." Our industry is closely watching the potential change in U.S. trade and tariff policy, as well as any reciprocal changes in foreign trade and tariff policies, and we are adjusting our business operations accordingly to account for a dynamic global marketplace. However, the aerospace and defense industry should be the example of how to maintain – and grow – the manufacturing capacity of the United States. We enjoy a trade surplus; employing millions of American workers in stable, well-paid, career jobs; and deliver the best-in-class equipment around the world. Tariff policy, while effective in removing unfair market practices and reshoring manufacturing, should be done with careful consideration of adverse impacts, especially to the American taxpayer.

How We Win

To deter, defend against, and, if necessary, defeat our adversaries, the United States government must take an all-of-the-above approach to the defense ecosystem. A rising tide will lift all ships – strengthening the resiliency the DIB broadly, enhancing our manufacturing capacity, getting technology into the hands of the warfighter faster, refocusing on lethality, and ensuring we are prepared to meet the threats we face. This means finding new ways to empower new entrants, streamlining access for small and mid-sized businesses, and addressing the systems and policies that inhibit the success of the U.S. government's long-standing partners in industry. This could mean wholesale change of the acquisition system; it certainly means improving procurement times, reducing burdensome regulations, and unleashing technology at scale and cost when it is needed.

Right now, companies seeking to enter the DIB must contend with a multitude of laws and regulations that are cost- and time-prohibitive, disrupt established supply chains, and require implementation of costly new systems, processes, and procedures. Congress and DOD have correctly recognized the need to expand the DIB and reduce the barriers to entry. This recognition, while important, is not translating into action, as Congress and DOD continue to add new laws and regulations every year before properly assessing current policies and the

cumulative impact on the health of the DIB. Instead, Congress should focus on right-sizing the regulatory regime to encourage new entrants and support companies of all sizes within the DIB.

Mergers and acquisitions (M&A) should be viewed as a tool to strengthen the industrial base and provide stability to the workforce and business operations. Too often, these opportunities are reflexively dismissed rather than reviewed on the individual merits. M&A is a tool for companies to grow and to stabilize the workforce, unleash innovation, bolster performance, and strengthen capability and capacity. Some companies need to access the tools and resources of a larger company to continue development, while some investors view M&A as a faster path than becoming a program of record. Given the potential opportunity to bolster the health and resiliency of the DIB through these strategies, an effective government policy would fairly review the benefits and costs on a case-by-case basis considering the long-term health of the DIB.

Also of critical importance, federal investment in national defense must keep pace with the threats we face. For too long we were poised for peace, optimizing efficiency at the expense of capacity. Our adversaries are doing the opposite. China is investing in its military and innovation more than ever. DOD's 2024 China Military Report indicated China's military budget nearly doubled from 2013 to 2023, and Beijing's defense budget increased by 7.2 percent from 2022 to 2023. By comparison, President Biden's FY25 defense budget saw a 3.3 percent year-over-year increase — a decrease when adjusted for inflation.

At all costs, we must avoid a return to multiyear and arbitrary budget caps, insufficient defense funding, or defaulting to the use of stopgap funding legislation, which relies on two-year-old funding levels to meet the challenges of today. Continuing resolutions (CRs) waste money on programs no longer needed and prevents new programs from getting off the ground. Aside from the very real harm this inflicts on the wellbeing and morale of our military, CRs muddy the demand signals Congress sends the DIB, slow or even halt the development of cutting-edge technologies, and force businesses into stop-and-start cycles that are hugely inefficient and unsustainable.

Chairman Rogers and Chairman Wicker are correct: We need to increase defense spending now to regain our advantages over our adversaries and we need sustained, uninterrupted funding to maintain those advantages. While we welcome one-time budget increases included for defense in both the House and Senate budget resolutions, we cannot survive on one-time plus-ups alone. Returning to regular order and providing on-time, predictable, and sufficient funding for the departments and agencies that work with the DIB is the first and most important step.

China's historic military modernization is being buffeted by equally aggressive investments in innovation. Between 2000 and 2020, China's share of global research and development (R&D) rose from 4.9 percent to 24.8 percent. At the same time, China extended its super deduction for R&D expenses for manufacturing companies to an extra 100 percent of eligible R&D expenses in addition to actual expenses incurred — while a recent U.S. tax change reduced that deduction for American companies. That means for every \$100 spent on innovation, Chinese companies can deduct \$200, 10 times more than American companies in a similar situation.

To reduce this dangerous discrepancy, Congress must restore competitive R&D tax amortization rules to strengthen our global R&D posture relative to China. The tax code is imperative to incentivize the private sector, particularly the A&D industry to develop the next generation of technologies to keep the warfighter safe and maintain our global economic competitiveness.

On the international stage, our democratic industrial bases need the equivalent policy and regulatory runway to excel so that overall integrated deterrence is achieved. To this end, it is important the U.S. remove regulatory burdens to strengthen domestic manufacturing and supply chains and allow for closer cooperation with allies and trusted partners. Increasing domestic manufacturing and supply chain resiliency, easing technology sharing requirements, and growing our defense exports are key to a U.S. posture that effectively deters and out-innovates our adversaries. Partnerships like the AUKUS agreement have created regulatory fast lanes that allow us to work better and more cohesively with trusted partners to deter a shared adversary. We've seen great progress so far in this domain from the U.S. and our partner governments, but more can be done.

Building and strengthening the resiliency of the global supply chain while reducing our reliance on sole sources of supply are also strategic imperatives for the A&D industry and our government partners. This is essential to the health of the commercial aerospace sector, the DIB, and our overall deterrence. We are a long-lead supply chain industry. Our companies order strategic minerals, materials, parts, and components months in advance and are generally able to manage short- and medium-term disruptions. They also work on mitigation strategies in the event of long-term disruptions. For example, critical minerals have become a focus for our industry as our companies seek to reduce dependencies on adversarial sources, build both resiliency and redundancy into their supply chains, and manage cost as the strategic landscape demands the need for alternative sources of supply. Expanding the DIB with a balance of international and domestic suppliers in addition to commercial entities is vital to improving this resiliency, while also spurring innovation and competition.

Lastly, guaranteeing the DIB has access to the talent pipeline to sustain its work is foundational to these efforts. Investing in STEM education, reskilling current industry employees for new technologies, and enhancing our country's training efforts, including apprenticeship programs, on-the-job training, and certification and credentialing programs, are vital to expanding talent pools and ensuring a highly skilled, dynamic future workforce.

Conclusion

The President and this Congress are pursuing a policy of "Peace through Strength." The United States defense industrial base delivers that strength. Together, with the Executive Branch and Congress, the American aerospace and defense industry stands ready to bring about the changes we need to ensure the defense industrial base is prepared to deliver strength – today and tomorrow.



The Honorable Eric Fanning
President and Chief Executive Officer
Aerospace Industries Association

Eric Fanning is President and Chief Executive Officer (CEO) of the Aerospace Industries Association (AIA), the leading advocacy organization for the aerospace and defense industry with nearly 300 companies in its membership – ranging from multinational prime contractors to family-owned small businesses. As AIA's leader, Fanning develops the association's strategic priorities and works with member company CEOs to advocate for policies and investment that keep our country strong and competitive, bolster our capacity to innovate, and spur our economic growth.

