1	TO RECEIVE TESTIMONY ON DEFENSE INNOVATION
2	AND ACQUISITION REFORM
3	
4	Tuesday, January 28, 2025
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6	U.S. Senate
7	Committee on Armed Services
8	Washington, D.C.
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10	The committee met, pursuant to notice, at 9:30 a.m. in
11	Room SD-G50, Dirksen Senate Office Building, Hon. Roger
12	Wicker, chairman of the committee, presiding.
13	Committee Members Present: Senators Wicker
14	[presiding], Fischer, Cotton, Rounds, Ernst, Sullivan,
15	Cramer, Scott, Tuberville, Mullin, Budd, Schmitt, Banks,
16	Sheehy, Reed, Shaheen, Gillibrand, Blumenthal, Hirono,
17	Kaine, King, Warren, Rosen, Kelly, and Slotkin.
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- OPENING STATEMENT OF HON. ROGER F. WICKER, U.S.
- 2 SENATOR FROM MISSISSIPPI
- 3 Chairman Wicker: This hearing will come to order.
- 4 Thank you-all for coming. The committee meets this morning
- 5 to discuss the topic that is of great interest to every
- 6 member of this panel. We're here to talk about defense
- 7 innovation. We must change the way the Pentagon does
- 8 business, otherwise there's no way we can maintain
- 9 deterrence particularly against China.
- Today, we'll hear from three experts. Shyam Sankar
- 11 serves as the Chief Technology Officer at Palantir, which
- 12 has done important work for the military. Mr. Sankar has
- published widely on innovation, and we look forward to
- 14 hearing his ideas today. We'll also hear from Nate Diller,
- who has worked at both the Department of Defense and the
- 16 House Appropriations Committee, where I previously worked
- in another life. Today, Mr. Diller is the CEO of Divergent
- 18 Technologies, which is seeking to make revolutionary
- 19 changes in manufacturing, and we need revolutionary changes
- in DOD.
- 21 And finally, James Geurts, is with us today. In
- 22 addition to having one of the coolest nicknames around
- Hondo, he is ably and successfully served this country as
- 24 the acquisition executive for both SOCOM and the Navy. So
- 25 thank you-all for being here to talk about innovation.



- 1 The past few years have been marked by some success in
- 2 innovation improvements, but we have much more work to do.
- 3 Most of our work is actually ahead of us in this regard. I
- 4 believe we're poised to go faster and further than we have
- 5 thus far. I'm optimistic that many of my colleagues' ideas
- 6 for improvements and reform will have an enthusiastic
- 7 reception in this new Pentagon team.
- 8 I appreciate my friend, Ranking Member Reed, for
- 9 holding a hearing in the previous Congress on the planning,
- 10 programming, budgeting, and execution of the Reform
- 11 Commission. I expect we can continue to make progress in
- 12 this new Congress. As a matter of fact, Mr. Reed, and my
- 13 colleagues, we need a game changer, and we need it right
- 14 now.
- The committee took steps last year to remove
- 16 unnecessary steps from the acquisition process and get
- 17 defense innovators more powerful hiring authorities. We
- 18 can and should continue on that positive trajectory. I
- 19 recently released the FORGED Act, and published this white
- 20 paper entitled Restoring Freedom's Forge: America's
- 21 Innovation Unleashed.
- 22 And I must say, I appreciate the positive comments and
- 23 response that we've heard from industry and from government
- officials. The white paper lays out in specific detail my
- 25 plan to implement smart spending practices at DOD. The



- 1 FORGED Act proposes the most comprehensive set of budgeting
- 2 and acquisition reforms in decades.
- It focuses on five areas. First, we must cut the red
- 4 tape that burdens our defense workforce. Our regulations
- 5 are full of outdated and excessive compliance requirements.
- 6 Addressing this is exactly the type of work that DOGE is
- 7 contemplating, and I hope we can make progress in this
- 8 area. Contracting regulations total more than 6,000 pages.
- 9 Financial regulations add up to more than 7,000 pages. I'm
- 10 interested to hear our witnesses address how this committee
- 11 can reduce the statutory and regulatory burdens, even as we
- 12 retain the core elements of good policy.
- Second, we should harness one of our nation's core
- 14 advantages; our world class tech sector, which is built by
- 15 American entrepreneurial spirit. Government unique
- 16 requirements, have made it nearly impossible for commercial
- 17 companies and startups to do business with the Department
- 18 of Defense. We need to reward commercial innovation by
- making it possible for innovative companies to work with
- 20 the Pentagon.
- 21 Third, we must create competitive pressure by rapidly
- qualifying new suppliers to help build our weapon systems.
- More than 20,000 suppliers have exited the Navy
- 24 shipbuilding industrial base in the past 20 years, and
- that's just the Navy's industrial base. 20,000 suppliers



- 1 gone. I hope our witnesses will address how we can lower
- 2 barriers to second sources, and how we can adopt
- 3 technologies like 3D printing, which can dramatically
- 4 reduce costs and expedite production schedules.
- 5 Fourth, we must enable senior officials to manage
- 6 programs by reducing the bureaucracy's ability to veto
- 7 their decisions. A typical acquisition must satisfy nearly
- 8 50 documentation requirements and get 50 external sign-
- 9 offs. We need to be careful about the taxpayer's money,
- 10 but that is excessive. We need to give program managers
- all of the tools they need to success while retaining an
- 12 appropriate level of checks and balances.
- Finally, we should modernize the Defense budget
- 14 process by allowing money to move as fast as technologies
- and threats change. It currently takes at least two years
- 16 to request and receive funding. Meanwhile, the commercial
- 17 sector deploys new generations of technologies in less than
- 18 two years, and the Pentagon is continually lagging behind.
- We cannot keep conducting business as usual. I repeat
- We need a game changer in this regard, and we need it now,
- 21 because the United States is entering the most dangerous
- 22 period we've faced since World War II. Our adversaries are
- 23 rapidly innovating and leveraging commercial technologies.
- 24 In response, we must expand our capacity to produce and
- 25 sustain high-end weapons like ships, aircraft, and



missiles. At the same time, we must adopt autonomous, adaptive, and networked or swarming systems. This is not an either-or effort. We must produce traditional and innovative systems quickly, and at the scale of relevance. Doing so will ensure that we can deter our adversaries from taking action against us and our In other words, peace through strength. I look interest. forward to discussing those initiatives and more with our witnesses. And again, I welcome all three of them to our hearing, and I recognize my friend, Ranking Member Reed, for his remarks.



- 1 STATEMENT OF HON. JACK REED, U.S. SENATOR FROM RHODE
- 2 ISLAND
- 3 Senator Reed: Thank you very much, Mr. Chairman. And
- 4 let me join you in welcoming our witnesses, Mr. James
- 5 Geurts, Mr. Shyam Sankar, and Mr. Nathan Diller. Thank
- 6 you, gentlemen. You bring unique and important
- 7 perspectives to this discussion, and this is a very serious
- 8 and important discussion.
- 9 For many years this committee has examined various
- 10 challenges for the defense acquisition system. Time and
- 11 time again, we have heard the system is too slow, too
- 12 rigid, and too outdated to keep pace with the changing
- world. As such, the committee has worked hard and made
- 14 progress towards streamlining the acquisition system.
- 15 Importantly, we have helped provide the Department of
- 16 Defense with significant flexibility in the acquisition
- 17 authorities, including initiatives like middle tier
- 18 acquisition, rapid acquisition authority, and other
- 19 transaction authority. These authorities are intended to
- 20 enable the department to tailor acquisition strategies and
- 21 contracting approaches to fit the needs of each program.
- Indeed, lengthy risky programs demand more rigor and
- oversight, whereas less risky non-development programs may
- 24 move quicker with fewer bureaucratic checks on the process.
- 25 I would ask our witnesses for their views on the successes



- 1 and shortcomings of these acquisition authorities.
- 2 Responsible regulation is key to the success of the
- 3 acquisition and innovation ecosystem. Decentralizing
- 4 certain aspects of the system is beneficial, but going too
- 5 far may result in poor coordination among officers, and
- 6 could introduce duplication and waste. The lack of
- 7 coordination among the services or stove piping is
- 8 especially problematic for programs that are intended to
- 9 improve jointness throughout the force.
- 10 Several years of legislation to reform stove piping
- 11 has helped alleviate the issue. And further deregulation
- in some areas may be useful, but I would caution against
- 13 quick decisions that could undercut the progress we have
- 14 made. Many existing statutes and regulation exist because
- of past failures by the department, or poor behavior from
- industry, and it's important that we remain uncompromising
- 17 stewards of taxpayers' dollars. And I would ask for the
- 18 witness's views on this issue, also.
- 19 Further, we must remember that our acquisition network
- 20 is only as strong as our workforce. To meet growing
- 21 demands, the acquisition workforce must grow accordingly to
- include contracting officers, subject matter experts, and
- 23 skilled technicians in the defense industrial base. In
- this regard, I'm concerned that we have already begun to
- 25 see attacks on the department civilian workforce. The



- 1 Trump Administration has taken pride in the threat to slash
- the bureaucratic workforce, arguing a false equivalence
- 3 between fewer personnel and greater efficiency.
- 4 Ironically, reducing the acquisition workforce is
- 5 likely to increase the contracting timeline and eliminate
- 6 positions that support acquisition professionals will
- 7 inject new inefficiency into the network. I would
- 8 appreciate our witness's thoughts on the interdependencies
- 9 of the acquisition workforce and their recommendations to
- 10 make sure that acquisition workforce is appropriately sized
- 11 and trained.
- Finally, I would like to point out that innovation is
- more than technology. Improving the Defense Department's
- 14 innovation strategies will require more than overhauling
- 15 systems or increasing funding. It will require bold
- thinking by leaders at every level of the enterprise. I'm
- 17 reminded of a quote attributed to Winston Churchill,
- 18 "Gentlemen, we have run out of money now. We have to
- 19 think." Successful innovation requires creative people to
- 20 not only adapt to new technologies, but to adapt processes
- 21 to new situations where technology is not yet available.
- Now, we must think.
- To help us do so, I look forward to hearing from this
- insightful panel of experts, and I hope we can work
- 25 together to develop a better understanding of how the



Department of Defense can adapt quickly to a changing Thank you again to our witnesses, and I look world. forward to your testimony. Thank you, Mr. Chairman.



1	Chairman Wicker: Thank you very much, Mr. Reed. And
2	let me say, we're going to hear from our witnesses now, and
3	we'll have a round of five-minute question and answer. I'm
4	going just so that this Senator will understand and be
5	prepared. I'm going to yield my five minutes to Mr. Sheehy
6	because he has to preside in a few moments. So, after the
7	opening statements, Mr. Sheehy will ask questions and
8	they'll be followed by the ranking member, and then we'll
9	go forward with Senator Fischer and on down.
10	Mr. Sankar, we're delighted to have you and you are
11	recognized for as much as five minutes.
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- 1 STATEMENT OF SHYAM SANKAR, CHIEF TECHNOLOGY OFFICER
- 2 AND EXECUTIVE VICE PRESIDENT, PALANTIR TECHNOLOGIES
- Mr. Sankar: Well, thank you, Chairman Wicker, Ranking
- 4 Member Reed, members of the committee. Thank you for the
- 5 opportunity to testify today. Mr. Chairman, I want to
- 6 commend you on your proposal. I was fist pumping in the
- 7 air when I was reading it, and this is exactly the kind of
- 8 reform that we need to win.
- 9 I've spent nearly two decades at Palantir fighting the
- 10 bureaucracy to deliver cutting edge technology to our war
- 11 fighters. And my message today is simple; that defense
- 12 innovation and procurement are broken at precisely the
- moment. We need them to deter and defeat our adversaries,
- 14 and for reasons that are profoundly un-American.
- The root of the problem is that the Pentagon is a bad
- 16 customer. It's also the only customer. The defense market
- is functionally a monopsony where a sole buyer shapes the
- 18 market with prescriptive requirements, complex regulations
- in five-year plans worthy of Stalin, the Cold War is over,
- and everyone has given up on Communism except for Cuba, and
- 21 seemingly, with the DOD.
- The monopsony has created a divide between defense and
- 23 commercial sectors. I call this the great schism, but you
- 24 can think of it like the Berlin Wall. On the commercial
- 25 side of the wall, companies are free to compete and to



- 1 innovate. On the Defense side, a dwindling number of
- 2 contractors toil away for the monopsony. More and more,
- 3 they resemble state-owned enterprises instead of the
- 4 innovative founder-driven companies that they were once
- 5 were. The companies fit enough to climb the wall and
- 6 defect to the free world did so long ago.
- 7 Mr. Chairman, if we're going to win again, we need to
- 8 tear down this wall. And your report helps us do just
- 9 that. First, cut the red tape. Defense procurement is
- 10 constrained by mountains of regulations that paralyze
- 11 leaders and punish creativity. This is not what was
- 12 intended, but this is reality.
- And the road to hell is paved with good intentions.
- 14 For example, the DOD 5,000 series, it was 7 pages when
- David Packard wrote it in the '70s. It's now 2,000 pages.
- 16 That's an 11 percent compounded growth rate. One of the
- 17 few areas the Department outperforms the market.
- 18 Eliminating burdensome regulation must be a priority
- 19 because no amount of process can save us, but it can
- destroy us.
- Second, unleash innovation. To do that, we need to
- reverse this great schism. During the Cold War, 6 percent
- of Defense spending on major weapons went to defense
- 24 specialists. Chrysler made cars and missiles. General
- 25 Mills made serial and torpedoes. That great schism, we



- 1 need to turn it on its head. Today, that 6 percent has
- 2 turned into 86 percent going to defense specialists.
- 3 America needs our primes, and that's precisely why we need
- 4 to ensure that they are subject to commercial incentives
- 5 and to market pressure to keep them fit.
- We can fix this by ending the cost-plus mentality,
- 7 which makes us slower, poorer, and dumber. SpaceX reduced
- 8 launch costs by 85 percent. That simply isn't possible in
- 9 a cost-type domain. We also need to stress a commercial
- 10 first mindset in procurement. FASA is already the law of
- 11 the land. Perhaps we should just enforce it.
- Third, increased competition. Yes, please. But also,
- we need to increase competition inside of government.
- 14 During the early Cold War, the services competed against
- each other to develop the best ballistic missiles. The
- 16 Navy's Polaris, and the Air Force's Minuteman ultimately
- won, but not before the Jupiter, Thor, Atlas, and Titan
- 18 were developed in some form.
- Today, the bureaucracy would disparage that that
- 20 contest as duplication. I see a competitive market with
- 21 multiple buyers' pressure to innovate and no single point
- of failure for the department.
- Fourth, enable decisive action. We are a nation born
- of Founding Fathers. We understand the importance of great
- 25 creative leadership. In place of the cargo cult that



- 1 worship's process. Let's empower our people. We wouldn't
- 2 have ICBMs without Schriever, the nuclear Navy without
- 3 Rickover, the Apollo program without Gene Kranz. I
- 4 challenge you to name a comparable figure overseeing most
- 5 major programs today. And it's not for a lack of talent,
- 6 but we need to stop rotating people like fungible cogs
- 7 every two or three years, and give them the time and the
- 8 space to create.
- 9 Fifth, modernize the budget process. A budget is a
- 10 plan, and right now we are planning to fail. No private
- 11 company could survive if it took two years to budget for
- 12 projects internally. They would be completely outcompeted
- in the market. The fiscal OODA loop is not survivable, and
- 14 that's what sets the pace for the industrial base.
- Decision-makers in the building deserve to be treated
- like decision-makers with a pot of money and the discretion
- to reprogram rapidly to meet new threats unless we actually
- 18 do believe in central planning.
- We shouldn't be under any illusions about how hard
- these changes will be. You have to mobilize talent around
- it and attack the problem again and again, and that's why I
- think this hearing and this proposal is so valuable.
- Mr. Chairman, I look forward to taking your questions.
- 24 Thank you.
- 25 [The prepared statement of Mr. Sankar follows:]



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Τ	Chai	ırman	Wic	cker:		Thank	you	very	much,	Mr.	Sankar.
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- 1 STATEMENT OF NATHAN P. DILLER, CHIEF EXECUTIVE OFFICER
- 2 DIVERGENT INDUSTRIES INC.
- Mr. Diller: Chairman Wicker, Ranking Member Reed, and
- 4 distinguished members of the committee, it is an honor to
- 5 discuss defense innovation and acquisition reform with you
- 6 today.
- 7 At the core of this discussion, we must focus on
- 8 ensuring America's ability to deter aggression and create
- 9 that overwhelming strength, while minimizing risk to human
- 10 life, and reducing the burden on the taxpayer.
- 11 Unfortunately, America's ability to deter is at its lowest
- 12 point in many, many decades.
- 13 That said, the FoRGED Act coupled with a multitude of
- 14 other successes, leaves me more optimistic today that
- 15 America cannot only reverse this trend, but actually do it
- in a way that creates a renaissance in American
- 17 manufacturing and actually unlocks human creativity. But
- we must act today.
- I think the word forge provides some personal markers
- 20 for me. America's manufacturing output tripled that of
- 21 China during the time that I was pulling forged plows
- 22 growing up on a farm. By the time I flew F-16s dropping
- 23 forged bombs, we were at parity. Today as we discussed The
- 24 FORGED Act, China more than doubles our manufacturing
- output.



