



Ronald Reagan
INSTITUTE

March 2026

Center for Peace Through Strength
reaganfoundation.org/nsib





“We’re leading a revolution in technology, we’re pushing back the frontiers of space, and if we give our workers the tools they need—in industries old and new—give American workers the proper tools, and they can outproduce, outcompete, and outsell anybody, anywhere in the world.”

President Ronald Reagan || *Remarks at a Reagan-Bush Rally in Boston, Massachusetts, November 1, 1984*



Ronald Reagan

INSTITUTE

NSIB Report Card Team

Roger Zakheim

Director, Ronald Reagan Institute

Rachel Hoff

Policy Director, Ronald Reagan Institute

Rachel Lynch

Policy Associate, Ronald Reagan Institute

Eric Snelgrove

Subject Matter Expert

McKinsey & Company

Knowledge Partner

NSIB Program Advisory Board

Mr. Michael Allen

Managing Director, Beacon Global Strategies; Former Staff Director, House Permanent Select Committee on Intelligence

Mr. Mike Brown

Partner, Shield Capital; Former Director, Defense Innovation Unit

Mr. Eric Chewning

Executive Vice President Maritime Systems and Corporate Strategy, HII; Former Chief of Staff, U.S. Secretary of Defense

Ms. Samantha Clark

Senior Counselor, Palantir Technologies; Former General Counsel, Senate Armed Services Committee

Ms. Tara Murphy Dougherty

CEO, Govini

Mr. Mina Faltas

Founder and CIO, Washington Harbour Partners

The Hon. Eric Fanning

President and CEO, Aerospace Industries Association; 22nd U.S. Secretary of the Army

Mr. Jack Hidary

CEO, Sandbox AQ

Mr. Dan Jablonsky

Chairman and CEO, Ursa Major

Col. Gene Keselman

Executive Director, MIT Mission Innovation Experimental (MIx); Colonel, United States Air Force

Mr. Joe Lonsdale

Managing Partner, 8VC; Trustee, Ronald Reagan Presidential Foundation and Institute

Mr. Gilman Louie

Co-Founder and Managing Partner, America's Frontier Fund; Former CEO, IQT

Mr. Wahid Nawabi

Chairman, President, and CEO, AeroVironment, Inc.

Mr. Doug Philippone

General Partner & Co-Founder, Snowpoint Ventures

Mr. Chris Power

CEO, Hadrian

Mr. Raj Shah

Managing Partner, Shield Capital; Former Director, Defense Innovation Unit

Mr. Bob Simmons

Vice President, Defense, Space & Security – Government Operations, The Boeing Company

Mr. Tobin Smith

Senior Vice President for Government Relations and Public Policy, Association of American Universities

Mr. Trae Stephens

Co-Founder and Executive Chairman, Anduril Industries; Partner, Founders Fund

Mr. Dale Swartz

Partner, McKinsey & Company

Mr. Matt Tait

President and CEO, MANTECH

The Hon. Jim Talent

Former U.S. Senator

The Hon. Mac Thornberry

Former Chair, House Armed Services Committee

Mr. Josh Wilson

CEO, LMI Solutions

Introduction

The conversation about technological superiority in the era of strategic competition has led to major reforms and new initiatives aimed at leveraging America's innovation edge. But as the concept of the National Security Innovation Base (NSIB) gained prominence in recent years, there was no way to assess the impact of those reforms and initiatives. The NSIB Report Card, published by the Reagan Institute's Center for Peace Through Strength, fills that gap. It has become an authoritative and anticipated annual evaluation of the national security innovation ecosystem. Now in its fourth year, the NSIB Report Card is revealing important trends: where we are improving, where we are regressing, and where we are standing still—and therefore, falling further behind.

The NSIB ecosystem includes government agencies and actors, research laboratories, universities, innovative private sector firms, investors, and global allies and partners. The common purpose and coordinated efforts of these key stakeholders are vital to sustaining our competitive advantage and achieving U.S. national security objectives. This Report

Card measures the health, effectiveness, and resilience of the NSIB ecosystem and proposes recommendations for improvement.

As America's adversaries continue cooperating to undermine U.S. interests, the dynamism of the American private sector remains the engine of U.S. innovation. On the government side, leaders in Washington have mobilized to better leverage our innovation ecosystem for U.S. national security goals. Now, the building blocks are in place to deliver systemic transformation and modernize capabilities at speed and scale. But significant hurdles remain, with public sector inefficacy on coordination, funding, and procurement hindering progress toward technological superiority—even as the People's Republic of China continues to outproduce the United States.

The United States has everything it needs to secure its military, economic, and technological superiority: a free and open political system that empowers its best and brightest to innovate, a prosperous economic base, and a military that is the envy of the world. The trends identified in

this report card highlight both sources of strength and glaring areas of weakness that whittle away at America's advantage and provide openings for its adversaries. The pace and gravity of global competition demands decisive action to address points of vulnerability and mobilize the full potential of American innovation. With new leadership prioritizing working with industry, the rules of the game have been rewritten. Together, the NSIB ecosystem must sustain this progress to create actionable change.