Mr. Fanning brings nearly 30 years of public and private sector experience to his role at AIA. He joined the association after serving as the 22nd Secretary of the Army, where he provided civilian leadership and oversight of our nation's largest military service. He is the only person to have held senior appointments in all three military departments and the Office of the Secretary of Defense, previously serving as Chief of Staff to the Secretary of Defense, Acting Secretary of the Air Force and Under Secretary of the Air Force, and Deputy Under Secretary of the Navy/Deputy Chief Management Officer. In these roles, he helped spearhead budgets, personnel planning, and weapons systems and equipment acquisition.

Prior to his roles at the Pentagon and AIA, Fanning worked on the staff of the House Armed Services Committee and as Senior Vice President of Strategic Development for Business Executives for National Security. He was also the Deputy Director of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism and was associate director of political affairs at the White House.

Fanning serves as a member of the Ronald Reagan Institute National Security Innovation Base (NSIB) Advisory Board, Center for a New American Security (CNAS) Board of Advisors, the Council of Manufacturing Associations Board of Advisers (CMA), the National Medal of Honor Museum Advisory Board, the National Aeronautic Association Wright Trophy Selection Committee, and the Economic Club of Washington, DC.

Fanning holds a bachelor's degree in history from Dartmouth College. His awards include the Department of Defense's Medal for Distinguished Public Service (twice awarded), the Department of the Army's Decoration for Distinguished Civilian Service, the Department of the Navy's Distinguished Public Service Award (twice awarded), and the Department of the Air Force's Distinguished Public Service Award and Decoration for Exceptional Civilian Service.

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COMMITTEE ON ARMED SERVICES
U.S. HOUSE OF REPRESENTATIVES**

INSTRUCTION TO WITNESSES: Rule 11, clause 2(g)(5), of the Rules of the House of Representatives for the 119th Congress requires nongovernmental witnesses appearing before House committees to include in their written statements a curriculum vitae and a disclosure of the amount and source of any federal contracts or grants (including subcontracts and subgrants), and contracts or grants (including subcontracts and subgrants), or payments originating with a foreign government, received during the past 36 months either by the witness or by an entity represented by the witness and related to the subject matter of the hearing. Rule 11, clause 2(g)(5) also requires nongovernmental witnesses to disclose whether they are a fiduciary (including, but not limited to, a director, officer, advisor, or resident agent) of any organization or entity that has an interest in the subject matter of the hearing. As a matter of committee policy, the House Committee on Armed Services further requires nongovernmental witnesses to disclose the amount and source of any contracts or grants (including subcontracts and subgrants), or payments originating with any organization or entity, whether public or private, that has a material interest in the subject matter of the hearing, received during the past 36 months either by the witness or by an entity represented by the witness. Please note that a copy of these statements, with appropriate redactions to protect the witness's personal privacy (including home address and phone number), will be made publicly available in electronic form 24 hours before the witness appears to the extent practicable, but not later than one day after the witness's appearance before the committee. Witnesses may list additional grants, contracts, or payments on additional sheets, if necessary. Please complete this form electronically.

Hearing Date: February 26, 2025

Hearing Subject:

Strengthening America's Defense Industrial Base, Workforce, and Production Lines to Deter War

Witness name: Eric E. Fanning

Position/Title: President and CEO

Capacity in which appearing: (check one)



Individual



Representative

If appearing in a representative capacity, name of the organization or entity represented:

Aerospace Industries Association

Federal Contract or Grant Information: If you or the entity you represent before the Committee on Armed Services has contracts (including subcontracts) or grants (including subgrants) with the federal government, received during the past 36 months and related to the subject matter of the hearing, please provide the following information:

2025

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant
NA	NA	NA	NA

2024

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant
NA	NA	NA	NA

2023

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant
NA	NA	NA	NA

2022

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant
NA	NA	NA	NA

Foreign Government Contract, Grant, or Payment Information: If you or the entity you represent before the Committee on Armed Services has contracts or grants (including subcontracts or subgrants), or payments originating from a foreign government, received during the past 36 months and related to the subject matter of the hearing, please provide the following information:

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NA	NA	NA	NA

2024

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment
NA	NA	NA	NA

2023

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment
NA	NA	NA	NA

2022

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment
NA	NA	NA	NA

Fiduciary Relationships: If you are a fiduciary of any organization or entity that has an interest in the subject matter of the hearing, please provide the following information:

Organization or entity	Brief description of the fiduciary relationship
NA	NA

Organization or Entity Contract, Grant or Payment Information: If you or the entity you represent before the Committee on Armed Services has contracts or grants (including subcontracts or subgrants) or payments originating from an organization or entity, whether public or private, that has a material interest in the subject matter of the hearing, received during the past 36 months, please provide the following information:

2025

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NA	NA	NA	NA

2024

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NA	NA	NA	NA

2023

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NA	NA	NA	NA

2022

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NA	NA	NA	NA

STATEMENT OF
THE HONORABLE DAVID L. NORQUIST
PRESIDENT AND CHIEF EXECUTIVE OFFICER
NATIONAL DEFENSE INDUSTRIAL ASSOCIATION (NDIA)
BEFORE THE
HOUSE ARMED SERVICES COMMITTEE
ON
STRENGTHENING AMERICA'S DEFENSE INDUSTRIAL BASE,
WORKFORCE, AND PRODUCTION LINES TO DETER WAR

26 FEBRUARY 2025

NOT PUBLIC UNTIL RELEASED BY
THE HOUSE ARMED SERVICES COMMITTEE

Chairman Rogers, Ranking Member Smith, and distinguished Members of the Committee, thank you for the opportunity to speak with you today on strengthening America's defense industrial base which is essential for our nation's security. I will limit myself to brief opening remarks. For a more detailed analysis, the National Defense Industrial Association (NDIA) has just completed a report on the resilience of the U.S. defense industrial base titled *Vital Signs 2025*, and with the Chair's permission, I submit that report for the record.

For over 100 years, NDIA has provided a forum for government and industry leaders to collaborate and address complex defense issues so that our nation maintains a strong and resilient U.S. defense industrial base. NDIA and its affiliates represent over 1,700 defense companies of all sizes and sectors, the majority of which are small businesses. These companies design, manufacture, and maintain the cutting-edge technologies and systems that our armed forces rely upon to defend our nation.

During the last 35 years, government policy and funding decisions have resourced the U.S. defense industrial base for low-intensity conflict. Critical elements of the industrial base, including the manufacturing sector and skilled trade workforce, have atrophied. Industry behavior reflected the funding level and rules set by its customer – the federal government. But now the threat has changed. If we want increased capacity, speed, resilience, and innovation then we must prioritize them in the budget, acquisition, and requirements processes.

At a high level, many of the issues facing the U.S. defense industrial base are well known: sclerotic acquisition processes, brittle supply chains, insufficient procurement funding, unstable budgets, increasing regulation, and barriers to modernizing defense trade. This Committee has been a leader in addressing these challenges.

What makes change hard is that the system is so complex that change at one level is offset by counter pressures at another level. For example, we must be aware of how statutes, regulations, and policies driving compliance decisions at the program manager and contracting officer level can create incentives counter to the intent of reforms from Congress or senior Department leaders. One concrete example is how current policies and regulations deter industry ramping-up munitions production, and I look forward to engaging with you on this topic.

Likewise, new restrictions and barriers to entry are rising, including specific challenges around intellectual property and data rights as well as Cybersecurity Maturity Model Certification (CMMC) requirements. While well-intentioned, both are clear areas that discourage attracting new entrants, suppress innovation, and increase compliance costs.