- 1 After years in defense innovation and acquisition, I'm
- 2 convinced that a nation that does not manufacture
- 3 technology cannot maintain a technological and military
- 4 advantage. And this is what led me to transitioning to
- 5 divergent technologies today led by Kevin Czinger and his
- 6 son Lucas, where they are truly revolutionizing the factory
- 7 today, bringing us an ability to actually turn great ideas
- 8 into hardware for deterrence.
- 9 Daily, Divergent seemingly transforms a car factory
- into a weapons factory. It is operating at production
- 11 scales, leveraging 700 patents driven by AI. And right
- 12 now, we are literally printing our 253 mile an hour
- 13 hypercar in the morning and cruise missiles in the
- 14 afternoon. This can be done. It is all made in America.
- We're in agreements with most defense primes and many
- of our great American startups delivering capabilities for
- 17 air, land, sea, and space. The capital efficiency that
- 18 comes from this agility can reduce taxpayer burden,
- increase war fighting capability, and guickly rebuild U.S.
- 20 global innovation and manufacturing dominance.
- 21 What acquisition reform is needed to bolster defense
- 22 innovation and attract companies like Divergent to create
- 23 American military advantage? First, we have to be very
- 24 clear of turning America's software advantage into a
- 25 hardware advantage. We must foster competition for fully



- 1 digital and AI-driven design and production systems so
- 2 America can build.
- We must scale innovation successes. New acquisition
- 4 paths and organizations have created access to mobilize a
- 5 broad industrial base with the ability to create a hedge
- 6 portfolio of software-driven hardware. But it is not clear
- 7 that we have the structure to scale this to success.
- 8 Three, we need to build a civil reserve manufacturing
- 9 network so America can build. The factory is the weapon.
- 10 The taxpayer buys billions of dollars of weapons every year
- 11 solely for war. Why are we not buying some factories as a
- 12 service? These factories distributed, could produce parts
- 13 for legacy platforms to ensure we can fight tonight, can
- 14 scale a hedge portfolio, or produce commercial goods in a
- way that bolsters competition, increases our military
- 16 resiliency and capabilities, and saves billions of dollars
- 17 to the taxpayer.
- The term forge is fitting to express the gravity of
- 19 this moment. This act of forging is literally defined eras
- in civilization going back to the Bronze Age as societies
- 21 use the process to turn ideas into hardware. The title
- FORGED Act is appropriately to communicate the emergency
- 23 situation that we are in in America today as our eroded
- 24 capacity of turning ideas into hardware is creating this
- 25 national crisis.



1	Fortunately, visionaries mobilize a whole-of-nation
2	effort in World War II. It is time for Freedom's Forge
3	2.0. And while we're in emergency state, I am optimistic
4	because I believe the ingredients are present for a general
5	generational shift in manufacturing and defense innovation
6	that could be more notable than going from the Stone Age to
7	the Bronze Age. I'm confident America will forge that
8	peaceful and prosperous era together. Ladies and
9	gentlemen, it's time to build.
10	[The prepared statement of Mr. Diller follows:]
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          Chairman Wicker: Thank you very, very much, Mr.
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     Diller.
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          Mr. Geurts.
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- 1 STATEMENT OF HONORABLE JAMES F. GEURTS, FORMER
- 2 ASSISTANT SECRETARY OF THE NAVY, RESEARCH, DEVELOPMENT AND
- 3 ACQUISITION
- 4 Mr. Geurts: Chairman Wicker, Ranking Member Reed,
- 5 distinguished members of the committee, it's good to be
- 6 back here with you, again. And it's quite an honor to be
- 7 here for this discussion. Having spent the last almost 40
- 8 years of my career trying to drive innovation in
- 9 acquisition as a person in uniform, as a civilian, as an
- 10 appointee, and now in the private sector, it's a subject
- that's near and dear to my heart, and I think critically
- important for our nation.
- I've had the honor to lead some of the nation's finest
- 14 acquisition teams in time of war and global competition.
- 15 And I've seen what's possible when there's a clear
- understanding of intent, a sense of urgency at all levels
- of the organization, a close connection between the
- 18 acquirer and the operator, a robust and diverse network of
- industry partners, transparency to all the stakeholders,
- and an empowered and accountable acquisition workforce.
- 21 Unfortunately, over the last several decades, our
- 22 ability to do this at scale across the department has
- 23 decayed. The industrial base that service so well after
- World War II is not up to the challenges right now that we
- 25 need as a nation alone. The accumulation of decades of



- 1 statutes, regulations, processes, special interests, all
- well-intentioned about which permeate the bureaucracy, have
- 3 hobbled our ability to adapt and change
- 4 The risk-averse culture that that's driven has
- 5 diffused accountability across multiple organizations,
- 6 departments, and the workforce so that it's unclear who's
- 7 actually accountable to deliver, and they are not empowered
- 8 to actually deliver the results we need from them.
- 9 The challenges facing the department and nation are
- 10 many. The nation needs to be innovative, productive, and
- 11 agile; while also ensuring they're relentless stewards of
- 12 the taxpayer dollar rather than trying to rebuild the
- industrial base we once had. I believe we need to focus on
- 14 building the future industrial network that we need that
- 15 gives us the ability to scale and the ability to be agile
- in this time of global competition.
- 17 Harnessing our collective capabilities, talents, and
- innovations into such a dynamic and aligned network will
- 19 help overcome the limitations, and linear thinking, risk-
- averse approaches that have been impairing the nation's
- 21 competitive capability.
- Since I'm thankful that this committee is placing such
- 23 an emphasis on this issue and am optimistic with the tenets
- of the Forged Act, we have a systematic issue and we've got
- 25 to attack it systematically. We've tried over the last



1	couple of decades tweaking, making some changes here,
2	making some changes there. But if we're really going to
3	act at the scale and with the speed, we need as a nation,
4	we need to overhaul both our approach to the industrial
5	base, focusing on this industrial network, as well as
6	leveraging a clearly accountable and empowered acquisition
7	workforce.
8	Thanks for the opportunity to appear before you, and I
9	look forward to your questions.
10	[The prepared statement of Hon' Geurts follows:]
11	[COMMITTEE INSERT]
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- 1 Chairman Wicker: Thanks to all three of you. I'm
- 2 going to add for the benefit of the listening public and
- 3 those in the audience. Typically, in a hearing like this,
- 4 where there are three witnesses, the majority suggests two
- of the witnesses, the minority suggests one. It would be
- 6 hard for the listening public to know which witness today
- 7 was a majority witness and which witness was a minority
- 8 witness. So, I do appreciate your thoughtful testimony.
- 9 And at this point for it to begin our questioning, Senator
- 10 Sheehy, you were recognized for five minutes.
- 11 Senator Sheehy: Thank you, Chairman.
- 12 Everything you guys said, of course is, I think,
- 13 pretty blatantly accurate for everybody. And the word
- innovation is thrown around a lot for defense acquisition
- and systems development. And I don't think we really have
- 16 an innovation problem. Private companies innovate. We
- 17 have all these fusion labs within the military that
- innovate actually pretty well. The challenge is adopting
- 19 the innovation on a programmatic level and then fielding it
- 20 quickly.
- 21 And I think, Hondo, you know, when you and I were in
- together, you know, I served as a SEAL team leader and we'd
- 23 have IED threats that would -- the enemy would watch with
- 24 the binoculars how we would disarm an IED or what
- 25 technology we'd use. And the next day they would change



- 1 their design. Literally, the next day. I mean, they go
- 2 back to their garage, they'd rewire it, and then come out
- 3 the next day. And our policies for fielding equipment to
- 4 counter those IEDs were stuck at the pace of our defense
- 5 acquisition system. We'd send that feedback back home, and
- 6 maybe a year or two later, we'd get a new jammer or a new
- 7 tactic out and God bless the guys out there doing it which
- 8 is me a lot of the time.
- 9 Unfortunately, our ability to innovate, we didn't
- innovate at the speed of the threat. We innovated at the
- 11 speed of bureaucracy. And we can innovate, but adopting
- that quickly is the biggest challenge. So, I mean, it's
- open to anybody, especially you, Hondo, coming from a
- 14 career in that acquisition system. You know, what's the
- single biggest change we can make as a legislative body
- 16 quickly to encourage adoption of the innovation that
- 17 already exists?
- Mr. Geurts: Yes, sir. Thank you for the question. I
- 19 concur. Many of our roadblocks are self-inflicted and
- 20 culturally reinforced, and it's for a lot of different
- 21 reasons. I think the number one thing you can do is that
- you can empower the program manager and hold them
- 23 accountable. Right now, program managers answer to a --
- you know, dozens and dozens of folks they have to go get
- 25 permission to move a dollar to a better priority. If they



- 1 see a new technology that comes out, they have to spend
- 2 years creating a program to adopt. I think that's one.
- And then, two, breaking down this barrier so that --
- 4 listen, we need defense primes. As Shyam said, we need new
- 5 entrants, we need commercial providers. We need program
- 6 managers that have the authority to actually pick, have
- 7 visibility of all those things, and then rapidly be able to
- 8 choose the best performer.
- 9 And then, finally, we've got to break down the barrier
- that we've created between the person buying the equipment
- 11 and the person using the equipment. Again, well-
- 12 intentioned headquarters staffs that have accumulated over
- time reviewing that reviewer to doer ratio. So get the
- doers doing, get them aligned with the operational needs,
- 15 give them the flexibility to make the best decisions and
- 16 then hold them accountable to deliver.
- 17 Senator Sheehy: And Mr. Sankar, a question for you.
- 18 I love your writeup, by the way. Agree 100 percent. And
- when I got out, I actually started a defense company
- 20 myself. We ended up having to split the company in two
- 21 largely for investment purposes, because what you refer to
- 22 as, you know, that wall, which is very accurately
- portrayed.
- But in addition to the acquisition regulations and
- the, you know, DCAA accounting requirements and all that,



- there's also a restriction of you can innovate something
- 2 commercially and to bring that innovation back in and have
- 3 a cross-feed valve where the defense technology benefits
- 4 from commercial innovation is almost not allowed. And
- 5 therefore, we're missing out on a massive pool of --
- 6 especially as we move into machine learning models and AI,
- 7 we can't benefit from commercial.
- In your experience, how can the DOD better leverage
- 9 commercial innovations to make sure that the defense
- innovation is adopted at the speed that private sector
- 11 innovation is?
- Mr. Sankar: Well, thank you. You know, I think
- 13 Congress and its wisdom saw this in the '90s, right? This
- 14 is why we have the Federal Acquisition Streamlining Act,
- which is that the commercial, you have a much broader
- 16 market around which you can amortize your R&D in the
- 17 commercial world, and you can bring that stuff at a lower
- 18 risk and with much greater speed to the DOD.
- We were able to deliver the operation warp speed
- 20 supply chain in two weeks during Operation War Seed,
- 21 because actually two years before that, we had built very
- 22 similar solution in oil and gas. You can't connect those
- dots prospectively. I didn't make that investment in oil
- 24 and gas because I knew it would pay off when the nation
- 25 needed it for a Covid vaccine distribution.



- But really, if you're going after these hard problems,
- you can benefit whole-of-nation. At some point in time,
- 3 every car, camera, and serial box that Americans bought
- 4 actually subsidized our national security. So, I think I
- 5 would attack this systematically by thinking about what are
- 6 the barriers that have meant that we have developed a
- 7 defense industrial base and lost our American industrial
- 8 base.
- Now, I think the real issue here, to your point, we
- 10 don't have an innovation problem. You know, innovation
- 11 doesn't need capital. America's capital markets are the
- deepest and richest in the world. Dare I say, if you're
- unable to finance your idea, that probably tells you
- 14 something about your idea in this country.
- But innovation does need customers. And so,
- 16 shortening that OODA loop, the fiscal OODA loop. I think
- we'd be better off spending half the money twice as
- 18 quickly. It's really time, speed has a quality all of its
- own here. And that's how we drive up commercial adoption.
- 20 It will pull these folks into the industrial base in a way
- 21 that we really need.
- Yes, we need to cut the red tape. We need to get rid
- of some of these regulations. But I think the biggest
- 24 barrier is encouraging adoption, empowering our people. So
- 25 much of this, I couldn't agree more with Senator Reed's



- 1 comments that technology is -- it's not a technology
- 2 problem. It's actually a people problem, a leadership
- 3 problem. You can't chop off a lot of our regulations. You
- 4 know, something goes wrong, we come up with a new rule.
- 5 We're trying to chop off one end of the distribution of all
- 6 the things that can go wrong. You can't do that without
- 7 making sure nothing can go right either.
- 8 Chairman Wicker: Thank you, Mr. Sankar. Mr. Reed.
- 9 Senator Reed: Thank you very much, Mr. Chairman.
- Mr. Geurts, we all recognize how critical a workforce
- is to get anything done, and this is particularly a case in
- 12 acquisition. What's your assessment of the department's
- acquisition workforce today in terms of its capacity and
- 14 capability?
- Mr. Geurts: I think it is mixed. We have a very
- 16 talented workforce that's been hobbled for a bunch of
- 17 years. But they're also not fully informed on the full
- 18 market that's available to them. And so I think as we make
- 19 -- as a committee here makes all of these what it's look
- like very value-added changes, we've got to make sure we
- 21 handle the implementation step. Because right now we have
- lots of great authorities in the department. We have not
- implemented them to their full extent, nor trained the
- workforce to be able to leverage them to their full extent.
- So, part in part with change in the authorities and



- 1 rules needs to be rapid implementation guidance, and then
- 2 rapid training, and then hold everybody accountable after
- 3 you've done those two steps.
- 4 Senator Reed: One of the observations that I made,
- 5 particularly in regard to submarine construction, is Covid
- 6 sort of triggered a premature retirement of a lot of
- 7 government supervisors, workforce acquisition specialists,
- 8 et cetera. And we're lacking in those people, their
- 9 experience, frankly. And it comes down to people, as Mr.
- 10 Sankar said. Do we have to make a special effort to
- 11 rebuild that workforce?
- Mr. Geurts: Sir, I would do two things. One, we've
- 13 got to review the reviewer to doer ratio. So we have a lot
- of the workforce tied up in multiple levels of review that
- could be deployed to help immediately and get those assets
- doing work, not reviewing other people's work they're
- 17 doing.
- 18 Secondly, we need to create a training pipeline, which
- 19 fully informs them of how commercial markets work, how
- venture capital markets work, how traditional manufacturing
- 21 works, how new advance manufacturing works so they're
- 22 exposed to all of these opportunities, and then hold them
- 23 accountable for creating a strategy that bets leverages all
- of those capabilities.
- Senator Reed: Thank you, Mr. Sankar, thank you for



- 1 your testimony. One of the approaches we took was trying
- 2 to attract the non-traditional defense contractor. That
- was a term that's sort of changed over time because now
- 4 many of these non-traditional defense contractors are
- 5 actually defense contractors. In addition, they also have
- 6 access to and involved with governments in many different
- 7 capacities. Would you recommend any changes to this
- 8 approach of the non-traditional defense contractor?
- 9 Mr. Sankar: Thank you. I think what we seek with
- 10 non-traditionals is the same power of the American economy,
- 11 which is that people will take their private capital and
- 12 put it at risk to build new things and offer it to the
- 13 government, not at the taxpayer's expense. And if it
- works, that's great, and if it doesn't, no harm to the
- 15 taxpayer.
- And that's what you see with the non-traditionals,
- that they're going and raising private capital. They're
- 18 putting their balance sheet at risk, they're delivering
- 19 these innovations. If I was to contrast that to the
- traditional market, what the monopsonist prefers is I will
- 21 pay you by the hour. I will control everything you're
- 22 doing. I will own what you ultimately create. And then we
- 23 are surprised that that category of traditional player
- 24 isn't investing more in R&D. Well, I think, literally,
- we've gotten the industrial base that we've incentivized



- 1 getting. So, I think, you know, my hope is actually we
- 2 could find more ways of turning what we today view as the
- 3 traditionals into non-traditional, that would be the
- 4 alchemy that really powers our national security.
- 5 Senator Reed: One other aspect. Just observation and
- 6 we all understand that the defense industrial base has
- 7 shrunk dramatically from 20 years ago. A lot of that was
- 8 through mergers, acquisitions. In some cases, looking at a
- 9 threatening young competitive company and buying it for
- 10 reasons that might not be appropriate. How can we sort of
- 11 stop that?
- Mr. Sankar: Well, I'm spending my time personally on
- that. So, I think the antidote to the Last Supper, this
- 14 consolidation wave that happened is what we should call a
- 15 first breakfast. You know, how do you know as Palantir has
- 16 blazed a trail, survive the valley of death? I want to now
- lower the ladder and make it possible for many more new
- 18 entrants to get there.
- 19 How do I reduce the time it takes to get
- 20 accreditation? How do I enable it to field, yourself, not
- in an exercise that's not real, but in the actual war
- 22 fighting needs. Get more feedback and more scale as a
- 23 consequence. We need a positive-sum mindset here. And the
- 24 big shrinking that happened during the Last Supper
- encourages a zero-sum thinking, which we need to get out



- 1 of.
- 2 Senator Reed. Thank you.
- 3 Chairman Wicker: Thank you very much, Mr. Reed.
- 4 Before I turn to Senator Fischer, Mr. Geurts, this changing
- 5 the reviewer to doer ratio we could do that without a
- 6 changing the statute, could we not?
- 7 Mr. Geurts: In some cases, yes, in some cases, no.
- 8 So, there are certain parts of the statute that require,
- 9 you know, different offices review things. I think over
- 10 time, we've let the functional side get -- you know, the
- 11 contracting folks have to review it independently,
- 12 independent flight test authority. So many of those are
- internal, but a lot of those are driven by either statute
- or intent from external stakeholders.
- 15 Chairman Wicker: Thank you very much. Senator
- 16 Fischer. You're recognized.
- 17 Senator Fischer: Thank you, Mr. Chairman.
- Mr. Geurts, the impact of CRs on the department, it's
- well documented whether limiting new starts or the
- 20 challenges of increasing production rates. While CRS
- 21 result in concrete negative impacts, the department has
- 22 little influence over whether a CR actually occurs since
- 23 appropriations are the purview of Congress. Based on your
- 24 experience, are there any specific recommendations you have
- that would enable the department to continue to make