As knowledge partners for the Reagan Institute's NSIB Report Card, McKinsey & Company provided the fact base to support this assessment, and Eric Snelgrove consulted as a subject matter expert. The Advisory Board, composed of bipartisan and cross-sector national security stakeholders, provided invaluable input and feedback to shape the assessment, findings, and recommendations. The analysis was also informed by a series of interviews with current and former leaders from both the public and private sectors. We hope this report card serves as a useful policy tool for actors across the NSIB ecosystem.

Methodology

Structured, Repeatable Approach

1. Identify the set of indicators that are most diagnostic for assessing the health of the NSIB
2. Formulate key assessment questions and criteria to evaluate each indicator
3. Develop set of key metrics to measure each criterion
4. Assign grading for criteria and indicators based on comprehensive fact base
5. Generate recommendations for improvement
6. Update indicators, fact base, and grades on an ongoing basis

Grading Rubric

- A** Best-in-class performance globally that lives up to U.S. potential; critical source of American distinctiveness
- B** Multiple key areas of strength, with some room for growth
- C** Vulnerabilities and/or inconsistencies identified, with flat-to-declining trendline
- D** Ongoing major vulnerabilities that are significantly undermining health of the NSIB
- F** Catastrophic area of weakness that will have major implications for American technical, military, and/or economic leadership, if unaddressed

Trendline Performance evolution against March 2025 NSIB Report Card

⬆ Improving

↔ Neutral/flat

⬇ Deteriorating

NSIB Report Card grades represent a holistic baseline assessment that incorporates the quantitative and qualitative analysis underlying each indicator while also (where appropriate) benchmarking performance against U.S. potential and/or the performance of other countries. Annual reports measure improvement and/or deterioration from the prior year’s report card—as well as lack of substantive change, which may translate to a lower grade relative to the prior year.

NSIB Report Cards: Key Takeaways Over Time

2023



Clear customer and modernization misalignment

Broad agreement that **the need for faster NSIB reform** has not translated into execution, as **misaligned incentives, weak coordination, and unclear paths** to programs of record leave the U.S. with a **rapidly closing window to act**.

2024



Breakthroughs aren't breaking through

Despite **pockets of progress**, U.S. national security innovation remains **stuck at an inflection point**, where **poor customer clarity, weak modernization, and structural barriers** prevent promising advances from scaling into fielded capabilities.

2025



A chance for bold leadership

As complexity of threat environment and **pace of global competition reach fever pitch**, new leadership in Washington has an **opportunity to move faster** and **be bolder** to address challenges.

2026



Building blocks for transformation

New leaders have laid the **building blocks for systemic defense transformation** this year, but progress will depend on whether stated intent translates into **durable budget authority, contracting and acquisition behavior changes, and scaled execution**.

Key Takeaways: 2026 NSIB Report Card

New leaders have laid the building blocks for transformation

- Stronger demand signals (e.g., acquisition reform, AI strategy, reducing duplicative programs)
- Focus on faster, output-driven production and procurement of capabilities
- FY26 defense budget exceeds \$1T with passage of reconciliation bill and defense, with calls for increased topline of \$1.5T in FY27
- Refined critical technology priorities emphasize a commercial-first acquisition and investment approach

Pockets of DIB are transforming, but real progress remains limited

- Disruptors continue to build momentum across autonomy, sensing, munitions, space, AI
- Select cases of DIB innovating ahead of demand, but stronger USG signaling is needed
- DIB is beginning to invest in manufacturing capacity, but talent and infrastructure gaps remain
- Supply chain is beginning to rebuild across critical raw materials, energetics

Systemic transformation requires infusion of capital and overcoming structural hurdles

- Institutional private capital entering defense at industrial scale, and PE/VC flows continue to accelerate, though concentrated in downstream applications
- Ongoing political turmoil (e.g., CRs, government shutdowns) threatens stability and signaling
- Federal budget allocation is misaligned, with less than 1% of Pentagon contract dollars going to defense tech
- Production and scaling of modernized capabilities remains slow and limited

New leaders have laid the building blocks for systemic defense transformation this year, but progress will depend on whether stated intent translates into durable budget authority, contracting and acquisition behavior changes, and scaled execution.