In addition, as the Congress moves forward to reduce regulatory burdens and incentivize novel contracting approaches to attract and retain new companies, it is important to give traditional contractors access to the same streamlined system. Otherwise, we are signaling to nontraditional contractors that as they succeed, they will eventually graduate into the current slow, burdensome, and costly system.

This Congress and the new Administration have inherited the political conditions conducive to breaking up and reforming an acquisition system that prioritizes reducing risk over speed and innovation. The good news is our nation has a defense sector that is innovative and dynamic – what is required is to shape the conditions that will allow it to perform the way we want.

NDIA appreciates the Committee's leadership and focus on this strategic topic. We look forward to working with you to rebuild our defense industrial base in order to strengthen our nation's security. Thank you for the opportunity to testify today, and I am happy to answer any questions you may have.



2101 Wilson Boulevard, Suite 700, Arlington, VA 22201-3060 • (703) 522-1820 • (703) 522-1686 Fax • NDIA.org



The Hon. David L. Norquist
President and Chief Executive Officer
National Defense Industrial Association (NDIA)

The Hon. David L. Norquist is President and Chief Executive Officer of the National Defense Industrial Association (NDIA), the largest U.S. defense trade association. He joined NDIA on May 1, 2022.

Mr. Norquist has over 35 years of public and private sector experience in national security and federal financial management. This includes serving in three Senate confirmed positions: the Chief Financial Officer (CFO) of the Department of Homeland Security, the Under Secretary of Defense Comptroller/CFO of the Department of Defense (DoD), and the 34th Deputy Secretary of Defense.

As Deputy Secretary of Defense, Mr. Norquist was responsible for the day-to-day operations of the DoD, including managing the Pentagon's budget and personnel. In addition, he led reforms in the department's business processes and realigned investments to address the challenges of multi-domain warfare.

As the Under Secretary of Defense (Comptroller) and CFO, he supported the National Defense Strategy (NDS) through the development and execution of the annual defense budget of more than \$680 billion. Mr. Norquist also strengthened accountability to the taxpayer by implementing DoD's first department-wide financial statement audit.

Mr. Norquist began his career in 1989 as a Presidential Management Fellow supporting Army intelligence as a program and budget analyst with assignments on the Army staff, a major command, a defense agency, and at an overseas field site.

Following his time with the Army, Mr. Norquist served for six years with the House Appropriations Subcommittee on Defense as a professional staff member, where he focused on Air Force aircraft, munitions, ballistic missile defense, and information assurance.

Between his tours of government service, Mr. Norquist was a partner with Kearney and Company, a certified public accounting firm.

Mr. Norquist was born in Concord, MA. He is a 1989 graduate of the University of Michigan, where he received a BA in Political Science and a Master's in Public Policy. He also holds an MA in National Security Studies from Georgetown University.

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Hearing Date: 26 February 2025

Hearing Subject:

Strengthening America's Defense Industrial Base, Workforce, and Production Lines to Deter War

Witness name: Hon. David L. Norquist

Position/Title: President and CEO of the National Defense Industrial Association

Capacity in which appearing: (check one)



Individual



Representative

If appearing in a representative capacity, name of the organization or entity represented:

National Defense Industrial Association (NDIA)

Federal Contract or Grant Information: If you or the entity you represent before the Committee on Armed Services has contracts (including subcontracts) or grants (including subgrants) with the federal government, received during the past 36 months and related to the subject matter of the hearing, please provide the following information:

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Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant
N/A			

2023

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant
N/A			

2022

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant
N/A			

Fiduciary Relationships: If you are a fiduciary of any organization or entity that has an interest in the subject matter of the hearing, please provide the following information:

Organization or entity	Brief description of the fiduciary relationship
NDIA	Serves as the CEO and President of NDIA
	NDIA is a trade association with members representing all sizes and sectors of the defense industry.
Aerospace Corporation	Serves on the Board of Trustees
	Aerospace Corporation is an independent, nonprofit operating the only FFRDC for the space enterprise.
	For the purposes of this hearing, I only represent NDIA and not the Aerospace Corporation.

Organization or Entity Contract, Grant or Payment Information: If you or the entity you represent before the Committee on Armed Services has contracts or grants (including subcontracts or subgrants) or payments originating from an organization or entity, whether public or private, that has a material interest in the subject matter of the hearing, received during the past 36 months, please provide the following information:

2025

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NDIA membership and sponsorship at conferences	More than 1,700 NDIA members pay dues and sponsor events.	No payment was made directly related to the hearing.	NDIA is a defense trade association receiving membership dues and sponsorship.

2024

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NDIA membership and sponsorship at conferences	More than 1,700 NDIA members pay dues and sponsor events.	No payment was made directly related to the hearing.	NDIA is a defense trade association receiving membership dues and sponsorship.

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N/A			

2024

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment
N/A			

2023

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment
N/A			

2022

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment
N/A			

2023

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NCAA membership and sponsorship at conferences	More than 1,700 NCAA members pay dues and sponsor events.	No payment was made directly related to the hearing.	NCAA is a defense trade association receiving membership dues and sponsorship.

2022

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment
NCAA membership and sponsorship at conferences	More than 1,700 NCAA members pay dues and sponsor events.	No payment was made directly related to the hearing.	NCAA is a defense trade association receiving membership dues and sponsorship.



BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ARMED SERVICES

Strengthening the U.S. Defense Industrial Base

FEBRUARY 26, 2025

TESTIMONY OF:

MATTHEW O. PAXTON
PRESIDENT
SHIPBUILDERS COUNCIL OF AMERICA
20 F ST NW, SUITE 500
WASHINGTON, DC 20001

On behalf of the Shipbuilders Council of America (SCA), I would like to thank Chairman Rogers, Ranking Member Smith and members of the House Armed Services Committee for the opportunity to provide testimony on *Strengthening the U.S. Defense Industrial Base*.

I am Matthew Paxton, President of the Shipbuilders Council of America, the largest national trade association dedicated to representing the U.S. shipyard industry. The SCA has been in existence in some form since 1920 and currently represents more than 150 companies that own and operate shipyard facilities across the United States and partner companies that comprise the vital supply chain that makes up the nation's shipyard industrial base.

The U.S. shipyard industrial base is a diverse and critical manufacturing sector of our nation's economy. A 2021 study by the U.S. Maritime Administration¹ found that the industry supports more than 390,000 direct and indirect jobs across the United States and contributes \$42.2 billion annually to GDP. Shipyards are engaged in building, maintaining, modernizing and repairing vessels of all sizes for the U.S. Navy, U.S. Coast Guard, U.S. Army, NOAA, the Maritime Administration, local and state government customers and the 40,000 commercial vessels that operate in domestic commerce. Additionally, there is a vast supplier base that provides goods and services that support all facets of the domestic shipyard industrial base.

I testified before this committee in 2023 and noted that industry had weathered significant recent challenges including historically high inflation, supply-chain disruptions, workforce challenges, a lack of stable and predictable acquisition and maintenance plans from our government customers, sequestration, and continuing resolutions.

Since that time, not only has industry continued to support our nation, but additional challenges, including misleading statements from senior Navy leaders, political appointees and others that challenge the foundations of our industry and whether we have the capacity and capability to compete with, and defeat, a near-peer adversary.

I know that this committee and hearing is focused on the defense industrial base, however I want to take a moment to highlight the importance of the Jones Act for the domestic shipyard industry and what that commercial segment provides to our defense industrial base. The domestic commercial market is sustained by the Jones Act, which provides market certainty and stability. This law helps to ensure the existence of a domestic shipbuilding and ship repair industrial base. The Jones Act sustains a domestic market for which carriers, operators and shipyards vigorously compete.