- 1 progress on certain programs, even through a CR?
- Mr. Geurts: Thank you. Yeah, CRs are very damaging
- 3 to a rapid and agile workforce. One of the reasons is you
- 4 have to -- if you're applying an award of contract for the
- 5 year and now the CRS occurring, you're doing it in, you
- 6 know, three-month increments or two-month increments, and
- 7 it ties up both sides. So, I think anywhere we can create
- 8 authorities, if it's small programs, if it's programs that
- 9 we're know --
- 10 Senator Fischer: Sir, is there any place right now
- 11 that the department can continue its progress or does it,
- do you know of anything or it's all shut down?
- 13 Mr. Geurts: It's really challenging because of the
- 14 specificity of the CR and the challenges. I think some of
- 15 the services have asked for special authorities in areas
- 16 that are very dynamic. I know the Army has asked for
- authorities to be able to rapidly reprogram and be flexible
- in like electronic warfare, and UASs, counter-UASs. So I
- think there's areas where it's really a dynamic environment
- that I think we could work together to build a trust to be
- 21 able to have more flexibility in the CR period.
- Senator Fischer: Okay. Thank you. Mr. Diller, do
- you have anything to add from a private sector perspective
- 24 on this?
- Mr. Diller: Yes, Senator, I think there have been



- 1 some notable changes just over starting with the Fiscal
- 2 Year 2024 Defense Appropriations Bill, that that provided
- 3 some of that agility that is key. If we look at how
- 4 quickly our acquisition model works, where we're budgeting,
- 5 and in instances, it's taking four years for something to
- 6 actually come available.
- 7 That certainly is not the case from a private sector.
- 8 If we look at the pace that large language models in
- 9 artificial intelligence have occurred right there. Those
- 10 budgets were being built two to four years ago. And so I
- 11 would commend the work of the appropriators that have
- 12 looked to see what type of flexibility allows the speed of
- innovation that is actually happening in the private
- 14 sector.
- 15 It gets to this question of adoption, of innovation.
- 16 And so, I think really great pilots have happened. And
- 17 when we look at the ability to scale, it certainly -- at
- 18 some point the measure needs to be how can we get the
- 19 funding that actually allows that production and the
- 20 movement?
- 21 And I think there's been increased abilities. We look
- 22 at digital approaches to actually creating trust across the
- 23 Potomac River, where the Pentagon and the Congress can
- 24 actually get a higher degree of assurance that the money is
- 25 being spent quickly. This is being piloted right now with



- 1 DIU and I think that is going well. It's good for
- 2 industry, it's good for trust across the legislative and
- 3 executive branch.
- 4 Senator Fischer: Thank you. Mr. Sankar, in your work
- 5 with the department, what are some of the key factors that
- 6 limit your company's ability to innovate?
- 7 Mr. Sankar: I think really if you think about our --
- 8 when we first started the business, I thought our
- 9 competition was going to be the primes. That the primes
- would be threatened by the innovation of what we were
- 11 creating. But actually, the entity that was most
- threatened was the existing program of record. So, it's
- our inability to tolerate heterogeneous innovation coming
- 14 from a number of places.
- You know, all innovation starts off as something that
- is heterodox. It's going to challenge the status quo; it's
- 17 going to upset the apple cart. So, we need to enable more
- 18 flowers to bloom, and to recognize that innovation is
- 19 fundamentally messy and chaotic. And any attempt to put
- 20 process around it and make it clean destroys the
- 21 innovation.
- Senator Fischer: Mr. Geurts, as a former acquisition
- official, what do you think are DODs most promising
- initiatives to be able to take advantage of that commercial
- 25 innovation?



- 1 Mr. Geurts: So, I think, if I look back 10 to 15
- years ago, I think there was a divide between the
- 3 commercial industry's interest in national security and the
- 4 government's trust that they could actually deliver
- 5 something relevant to national security. And if you look
- 6 over the last 5 years in particular, that has, that element
- 7 is broken down. So, the conversations are starting to
- 8 occur, the trust is starting to occur, the demonstrated
- 9 success is starting to occur. Now, we have to do that at
- 10 scale as a matter of business, not as an exception.
- 11 Senator Fischer: Thank you. Thank you, Mr. Chair.
- 12 Chairman Wicker: Thank you, Senator Fischer. Senator
- 13 Shaheen.
- 14 Senator Shaheen: Thank you, Mr. Chairman. And thank
- 15 you to each of our witnesses for being here today.
- I recently took over as the ranking member of the
- 17 Senate Foreign Relations Committee. And one area that
- 18 comes up over and over again is ensuring that our foreign
- 19 military sales process works not just for us, but for our
- 20 allies, for our military, and for our industries. And to
- 21 ensure that we maximize the capabilities of our alliances,
- we need to focus on being able to fight in an interoperable
- 23 and coordinated way with our allies and partners. I assume
- that you would each agree with that. You're nodding.
- So, Mr. Geurts, how should industry and government



- think about and be working to ensure that American
- 2 businesses can work with our counterparts, with our allies
- 3 in Australia and Japan and South Korea to ensure that
- 4 systems are built on compatible architectures that allow
- 5 coordination between our forces in combat?
- 6 Mr. Geurts: I think a couple things. One would be
- 7 anywhere we can reduce the FMS burden in terms of
- 8 regulation, and statute, and things that make it hard to do
- 9 FMS sales, and things that disincentivize our allies and
- 10 partners wanting to use the FMS system.
- 11 Secondly, I think as commercial --
- 12 Senator Shaheen: Are there specifics that you would
- 13 point to?
- Mr. Geurts: I think there's been a number of studies
- on areas that we can break down. A lot of it's the review
- 16 timeline. A lot of it's the external authorities. I think
- 17 there's work to be done there. And then I think as
- 18 commercial is global, there are areas where we can leverage
- 19 commercial capabilities that do span many of our allies and
- 20 partners that are already interoperable from the start and
- 21 leverage those versus trying to back in interoperability
- from a custom DOD-made area. We've got to differentiate
- it. It's not one or the other. We need both.
- Senator Shaheen: I certainly agree with that. Mr.
- 25 Diller, one of the things that has happened as the result



- of the war in Ukraine is that we've watched how creative
- 2 the Ukrainians have been with many of their responses to
- 3 that war. Do you think that there are lessons that we
- 4 should be taking from what the Ukrainians have been able to
- 5 do?
- 6 Mr. Diller: Yes, ma'am. Unfortunately, I don't know
- 7 that our defense primes or our startups responded in the
- 8 way that we necessarily would want to that type of crisis.
- 9 I do think, fundamentally, as has been discussed with my
- 10 colleagues, this is an industrial-based problem in America,
- 11 not just a defense industrial-based problem.
- 12 And so how do we look at taking the next leap that
- allows the factory to be part of that war system, that war
- 14 fighting system? You see agility in Ukraine that you are
- 15 actually getting hardware to evolve at the speed of
- 16 software.
- On your previous question about FMS, if we can
- 18 actually have 21st century manufacturing system that is
- 19 digitally driven. It allows us to actually have that
- 20 factory evolving at the pace of the war to close that OODA
- loop, as it's called, and to create both interoperability
- between nations, and to be able to scale and remain agile
- 23 in warfare.
- Senator Shaheen: Thank you. Mr. Sankar, I'm a big
- 25 proponent of small business. They create 16 times more



- 1 patents than large businesses. One of the ways that we try
- 2 and take advantage of that innovation is through the Small
- 3 Business Innovation Research Program, which has been very
- 4 successful. I know it's a program that Palantir has worked
- 5 with extensively.
- 6 So, I am very concerned about the order that just came
- 7 out from the acting director of the Office of Management
- 8 and Budget that essentially puts on hold any financial
- 9 assistance that's dedicated to any programs like SBIR.
- 10 There are 82 of those programs within the Department of
- 11 Defense. What does it do to the research that's going on
- in our small businesses when there's that kind of a halt on
- the program, and we don't know how long it's going to last,
- 14 and we don't know whether it's going to be forever, or if
- they're going to be able to resume what they're doing?
- Mr. Sankar: Well, what I can certainly speak to is
- the value of small business. So, if we think about the
- 18 American system. This is about David versus Goliath, and
- 19 you know, we need the small business program to continue to
- 20 encourage many more Davids to get out there. But we should
- 21 be clear that we want David to get big. You know, where,
- where the small business program may be failing our
- 23 existing entrepreneurs is it's just enough to keep them
- 24 small. A class of indentured servants living as small
- 25 businesses. But that's not what we aspire for them. We



- want the small guy to have an opportunity to become the
- 2 next king.
- And so, if there were ways of continuing to evolve
- 4 that program so that we were holding ourselves collectively
- 5 more accountable to how many of our small businesses were
- 6 able to get big, how many of them are now defining the next
- 7 frontiers of what we're doing in defense innovation, I
- 8 think the nation would be much better off.
- 9 Senator Shaheen: I certainly agree with that, and
- 10 hope that we can look at the next stages of the SBIR
- 11 Program to do that.
- 12 Chairman Wicker: Thank you, Senator Shaheen. Senator
- 13 Rounds.
- 14 Senator Rounds: Thank you, Mr. Chairman. First of
- 15 all, let me thank all of you for being here today and
- 16 helping us in this project.
- 17 Albert Einstein, in a letter to President Roosevelt,
- 18 identified the risk of losing to Nazi Germany with regard
- to the possibility of a nuclear bomb. He talked about the
- 20 need the United States to take lead role and basically
- 21 begin that project. At the same time, once that occurred,
- the Manhattan Project was ordered, we started a process
- within our industrial base and within the scientific
- 24 community that was unbelievable at the time. And part of
- 25 it had to do with a whole lot of really, really bright



- 1 people talking to one another, both from within the
- 2 Department of Defense, within the National Laboratories as
- 3 they had existed back then, the universities, but also the
- 4 military, and the political leaders.
- 5 Today, I guess my question, to begin with, we face a
- 6 very similar situation right now with the implementation of
- 7 AI, and with adversaries who are moving very, very rapidly.
- 8 And this tool that we have, this AI tool, the countries
- 9 that are best able to incorporate it and to move it forward
- 10 as quickly as possible, are going to win the race
- 11 militarily and economically as well.
- Mr. Geurts, in the time that you were within the
- 13 Department of Defense, how often did you actually have a
- 14 round table or a visit with some of the key thought
- leaders, industrial base leaders, innovators? Did you ever
- 16 sit down and just have a round table with them, or is that
- 17 restricted?
- Mr. Geurts: Yes, sir, I did. I would, both of my
- 19 time in special ops and in the Navy, we would create the
- 20 forum for those kinds of discussions. And I would concur.
- 21 Having those kinds of discussions is fully available within
- the statute and critically important to understanding the
- opportunities that are in front of us and how to leverage
- 24 the full ecosystem.
- Senator Rounds: Mr. Sankar, Palantir is recognized as



- 1 an innovative organization, a thought leader a proven
- 2 facilitator in many cases with regard to AI implementation.
- 3 How often are you invited into the Pentagon to sit down and
- 4 to visit, to talk about how you can coordinate with our
- 5 purchasing organizers, the acquisition people, in terms of
- 6 actually acquiring the best and coordinating it with the
- 7 weapon systems that we have today?
- 8 Mr. Sankar: I'd say it's pretty a mixed bag. There
- 9 are certain parts of the community that are very proactive
- in seeking advice and interest from outsiders, actually
- 11 even seeking help and pulling together the right groups of
- 12 folks who would be completely non-traditional and very far
- away from defense. And there are others that have a more
- 14 captive sort of approach to this.
- 15 Senator Rounds: You ever been invited in to sit down
- 16 and talk?
- 17 Mr. Sankar: A few times I have, yes.
- 18 Senator Rounds: Mr. Diller?
- Mr. Diller: So that, I think, if we look at the
- innovation progress that's happened over the last, you
- 21 know, decade or so. I think you kind of see three
- 22 different eras of this starting with the conversation with
- the launch of DIU. Eventually, though, that conversation
- 24 needed to move into something more meaningful, which I
- think started where we got to contracts, where notable



- 1 civil reform allowed those conversations to happen against
- 2 sometimes large inertial hurdles that thought that
- 3 conversation couldn't happen.
- I think we need to get to this third era that actually
- 5 is how do we turn this into capability? How do we actually
- 6 scale to get hardware and software so that this is not an
- 7 episodic conversation, but this is the way we conduct war
- 8 in America, this is how we mobilize America for war. And
- 9 that is still a gap that I think is needing to be filled.
- 10 But I'm optimistic that we're on a path building on these
- 11 successes and these pilots that is possible.
- 12 Senator Rounds: Look, I agree with you that that's
- 13 the path forward. I'm just questioning whether or not our
- 14 acquisition process today will allow that to happen.
- Mr. Geurts, we have a rapid acquisitions process that
- some of the branches are able to access. Is there any
- 17 reason why all of our acquisitions shouldn't be based upon
- 18 a rapid acquisitions approach?
- Mr. Geurts: Sure. I couldn't agree more. I get a
- 20 little frustrated when we have the rapid acquisition
- 21 community and then everybody else. We should all be rapid.
- 22 And to your previous point, I'm a huge believer in the
- 23 networks, and we do have a culture of lawyers that look to
- 24 everything bad about having conversations versus what's
- 25 appropriate. And I think that's an area where we can do



- 1 much, much better as a community. In fact, we have to.
- Senator Rounds: Mr. Sankar, rapid acquisitions.
- Mr. Sankar: I could not agree more that everything
- 4 should be rapid. You know, speed is our greatest strength.
- 5 The American entrepreneurial spirit of, essentially, when
- 6 everything is on the line, we throw away the rule book and
- 7 we execute.
- 8 Senator Rounds: Mr. Diller, you agree?
- 9 Mr. Diller: 100 percent.
- 10 Senator Rounds: Thank you. Thank you, Mr. Chairman,
- 11 Chairman Wicker: Mr. Sankar, if there were a round
- table and your competitors were invited and not you, you'd
- 13 have a problem with that?
- Mr. Sankar: Well, arguably that's what's happening
- 15 today. I mean, it happens. People need to get the best
- 16 counsel they can. We need to move together. There are
- 17 going to be lots of opportunities to keep competing. What
- 18 we need to move away from is a big monolithic approach
- where you had one chance to get involved to actually every
- 20 quarter we are adapting new technologies, and there's a
- 21 constant kind of reshuffling of who are the performers on
- 22 the work.
- Chairman Wicker: Very helpful. Senator Hirono.
- Senator Hirono: Thank you, Mr. Chairman. Mr. Diller,
- as one of the authors of the recently released Blueprint



- 1 for Breakthroughs in Defense Innovation report, you
- 2 recommend giving the combatant commanders, including
- 3 INDOPACOM, the largest AOR, specific funding to accelerate
- 4 the rapid fielding of new technologies to solve theater-
- 5 specific problems.
- 6 What advantages would such a change inject into the
- 7 defense acquisition system, and how would you address
- 8 concerns from those who argue the combatant commanders
- 9 already have a say in how DOD prioritizes and procures
- 10 emerging technologies?
- Mr. Diller: Yes, Senator, those recommendations were
- 12 specifically building on the success that Chairman Calvert
- on the House Appropriations Committee championed when he
- 14 added \$220 million of colorless funding to ADIU, Agile, and
- 15 enterprise fielding capability.
- There's been incredible success in being able to
- 17 provide that flexibility directly to the combatant command,
- 18 who right now is urgently developing capabilities to ensure
- 19 the potential 2027 risk is deterred and to make sure that
- there is proper balance. This was specifically how do we
- 21 move into 21st century acquisitions of making sure that
- there's a digital thread, there's digital accountability
- between the appropriators, making sure that that is tied
- 24 back into a resourcing approach that is institutionalized
- in the Pentagon and is tied directly to that war fighter



- 1 capability.
- 2 So, it's not necessarily acquisition, it's not
- 3 acquisition authority, but it is something that's much more
- 4 stronger than just the combatant command, asking to
- 5 actually have a say of where dollars go.
- 6 Senator Hirono: I think that is an important kind of
- 7 we looking at who gets to make these kinds of decisions and
- 8 who gets to weigh in. And I agree with you that I think
- 9 the combatant commanders should have a greater say.
- For Mr. Geurts, everyone agrees that DODs acquisition
- 11 workforce must manage complex requirements pathways and
- 12 extensive reporting structures, which does create a risk-
- 13 averse culture. It's been acknowledged that the DOD has a
- 14 risk-averse culture. What kind of training or tools do
- acquisition professionals need to better leverage the
- 16 existing innovative procurement pathways like OTA? It's
- 17 the other transaction authorities or the middle tier
- 18 acquisition pathway. So we've tried to create innovative
- 19 ways for faster acquisition, but not if people do not take
- 20 advantage of these pathways.
- Mr. Geurts: Yes, Senator. There are plenty of
- 22 pathways. At SOCOM, I think we created 17 different ways
- to buy things, and then we empowered program managers to
- 24 pick the right one and held them accountable to deliver.
- I think we have to get away from the idea that we're



- 1 efficient if we pick one way to do everything, and then
- 2 train everybody to one standard as opposed to exposing them
- 3 to all the different opportunities and then training them
- 4 what's the right tool to pick for what's the right job.
- 5 Part of that is empowering the program manager so they have
- 6 the authority to pick that tool, and it's not spread out
- 7 between what legal thinks, what contracts thinks, what the
- 8 operator thinks. I think that will go a long way.
- 9 Senator Hirono: Do the other panelists agree with Mr.
- 10 Geurts' approach?
- Mr. Sankar: Yes, I do agree. If I was to add one
- thing on top of that is it's really bringing acquisition
- 13 closer to the operators, to the war fighters. There's a
- 14 way in which, where we divide these things up so cleanly
- and expect that acquisition can deliver on its own.
- 16 Another way of thinking about your guestion on combat
- 17 commanders is it's the answer to the monopsony. You know,
- 18 we have 13 SOCOMs, we can introduce a lot more demand
- 19 signal. We should be celebrating the heterogeneity and the
- 20 needs across our SOCOMs rather than having a unitary
- 21 solution driven by the services that that needs to be
- 22 universal.
- Senator Hirono: Before I run out of time, I wanted to
- 24 mention the importance of SBIR, and this is a way for us to
- really support and encourage particularly small companies



- 1 to be innovative and creative. And we should be supporting
- 2 it. But now, apparently, there's a pause on the, these
- 3 initiatives, SBIR. So, Mr. Sankar mentioned, I think that
- 4 you understand the importance of SBIR. I'd like to know if
- 5 the other two panel members agree. Mr. Miller?
- 6 Mr. Diller: Yes, ma'am. I, as the director of
- 7 AFWERX, I issued thousands of them a year. There are
- 8 reforms that should happen, but it has done incredible
- 9 things to help mobilize the American industrial base.
- 10 Senator Hirono: Mr. Geurts, you agree?
- 11 Mr. Geurts: Yes, ma'am.
- 12 Senator Hirono: Thank you.
- 13 Chairman Wicker. Thank you, Senator Hirono. Senator
- 14 Ernst.
- Senator Ernst: Thank you, Mr. Chair. And gentlemen,
- thank you for being here today. I am particularly excited
- 17 about the discussion today, and I hope that we can take
- this information and your thoughts, and actually act on it.
- So I'll start with you Mr. Diller. I serve as the
- 20 chair of the Senate Committee on Small Business and
- 21 Entrepreneurship, and I'm working on a bill to actually
- 22 reform SBIR. While it's important, I agree, it needs to be
- 23 reformed. So what I'd like to do is revamp phase 3
- 24 acquisitions, and a number of the efforts you've helped
- 25 create have been very successful in scaling technologies



- 1 from innovative small businesses to the war fighter.
- So, Mr. Diller, how can we reform SBIR and expand on
- 3 this work across the DOD innovative ecosystem?
- 4 Mr. Diller: Yes, ma'am. First, thank you for your
- 5 leadership and being a champion for small businesses. We
- 6 talk about mobilizing America. This particular capability
- 7 with SBIR is key. When we picked it up in AFWERX, it was
- 8 not a perfect program, but it was a tool that we had. And
- 9 thanks to the help here on Capitol Hill, it has been better
- 10 year after year.
- I think there are three important things that we need
- 12 to do in the SBIR program. One, I think expanding the
- 13 number of companies who can get in. This frustrates to
- 14 sometimes the venture capitalists because they can't pick
- easily. But this is a venue, the conversation about how do
- we bring in many companies for the conversation. This is
- 17 the venue for that conversation. So, actually, more SBIRs
- 18 with lower dollar amounts initially, but we also need to be
- 19 very deliberate about scaling, and only scale and scaling
- 20 quickly.
- Those best companies, we need to be better at
- judicious reviewers of which companies to scale. And then
- building on things like the stratify program that can
- literally take a company from a \$50,000 program in one year
- to a \$50 million program the next year through proper due



- diligence internal to the Department of Defense.
- The last piece of that is that due diligence. Making
- 3 sure that the dollars that are going through the SBIR
- 4 Program are actually going to American companies and are
- 5 not feeding the adversary. And that piece is making sure
- 6 that that is consistent and rigorous across the department
- 7 with clarity for those companies that want to make sure
- 8 they have clean capital. How is that conversation
- 9 happening? And there's more opportunity to build the
- 10 proper relationship with industry to get everyone on board
- 11 with that mobilization?
- 12 Senator Ernst: That's fantastic. And making sure the
- dollars go to American companies is extremely important as
- 14 well. I have focused on that.
- Mr. Sankar, as chair of the Senate DOGE Caucus, I
- 16 couldn't agree more with your Defense Reformation paper
- where you state that small business program should not be
- 18 welfare. I agree wholeheartedly. And in the past decade,
- 19 25 companies they're notoriously known in my circles as
- 20 "SBIR Mills" received 18 percent of all award dollars at
- DOD amounting to about \$2.3 billion. That's a \$92 million
- windfall per company in a program meant for small
- 23 businesses.
- 24 GAO reports that these frequent flyers have lower
- 25 sales and investments and fewer resulting patents. We have



- 1 a problem here. So, Mr. Sankar, how can we eliminate this
- waste of taxpayer dollars, and reorient the SBIR program to
- 3 its original purpose as a source of merit-based seed
- 4 funding?
- 5 Mr. Sankar: I could not agree more. That's clearly
- 6 an abuse of the intent here. One thing we could think
- 7 about is time limiting; how long a company is eligible.
- 8 It's not just about the size and staying below some sort of
- 9 threshold. But look, we aspire for this small company to
- 10 get big, and I don't know if the right threshold is five
- 11 years or 10 years, but there's some amount of time that we
- would expect you to have the opportunity to get big. We're
- 13 going to bet on other entrepreneurs in the future.
- 14 The other part is more of a top down. As we measure
- the efficacy of the SBIR Programs, we should really be
- thinking about how many big companies were we able to
- 17 create. And I think that will help us have a clear head as
- 18 we think about the next rounds of investments that we're
- 19 going to make.
- Senator Ernst: Yeah, I agree. And if you go back and
- 21 you look at the companies that are benefiting from these
- 22 programs right now, most of them exist on the East and West
- 23 Coast. Very few of those dollars are actually getting
- 24 spread into Middle America. And I do think that that this
- will change in the future and provide opportunity for more



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    small businesses.
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          Mr. Geurts, I will get back with you on questions for
    the record, but I appreciate your service to our nation.
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         Mr. Geurts: Thank you, ma'am.
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         Senator Ernst:
                          Thank you. Thank you, Mr. Chair.
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                            Thank you very much, Senator Ernst.
         Chairman Wicker:
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    A few of our members of the committee have referred to a
    paper written by Mr. Sankar, entitled The Defense
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    Reformation, consisting of 19 Pages. Some of them are just
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    title pages, but I ask unanimous consent that we enter that
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    into the record right after Mr. Sankar's testimony.
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    Without objection, it is so ordered.
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- 1 Chairman Wicker: And Senator Kaine, you are
- ² recognized.
- 3 Senator Kaine: Thank you, Mr. Chair. And thanks to
- 4 our witnesses. I appreciate this hearing. I think it's
- 5 really important that we dig into this.
- And if I could, Mr. Chairman, I'd like to recommend,
- 7 as we're looking at this topic, that we also think about a
- 8 hearing on workforce, because I think acquisition reform is
- 9 needed. I think a lot of our challenges are also around
- 10 inadequate workforce in the defense industrial base. And
- 11 I'd love to have a committee hearing on that topic as well.
- 12 This is something Mr. Geurts and I have talked about
- 13 before.
- Mr. Diller, you mentioned DIU, the Defense Innovation
- Unit, and I want to ask you, and then the others, if you
- 16 care to comment. How would you assess? I've been
- impressed with their mission, and I've been impressed with
- some of what they've done, but I haven't been involved with
- it in a day-to-day way. Maybe you-all have. How would you
- 20 assess both the performance of DIU, but maybe more
- importantly, the promise of DIU?
- Mr. Diller: Certainly, from a performance
- perspective, this is a startup inside a very, very complex
- 24 bureaucracy. For years, those startups internal to the
- bureaucracy largely get eaten by the bureaucracy. You can



- 1 look at the rate of hiring to actually be able to build the
- organization. Even when the top leadership in the Pentagon
- 3 says go higher, the frozen middle certainly makes that a
- 4 challenge. I saw the same thing when I was in AFWERX.
- 5 So given those headwinds that they must address, I
- 6 think it provides -- they've been making great progress.
- 7 There have been great companies that are getting built
- 8 because of the collaboration. Real contracts are now
- 9 turning into capability that is actually deterring an
- 10 adversary.
- 11 Senator Kaine: What advice would you give to the
- 12 Pentagon today about DIU and the way they should sort of
- position DIU within the DOD?
- Mr. Diller: I think the NDAA that had been passed
- over the last couple of years of elevating specifically --
- the challenge that we've had with innovation in the past is
- 17 when these new technologies come to the forefront. It does
- 18 not necessarily fit in with our traditional program
- 19 executive officers. It doesn't necessarily fit in with our
- training and adoption pipelines. And many times, it
- doesn't necessarily have an obvious fit in one of the
- 22 services. And this is nothing pejorative to the service.
- 23 It's just new, and we don't have a home for it.
- And so, DIU is fit that place of actually identifying
- 25 joint capabilities to support the joint war fighter. And I



- 1 think that elevation as it is being reported directly to
- the Secretary of Defense, so that the conversation with
- 3 great companies in this ecosystem can be free and open, so
- 4 that it is encouraging actual use of existing authorities.
- 5 Right? Is a culture change that is using existing
- 6 authorities to create the speed so that we can actually
- 7 move in in a relevant pace?
- 8 And I think that structure is there. There's a lot
- 9 still to build out in that structure. DIU is the small
- 10 acquisition piece of this. There's an adoption piece on
- 11 the back end that might not quite be there, and there's
- 12 some questions of what specific problems are these
- organizations solving that doesn't fit into the beginning
- 14 either. So, there's room.
- Senator Kaine: Let me switch gears. A lot of the
- 16 testimony this morning has been about encouraging
- innovation and emerging technologies that, as you say,
- 18 might not fit directly within the silo mentality. I want
- 19 to talk about acquisition innovation in an ongoing area
- that we've had a lot of problems in that shipbuilding and
- 21 subs.
- We had to put \$5.7 billion at the end of the year into
- the Virginia Class Sub program to try to move it more into
- on-time, on-budget. And that was after we did a
- supplemental bill in April, putting money into the program



- on top of the base budget. Mr. Geurts and I have dealt
- with this. What would be a way to think of acquisition
- 3 reform in the context of like ship and sub building? How
- 4 should we look at different contract vehicles? What would
- 5 your thoughts be on that?
- 6 Mr. Geurts: Yeah, sir. I think we should look at
- 7 innovation acquisition reform in all phases. There's great
- 8 technology. We spend over \$10 billion a year on ship
- 9 repair. There's state of art technology that could enhance
- 10 that today, reduce those bills, get throughput up.
- I go back to this. We need a network of performers.
- 12 We need a big ship building -- you know, capital-intensive
- shipyards, but we need to have them connected to a whole
- 14 network. Whether it's commercial service providers that's
- 15 got digital data, whether it's Nate's rapid manufacturing
- and adaptable things. That's a piece I think we're
- 17 missing.
- We have these kinds of pockets of old legacy things,
- 19 new commercial things we haven't yet tied that together
- into a well-performing network where people can come in and
- 21 out of that network as their performance merits.
- 22 Senator Kaine: Others have thoughts on shipbuilding
- in particular in my last 17 seconds?
- Mr. Diller: Just briefly, if you go look at --
- Mr. Geurts: Take the whole 30 seconds. I'm



- 1 Mr. Diller: We are living in an industrial age that
- 2 does not match the talent pool that we have out there. We
- 3 really must think about what the next leap is in
- 4 manufacturing.
- 5 Senator King: So back to the workforce question. I
- 6 appreciate that. Thank you, Mr. Chair.
- 7 Chairman Wicker. Thank you very much, Senator King.
- 8 Senator Budd.
- 9 Senator Budd: Mr. Geurts, thanks for your service at
- 10 the SOCOM. So, what are some of the takeaways that you've
- 11 had from SOCOMs approach to rapid acquisition? And do you
- think it's realistic to apply those lessons learned to
- 13 military services?
- Mr. Geurts: Absolutely. I think a couple of those
- 15 key things are rapid decision-making, creating venues to
- 16 get exposed to all the technical capabilities and
- 17 performance that are out there, like soft works. I think
- it is having the trust of Congress and the relationship to
- 19 be flexible. And I think it's empowering the program
- 20 executive officers to manage a portfolio, not manage
- 21 individual programs.
- Senator Budd: Appreciate that. Mr. Sankar, Mr.
- 23 Diller. Mr. Sankar, we'll start with you first. So,
- what's been your company's experience having navigated the
- Pentagon's accounting and invoicing standards regulatory



- 1 requirements terms of payment, all that. How has that
- 2 affected your ability to do business with the DOD, and you
- 3 said you've been there, I believe, a couple of decades, Mr.
- 4 Sankar, so maybe in the early days as a smaller company,
- 5 maybe much more intimidating at that point. So, if you
- 6 want to go back in history a little bit, what was it like
- 7 as a startup trying to do business with DOD?
- 8 Mr. Sankar: It was quite complicated. I can't tell
- 9 you the number of times we submitted invoices and somehow
- 10 didn't fill out the right, you know, tick box somewhere.
- 11 And that meant the invoices would get kicked back. People
- 12 always say you can count on the government to pay its
- 13 bills. I think you can in the end, but perhaps not always
- on time, just given how byzantine the process is.
- So, I think it's not commercial. That's kind of the
- 16 reality of it. And we should be thinking about where the
- divergence from commercial standards helps the taxpayer,
- 18 helps the government, and where is a vestige of how we've
- 19 built the system over time. I think it does act as a
- deterrent and to new entrants coming in.
- 21 Senator Budd: So, as for the small business folks
- that are out there listening, what would payment terms be
- like for a small business perhaps in the early days? What
- would be expected?
- Mr. Sankar: Well, everything is paid in arrears, of



- 1 course. So, you can't structure it any other way. Maybe
- the payment terms are quite reasonable, net 30, something
- 3 like this.
- 4 Senator Budd: Then what's the difference between that
- 5 and reality?
- 6 Mr. Sankar: You could probably add a couple months on
- 7 that.
- 8 Senator Budd: Ouch. Well, I'm glad you survived.
- 9 Mr. Diller?
- 10 Mr. Diller: Sure. We have one contract right now
- 11 with the government that is a cost accounting. If we can
- 12 avoid it, we will not do that again. It does not serve --
- 13 I don't think the government well for this type of work,
- 14 and it certainly does not serve the small business well.
- 15 And so, I think there -- you know, going back to this
- 16 question of the reviewer versus the doer, we still have
- 17 failed to get the Department of Defense into the 21st
- 18 century to digitize the reviewer part at a pace of
- 19 relevance so that there can be more doers.
- 20 And that work still is lacking significantly. It's
- 21 slowing down the government. It is creating waste, and it
- 22 is keeping us from getting the best technologies in the
- 23 hands of our war fighter.
- Senator Budd: Thank you. Mr. Geurts, acquisition
- 25 professionals, they often cite the high costs, the robust



- 1 penalties, and disincentives to taking programmatic risks.
- 2 And I think it results in a culture of compliance over
- 3 innovation. You've mentioned that a little bit this
- 4 morning.
- 5 So, in contrast, in the non-DOD world, many industry-
- 6 leading companies, they celebrate failure and they adopt an
- 7 iterative approach to learning quickly. How might program
- 8 managers be able to achieve rapid iteration while
- 9 minimizing the risks of failure?
- It seems to me, if you want to address the cultural
- issue here, and I don't know if it's a class or a -- I've
- 12 heard somebody ask, what tools do you need? I think it's
- more than that. I think it's a cultural issue. So, if you
- 14 agree or disagree, please weigh in on that a little bit,
- too. It is absolutely a cultural issue. There's training
- 16 you can do to expose people to the tools.
- Mr. Geurts: Yeah. But if they're in the wrong
- 18 culture, they won't take advantage of the tools. And so, I
- think it goes back to being outcome-focused, having unity
- of command, who's in charge, and then holding that person
- 21 accountable. And in the SOCOM world, there was more of
- that than there was, and there was flexibility.
- You can create strategies where you'll have rivalries
- 24 and multiple performers because you can act very
- efficiently. And then if a company performs well and has a



- 1 product, the operator wants you buy more of them. If they
- don't, you buy less and go to a different product. That
- 3 doesn't align well with a centrally planned -- you know, 30
- 4 percent of our program elements are less than \$10 million a
- 5 year where you send 47,000 pages of budget documentations,
- 6 and then you get hauled up in front of a staffer if you
- 7 make a decision that's the right decision, but doesn't
- 8 align with that bureaucracy. We've got to get to a better
- 9 spot in that regard.
- 10 Senator Budd: Thank you.
- 11 Chairman Wicker: Thank you, Senator Budd. Senator
- 12 King.
- 13 Senator King: Thank you, Mr. Chairman. I'd like to
- 14 go back to Senator Reed's opening statement at the end
- where he talked about Churchill and the necessity of
- 16 thinking fast. The first step, it seems to me in this
- 17 process is to have a better focus on what we need in the
- 18 future and not what we needed in the past.
- The prime examples to me are hypersonics and directed
- 20 energy. The ground-based interceptor program. Those
- 21 missiles up in Alaska that are designed to hit a bullet
- with a bullet are \$70 million apiece. By the way, I got
- that number from an AI app on my phone. But the point is,
- we have been fighting the last war. Instead of talking
- about directed energy, which costs 50 cents a shot rather