Additionally, SCA has been very actively engaged with members of this Committee, including Seapower Chairman Kelly and Readiness Ranking Member Garamendi to support critical pieces of legislation like the SHIPS for America Act. This legislation would represent a significant step forward in strengthening the nation's shipyard industrial base and would establish a comprehensive national maritime strategy. We are encouraged by its focus on bolstering American shipbuilding and ensuring a robust maritime sector capable of supporting our nation's economic and national security. SCA is committed to continuing its engagement with these Congressional members and staff to refine and enhance the legislation, especially to better support our domestic

¹ <https://www.maritime.dot.gov/sites/marad.dot.gov/files/2021-06/Economic%20Contributions%20of%20U.S.%20Shipbuilding%20and%20Repairing%20Industry.pdf>

ship repair industry, and we look forward to collaborating with policymakers to ensure the success of initiatives that secure the future of America's shipyard industrial base and maritime workforce.

I absolutely admit that U.S. shipyard capacity is not what it once was. However, contrary to popular belief, the U.S. shipbuilding market did not wane because we rested on our laurels or rejected innovation or capability. Our market has changed dramatically since World War II, when shifting administrative priorities, from Republican and Democratic Administrations, curbed programs to support our industry. At the same time, other countries, including our allies like Korea and Japan, and current pacing threats like China and Russia, recognized the sovereignty benefits of a domestic shipyard industry and doubled down on subsidizing, financing, and otherwise distorting the global market in shipbuilding. Those shifts have not been recognized by more recent U.S. leadership, which instead has blamed industry for the international change in market conditions.

Let me be clear, U.S. shipyards do not compete on a yard-to-yard basis when benchmarked against other international shipyards. Each of our individual, privately-owned or publicly traded shipyards competes with a state-backed or state-owned enterprise. When other market conditions are factored in, including generous financing, single-ship orders of 50+ ships, no design changes and other government support efforts, the current state of play emerges. We can see through recent events, whether it's Korea exiting the container shipbuilding business², Japan suing Korea in the WTO over subsidization of the shipyard industry³, European government bailouts of various shipyard companies⁴, and the USTR findings on how China targeted the maritime and shipbuilding sectors for dominance⁵, that the distortions in the market become even more clear.

If we are going to better support our domestic shipyard industry and enable our shipyards and maritime industrial base to compete with near-peer adversaries, we need to better understand how we got here. Therefore, I am here today to implore this body, the Congress as a whole, and this Administration to recognize the challenges that have led us to where our industry is today and to take steps to remedy critical issues, including: lack of efficient use of current domestic shipbuilding and repair capacity, excessive oversight and reporting requirements, unrestrained change orders, lack of vessel design discipline in government shipbuilding programs, and excessive focus on competition rather than partnership with industry.

How We Got Here

In 1993, following the end of the Cold War, the Congress and the Department of Defense made a decision to reduce the size of the military in light of the world being rid of the Soviet threat.⁷ At a dinner that later came to be known as the "Last Supper" the CEOs of major defense contractors were sat down by the then-Secretary of Defense and told that there were too many companies in the defense industrial base and that industry needed to consolidate. And industry did – since then

² <https://www.kedglobal.com/shipping-shipbuilding/newsView/ked202401080007>

³ <https://www.reuters.com/article/business/japan-takes-second-complaint-to-wto-over-south-korean-shipbuilding-idUSKBN2041X4/>

⁴ <https://maritime-executive.com/article/shipyard-sale-expected-as-harland-wolff-is-insolvent-sets-administration>

⁵ <https://maritime-executive.com/article/german-bailout-of-meyer-werft-is-coming-together>

⁶ <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2025/january/ustr-finds-chinas-targeting-maritime-logistics-and-shipbuilding-sectors-dominance-actionable-under>

⁷ <https://www.wbur.org/onpoint/2023/03/01/the-last-supper-how-a-1993-pentagon-dinner-reshaped-the-defense-industry>

nearly 70% of the companies that served the DOD in 1993 were absorbed and others combined to serve the reduced needs of the Pentagon. Ultimately, this resulted in less competition for shipbuilding and ship repair.

I provide this history lesson to highlight that it was a shift in demand from the Navy and DoD customer that decided to hollow-out the defense budget. In the decades since, there has been a significant reduction in the number of ships purchased, maintained and modernized by the Navy. In 1992, before the “Last Supper” took place, there were 471 active ships in the Navy⁸, and there are 295⁹ in today’s Navy.

Not only has there been a reduction in the size of the overall number of Navy ships, but there has been a commensurate increase in complexity, scope, and requirements added to the nation’s Naval vessels. A recent industry report¹⁰ demonstrated that “Navy shipbuilding contracts over the last several decades have shifted risk disproportionately to industry without concomitant.”

Recent programs have seen an increase in “competition” from “those beyond the traditional, well-established” shipyards” giving fresh hope that “market competition would enable new government management and contracting approaches beneficial to the taxpayer and the U.S. Navy.” Unfortunately, those benefits were not realized on these recent programs because, at the root, there have been no changes to “how the Navy and industry manage the programs, significantly contributing to delays and cost overruns.”

We don’t need another study to discuss how to better shipbuilding and repair in the United States, we need action to address the following issues:

- Utilization of current and existing shipyard capacity
- Excessive oversight and requirements from the government customer
- Excessive focus on competition at the expense of partnership
- Volatile markets as a result of budgets not being implemented, regular appropriations bills not being passed, and the constant doom-loop of continuing resolutions

Utilizing Current Capacity

Over the last several years, I have heard from multiple Navy, Congressional, and other thought leaders that there are only 4 or 7 shipyards in the United States.

This is not true. The MARAD report I mentioned in my opening remarks notes that there are more than 120 shipyards across the United States and the SCA alone represents 39 shipyard companies that own and operate over 60 shipyard facilities nationwide.

The confusion comes from a few places, most notably that there are 7 shipyards that currently have construction contracts for large Navy ships: Austal USA, GD Bath Iron Works, GD Electric Boat, GD NASSCO, HII Ingalls Shipbuilding, HII Newport News Shipbuilding, and Fincantieri Marinette Marine. However, those shipyards represent only a certain percentage of total US drydock capacity. Additionally, these yards are working within industry, in new and innovative ways, to subcontract

⁸ <https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html#1993>

⁹ <https://news.usni.org/2025/02/10/usni-news-fleet-and-marine-tracker-feb-10-2025>

¹⁰ <https://www.linkedin.com/pulse/us-navy-shipbuilding-contract-risk-sharing-ajay-patel-4nvoc>

the construction of critical components to other U.S. shipyards to meet milestones for various classes of ships. While 7 companies may have the major Navy acquisition contracts, U.S. shipyards of all sizes are building dry docks¹¹, submarine modules¹², structural steel components¹³, aircraft carrier elevators¹⁴, berthing barges, strategic tugs, submarine tenders and auxiliary oilers¹⁵ and other elements to support the Navy's Fleet acquisition plans.

The second source of confusion is the role that the private shipyards play vs. the public yards. The state of the public shipyards is dire, and the Congress has authorized a \$21 billion Shipyard Infrastructure Optimization Plan (SIOP) to upgrade those facilities. There are 4 public shipyards in the U.S.¹⁶, that are responsible for the maintenance and readiness of the nation's nuclear fleet, particularly the propulsion systems. In fact, these 4 public shipyards repair, modernize, and maintain exclusively nuclear-powered warships.