- than \$70 million the focus has been on missiles and
- 2 missiles. And by the way, those missiles won't do anything
- 3 with hypersonics. That's another technology that we were
- 4 late on.
- 5 And so, this process has to start with acquiring the
- 6 right things. New technologies win wars. Genghis Khan
- 7 conquered the world because of the invention of the
- 8 stirrup. The Battle of Agincourt was won by the longbow.
- 9 World War I, the tank, World War II, the atomic weapon. So
- 10 I think this discussion has to start before we get to all
- 11 the processes that we're going after the right products.
- Mr. Sankar, do you have any thoughts on that?
- 13 Mr. Sankar: Yes, I do. I love the tank example in
- 14 particular because it was the Royal Navy that built the
- 15 tank. It was widely --
- Senator King: They were called tanks because the code
- 17 name was tankers for the Eastern front or something like
- 18 that.
- Mr. Sankar: And I think this shows you, I think, even
- 20 before the tank, there was the land boat, which Churchill -
- 21 you know, this seems to be a hearing about Churchill in
- 22 many ways. But the reason I think that's really important
- is it was a heterodox approach. If you had asked the
- 24 British Army to think of what they were going to need to
- win World War I, they would've been wrong. In fact, they



- were wrong.
- 2 Senator King: They would have said more troops and
- 3 deeper trenches.
- 4 Mr. Sankar: We have to recognize that the innovation
- 5 to fight and win the next war will come from the edges of
- 6 our military. The people who are closest to those
- 7 problems. It's very unlikely to come from this city.
- 8 Senator King: And we wouldn't have had a nuclear
- 9 navy, but for Admiral Rickover.
- 10 Mr. Sankar: And as Zumwalt said, the Navy had three
- 11 enemies; the Soviet Union, the Air Force, and Hyman
- 12 Rickover. So he was not widely loved, but I think we need
- more tolerance for the heretics, you know, because these
- 14 heretics end up being our heroes.
- Senator King: Well, I hope that -- and I don't know
- 16 how you inject creativity into the process. Mr. Geurts, do
- 17 you have any thoughts on that?
- Mr. Geurts: I also think, sir, that we need to invest
- in the capacity to act quickly. So back to Mr. Diller's
- 20 comment, even if we plan much better, if we don't have the
- industrial network that can react quickly, then we're going
- 22 to -- if we have to wait to create that to decide the
- 23 perfect thing we want. And so, I'm also a fan of the plan
- for the unplanned, create the capacity to rebuild. We've
- lost the middle of our industrial base. We've got very big



- 1 performers, a lot of little small performers. And that's
- where I think the commercial marketplace venture, you know,
- 3 scaling into that middle becomes really important.
- 4 Senator King: Speaking of acting quickly, this is a
- 5 chart that derived from our dear departed chairman, Jim
- 6 Inhofe. It compares the time it takes from concept to a
- 7 new product starting back in 1945. The dark line is
- 8 military aircraft. The light blue line is a commercial
- 9 aircraft, and the red line is an automobile.
- 10 So back around in the '60s and '70s, those three
- 11 things took about the same time to get to prototype and
- 12 actually going. But something happened. And now, a
- military aircraft is like 25 or 30 years from concept to
- 14 development. Commercial aircraft much, much faster. And
- an automobile has gone down. So, I believe that a lot of
- this is because of the bureaucratic things that we've been
- talking about today, the impediments to actually getting
- 18 some of these products to market.
- The other thing that bothers me is the proclivity of
- 20 the Pentagon to have its own product. It can't buy
- 21 something off the shelf. Senator Tillis used to bring the
- spec for the handgun which was I don't know how many
- thousand pages. Instead of going to commercially available
- 24 handgun, all of that would require -- requirements creep as
- 25 another problem. The definition of requirements and then



- 1 requirements keep stacking up. Mr. Diller, do you have any
- 2 thoughts on those ideas?
- Mr. Diller: Sure. The Air Force has emptied the
- 4 museums and the boneyards for C130 hub caps. This took us
- 5 days to build. It will take months to get it certified.
- 6 It finally was to fly. It took months to certify. Nothing
- 7 changed. The data was available on day one. The hardware
- 8 was available on day one. It did not change. We have to
- 9 change the pace of adoption. We must digitize our
- 10 industrial base. We must digitize our bureaucracy
- 11 Senator King: With your indulgence, Mr. Chairman, one
- of the problems is the risk-averse, which has been
- discussed. As I've observed the development of
- 14 hypersonics, for example, the Chinese seem willing to fail.
- 15 They do tests and fail. We have to have every test work.
- 16 And that has dramatically, in my view, slowed down our
- development of some of these important technologies. Mr.
- 18 Sankar, you're nodding your head. Is that correct?
- 19 Mr. Sankar: I mean, just like the Starship. Elon
- learns more from the Starship breaking up than he does from
- 21 an inherently waiting and slowing down to get the right
- 22 perfect launch one time around.
- You know, the value, the rate of learning. The first
- derivable learning is our competitive weapon. It's how
- 25 quickly we are adapting, not what are we capable of doing



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    today. It's how much are we changing tomorrow? I could
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    not agree more.
         Senator King: Thank you. Thank you, Mr. Chairman.
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         Chairman Wicker: Well, thank you very much. Now,
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    before I recognize Senator Banks, I think we need to add to
    the record a smaller copy of that chart.
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         Senator King: I'll provide it to the committee.
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- 1 Chairman Wicker: Provide it. I find it very
- 2 interesting. And also, Mr. Diller, if you don't mind,
- 3 Senator Banks, what is the object that you just picked up?
- 4 And tell us a little more about that.
- 5 Mr. Diller: So, Senator Wicker, going to your first
- 6 point. If America goes to war tonight, we will go to war
- 7 with the multi-trillion-dollar legacy force that we have
- 8 today. When we talk about innovation, while there are
- 9 great third offsets, hedge forces, replicators of
- 10 autonomous robots, we must make sure that innovation is
- 11 supporting the multi-trillion dollar force that we have
- 12 today.
- The C-130, as the Air Forces said, did not have a
- 14 supply chain for hubcaps. They had emptied the museums;
- they had emptied the boneyards. This is available to be 3D
- printed, literally designed by Kevin Czinger and his team
- 17 at Divergent Technologies, and he did it in days digitally
- 18 designed. You know, there was a degree of data available
- 19 that is unprecedented with legacy approaches.
- But the challenge of getting this adopted into the DOD
- 21 bureaucracy is one that -- it goes back to this risk
- 22 aversion; it goes back to how do we digitize this entire
- 23 system? How do we use digital engineering and digital
- 24 manufacturing because this saves the taxpayer billions of
- dollars, and it allows aircraft that are available today in



- 1 a legacy force to fly tonight. Many of them cannot do that
- 2 today because of the horrific, horrific debt that we have
- 3 at our depots and in our sustainment enterprise. This
- 4 means innovation. It is there and available.
- 5 Chairman Wicker: Be a little more specific about what
- 6 the holdup is.
- 7 Mr. Diller: The holdup is the risk-aversion. Look,
- 8 there are things that fail. It goes through our
- 9 airworthiness processes as you look at this, right? In
- 10 some instances, there are some parts that if they fail, it
- 11 is a loss of human life. And how is it that we make sure
- that we're using digital approaches to identify where are
- 13 those safety critical things? How do I consume data in a
- 14 21st century manner that is a digitized touch to that
- engineering design, that is taking a degree of data, when
- we are certifying cars parts for Aston Martin, Bugatti,
- 17 McLaren, we are doing that with data sets that are
- 18 unprecedented and unconsumable today by the Department of
- 19 Defense.
- Those companies, the highest brand name companies in
- 21 the world, would not be offering those safety critical
- 22 parts on their vehicles if they did not have assurance of
- 23 those data sets.
- When we look at the Department of Defense, that's
- 25 going to take years unless there is encouragement. And



- 1 thanks to your team, this initial language started with the
- 2 25 NDAA, we must build on it. We must drive that adoption.
- 3 There are incredible innovators in the Department of the
- 4 Air Force that want to do this, but it is going to take a
- 5 nudge to actually digitize and to make sure that that
- 6 massive risk aversion is saving dollars for the taxpayer
- 7 and providing war fighting capability.
- 8 Chairman Wicker: Thank you very much. Senator Banks,
- 9 you've been indulgent, and the chair will be indulgent with
- 10 you on your questions.
- 11 [Laughter]
- 12 Senator Banks: Thank you, Mr. Chairman.
- Mr. Sankar, what kind of a difference would it make if
- 14 we gave the combatant commands their own acquisition
- 15 authority?
- Mr. Sankar: I think it is the single biggest
- 17 difference that we can make here. You know, the Department
- of Defense is the only institution I know of that divides
- up supply and demand. The integration of supply and demand
- 20 is the beating heart of any company, that consensus driving
- 21 process.
- The SOCOMs handle the demand, real world events, the
- 23 services, man train equipped, they provide the supply.
- 24 That would work if we really thought every SOCOM and all
- 25 needs were perfectly knowable and unitary across space and



- 1 time here. But actually, all of our advantage comes from
- 2 the fact that we might need slightly different things and
- 3 the signal for where that comes from is the combatant
- 4 commander.
- 5 So how do we give the people closest to the fight, the
- 6 ability to express a little bit of competitive demand
- 7 signal? 90 percent of what you want is probably coming
- 8 from the services, but that 10 percent gap is what's going
- 9 to make or break us in that fight.
- How do we give them a little bit of budget, a little
- 11 bit of authority and ability to break the monopsony and
- 12 introduce something like a free market where there's
- multiple demand signals coming.
- And, you know, if we go back to world war, like how
- did we have a world where every service was competing to
- 16 build an ICBM? Well, maybe a SOCOM commander should decide
- 17 whether the Navy or the Air Force has the better idea and
- 18 concept for their specific force employment or the emergent
- 19 needs that they're actually seeing. And I think that
- 20 competition will get us all to be better.
- 21 Senator Banks: It seems like common sense. Why
- 22 aren't we doing that already?
- Mr. Sankar: You know, I think having the luxury of
- having won the Cold War, is we view that as duplication.
- We view that as wasteful. Why can't we just pick the right



- 1 answer upfront? I think our system is exquisitely designed
- 2 to solve all problems that can be solved, deductively, top
- down, we can think our way through it.
- 4 But the promise of America, is that there's so much
- 5 messiness, it's all inductive, you know, and our system is
- 6 very, very bad. It's poorly set up currently. To find the
- 7 things you got to reason your way through. You got to
- 8 experience it, roll up your sleeves, get dirty and realize
- 9 new insights as a consequence of doing that. I think we
- 10 solve that by giving a little bit of strategic autonomy to
- 11 the SOCOM commanders to buy what they need and to build
- 12 what they need.
- 13 Senator Banks: So, play that out. How would the
- 14 services and the defense agencies react if they had to
- compete with another buyer?
- Mr. Sankar: Well, I think, you know, like most people
- don't really like competition. Of course, a part of that's
- 18 going to be a threat. But I think if you get past the
- initial hysteresis, you'll have the next step from that is,
- okay, well, how do I actually change what I'm building so
- that the SOCOM commander wants what I'm building? That's
- where we're going to start to get the leverage from that.
- I can think about it as this is also the idea around
- 24 competing programs and competing program managers that I
- 25 saw in the Forge deck, where if we have -- what is the



- 1 incentive for a program manager to adopt new commercial
- 2 approaches that actually disrupts their existing program?
- 3 So, I think today's incentive with a unitary effort is
- 4 deny, deny, deny, pretend it doesn't exist, block it.
- 5 Versus actually I'm competing against another great
- 6 American one corridor down. I want to be the first person
- 7 to adopt the disruptive technology so that I can win.
- 8 Senator Banks: Do you have a good example where the
- 9 combatant command's, lack of acquisition authority caused
- 10 delays, or even hurt the mission?
- 11 Mr. Sankar: Well, I think you could look at the
- 12 success of Project Maven, which really didn't come from the
- 13 services. You know, people love to derive OSD level
- 14 efforts as bureaucratic or not sustainable. But that
- innovation really came from the 18th Airborne. It came
- 16 from CENTCOM. It came from UCOMM, it came from the Afghan
- 17 NEO. It came from the emerging demand signal in the world,
- 18 the crisis that had to be responded to, the learning that
- 19 could only happen there, folded in capabilities that
- 20 ultimately scaled to the force.
- 21 Senator Banks: Mr. Geurts, program managers in the
- 22 private sector are obviously paid more than government
- 23 employees. They also get bonuses and stock options for
- 24 good performance. But in DOD, the uniform military
- 25 personnel and civilians managing our critical weapons



- 1 programs get paid the same whether they deliver or not. Do
- 2 you think the limited pay for performance system that the
- 3 DOD has tried, has worked?
- 4 Mr. Geurts: My experience both personally and
- 5 professionally, is it's not a pay issue. The high majority
- 6 of program managers want to deliver an operationally
- 7 relevant capability for the war fighter. They are just
- 8 mired in a bunch of distractions, a bunch of outside
- 9 stakeholders. Many more people can say no than can say
- 10 yes. And so, they spend 90 percent of their time managing
- 11 your bureaucracy, not managing the effort.
- 12 And then I think the other piece is we've got to also
- 13 get to the point to be innovative, you have to start things
- 14 quickly, we also have to be able to kill things quickly.
- 15 And for lots of different reasons and I think that's one of
- 16 the challenges If you give SOCOMs acquisition authority,
- 17 we'll start a lot of things. But if we can't kill the
- 18 things that aren't performing for whatever reason, then you
- won't have a highly functioning adaptive system.
- 20 Senator Banks: Well put. I yield back.
- 21 Chairman Wicker: Thank you very much. Senator
- 22 Cramer.
- Senator Cramer: Thank you, Chairman Wicker, Senator
- 24 Reed, thank all three of you for being here.
- I've stayed the whole time because this, frankly, this



- 1 is why I'm here -- is what you're talking about. I'm not
- 2 sure of all the solutions, but so far, I like what I'm
- 3 hearing. And this is exactly why by the way, Senator Kelly
- 4 and I stood up the Defense Modernization Caucus. So, thank
- 5 you for your comments today.
- 6 I'm going to go a completely different direction than
- 7 I was planning to, or that my staff was planning me to. I
- 8 was thinking back to my first days on -- in the Senate.
- 9 And it was at that time when DOD was looking for somebody
- 10 to, you know, to win a contract for cloud computing. And
- 11 the Jedi, remember the Jedi competition? And I remember
- 12 they chose Microsoft and Amazon early 2019 to compete, late
- in 2019, they awarded Microsoft. And what resulted in that
- 14 was, of course an immediate protest.
- And then they went on a while longer, flipped the
- 16 script, chose, you know, Amazon, then Microsoft protested,
- 17 and then NSA took over. Anyway, about five years later, we
- 18 have companies doing cloud computing. I was very
- 19 frustrated by the ability for a company who didn't win the
- 20 contract, regardless who the company is, to protest the
- 21 company who did, and then hold up, you know, modernization
- 22 by five years now, a lot of things were happening in the
- 23 meantime.
- But then we fast forward to today, where we read about
- 25 now what I believe to be the most innovative agency within



- the DOD, the Space Development Agency, which has been under
- 2 attacks since the day we stood it up by swamp creatures and
- 3 legacy space operators and legacy acquisition of
- 4 procurement officials and a protest that I almost guarantee
- 5 you, will slow up the proliferated war fighter space
- 6 architecture, which is the worst thing that could happen.
- 7 And it's even led as, you know, to a PIA claim that
- 8 looks more political than it does real to me, quite
- 9 honestly. And I would just like each of your comments or
- opinions about the protest regime and whether there's more
- 11 that can be done there. Don't get me wrong, competition
- 12 requires the ability to challenge, but it shouldn't provide
- the opportunity to make the country less safe. And I'll
- 14 just start with you Mr. Geurts, we can just go down from
- 15 there.
- Mr. Geurts: Yeah, sure. I do agree there needs to be
- an avenue, but that avenue over time has gotten abused.
- 18 One thing I suggested early on was you get one bite at the
- 19 apple; you could protest the GAO or court of federal claims
- you couldn't protest twice. I also think there should be
- 21 some look at behavior over time and some disincentive for
- what I would call chronic protesting, particular by
- 23 incumbents.
- Mr. Sankar: I agree. It's also been abused that I
- think it's a hard problem for the reasons that you've



- 1 already articulated. But I think one way that we could
- 2 really buy this down is by doing more bakeoffs, more things
- 3 in parallel, getting more things fielded, because anyone
- 4 can win a fiction writing contest. You know, it has no
- 5 correlation to your ability to perform.
- But when we have the satellites in space, we'll be
- 7 able to tell one way or another, maybe we'll decide,
- 8 actually, we should have 50-50. Maybe we should have
- 9 multiple performers. Maybe we're working bad decisions
- 10 because we're evaluating you through a fiction writing
- 11 contest instead of empirically in the field.
- 12 Senator Cramer: I thought, by the way, the examples
- one of you used a little bit ago, Elon Musk learning more
- 14 from blowing up. I was at the Starship launch with
- 15 President Trump, and it was very confusing for several of
- the business people there to hear Elon speak so positively
- 17 about the booster that didn't come back. And they had to
- 18 put in the water and like, but we learned so much.
- You know that's a tough culture in our business and in
- 20 government but it's one we have to foster. Mr. Diller,
- 21 your comments on the protest.
- Mr. Diller: Sure. It gets to that risk. I went to
- the French test pilot school and the speed that my 5-year-
- old was able to learn French compared to me, he didn't
- 25 care. Right. He did not have this risk averse culture.