All other Navy, Maritime Administration, and MSC ships are repaired, maintained, and modernized by the private sector shipyards. The SCA only represents *private* shipbuilding and repair facilities which are not operated by the government.

It is also critical that the nation, including our government customers, understand that shipbuilding and ship repair are *heavy* manufacturing industries – not traditional manufacturing industries. Building and maintaining one ship, let alone several hundred, is a complex undertaking and is much different than procuring weapons, aircraft or other military hardware. That is not to say that our industry cannot be responsive or innovative, but it is to put a marker down to better understand what can be achieved so that our ships can successfully complete their required missions and bring our sailors home safely.

I want to state very clearly that CAPACITY is not the major contributor to meeting on-time delivery dates in both new construction and repair. In fact, the industry's current capacity is underutilized, resulting from a myriad of issues including multi-pronged budget and acquisition strategies, shifting maintenance plans, and budgets that are neither predictable nor stable.

Fewer Ships & More Requirements

I was recently asked by a colleague about where the failure point was on a certain ship program and "who was responsible for the decisions that were made." That is an extremely difficult question to answer, and it should not be, but it speaks to the enormous levels of oversight provided by our customer – from requests for proposals (RFP) to ship delivery. I am not advocating for a single point of failure system, but there needs to be accountability for the true reasons programs are being delayed – whether by industry or the government. Currently nobody owns cost and schedule and that needs to change.

¹¹ <https://www.bollingershipyards.com/news/bollinger-awarded-contract-for-state-of-the-art-floating-dry-dock-for-the-nations-new-columbia-class-ballistic-missile-submarine/>

¹² <https://usa.austal.com/news/submarine-industrial-base>

¹³ <https://www.navalnews.com/naval-news/2024/10/baa-systems-ship-repair-begins-production-of-submarine-components/>

¹⁴ <https://www.navalnews.com/naval-news/2023/06/austal-begins-construction-on-aircraft-elevators-for-us-navy-carriers/>

¹⁵ <https://crsreports.congress.gov/product/pdf/RL/RL32665>

¹⁶ <https://www.navsea.navy.mil/Home/Shipyards/>

I would invite any member who considers themselves to be good stewards of the taxpayer's dollars to look at a single contract through the entire lifecycle – from RFP to completion. Notice how many levels of approval each contract must take before moving on to the next step, how long the changes at each stage take, and how much waiting around, on both sides, there is to move the contract forward. Anecdotally, I can see this on the ground – for example, I was recently in a shipyard where the ratio of shipyard workers to NAVSEA oversight was 16 to 1 and in another shipyard (admittedly smaller) had a 2 to 1 ratio. In any objective view this is simply not efficient and overly burdensome, resulting in bureaucratic breakdowns impacting schedule and cost. In reference to the smaller shipyard that had the 2 shipyard workers to every 1 NAVSEA personnel ratio; it lost so much money building for the Navy it has decided to never bid on such a contract again, reducing the overall industrial base that would otherwise be available to compete for these projects.

SCA does not advocate for one program or ship class over another, however, I wanted to highlight a few examples of programs that demonstrate the overbearing nature of our government customers and how requirements creep bears itself in other ways.

Per the recent industry report I referenced earlier on shipbuilding contract risk sharing, the Navy added 3,000 pages of performance and design specifications to an existing parent design for the FFG(X) frigate program before the contract was even awarded. Each offeror then worked, in great detail and at great expense, to modify their design specifications to meet the Navy's new needs. Despite this process, NAVSEA technical warrant holders continued to impose "unilateral design changes" after the contract was awarded. According to the report's analysis, while some of the contract delay is due to staffing and supply chain issues, a significant portion of the delay on the frigate is due to changes required by NAVSEA to the original proposed design. GAO concluded with similar findings¹⁷.

A similar issue arose on the Landing Ship Medium (LSM) where five concept design studies were awarded to industry in 2021 with the Navy requesting industry use a parent design, with evolving modifications through a series of impact studies. As with FFG(X), the Navy continued to add requirements, including shock and firefighting systems, which drove the cost of the ships well above the \$150 million average initially estimated by the Navy.

What examples like these demonstrate is that by the time the contract is awarded, industry is already operating at a loss. Shipyards invest significant effort preparing designs, conducting extensive feasibility assessments, and shaping workforce plans based on initial requirements. Even when a company wins the contract, they are still dealing with shifting NAVSEA requirements mid-program, pushing even more cost burden onto shipbuilders while adding delays and inefficiencies.

Instead of fostering stability for industry, the acquisition process has instead produced a race to the bottom wherein contractors "win" by taking on unsustainable margins, unexpected cost growth, and near-guaranteed program losses. The emphasis on "competition" comes at the expense of partnering with industry, understanding and utilizing best practices and ultimately completing successful acquisition programs.

¹⁷ <https://www.gao.gov/products/gao-24-106546>

Sailors deserve the best we can offer. However, we are over-designing the platforms to the point that they are not able to be manufactured, and thus, sailors are asked to perform on older vessels with less capabilities. There must be some level of “mission-sufficient” when it comes to design.

We in industry absolutely want to be good stewards of the taxpayer’s dollar, which is why we are here, as partners to the Navy and other services to find solutions. We want to increase industry accountability via more autonomy. However, there are similar contracting struggles on the maintenance side of the ledger as well.

Navy Non-nuclear Surface Ship Maintenance and Modernization

During the last two decades, many of the same maintenance availability “lessons learned” have been relearned or repeated. These issues, however, appear much more significant now when the contracting strategy awards each ship separately and independently in the name of competition. To achieve on-time-completion in ship repair, the following key factors must be performed by the collective maintenance team from industry and the Navy for execution success and efficiency:

- Definitive scope of work, which is complete, accurate and well understood. This would greatly limit the amount of change management and therefore result in less days of maintenance delay by the Lead Maintenance Activity (LMA).
- Material available which supports the scope of work. This includes all material (Contractor Furnished Material (CFM), Government Furnished Material (GFM), and Long Lead Time Material (LLTM).
- An accurate plan which supports a purposeful schedule integration for the executing LMA. This includes all maintenance and modernization providers.
- Adequate manning and facilities to support the planned execution, including the on-time arrival of the Navy berthing barge to support the crew move off.
- Additional focus on cycle times versus just the delivery date. Continuing to drive down cycle time will increase the throughput of availabilities across a choke point of infrastructure. This effort should be tied directly to minimizing the cost per day of the ship availability and therefore maximizing the ship’s operational availability.

Add continuing resolutions and an increased operational tempo from the Navy Fleet on top of these issues, and you can see why industry is challenged to improve on time completion of maintenance availabilities.

U.S. Ship Repair Comparative

The domestic industry is also often compared to our international counterparts, with some going as far as to suggest that we should outsource our critical maintenance availabilities to overseas facilities.

Not only would outsourcing these critical U.S. jobs devastate our domestic ship repair capabilities, but I cannot stress enough how outsourcing work overseas would further reduce the Navy’s ability to meet it’s on time maintenance goals.

There is a significant difference in how the U.S. shipyards execute surface ship maintenance availabilities in the five fleet concentration areas and how surface ship maintenance is executed overseas. The current acquisition and contracting strategy for non-nuclear surface ships in the U.S. shipyards are administered by NAVSEA. Overseas, in Rota, Spain, Yokosuka and Sasebo, Japan and soon South Korea, the contract is administered by NAVSUP over multiple years.