- 1 It's the same with Elon Musk. When we look at these
- 2 protests, if we take this approach or chairman of the joint
- 3 chiefs of staff use this phrase, "acquire to require", and
- 4 it's exactly what Sean was saying, how do we slowly build
- 5 trust? Because it's at the core, it's a trust issue. If
- 6 we actually work together at the beginning in ways that OTs
- 7 allow us to, that trust can be billed.
- 8 Chairman Wicker: Thank you very much, Senator Cramer.
- 9 Mr. Sankar, before I go to Senator Warren, do we have the
- 10 statutory authority in place to have the type of bake off
- 11 that you described?
- 12 [Laughter.]
- Mr. Sankar: We absolutely do. And we have
- 14 participated in just those sorts of down select processes.
- 15 Chairman Wicker: Okay. So it's just a matter of the,
- 16 folks in charge doing that. Senator Warren
- 17 Senator Warren: Thank you, Mr. Chairman, and thank
- 18 you for holding this hearing. So, DOD buys a lot of stuff
- 19 from defense contractors and to protect the military and
- 20 taxpayers, it's long been the law that defense contractors
- 21 must give DOD contracting officers certified cost and
- 22 pricing data, to help verify that a price that's being
- 23 charged is fair and reasonable.
- One of the big exceptions to this though, is for
- 25 "commercial goods and services" based on the principle that



- the market will make sure it's a fair price. If you could
- 2 buy it on Amazon, that's a fair price. You don't have to
- 3 go into all the background on how you got there. I get
- 4 that, and I am all for commercial buying.
- 5 But the fact is, this is turned into a massive
- 6 loophole where big defense contractors withhold data, even
- 7 though there's no market and DOD effectively, the only
- 8 customer, doesn't have this information so that these giant
- 9 companies can price gouge the military.
- 10 So I want to give you an example here. For years, the
- 11 Army was buying Chinook helicopter engines from Honeywell,
- 12 and Honeywell successfully lobbied Congress so its engines
- would be treated as commercial, and Honeywell wouldn't have
- 14 to turn over the certified cost and pricing data. Now, Mr.
- Sankar, you're the CTO of Palantir, a billion-dollar tech
- 16 company that contracts with DOD. Once Honeywell got the
- 17 engine moved to a commercial engine, what do you think
- 18 happened to the price?
- 19 Mr. Sankar: I'm not familiar, Senator.
- Senator Warren: Well, it went up, not down by a
- 21 hundred percent. And that's the problem we've got here.
- Too often, DOD is outgunned when it is negotiating with
- these giant defense contractors, which is exactly why it
- 24 needs the cost and pricing data to avoid being ripped off.
- Now, Mr. Sankar, your company Palantir, is looking to



- 1 create a consortium with another defense tax company
- 2 Anduril, is that right?
- 3 Mr. Sankar: Yeah.
- 4 Senator Warren: To jointly bid for something called
- 5 "other transactions agreements", or since we have to give
- 6 everything initials OTAs, where the government also waives
- 7 taxpayer protections on how to get pricing information.
- 8 And I'm sure it's not your intent to team up with another
- 9 organization in order to price gouge the military. So,
- 10 this next question should probably be easy here.
- DODs Inspector General recommended requiring bid
- 12 contractors to alert military contracting offices when the
- 13 price of a good or service goes up by 25 percent. In other
- 14 words, move it up so other people -- and can get eyes on
- it. Mr. Sankar, do you agree with the IG's recommendation?
- Mr. Sankar: I do agree. I think the price signal is
- 17 part of the competitive market and encouraging more
- 18 entrants and capital to efficiently be allocated to improve
- 19 things.
- 20 Senator Warren: Excellent. And will Palantir agree
- 21 to do that voluntarily?
- Mr. Sankar: I would defer to my team here, but I
- don't think we would've any conceptual disagreement with
- 24 that approach. Okay.
- Senator Warren: So, can I treat that as a yes?



- 1 Mr. Sankar: I would defer to my team.
- Senator Warren: Well, I want to be clear here,
- 3 because --
- 4 Mr. Sankar: As the CTO we don't speak on the business
- 5 side.
- 6 Senator Warren: We only know about most of these
- 7 overcharges because of the work that the Department of
- 8 Defense Inspector General has done. This is the person who
- 9 President Trump just illegally fired on Friday night, along
- 10 with at least 16 other IGs. I am deeply concerned that
- 11 this administration is removing exactly the cops on the
- 12 beat, that we need to identify waste and to prevent these
- 13 kinds of increases.
- So, Mr. Sankar, do you think it helps or hurts
- 15 national security to have Senate confirmed watchdog who can
- be there on pricing questions like this to call balls and
- 17 strikes?
- Mr. Sankar: As a technologist, what I can speak to
- is, when you look at Intel in the late sixties, 96 percent
- of the market for integrated circuits was the Apollo
- 21 program and the DOD, but Bob Noyce says the co-founder of
- 22 Intel, the co-inventor of the transistor, always envisioned
- 23 a bigger commercial market, our ability to deliver a salt
- breaker and ultimately have an asymmetric threat against
- 25 Soviets --



- 1 Senator Warren: I'm sorry, can you relate that to the
- 2 question I just asked?
- Mr. Sankar: Yeah, I promise it'll get there. So, our
- 4 ability to deliver a salt breaker was because actually he
- 5 could create integrated circuits that were thousands of
- 6 times cheaper than when we were building Apollo. That was
- 7 only possible because he had an eye towards the commercial
- 8 market.
- 9 So I completely agree that if you have a fake
- 10 commercial item that doesn't actually have commercial
- 11 applicability, if the company is not able to leverage a
- 12 diversified R&D base that goes beyond the government, that
- that is the promise that should lead to price performance
- improvements for the government, then you're not getting
- 15 the value of the commercial item.
- But when we look at space, for example, I grew up in
- 17 the shadow of the Space Coast. The cost to get a kilogram
- into orbit for the shuttle was \$50,000 a kilogram. So the
- 19 cost with Starship heavy reuse will be 10 bucks. So,
- Senator Warren: Mr. Sankar, I very much appreciate
- 21 that you're trying to push here on cost, I am too. The
- question I had asked you is whether or not we need IGs, who
- are the whistleblowers, who say people are cheating on the
- 24 cost, for example, on the definition of commercial, are
- 25 somebody who can help us bring these costs down.



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1
         Pentagon is spending $440 billion this year on
2
    contracts. It's important for us to get better procedures
3
    in place to get some eyes on what they're doing. And IGs
4
    help us do that. Thank you.
5
         Chairman Wicker: Thank you very much, Senator.
6
    Perhaps Mr. Sankar would like to respond on the record to
7
    that last matter. And with regard to deferring to your
8
    team, once you've had a chance to do that, perhaps, Mr.
9
    Sankar, you could supplement your question on the record
10
    along with other things.
11
         [The information referred to follows:]
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         [COMMITTEE INSERT]
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- 1 Chairman Wicker: Senator Schmitt.
- Senator Schmitt: Thank you, Mr. Chairman.
- 3 And I'll start where Mr. Sankar left off and ask a
- 4 question. And all three of you feel free to chime in. I
- 5 also serve on the Commerce Committee. And to my surprise,
- 6 in my first year, I was named the ranking member of the
- 7 Space and Science Subcommittee. I would not have put that
- 8 on my Bingo card in coming into the Senate in my first two
- 9 years. But I found it fascinating because of the
- innovation that's happening in space, driven by the
- 11 commercial private sector, right?
- One of the things that we were able to do was to
- extend the learning period which is kind of essentially
- 14 allowing these companies to innovate and any regulations
- that would come really sort of follow the path of what has
- 16 worked.
- So not to artificially constrain the innovation on the
- 18 front end with a bunch of bureaucrats who are just sort of
- making it up, not really knowing where the rules of the
- 20 road really should be. I'm wondering is there a scenario
- or how would we construct something similar? I mean, we're
- 22 all getting at this challenge of innovation. And how do
- you unlock it in what seems to be a Pentagon that has just
- 24 sort of been captured by centralized planning.
- I mean, I think our great advantage against communist



- 1 China is our ability to innovate, they're really good at
- 2 copying. We're really good at innovating, but if we
- 3 hamstring our ability to innovate, we lose our advantage,
- 4 right?
- 5 So, this example of a learning period as it relates to
- 6 commercial space, what would be a version in your mind
- 7 that, that we could sort of replicate in the NDAA?
- 8 Mr. Sankar: Well, I think the commercial SpaceX is a
- 9 great example where -- you know, SpaceX wasn't given the
- 10 monopoly. They had to earn it. We had multiple competing
- 11 approaches to get to space, and they thought that they
- 12 could do that at a price performance level, no one else
- 13 could. And that's clearly been proven to be true. And I
- think if we applied that more generally, which is like the
- 15 inductive bottoms up innovation is the American spirit,
- 16 that is our competitive advantage. How do we get more
- 17 shots on goal for all the efforts we're going to? Less
- 18 certainty in the top-down centralized planning, more space
- 19 to have new performers, new entrants, present the heterodox
- 20 ideas.
- I think for that to really take hold, you either need
- 22 to have competitive program offices within the services or
- you need to empower the SOCOMs to create that sort of
- demand signal that varies, that pushes the adoption of
- 25 innovation.



- If I look at our own company, the history, all of our
- 2 adoption came from the field. It came from Iraq; it came
- 3 from Afghanistan. It didn't come from the program offices.
- 4 It actually came despite the program offices. They were
- 5 resistant to this as something that was going to screw up
- 6 their cost schedule performance.
- 7 And so, I think the kiss of death would be trying to
- 8 create some sort of smooth process to go from new ideas
- 9 that are innovative to scaling them. I promise you that is
- 10 always going to be hard, that is always going to be messy,
- it's going to be interpersonally friction full. If we wrap
- 12 that in process, we will kill it and smother it. But if we
- enable ourselves to lean into that friction, we will be
- 14 able to field the cutting-edge technologies we need.
- Senator Schmitt: So, in addition -- I want the other,
- 16 two to chime in too. In our meeting, prior to this
- 17 hearing, we talked a little bit about having the
- 18 competition among services is an idea. Combatant
- 19 commanders having some flexibility to adjust so whether
- it's sort of a separate pot of money dedicated for that,
- 21 we've talked about in this committee about having a
- separate pot for smaller players, the disruptors, who might
- 23 come into the marketplace, what other concrete ideas exist?
- 24 And I guess, because I won't have time to ask the
- 25 second question, but in the context of, if we were at war



- 1 right now, like, let's say we're at war with China
- 2 tomorrow. Like what would we do differently? Like, what
- 3 would we do differently that we're not doing now?
- 4 Mr. Geurts: Yeah. Just quickly and happy to do a
- 5 follow up, but I think we leveraged the full, I go back to
- 6 this industrial network. We have tremendous commercial
- 7 capacity we aren't tapping into and leveraging. We have
- 8 tremendous -- we have to rebuild manufacturing, but not
- 9 rebuild what we used to have, rebuild it with modern
- 10 technology that's flexible. We have to think about, let's
- 11 take contested logistics, leveraging electric vehicles,
- 12 things that already exist, rather than trying to recreate
- this giant purpose-built force, become really fast
- 14 adopters, integrators, and not try and be the inventors of
- everything.
- There's plenty of invention around. We need to be
- 17 super-fast at importing it, integrating it, and then
- 18 getting it into the hands of our women and men in service.
- 19 Mr. Diller: I think there are models that exist.
- 20 They have been practiced over the last few years. They
- 21 were not scaled. I don't know that we have the structure
- 22 to actually scale those currently. We have done incredible
- work; the department should be commended on incredible work
- of these multiple pilot projects. Eventually, that must
- turn into, without becoming overly bureaucratic, right?



- 1 This is the risk, build on those successes of reaching out
- 2 to thousands of companies.
- And speed is everything. How do you scale them in a
- 4 relevant timeline? It's possible. It does require some
- 5 flexibility. It requires transparency from the department
- 6 that's going to create the trust for speed.
- 7 Thank you.
- 8 Chairman Wicker: Thank you, Senator Schmidt. Mr.
- 9 Sankar, I'm so glad Senator Schmidt asked that question.
- 10 If we found ourselves at war immediately, go ahead and be
- 11 the third response to that question.
- Mr. Sankar: I think we would lean in heavily into the
- 13 primacy of people. Do you have the right person in charge
- of these programs? You'd stop rotating them immediately.
- You'd go deep on focus. You'd probably do a lot more with
- vertical integration of the capabilities, not reliant on
- 17 thin horizontal supply chains.
- But I think we would organize around the most credible
- 19 people and humans we have and limit the number of programs
- 20 we have, concentrate our arrows behind those things. And
- 21 today, we kind of have this bingo card approach to rotating
- our general officers around making sure in the spirit of
- jointness, that they have this array of experiences. I
- think that probably helps you in peace time, but I think it
- 25 strictly hurts you.



- 1 You know, you haven't even been in the role long
- 2 enough to learn from the mistakes you've made. You don't
- 3 even know their mistakes yet. It takes a long time for
- 4 these programs to get to the point where you're up the
- 5 learning curve. I don't think you could just randomly
- 6 replace Elon or Glenn Shotwell and expect these rockets to
- 7 keep working. They have accumulated this knowledge over 20
- 8 plus years of building them.
- 9 Chairman Wicker: Are we in peace time now?
- 10 Mr. Sankar: In my opinion? No. but I think we got
- 11 to get the whole country to realize that.
- 12 Chairman Wicker: Thank you very much. Senator Rosen.
- 13 Senator Rosen: Well, thank you, Chairman Wicker and
- of course, Ranking Member Reed. Really an important
- 15 hearing. I'd like to thank each of you for being here to
- 16 and testifying today. You know, I want to build upon a
- 17 little bit about what Senator Warren brought up on
- 18 competitive pricing, because consolidation of our defense
- industrial base is concerning, to say the least. Because
- since the 1990s, the number of U.S. aerospace and defense
- 21 prime contractors have shrunk from 51 down to 5. 51 to
- 22 five.
- 23 As a result, the Department of Defense is increasingly
- dependent on a small number of contractors for critical
- 25 defense capabilities. This constrains us in many ways and



- 1 I hope for a bigger conversation on the value of early-
- 2 stage research and what it can teach us. You've been
- 3 speaking to that, but that's a much larger conversation we
- 4 can't have in five minutes.
- 5 Mr. Diller, how should DOD help support advanced
- 6 technology?
- 7 Our small businesses that do that, especially those
- 8 who struggle to find private capital, we want them to be
- 9 more attractive for investments so they can survive the
- infamous valley of death stage, accomplish technology
- 11 transition, and become part of our defense industrial base.
- 12 And for Secretary Geurts, I'm going to ask you a
- 13 follow up. For those defense-focused small businesses who
- 14 can't find the private capital, they don't make it across
- the valley of death. How might public private partnerships
- incentivize domestic investors to help support them? So,
- 17 Mr. Diller and then Mr. Geurts?
- Mr. Diller: Yes, ma'am. Thank you. When we launched
- 19 what we called AFWERX 2.0 in 2020, we created this process
- 20 called AFWERX Prime Process. You can say what you want the
- 21 particular marketing around that. But what it did is it,
- 22 recognized that there are many technologies, emerging
- technologies, that DOD can actually become an incredible
- incubator to: one, reduce the technical risk, two, reduce
- 25 the regulatory risk, and three, reduce the re adoption



- 1 risk.
- 2 And we were able in a few instances to actually, I
- 3 think establish a dual set of technologies to some degree,
- 4 an actual market in America, because of that approach.
- 5 Because very quickly, some of those companies at the
- 6 beginning came in on a \$50,000 small business contract that
- 7 we've been talking about, but were given authorities to
- 8 turn that \$50,000 contract into a \$50 million contract over
- 9 the course of a year.
- And so speed is everything. Getting the department to
- 11 understand the critical nature of speed, and as we are in a
- 12 wartime footing, that is yet ever more critical. Those
- things have been piloted. There have been initial moose by
- 14 the department to create the flexible funding to actually
- 15 get them to scale. We must double down and make sure that
- 16 that success can scale.
- 17 Senator Rosen: Mr. Geurts, what do we do if they
- don't make it across? How do we incentivize these public-
- 19 private partnerships --
- Mr. Geurts: I think we need to be careful that I
- 21 don't think every company is going to make it across. And
- we want to make sure we don't over rotate the other way, so
- that you know, if you don't have a product that meets a
- need at a price that's affordable and reasonable, then you
- 25 may not make it across.



- Where I do think we have to focus more is how to
- 2 quickly scale the products and services that we need. And
- 3 in many cases, these small businesses have a piece of the
- 4 solution, but aren't the whole solution. And so that's
- 5 where I think there's opportunity to create a network where
- 6 either they get together or they band together with either
- 7 commercial or another company that can help get them
- 8 across.
- 9 Senator Rosen: You can connect them; they can
- 10 potentiate their value together. Well, I want to keep a
- 11 little bit on this potentiation, because technology supply
- dependent a fragile global supply chain from critical
- minerals to semiconductors. Nevada, of course, my home
- 14 state, we mine lithium, magnesium, and other critical
- minerals.
- Well, we have a role to play in these technologies
- 17 too, but only if we make a concerted effort to
- 18 strategically leverage our resources, leverage our
- 19 advantages to overcome our global supply chain challenges.
- 20 So again, Secretary Geurts, what specific strategies can
- 21 the U.S. employ to mitigate these vulnerabilities,
- investing in domestic industry to help it strengthen our
- 23 supply chain resilience?
- Mr. Geurts: Yeah, I'm really optimistic on the focus
- of not only owning our supply chain, but adding multiple



1 sources of supply to build resilience. And I think, you 2 know, five years ago, that wasn't part of the conversation. It's part of every conversation now, and looking at all the 3 4 resources we have, and then how do we incentivize that is 5 going to be critically important, whether it's the rare 6 earth and minerals all the way to being able to, you know, 7 remanufacture a part that's been out of production for 30 8 years. 9 Senator Rosen: Thank you. And I'll submit this 10 question for the record, but as the only former software 11 developer here in the United States Senate, I want to talk 12 a little bit about high quality systems and software and 13 how we prioritize across the enterprise DODs management of 14 technical debt, which cost of choosing speed over quality, 15 and when we develop software systems. I'll submit that for 16 the record for you. Thank you. 17 [The information referred to follows:] 18 [COMMITTEE INSERT] 19 20 21 22 23 24



25

- 1 Chairman Wicker: Thank you, Senator Rosen. Senator
- 2 Scott.
- 3 Senator Scott: Thank you, Chairman. Thank you for
- 4 holding this hearing. Mr. Geurts, when I was in business,
- 5 I had a written purpose for everything we spent money on.
- 6 When I went to Wall Street to raise money, they wanted to
- 7 get a return on their investment. When I became governor
- 8 of Florida, there's 4,000 lines to the budget, what we did
- 9 was we had a written purpose for every line. And if they
- 10 didn't meet the purpose, we didn't continue to fund them.
- 11 Is that how DOD works?
- Mr. Geurts: I would say yes and no. I would say
- there's a written purpose in about a stack of budget docs
- 14 this thick, where there's a purpose against every budget
- line. Are those looked across and are they scrubbed the
- 16 way they need to be? No. Is return on investment looked
- 17 at as close as it needs to be? No. And are we good at
- 18 stopping things we started, we're horrible at that. And
- 19 that's one of our biggest inhibitors to innovation, is we
- 20 can't stop things that aren't adding value to fund things
- 21 that we need to be working on.
- 22 Senator Scott: Can you give me an example where it
- 23 didn't hit a purpose and there was some accountability?
- Like, did they stop a program? Did somebody lose their
- job? Can you gimme one example of, you know, there was a



- 1 written purpose for something, it didn't happen, and some
- where there was change made?
- Mr. Geurts: Not sure I have a clear example of that
- 4 as much as many times we are issued sometimes through
- 5 congressional budget changes activities to go work on that
- 6 were not in our original plan. Some of that can be value
- 7 added. Some of that may not be value added. I can't give
- 8 an example of where there was a purpose for funding that
- 9 and somebody didn't execute the purpose. You could argue
- 10 whether the purpose was the right purpose but I can't give
- 11 an example.
- 12 Senator Scott: So you don't have an example where
- anybody was ever held accountable for not fulfilling their
- 14 purpose?
- Mr. Geurts: Well, I think there's plenty of examples
- of that. You can look at what I did as a Navy secretary
- 17 and the Ford Program manager.
- 18 Senator Scott: So, what happened? Did somebody get
- 19 fired?
- 20 Mr. Geurts: Yes, he did.
- Senator Scott: And why? What didn't he do?
- Mr. Geurts: Didn't execute the outcomes I expected as
- 23 a program manager.
- Senator Scott: Good. Mr. Sankar, Mr. Dillard, do you
- 25 guys like to compete?



- 1 Mr. Sankar: I love it.
- Senator Scott: How about you?
- 3 Mr. Diller: Absolutely.
- 4 Senator Scott: Okay. So, to compete, does it make
- 5 you better?
- 6 Mr. Sankar: 100 percent. Without exception.
- 7 Senator Scott: So, have you lost?
- 8 Mr. Sankar: Yes.
- 9 Mr. Diller: Often.
- 10 Senator Scott: Okay. And when you did, what'd you
- 11 do?
- 12 Mr. Sankar: Get better.
- 13 Mr. Diller: Try harder.
- 14 Senator Scott: Okay. So do you feel like that's the
- way DOD operates, where they're out trying to get people to
- 16 go compete, to find out the best product service, things
- 17 like that?
- Mr. Sankar: I think it attempts to but sometimes the
- 19 nature of the competition can be a fiction writing contest,
- 20 like an RFP. Sometimes the competition is so constrained
- 21 and not real world enough that it doesn't provide a long
- 22 enough runway. Sometimes the competitions are just too
- short, where actually what you want is, you want to be able
- to get a bunch of people in continuous competition that
- just because you're winning today, I want to have an



- 1 incentive to invest my private capital into R&D and show up
- 2 next month with a better mousetrap, and try to win with
- 3 that and show up the month after that and do that again.
- 4 Senator Scott: And are you rewarded for that?
- 5 Mr. Sankar: Spiritually, right now we are, but I
- 6 think we're at the beginning of a broader transition with
- 7 DOD, where I think that can result in the sort of rewards
- 8 that make this sustainable.
- 9 Senator Scott: Okay. For both of you, if you had
- three things you're going to do to, you know, to force big
- 11 change at DOD, what would you do?
- 12 Mr. Sankar: I feel like I'm starting to sound like a
- broken record, but my two core suggestions, the first would
- 14 be have competing programs. Do not give a program a
- monopoly on a certain capability area. Let multiple
- departments, organizations, units, programs within the
- 17 government compete with each other. That's why SpaceX is
- 18 so innovative right now, is because it is a food fight
- 19 between various different agencies. We should embrace that
- when we were winning that's what it looked like.
- The second one is, push more authority to the
- 22 combatant commanders to decide what they need. Use that to
- 23 drive signal and reformation to the services and the
- 24 department broadly.
- 25 Senator Scott: Mr. Diller.



- 1 Mr. Diller: Digitize. The future is digital, and we
- 2 are not there yet. Second, be clear that there are
- different types of portfolios that attract different types
- 4 of companies that need a different culture, and make sure
- 5 that there is a path of doing that.
- And lastly, make sure that we actually have the
- 7 ability to manufacture in America. DOD could be the
- 8 catalyst to actually shift American manufacturing.
- 9 Manufacturing is not a DOD problem; this is an American
- 10 problem. And it must be solved to avoid the crisis that we
- 11 have in building, turning ideas into hardware.
- 12 Senator Scott: Thank you, Chairman.
- 13 Chairman Wicker: Very good. Senator Scott. Senator
- 14 Kelly.
- 15 Senator Kelly: Thank you, Mr. Chairman. Thank you,
- 16 all of you for being here today. As the Ranking Member of
- 17 the Airland Subcommittee and the co-chair of the Defense
- 18 Modernization Caucus, along with Senator Cramer, I'm
- 19 focused on maintaining our competitive edge over our
- 20 adversaries. To achieve this, we've got to ensure that our
- 21 military is not only equipped with cutting edge technology,
- 22 but also as the infrastructure to remain effective in
- 23 contested environments, where supply chains and sustainment
- 24 could be disruptive.
- I don't know if the three of you saw an order from OMB



- 1 from the White House last night or yesterday, an expansive
- order with repercussions across the country. And it's
- 3 unprecedented in this order and I'll explain here in a
- 4 second where I think the defense impact could be. But this
- 5 is cutting, pausing Medicaid health plans, Pell Grants,
- 6 Meals for Kids, nutrition programs for pregnant mothers,
- 7 programs to help homeless veterans.
- 8 And it appears that it also may freeze federal funding
- 9 and grants for Department of Defense Research in
- 10 manufacturing technology and other small business
- 11 innovation programs.
- So, I want to ask each of you, starting with Mr.
- 13 Geurts, have you looked at this memo that was issued last
- 14 night? And are you concerned that a blanket freezing of
- 15 these funds -- how would it impact our readiness and
- 16 ability to compete with China and other adversaries? I
- 17 want to start with Mr. Geurts.
- Mr. Geurts: Sir, I have not seen the exact memo you
- 19 referenced. But more globally, one of the challenges with
- the DOD as a customer is there's lack of trust that they'll
- 21 be there and they will start, stop, start, stop. And I
- think that could send a bad signal to business. And then
- also, if we stop a bunch of research and are not staying on
- 24 the technical edge, that could be detrimental to the force.
- Senator Kelly: And Mr. Sankar, for Palantir



- 1 specifically, let's just say in a couple days, you find out
- 2 that that contract payment that you were about to receive,
- you're not going to receive it, and you're not going to
- 4 receive it next month or the month after that. Could you
- 5 talk specifically about how it would impact your company?
- 6 Mr. Sankar: I think you can imagine that it causes
- 7 quite a bit of heartburn, particularly for services already
- 8 rendered. But it's a difficult environment.
- 9 Senator Kelly: And where are your employees?
- 10 Mr. Sankar: All over.
- 11 Senator Kelly: All over how many
- 12 Mr. Sankar: 4,000 total.
- 13 Senator Kelly: If you didn't get paid by the federal
- 14 government for the next three months, how many of them do
- 15 you think you'd have to lay off?
- Mr. Sankar: I would rather not think about it.
- 17 Senator Kelly: You'd rather not think about it.
- 18 Okay. Mr. Diller, for divergent, what would be the impacts
- if your federal dollars contract payments were to stop?
- Mr. Diller: As a dual use company that really is just
- 21 starting into the defense space, certainly, it would deter
- us from continuing that. I think, you know, we've seen
- this over the years, and this is one of the many things
- that creates risk for companies. And in some instances
- when I was a director of AFWERX, you simply could not



- 1 convince some commercial companies to go do business with
- 2 the Department of Defense. And so obviously, trust is key
- 3 on these things. And understanding continuity of
- 4 agreements made is important.
- 5 Senator Kelly: Yeah. So you're going to find out in
- 6 the next probably 24 hours if it's going to impact you and
- 7 your company and your employees and people who live in
- 8 those communities. But this is an unprecedented overreach
- 9 from the White House, with a directive from OMB to freeze
- 10 programs that folks on this committee, in the United States
- 11 Senate authorized money to be appropriated for very
- 12 specific programs.
- Programs -- I'll get back to, that help homeless vets,
- 14 nutrition programs for moms, but also programs that affect
- our safety, our readiness, and our troops to make sure that
- 16 they have the combat power that they need to win, win in a
- 17 very tough environment.
- So I'm very concerned about this action that the White
- 19 House took without, I guess they notified us. They say it
- 20 goes into effect at 5:00 PM, I suggest when you get back to
- 21 your companies that you take a close look and see what the
- impact is going to be to you and your employees and our
- 23 readiness. Thank you, Mr. Chairman.
- Chairman Wicker: Thank you. Senator Kelly. Senator
- 25 Sullivan.



- 1 Senator Sullivan: Thank you, Mr. Chairman. I'll
- 2 comment on follow up on Senator Rosen comment about
- 3 critical minerals, ill actually comment on a really good
- 4 executive order. And the critical mineral issue, is the
- 5 good news is Biden's out Trumps in, especially for my
- 6 state. We have incredible resources of critical minerals
- 7 for our military.
- 8 And Joe Biden spent four years shutting down Alaska
- 9 because radical environmental groups said, don't mine in
- 10 Alaska, get it from China. So that's what we did for four
- 11 years. And Donald Trump is changing that on day one.
- 12 So Senator Rosen asked about critical minerals, the
- 13 good news, the most important news for critical minerals
- 14 for America is, Biden's gone and Trump's in. And that is
- really good for the people in my state who have been
- 16 sanctioned more than fricking Iran and Venezuela by the
- 17 last administration.
- But let me, I'm venting here a little bit, Mr.
- 19 Chairman. Sorry. Let me get to the point of the hearing.
- 20 Thank you for holding this hearing. This is really
- 21 something all three of you're going to have experience on.
- 22 So I really want to get a sense of it. Mr. Sankar, you
- 23 might remember at the lunch that you and I were at
- 24 recently, where Admiral Paparo was talking about
- 25 contracting officers who are in the middle of their



- 1 careers, don't want to rock the boat. This idea of a
- 2 frozen middle in the Pentagon.
- We all love our military, I think Mr. Diller, you
- 4 actually served as a contracting officer, acquisition
- officer. What are some of the ways that we can best
- 6 incentivize contracting officers in the Pentagon to take
- 7 risks on newer companies as opposed to always default to
- 8 Lockheed and Raytheon and, you know, take the easy route.
- 9 Because I think the culture in the Pentagon is one
- 10 thing we got to work on, and you all have experience on
- 11 that so I'd love to get your sense quickly, because I have
- 12 some other questions, but culture contracting officers, how
- do we incentivize risk taking without people being scared
- in the big bureaucracy of the Pentagon? Go ahead. All
- three of you take a crack at it.
- Mr. Sankar: I'll offer a thought here. First is get
- 17 them out of the Pentagon. You know, maybe we need to have
- 18 our contracting officers or acquisition folks forward
- deployed closer to where the problems are, understanding
- the ways viscerally, you know, there's a reason SpaceX
- locates their R&D engineers on the production floor, that
- is a heterodox approach that we certainly would not see in
- the defense industrial base. But that's where you observe
- the problems, you change your design, you're able to close
- 25 those loops very quickly.



- 1 Chairman Wicker: We could do that now. Could we?
- Mr. Sankar: We could. The second part is, have
- 3 another American one corridor down that they're competing
- 4 against. Yes. You're, you know, that the risk of
- 5 disrupting your schedule is outweighed by the fact that
- 6 that person's going to win, and you're going to lose that.
- 7 Senator Sullivan: I love that idea. Anyone else, Mr.
- 8 Diller?
- 9 Mr. Diller: Incentivize speed. In AFWERX, we went
- 10 from no contracting shop, and we deliberately were saying
- 11 we are establishing a different culture. There are people
- in the Department of Defense, I would say most of them
- 13 actually, that want to move at speed. As Mr. Geurts
- 14 mentioned, this is not necessarily about money. It is a
- mission that they actually want to engage in.
- And when leadership actually takes on the risk
- themselves and unlocks the people working for them, you can
- 18 attract incredible contracting officers. There are so many
- of them out there, and they're ready to move with speed to
- 20 buy the right things.
- 21 Senator Sullivan: But they need to be told from the
- top-down percent, Hey, it's okay to, you know, contract
- with this up and coming upstart versus the big guy who's
- 24 going to take 15 years to get his product out. Correct?
- 25 Yeah.



- 1 Mr. Geurts: Yes, sir. One, you got to get them
- 2 aligned with the program manager so that they're not on an
- 3 island of their own. And then that team puts together the
- 4 strategy and is held accountable for looking across the
- 5 entire thing. The second thing, which the -- is helping,
- 6 the burden we put on a contract officer to award a
- 7 contract, the number of things they have to sign, the
- 8 number of certifications is ungodly. Yeah. And so, this
- 9 committee could really help by scrubbing a bunch of that
- 10 underbrush --
- 11 Senator Sullivan: Is that not in statute, is it?
- Mr. Geurts: Yes, sir. I mean its statute, which then
- we propagate in implementation and processes. And then
- 14 well --
- Senator Sullivan: Maybe for the record, if you have
- some ideas on that real quick, I want to just ask one final
- 17 question.
- Mr. Sankar, you did a great job on your Defense
- 19 Reformation piece published in October, but there's and I
- love the idea of competition between programs, but how do
- 21 you envision the acquisition system working when the
- services have a lot of, you're very focused on the
- 23 combatant commands, and I get that, that makes a lot of
- sense, but the services also have a lot of skin in the game
- and is there a challenge that if you're moving it to



- 1 combatant commands, the services are going to be, hey,
- 2 that's my piece of the territory. What do we need to do
- and how do you make them work together better?
- 4 Mr. Sankar: Well, I think if we thought about it at
- 5 the margin, a little bit of overlap is actually what gets
- 6 them to rise to the occasion.
- 7 Senator Sullivan: That's your competition thesis.
- 8 Mr. Sankar: Yes. And so I think, you know, I'm not
- 9 sure you'd say Air Force, please go build me an aircraft
- 10 carrier, you know, but it's really like, where are we on
- 11 the margin? One example, when we were trying to build
- 12 JADC2, we have Overmatch, we have a BMS and we had Project
- 13 convergence, but each of those was just trying to build
- 14 software or JADC2 within their service, which you could
- 15 argue is a little bit of a contradiction on the concept of
- 16 JADC2 to begin with.
- Maybe a more productive frame would've been, each of
- them is actually seeking to field software and capabilities
- 19 to the combatant commanders across components, across
- services, and that's going to create the productive tension
- 21 to win. And that would also force interoperability, it
- would force a lot of the things that we aspire for. It
- would be MOA in practice instead of MOA on paper. And so I
- think we forget that first you have to be effective before
- you can focus on efficiency.



- 1 Chairman Wicker: Members can supplement their
- 2 answers. Thank you. Thank you very much. Senator
- 3 Slotkin.
- 4 Senator Slotkin: Thank you, Chairman. Thank you for
- 5 holding this hearing. I was glad that our first official
- 6 hearing beyond a confirmation hearing was on something
- 7 where we should have very bipartisan approach to this
- 8 issue. I'm a former CIA officer and Pentagon official, so
- 9 I feel like I saw a lot of this up close.
- And I think the most important stat for me that I
- 11 think about, that I measure our success or failure at is
- 12 someone told me that to go for the Chinese government, to
- 13 go from concept to fielding a program in their military is
- 14 a one-year string. And for the United States, it's a
- three-year string, right? And I can't imagine all the man
- 16 hours in between those, those three years.
- And so to me, I mean, we hope we never have a conflict
- 18 with China or anybody else, but we have to have the speed
- of decision making to change on a dime.
- I have seen in three tours in Iraq, particularly with
- 21 some special authorities the special forces have, to really
- innovate in the field. The most exciting stuff I've ever
- 23 seen was just where the flash to bang was like, boom, we
- got a problem, we have authority to go do it, let's go do
- 25 it.