The different approaches to contracting strategies and execution result in huge disparities between these markets and result in apples-to-oranges comparisons between the two. The ship repair industry has been alarmed at proposals from previous Senior Navy leadership to outsource even more of the availabilities in private ship repair to foreign markets. While we absolutely support the Fleet's needs to do voyage repairs or to repair battle-damage as needed, recent proposals would move existing domestic repair work overseas – not battle-damage or contingency work that we would predict to see in a conflict.

As noted above, this only exacerbates the instability in the domestic private ship repair market. Additional factors, including increased complexity of work, available Government Furnished Materials (GFM) and Long Lead Time Materials (LLTM), a reduced regulatory structure and other elements that enable those foreign contracts to be conducted more efficiently than those executed by NAVSEA. Industry is hopeful that Navy leaders will come to better understand these differences and work with and support the domestic industrial base to ensure more predictable and stable ship repair opportunities.

Budget Uncertainty and Continuing Resolutions

The current prospect that we are facing a year-long Continuing Resolution is agonizing to industry. Since 2010, the private shipbuilding and ship repair industry has grappled with the constant up-and-down nature of budget cycles because of sequestration and, more recently, the embrace by Congress of Continuing Resolutions. It is paramount that Congress does its part and returns to passing regular appropriations bills on time before the end of each fiscal year.

Unstable budgets and continuing resolutions are devastating to the shipyard industry by undermining the industry's ability to operate effectively and plan for the future. CRs introduce uncertainty, making it difficult for contractors to plan long-term investments and secure the necessary resources for critical projects in advance. The lack of consistent funding also stifles innovation and efficiency, as contractors are hesitant to invest in research and development when future budgets remain unclear.

Moreover, the short-term nature of CRs hampers workforce stability, as shipyards may be forced to delay hiring or face layoffs, which in turn erodes the specialized skills required for complex defense projects.

Ultimately, the stop-start nature of Continuing Resolutions punishes industry by delaying resolution and awards of contracts in new construction and repair, ultimately making ships more expensive and behind schedule.

Righting the Ship

I have laid out a lot of the problems and challenges facing our industry, but I want to take a look at steps that industry, the Congress and the Navy can take to "right the ship."

SCA would encourage the Congress to continue to support stable, realistic, and predictable budgets for the U.S. Navy and Coast Guard and we appreciate the work this committee has done to add authorities and dollars to critical accounts to see these goals realized. While we recognize it is hard to accurately forecast needs 30 years into the future, there must at least be stability and fidelity in the Five Year Defense Plan (FYDP) and the 10-year shipbuilding horizon, otherwise there

will be significant disruption to the industrial base. Additionally, we encourage this committee and the Congress to continue to hold the services to account through effective oversight.

To meet Fleet Force structure goals, Congress can authorize the use of acquisition strategies that enhance cost reduction rather than requiring the entire procurement cost of a ship to be funded in one fiscal year. Authorizing alternative funding approaches such as advanced procurement, incremental funding, and block buy contracting could increase stability in Navy and Coast Guard shipbuilding plans and increase the number of ships that could be built for the same amount of procurement funding. These same acquisition strategies must be considered and implemented for Navy non-nuclear surface ship maintenance and modernization.

By using advanced procurement in shipbuilding, Congress can define the full cost of a ship in an initial appropriations act but defer some of the appropriation to future years. For the shipbuilding industry and the supplier base, this creates an early financial commitment that enhances job security and encourages capital investment. Additionally, advance procurement can reduce the total construction cost of a ship through improved sequencing or year-to-year balancing of shipyard construction work and the purchase of batch items that can be manufactured in an efficient and economic manner.

Authorization of incremental funding, where cost is divided into two or more annual portions, allows for expensive items, such as large Navy ships, to be procured in a given year while avoiding or mitigating budget "spikes" and major fluctuations in year-to-year budget totals. While this authorization also requires appropriations support, industry believes that incremental funding would also allow construction to start on a larger number of ships each year so as to achieve better production economies. And an added benefit often not considered is a reduction in the amount of unobligated balances associated with DoD procurement programs.

Managing new construction requires long-term, steady inputs and a recognition that construction timelines cannot be changed rapidly. To address this, I would recommend the Congress consider a proposal from a recent CRS report called continuous production¹⁸, which would emphasize Navy shipbuilding plans that provide continuous, steady production rates. An approach like this would allow for the industrial base to maintain a steady drumbeat of work, and the Navy could manage the size of the fleet on the "back end" of a ship life-cycle rather than the front.

Additionally, we need the Navy to become a better customer for buying ships. As I mentioned previously, there needs to be some level of "mission-sufficient" when it comes to design of our Navy ships. There also needs to be accountability for maintaining cost and schedule.

There also must be similar commitments to fund the "tail", or the maintenance, of the current and new ships entering the fleet to ensure that they remain in commissioned service through their expected life cycle. Much like shipbuilding, ship repair and modernization would benefit from the use of acquisition strategies that promote private sector investment in people and infrastructure, increase the volume of work in existing shipyards and promote the speed of execution to meet the unique challenges of the maintenance and modernization environments. Current strategies appear to reduce the very complex nature of repair and modernization to a commodity rather than

¹⁸ <https://crsreports.congress.gov/product/pdf/RL/RL32665>

appropriately implementing a strategy that optimizes the capacity of industry's existing workforce and facilities.

Lastly, we ask this body to do its part to regularly authorize and appropriate funds to provide predictability and stability for government shipbuilding and repair programs.

Conclusion

In conclusion, the shipyard industry stands ready to meet the challenges ahead and to work with our government partners to deliver ships on time and on budget. Looking toward the future, we hope that the Congress, and this committee in particular, continues championing the domestic shipyard industry and works with our government customers to provide stability and predictability for the men and women of the U.S. shipyard industrial base.

Thank you again Chairman Rogers and Ranking Member Smith for allowing me to testify alongside such distinguished witnesses today. I look forward to your questions.



Matthew Paxton
President | Shipbuilders Council of America



Matthew Paxton was selected to be the President of the Shipbuilders Council of America in 2007. In this capacity he leads the team in advocating for a robust U.S. shipyard industrial base. With five years of legislative and policy experience in the United States Senate, Matthew has a strong focus on the legislative process, including the appropriations and authorizations committees of Congress.

Matthew is also a lawyer, focusing on maritime law and environmental issues.

Previously, Matthew served as Senior Counsel on Maritime, Oceans and Atmosphere for the U.S. Senate Committee on Commerce, Science, and Transportation. Prior to joining the Commerce Committee, he served as Legislative Director for Senator Ted Stevens from 2004 until 2005. From 2001 to

2004, Matthew was a Legislative Assistant to Senator Stevens.

Matthew earned his B.A. degree in Political Science from the University of Washington in 1997 and his J.D. degree from Willamette University College of Law in 2001. He is admitted to practice law in Washington State.

**DISCLOSURE FORM FOR WITNESSES
COMMITTEE ON ARMED SERVICES
U.S. HOUSE OF REPRESENTATIVES**

INSTRUCTION TO WITNESSES: Rule 11, clause 2(g)(5), of the Rules of the House of Representatives for the 119th Congress requires nongovernmental witnesses appearing before House committees to include in their written statements a curriculum vitae and a disclosure of the amount and source of any federal contracts or grants (including subcontracts and subgrants), and contracts or grants (including subcontracts and subgrants), or payments originating with a foreign government, received during the past 36 months either by the witness or by an entity represented by the witness and related to the subject matter of the hearing. Rule 11, clause 2(g)(5) also requires nongovernmental witnesses to disclose whether they are a fiduciary (including, but not limited to, a director, officer, advisor, or resident agent) of any organization or entity that has an interest in the subject matter of the hearing. As a matter of committee policy, the House Committee on Armed Services further requires nongovernmental witnesses to disclose the amount and source of any contracts or grants (including subcontracts and subgrants), or payments originating with any organization or entity, whether public or private, that has a material interest in the subject matter of the hearing, received during the past 36 months either by the witness or by an entity represented by the witness. Please note that a copy of these statements, with appropriate redactions to protect the witness's personal privacy (including home address and phone number), will be made publicly available in electronic form 24 hours before the witness appears to the extent practicable, but not later than one day after the witness's appearance before the committee. Witnesses may list additional grants, contracts, or payments on additional sheets, if necessary. Please complete this form electronically.

Hearing Date: Wednesday, February 26, 2025

Hearing Subject:

Strengthening the U.S. Defense Industrial Base

Witness name: Matthew O. Paxton

Position/Title: President

Capacity in which appearing: (check one)



Individual



Representative

If appearing in a representative capacity, name of the organization or entity represented:

Shipbuilders Council of America

Federal Contract or Grant Information: If you or the entity you represent before the Committee on Armed Services has contracts (including subcontracts) or grants (including subgrants) with the federal government, received during the past 36 months and related to the subject matter of the hearing, please provide the following information:

2025

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant

2024

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant

2023

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant

2022

Federal grant/ contract	Federal agency	Dollar value	Subject of contract or grant

Foreign Government Contract, Grant, or Payment Information: If you or the entity you represent before the Committee on Armed Services has contracts or grants (including subcontracts or subgrants), or payments originating from a foreign government, received during the past 36 months and related to the subject matter of the hearing, please provide the following information:

2025

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment

2024

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment

2023

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment

2022

Foreign contract/ payment	Foreign government	Dollar value	Subject of contract, grant, or payment

Fiduciary Relationships: If you are a fiduciary of any organization or entity that has an interest in the subject matter of the hearing, please provide the following information:

Organization or entity	Brief description of the fiduciary relationship

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2025

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment

2024

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment

2023

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment

2022

Contract/grant/ payment	Entity	Dollar value	Subject of contract, grant, or payment

DOCUMENTS SUBMITTED FOR THE RECORD

FEBRUARY 26, 2025

CLAY HIGGINS
3RD DISTRICT, LOUISIANA
MEMBER, HOUSE FREEDOM CAUCUS



Congress of the United States
House of Representatives
Washington, DC 20515

COMMITTEE ON HOMELAND SECURITY
CHAIRMAN, BORDER SECURITY AND ENFORCEMENT
TRANSPORTATION AND MARITIME SECURITY
COMMITTEE ON OVERSIGHT AND ACCOUNTABILITY
GOVERNMENT OPERATIONS AND
THE FEDERAL WORKFORCE
NATIONAL SECURITY, THE
BORDER, AND FOREIGN AFFAIRS
COMMITTEE ON ARMED SERVICES
SEAPOWERS AND PROJECTION FORCES

February 24, 2025

Mr. Terence Emmert
Acting Secretary of the Navy
1200 Navy Pentagon
Washington, DC 20350

Acting Secretary Emmert,

While I support President Trump's directive in Executive Order 14169, "*Reevaluating and Realigning United States Foreign Aid*," I urge you to provide acquisition contracts that are already under construction with expedited review.

The proposed 90-day pause on foreign development programs jeopardizes American shipyards, including one of my constituent shipyards, Metal Shark Boats (MSB). In 2017, MSB was awarded two contracts for a total of seven Near Coastal Patrol Vessels (NCPVs) in support of U.S. Southern Command partner nations and the Foreign Military Sales (FMS) program. Under EO 14169's review pause, MSB has received stop-work orders for these two contracts. Without an expedited review and resumption of work, MSB projects a loss of up to 100 jobs at their yard, and a subsequent 100+ jobs at their suppliers and subcontractors, many of whom are shared with other shipyards around the Gulf of America.

As you know, our nation's shipbuilding industry has faced great adversity in recent years. Workforce retention has been a persistent issue for small shipyards, and a prolonged furlough would threaten workforce availability and further disrupt the U.S. shipbuilding industry. With concerns about our posture against near-peer adversaries, we cannot neglect America's small shipbuilders, who are a critical component of the defense industrial base. I respectfully request U.S. shipyards with funded, existing FMS contracts be granted expedited consideration or exemptions from stop work orders under Sec. 3(e) of EO 14169.

I urge your full and fair consideration of this request. Please know that I will use the full authority of my office to continue my support for our nation's Navy and important shipbuilding programs. I look forward to working with you on this mission.

Respectfully,

Clay Higgins
Member of Congress

CC: The Honorable Donald J. Trump, President of the United States
The Honorable Marco Rubio, Secretary of State
The Honorable Pete Hegseth, Secretary of Defense

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QUESTIONS SUBMITTED BY MEMBERS POST HEARING

FEBRUARY 26, 2024

RESPONSE TO QUESTIONS SUBMITTED BY MR. WILSON

Mr. WILSON. In your testimony, you mention some of the issues facing our defense industrial base. One area you mention is our current skilled trade workforce has lost effectiveness due to it being underutilized. Do you believe that this is the only reason our workforce has deteriorated, or is it also due to lack of new workers being attracted to the job fields?

Mr. NORQUIST. Representative Wilson, thank you for your question. Unfortunately, several obstacles are stymieing the growth and sustainability of America's skilled workforce. First, there is a lack of communication, awareness, and coordination between various sponsors of vocational training programs.

For example, many regional technology hubs promoted by multiple federal agencies, as well as individual companies in the U.S. DIB, have experimented with workforce solutions, often through individual partnerships with community colleges and trade schools.

However, without a central repository, these hubs are unable to easily collaborate, identify best practices, promote the workforce, and propagate solutions nationwide. Second, for many in our nation's education pipelines, a bachelor's degree for every student is considered the ideal outcome. While the intentions are honorable, the impact unfairly presents students with a single outcome - a four-year degree - as the only viable option for a successful future, thereby artificially limiting potential career fields in which a student could thrive.

Finally, the national perception of skilled labor as a less desirable career path hampers recruitment efforts. Due to a negative perception, fewer potential candidates are willing to view these kinds of jobs as viable or desirable and are therefore unlikely to enroll in Career and Technical Education (CTE) or apprenticeship programs.

To compound this challenge, many positions in the U.S. DIB require background checks, drug tests, and/or security clearances, adding additional perception barriers to filling the U.S. DIB's skilled workforce demand. Furthermore, government-industry forums have reinforced that the U.S. DIB is not competitive with the commercial sector in the areas of compensation and fringe benefits. Due to regulations limiting the U.S. DIB's profits and wage limits, the U.S. DIB has not been able to keep up with non-defense increases in pay, making it hard to recruit and retain professionals who can find higher pay and more attractive benefits elsewhere.

Without tailored and scalable apprenticeship programs, changes in awareness and perception of skilled labor careers, and increasing the competitiveness of the U.S. DIB to the commercial sector, there simply may not be enough welders, technicians, electricians, maintainers, and other skilled workers available to meet the manufacturing needs of the U.S. DIB, not to mention the nation as a whole.

Mr. WILSON. Mr. Paxton, in your written testimony you stated that capacity is NOT the major contributor to meeting on time delivery for both new construction and repair of ships. Yet, with our capacity we still are having issues with US Navy ships being ready to support operations and deployments. How do we support the defense industrial base and the shipyards to meet these production and maintenance benchmarks for our warships, so we can remain ready to meet the threats presented by a possible conflict in the Pacific?