- 1 And so I would describe, I did six years on the House
- 2 Armed Services Committee, that our committee in a
- 3 bipartisan way was ready to hurl authorities at the
- 4 Pentagon if we thought it would actually help move things.
- You have an open you know, sort of door, I think with
- 6 Democrats and Republicans. I have come to believe that
- 7 culture is critical. The idea that a mid-level contracting
- 8 officer is going to break out and do something new when
- 9 they're not getting their pressure in a chain of command
- organization is like saying that, you know, Senator
- 11 Wicker's mid-level staff should be doing something on his
- 12 behalf. At the end of the day, the buck stops with him.
- And so I think a Reform-minded Secretary of Defense,
- 14 again, I'm not talking about party, is the most important
- thing to taking this on and prioritizing it. I hope that
- 16 the Secretary of Defense again, gets through what I see as
- 17 really sort of side issues and gets back as he says, he
- wants to, war fighting, which is the speed of decision
- making and taking a home hold of that acquisition system
- 20 and changing it.
- But to me, this is about culture. And until we get
- that right, we're just going to be spinning our wheels. I
- would also note that you guys, you know, in the private
- sector, you get to gamble with your shareholders or with
- your investors', money, gambling with taxpayer dollars is



- just a higher threshold, right? It's going to be a higher
- 2 threshold. It's never going to be like the private sector.
- 3 And we all complain when the F-35 goes over budget and all
- 4 these things because they're wasting taxpayer dollars.
- 5 So there's a conundrum there that doesn't make DOD
- 6 perfect as an analogy for the private sector. But we're in
- 7 violent agreement that we need to do something to speed
- 8 things up. I just think it has to be top down. And I hope
- 9 we can push that agenda in a bipartisan way together.
- In the meantime, I do have to say, following on what
- 11 Senator Kelly just said, Senator Wicker, we have a
- 12 constitutional issue going on right now, where this body
- has appropriated money for defense programs and a million
- 14 other things. And the Trump administration has come in and
- contravened your own and all of our guidance on programs in
- the past, I'm not talking about programs in the future,
- 17 every president gets to decide how they want to create
- 18 programs that they want to implement.
- But for things that have already been appropriated,
- 20 right now, the military health system as, research projects
- 21 are all on hold. Talk about service members safety and
- 22 health, funding for the Fisher House, wounded Warriors on
- 23 hold, all Army contracts on hold. Okay. I don't see how
- this isn't just purely throwing the baby out with the bath
- 25 water.



- I get that Mr. Trump is going to make changes. I won
- on the same ballot as Mr. Trump. I understand that, but
- 3 this is to me breaking the constitutional rules that we
- 4 have set up here. So, I would assume we're going to see
- 5 some serious action from this body, I hope, on a bipartisan
- 6 basis.
- 7 I've filibustered my entire time but all this to say
- 8 Mr. Chairman, you have a friend in this cause. I want to
- 9 make it a top-down cause so we actually move the needle,
- 10 otherwise, we're just giving scraps at the margins for
- 11 contract officers who are going to do what their boss says,
- 12 If their boss demands action. I'll leave it at that.
- 13 Chairman Wicker: Thank you, Senator Slotkin. And let
- 14 me just respond very briefly. I think all three of these
- witnesses have not had a chance to read the memo to which
- 16 you and Senator Kelly referred and questions are being
- 17 asked around Capitol Hill at this very moment about that
- 18 and they'll be more visiting about that issue.
- 19 So it is almost the end of the first round, and I'm
- 20 the last questioner. Let me ask a thing or two. Mr.
- 21 Sankar, you said the stockpile is not the deterrent, the
- 22 flow of mass production is the deterrent. And Mr. Diller,
- you say the factory is the weapon, and if we need more
- 24 factories for sustainment and war, we should be buying that
- 25 capacity. Now you're both saying the same thing there, are



- 1 you not nodding?
- Now, Mr. Diller, when you say we should be buying that
- 3 capacity, you're not talking about ownership of the
- 4 factory, are you?
- 5 Mr. Diller: No, Senator. But what I'm suggesting is
- 6 that today we have a crisis in sustainment. And there is
- 7 an instance because of the -- both from a national
- 8 industrial based perspective and because of some of the
- 9 challenges in defense innovation, we have locked our depots
- and our sustainment out of being able to actually create
- the parts that are needed today to fill the multi-trillion-
- dollar portfolio we have. Those depots could actually
- 13 field today, factories as a service, that would have
- incredible agility to ensure that the legacy force that we
- must have, that we've invested trillions of dollars in, is
- 16 ready to fight tonight. That needs to be a wildly agile
- 17 factory as a service.
- 18 That same factory, as honorable Geurts had mentioned,
- becomes this network then, so that small companies are able
- 20 to go build entirely new things. If we call these hedge
- 21 portfolios, right? The autonomous light a charitable mass,
- the agility of these factories that are available in an
- entirely new step of American manufacturing, that is
- 24 possible today.
- Our depots could be an incubator for that type of



- thing to actually go through digital certification
- 2 processes for tools like this to be able to save the
- 3 taxpayer dollars, to be able to drive information
- 4 Chairman Wicker: As Mr. Diller holds up the hubcap.
- 5 Mr. Diller: Yes, sir. Yes.
- 6 Chairman Wicker: Now, Mr. Geurts, shall we make it
- 7 unanimous on that point?
- 8 Mr. Geurts: Yes, sir. And I'd also add we are really
- 9 enthusiastic about prototyping and we're completely
- 10 underperforming in production. We are actually not
- 11 producing much new capability, and in the cases in
- 12 replicator we have, we may spin up a production and then
- 13 shut it down six months later. So I do think a focus on
- 14 production, both in terms of capacity, how to network that
- production, how to digitize that production and get to
- 16 producing more and getting our iteration speed up, would do
- 17 two things.
- One, it would allow us to grow this manufacturing
- 19 capacity. That in itself is deterrence. Secondly, it
- 20 would allow us to field new things to the field versus just
- 21 doing one-off prototypes and doing one-sie two-sies.
- Chairman Wicker: Mr. Sankar, in your white paper, you
- 23 say on page nine, that our centralized predictive program
- 24 budgeting management and oversight process values time
- 25 spent rather than time saved. Will you elaborate on that?



- 1 And then we'll let our other two witnesses give their
- 2 views,
- Mr. Sankar: The way that we want to provide resource
- 4 is based on how expensive is it to do something. But that
- 5 is a complete disincentive for reimagining things. My
- 6 critique around production versus stockpile is really that
- 7 we do not have the necessary incentive to design for
- 8 manufacturability.
- 9 You know, we are so proud of the exquisite weapon that
- 10 we made as a prototype to -- point here, but we didn't
- 11 think through, can I make 10,000 of these? How long will
- 12 it take, you know, if it takes two years to build a single
- munition, that's not going to scare sheep, you know, so
- 14 really, we need to be thinking about manufacturability from
- 15 the very beginning here.
- And that I think then leads us to thinking about
- 17 entirely different classes of weapon systems and different
- 18 ways of organizing ourselves and our industrial base to go
- 19 accomplish that.
- 20 Chairman Wicker: Honorable Geurts, time spent versus
- 21 time saved.
- Mr. Geurts: I would agree with that. I do think we
- 23 have to differentiate the market. So the DOD buys a lot of
- 24 stuff. And so we're not -- we need lots of different ways
- to do things, not try and pick one that's, you know, we'll



- 1 do everything well. And I think that's an opportunity. I
- think the second piece is, we need to get to continuous
- 3 competition on many of our products, so that we can bring
- 4 in new entrants and continually drive the system.
- Because right now, because of the time to budget for a
- 6 program and the rigidity of all the planning, it's kind of
- 7 a big bang theory. We have one big contract award, and
- 8 then you're stuck with that for 15 or 20 years versus what
- 9 I would say, continuous competition, which then
- 10 incentivizes all the kind of behaviors we're looking for.
- 11 Chairman Wicker: Mr. Diller, anything to add?
- Mr. Diller: The technology is there. It is available
- to rapidly transform our department of defense today. It's
- 14 adoption, adoption, adoption. We have to engage with this
- bureaucracy, accelerate this at bureaucracy, so that we are
- 16 actually mobilizing that entire industrial base because it
- 17 is urgent. This is a critical time and I am very, very
- 18 optimistic that America is going to be able to build
- 19 together.
- 20 Chairman Wicker: Thank you very much. Senator
- 21 Slotkin, do you have other questions? I do. We'll begin
- 22 round two, and its only Senator Wicker participating.
- Gentlemen, Mr. Sankar thinks it's a shame that
- 24 companies that used to make other products, non-defense
- related, are no longer in that business, only 6 percent.



- 1 Chrysler used to make cars and missiles. Ford made cars
- 2 and satellites. General Mills made cereal and artillery
- 3 and guidance systems. Does he have a point there, Mr.
- 4 Geurts?
- 5 Mr. Geurts: Absolutely. The second I would add to
- 6 that is that we've also systematically lost the middle of
- 7 our industrial base. And this is where I think a lot of
- 8 the venture backed companies, we need to scale him quickly
- 9 so that we've got companies that are agile enough to move
- 10 quickly, right? But big enough to move at scale. And
- 11 that's one of the things I think as we build this
- industrial network of the future, we've got to build back
- the middle of the industrial base.
- 14 Chairman Wicker: Mr. Sankar, there's a reason that
- 15 happened. And can it be reversed?
- Mr. Sankar: Yeah, it can be reversed. I think we
- 17 have to remember the industrial base we had today; we think
- 18 of it as Northrop Grumman, but it was Jack Northrop. It
- 19 was Leroy Grumman, it was Glen Martin, not Lockheed Martin.
- 20 You had these difficult founders. We would recognize them
- 21 as Elon Musk type personalities who were interested in
- 22 doing something big.
- It was not about this quarter's results. It was
- 24 actually, they were dual purpose, not just dual use. You
- 25 know, it wasn't about the cereal. It was everything I



- 1 learned building machinery to process cereal, I could turn
- 2 into artillery to defend the nation.
- And we have those founders back. \$120 billion of
- 4 private capital has been deployed into national security
- 5 companies. That's funding founders. It's funding the
- 6 Palmer Luckys of the world, the Sang brothers of the world.
- 7 We need to empower them. And I think that's how we get
- 8 back this long-term commitment to the problems and
- 9 challenges our nation actually face, the
- 10 reindustrialization of the nation.
- We can't have an anodyne view of capital. Europe has
- 12 created zero companies worth a hundred billion dollars or
- more in the last 50 years. We created all of our trillion-
- 14 dollar companies in America in the last 50 years, with
- 15 founders.
- 16 Chairman Wicker: Is that a mindset or a statute that
- 17 needs to be changed?
- 18 Mr. Sankar: I think it's a mindset. It's,
- 19 recognizing that within our buyers in the Pentagon as well,
- you know, why did these people leave the industrial base?
- You know, as much as we want to point at the last supper,
- 22 as the moment, it actually, those conversations started in
- the boardrooms of America in the seventies and the
- eighties.
- 25 And what was slowly building up, is where I started



- 1 with my oral, is that the Pentagon is a bad customer. It
- 2 doesn't actually -- if you just look at it purely
- 3 financially, it makes more sense for Ball to sell aluminum
- 4 cans than to build satellite buses. And as a monopsonist,
- 5 the Pentagon needs to look at that and say, how do we fix
- 6 that? I want Ball building satellite buses. I want the
- 7 American industrial base, not a group of yes men in the
- 8 defense industrial base who have permuted their businesses
- 9 to serve just me.
- 10 Chairman Wicker: On that issue, Mr. Diller, do you
- 11 wish to weigh in?
- Mr. Diller: Certainly, look for all the pejorative
- things that we've said about the Department of Defense. It
- 14 has done incredible things, and it has actually an
- opportunity to do something that I don't know that any
- other institution can. And it has created incredible
- 17 things. I was a program manager in the global positioning
- 18 system. It drove adoption of one of the most incredible
- 19 networks in the world.
- There are instances where DOD has been the catalyst
- 21 for wild change. And with all the great things that we've
- 22 said about commercial, you cannot look at a downward trend
- for many decades now of the loss of not defense industrial
- 24 manufacturing, but of American industrial manufacturing.
- 25 And now, Chairman, is the time for DOD to be that



- 1 catalyst again. It is possible to do exactly what Shyam
- 2 has said. Divergent is today manufacturing cars. We are
- 3 today printing missiles. We are today printing satellite
- 4 buses in the same exact factory floor.
- If we look to a future that is going to actually
- 6 counter an adversary, there are people who dislike change.
- 7 There are three groups of people that very much dislike
- 8 change. One, they're the bureaucrats. They like to
- 9 continue doing what they have done in the past. I would
- 10 say industry to some degree, doesn't like change, because
- 11 we have built ourselves on legacy approaches to
- 12 manufacturing. And they, look at this and they don't want
- 13 the uncertainty.
- 14 The last group that doesn't like change is the enemy.
- 15 The enemy hates change. If we want to deter, we must be
- 16 agile. We must force the bureaucracy to be agile. We must
- 17 force the industry to be agile. That can happen today, but
- 18 America cannot afford \$200 million facilitation cost for
- every new munition factory, especially when it's a legacy
- 20 munitions factory.
- It is possible today to create a network of 21st
- 22 century AI-driven industry 5.0, pick your buzzword, but it
- does not look like anything that has ever been manufactured
- in the history. It is a step change. It literally is
- 25 going from the stone age to the bronze age. It could



- 1 happen today. It's the only way that you can afford real
- deterrence. Where you have a dual use factory, you have
- 3 dual use capabilities that come out of that factory. You
- 4 have dual use capital that is coming from an incredible
- 5 source of American strength, and most importantly, it is
- 6 dual use talent.
- We can't talk about a workforce problem; we're telling
- 8 our sons and daughters to go back and pound rivets and weld
- 9 in the same way that their great grandparents did.
- 10 Children have grown up playing Lego, robotics, playing in
- 11 AI. That is not what our factories look like today.
- 12 It could be, this committee could be the catalyst for
- that change, and is the only way that we are going to
- 14 create real deterrence in a timely manner that must happen
- 15 for America to remain in its lead, both from a
- 16 manufacturing perspective, from an economic perspective,
- from a technological perspective, and from a military
- 18 perspective.
- 19 Chairman Wicker: By the same token, Mr. Diller, we
- 20 hate it when our enemies engage in change.
- Mr. Diller: 100 percent.
- Chairman Wicker: Yes, absolutely. Well, a couple
- more questions and you've been most helpful to us. Mr.
- 24 Geurts, let's talk about the requirements process. Does it
- often overly specify solution that then gets turned over to



- 1 industry? Should programs be able to develop multiple
- 2 capabilities within a requirements portfolio broadening the
- 3 scope of the acquisition management?
- 4 Mr. Geurts: Yes, sir. I think we need to transform
- our thinking into -- we've got a problem statements, not
- 6 requirement statements, and then you empower a portfolio
- 7 acquisition executive to go tackle those problems with
- 8 close association to their operator.
- 9 Back to your previous question, we have program
- 10 managers that want to go out and meet need, right? They
- 11 want to go drive change. They have not been incentivized
- or rewarded for moving outside the system. With the top
- 13 cover of this committee is putting forth in the Forge Act,
- 14 with those actions, I think you'll see, you know, that
- 15 culture Senator Slotkin talked about. That's what we've
- 16 got to go off and attack.
- 17 Chairman Wicker: Thank you. And, finally, Mr.
- 18 Sankar, do you sometimes find yourself competing not with
- other businesses, but with the government itself?
- Mr. Sankar: I would say quite often. More often do
- 21 we find ourselves competing with the government than with
- other industries. Sometimes that takes the form of FFRDCs,
- where they have a privileged position. You could say
- there's maybe even a conflict of interest where they're
- deciding what needs to be built and then specifying how



- 1 it's going to be built in a way that is structurally anti-
- 2 commercial.
- I'd say the very beginning of our company, we were a
- 4 threat to certain programs of record. And the way that
- 5 they were doing it. I don't think the industrial players
- 6 were resisting us so much as the acquisition community was
- 7 resisting us, despite the signal from the war fighter. And
- 8 I think we solved these problems by embracing the fact that
- 9 there were going to be heterogeneous approaches. There was
- 10 going to be constant new technology insertion, and that
- 11 actually you as a program of record, don't have a monopoly.
- 12 There's someone, a corridor down who could move faster on
- this new capability, and that provides you the incentive to
- 14 move faster.
- 15 Chairman Wicker: Thank you, gentlemen. This has been
- one of the most informative, two and a half hours that I've
- ever had as a member of this committee. And also, I'm
- 18 proud of the members of this committee, and I hope you are.
- 19 There's a lot of talent and a lot of brain power and a lot
- of thought that has gone into this hearing, and I
- 21 appreciate the participation. We had a 100 percent
- 22 attendance today, and I appreciate that.
- Now, let me check and see if I need to make an
- 24 announcement with regard to the record remaining open or
- 25 anything of that nature. There will be questions for



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1
    record, and we'll notify the witnesses as to the time
 2
    constraints. And with that, the hearing is adjourned.
          [Whereupon, at 12:00 p.m., the hearing was adjourned.]
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