Mr. PAXTON. There are certainly challenges the Navy faces in getting ships out on time for their operations and deployments. However, there is a significant difference between the challenges at the Public Shipyards and the challenges in the private ship repair industrial base, which is the subsection of the industry that I represent. While not where we want to be, according to the GAO, the private shipyard industrial base has improved on time ship maintenance efforts since 2019. The core issue is not the raw capacity; it is how we plan, fund, and execute work across the enterprise. We can meet the production and maintenance benchmarks and keep the Fleet ready for a Pacific contingency; by stabilizing demand, disciplining requirements, fixing material readiness, empowering execution, and fully leveraging the potential of the U.S. industrial base.

Stable and predictable workloads and budgets are key to ensuring ontime maintenance of our naval assets. Reaching on-time availability depends on having mate-

rials ready. Government-furnished equipment and long-lead items need to be funded early, staged ahead of need, and tied to clear work packages, with suppliers actively managed in the schedule of risk plan. That means defining scope sooner and more completely, aligning schedules across all providers, and staying focused on shrinking cycle time, not just chasing a delivery date.

At the same time, we should upgrade public shipyards for nuclear work, keep a steady flow of non-nuclear surface maintenance at private yards, and avoid sending routine jobs to foreign shipyards as this weakens the domestic industry and hurts our readiness. As I said in my testimony, the Navy needs to make investments to fund the “tail” or maintenance, of the current and new ships entering the fleet to ensure that they remain in commissioned service through their expected life cycle.

Much like shipbuilding, ship repair and modernization would benefit from the use of acquisition strategies that promote private sector investment in people and infrastructure, increase the volume of work in existing shipyards and promote the speed of execution to meet the unique challenges of the maintenance and modernization environments. Current strategies appear to reduce the very complex nature of repair and modernization to a commodity rather than appropriately implementing a strategy that optimizes the capacity of industry’s existing workforce and facilities. Lastly, we ask this body to do its part to regularly authorize and appropriate funds to provide predictability and stability for government shipbuilding and repair programs.

RESPONSE TO QUESTIONS SUBMITTED BY MR. CARBAJAL

Mr. CARBAJAL. Mr. Fanning, You made a point in your testimony that I want to highlight. The industrial base is shaped by and relies on demand signals from the federal government.

Last year, the Space Force released its Commercial Space Strategy, and the DoD released its Commercial Space Integration Strategy, both of which I was pleased to see.

What kind of demand signals do documents like this send to industry? And what potential consequences for industry do you foresee if the Department and Space Force don’t follow through and execute these strategies?

Mr. FANNING. Last year’s Pentagon’s Commercial Space Integration Strategy and the Commercial Space Strategy from the U.S. Space Force were effective outlines for how the U.S. government may incorporate space capabilities pioneered by commercial companies, including AIA members, into the national security space enterprise.

Strategy documents such as these send clear demand signals to industry that the federal government is open and willing to collaborate with the private sector to scale and integrate emerging commercial technologies into the Pentagon’s future architectures. However, these strategy documents often lack a clear path towards implementation, concrete milestones, and funding mechanisms to ensure accountability. Future commercial strategies and implementation plans should include actionable steps so that the Pentagon can capitalize on the rapid innovation taking place in the commercial space sector.

Without incentives to act on these comprehensive commercial strategies, the federal government may risk falling behind potential adversaries in harnessing emerging technologies that give our warfighters the advantage.

RESPONSE TO QUESTIONS SUBMITTED BY MR. GOLDEN

Mr. GOLDEN. Recently there have been a lot of conversations about how to fix the Defense Industrial base to speed up production across several sectors. Mr. Paxton, particularly with shipbuilding, what can we do right now to stop talking about this and see true progress in this area?

Mr. PAXTON. The fastest way to move from talk to tangible progress is to restore predictability and discipline across the system. This starts with ending budget whiplash and signaling steady demand to shipyards and suppliers. Congress should pass full-year appropriations on time and expand flexible tools, advanced procurement, incremental funding, and block buys; to smooth work, unlock supplier investment, and keep crews on the job.

Congress should also sustain the domestic maritime base by reinforcing policies that support the commercial segment, including the Jones Act, and by supporting legislation such as SHIPS for America to expand U.S. shipbuilding and repair capacity and the supplier ecosystem. In parallel, the Navy can act now by using the shipbuilding and supplier capacity we already have. That means moving past the “seven

yards" idea and spreading work across over 120 U.S. shipyards and a wide supplier base that already produces key components and support vessels.

The Navy should speed up oversight and decision-making from RFP through delivery, lock requirements at contract award, and hold internal Navy teams accountable for cost and schedule when changes are truly necessary. To cut costs and improve fleet readiness, we must get the fundamentals right, and execute on them early. Taken together, these actions will deliver ships faster and cheaper while strengthening the industrial base.

Mr. GOLDEN. Mr. Paxton, you also stated in your written testimony that there are more than 120 shipyards across the US. How can we leverage these smaller shipyards to not only help build our future ships, but maintain them when they come up on a maintenance cycle? Furthermore, what would happen if these smaller shipyards were to shut down, even though they are currently under-utilized?

Mr. PAXTON. The U.S. has more than 120 shipyards, we can build that capacity by steadily sending modular construction and standardized maintenance to the qualified small yards on a reliable schedule. Large shipyards can have smaller facilities to build repeatable sections and critical components. If funding is stable, designs are disciplined, and interfaces are standard, we see similar reductions to mid-stream changes and rework.

While the government is the largest customer by volume and capital, there is still a stable domestic commercial market that is essential to maintain the shipyards beyond those that do traditional Navy and Coast Guard work. While the closing of smaller yards is devastating to our national capacity for shipbuilding and ship repair, it's also devastating to the local economies that depend on these companies as economic engines. A 2019 Maritime Administration report found that for every 1 job in a shipyard, there are more than 2.6 jobs created in the broader community. When the jobs are lost at the waterfront, there are economic reverberations throughout these communities.

Mr. GOLDEN. The Marine Corps cannot maintain their USC Title 10 requirements because the Amphibious Ships availability is not at full capacity due to maintenance restraints. Can these smaller and current shipyards assist in this matter? If so, how?

Mr. PAXTON. Smaller and mid-tier private shipyards can indeed help close the amphibious maintenance gap that is constraining the Marine Corps Title 10 readiness, but doing so requires changes in how work is planned, contracted, and executed. Private companies already handle all non-nuclear surface maintenance and have unused capacity.

The real problems are unstable funding, change orders to existing work packages, material shortages, and inconsistent demand from the Navy for amphibious readiness. To save money, the Navy has proposed early retirement for some ships and cancelled critical maintenance on them. Those early retirements and delayed maintenance availabilities further challenge the stability of the domestic workload. Inevitably, it becomes a vicious cycle wherein delayed or cancelled maintenance results in more work needing to be done to get the ships ready for deployment. However, the Navy is still allotting regular maintenance budgets for increased work, which leads to a narrative that the shipyard industrial base is the root of the maintenance challenge, when there are multiple factors that inform this issue.

Introducing new domestic shipyards to Navy maintenance, especially those outside of Navy homeports will not get at root challenges of ship repair and maintenance delays. Locking the scope early, securing all required government and long-lead materials before work starts, and uniting all modernization teams under one accurate schedule are the key drivers of on-time delivery.