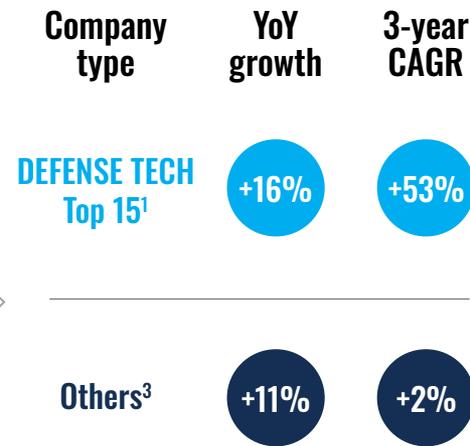
Key Chart: Pentagon spending on defense tech has doubled but still accounts for less than 1% of total contract dollars

Pentagon Obligated Dollars to Defense Tech and Others (2023-2025, \$B)



% of total pentagon obligations

	FY23	FY24	FY25
DEFENSE TECH¹	0.4%	0.8%	0.8%
TOP 3²	0.3%	0.7%	0.7%
OTHERS³	99.6%	99.2%	99.2%



- Top defense tech companies are increasingly capturing funding obligations, doubling market share from 0.4% to 0.8% between FY23 & FY25—however, this still represents less than 1% of total contract dollars.
- The top 3 defense tech companies (SpaceX, Palantir, Anduril) have a greater combined market cap than the top 5 primes combined despite accounting for 0.7% of total Pentagon obligated dollars.
- Disruptor funding remains overwhelmingly concentrated in top 3 companies, accounting for 84% of total defense tech funding in FY25.

1. Top 15: Major defense tech companies: SpaceX, Palantir, Anduril, Saronic, Sierra Space, Astranis, Castelion, Shield AI, Skydio, Applied Intuition, Cerebras, Dataminr, Scale AI, Vannevar Labs, Hadrian 2. Top 3: SpaceX, Palantir, Anduril 3. Others: Includes defense primes, engineering services providers, and any other Pentagon contractors

Overview of Recommendations

CHALLENGES TO ADDRESS

Lack of multi-year demand signals

HOW TO IMPROVE

Strengthen the government's demand signal so private capital and industry can scale with confidence

- Expand Advance Market Commitments (AMCs) to create predictable, multi-year procurement signals
 - Modernize budget and acquisition data systems to increase transparency and execution accountability
 - Reduce uncertainty caused by annual appropriations volatility
-

Slow scaling pathways at home and with allies

Streamline how innovation moves from development to deployment and export

- Digitize and fast-track FMS/DCS processes to meet allied demand at speed
 - Enable iterative delivery and multi-country licensing models
 - Prioritize and resource Edge AI for contested environments to ensure operational relevance
-

Inadequate infrastructure and workforce for scaling

Strengthen the foundational inputs and industrial base required for sustained advantage

- Launch a national defense manufacturing apprenticeship pipeline
 - Accelerate the standup of a nationwide network of shared commercial classified facilities
 - Align labs, FFRDCs, and UARCs to uniquely governmental gaps and accelerate transition relevance
-

Additional recommendation details on pages 36–37

Definitions of Key Indicators

“Outputs” of a Strong NSIB Ecosystem

- 1 Defense Modernization** Translation of innovation into national security capabilities with production at speed and scale through agile acquisition models
 - 2 Innovation Leadership** Overall quality of U.S. research and commercialization in priority technologies and status as a center of global knowledge networks
 - 3 Pull-Through for Broader National Priorities** “Multiplier” effect of NSIB on broader economy and government effectiveness
-

“Inputs” Driving U.S. National Security Innovation

- 4 Customer Clarity** Demand signal for customer (government) innovation priorities, including funding and acquisition pathways to match the aspiration
 - 5 Innovation Capital** Holistic set of public and private financial capital—along with non-financial assets and infrastructure—available to resource the NSIB
 - 6 Private Sector Innovator Base** Broad-based, self-innovating, forward-leaning ecosystem of traditional defense firms, startups, and commercial hyperscalers engaged in NSIB-relevant efforts
 - 7 Public and Civil Innovation Base** Defense/national labs, other FFRDCs/UARCs, and academic institutions developing (and protecting) national security-oriented research
 - 8 Manufacturing Capacity and Industrial Base** Resilient, innovative production base and infrastructure that enables innovators to deliver on NSIB modernization and other strategic priorities
 - 9 International Alliances and Partnerships** Level of linkage between U.S. and international partners (e.g., IP rights, data sharing)
 - 10 Talent Base** Pipeline of domestic and foreign-born talent trained and working in NSIB-relevant fields across the public and private sector
-

Grading Overview

	2024 Grade	2025 Grade	2026 Grade	Trend	Grading Rationale	
Outputs	1. Defense Modernization	D	D	D	→	Defense modernization continues at a slow pace with pockets of disruptive capabilities emerging within select services (e.g., Army & Space Force). Major program misses across the services continue to hamper broader modernization efforts. Innovative procurement approaches are gaining traction; however, concerns persist around the Pentagon's ability to deliver at scale and speed using new pathways (e.g., delays for MTA and MDAP programs).
	2. Innovation Leadership	A-	A-	B+	↓	The U.S. maintains status as a global leader in innovation; however, China is rapidly closing the gap in critical areas, including next-generation telecommunications and AI. China has seen a boom in high-quality research output, with Chinese research universities quickly climbing global rankings amid Chinese institutions outpacing U.S. institutions in quality research output.
	3. Pull-Through for Broader National Priorities	B	B	B	→	U.S. defense spending remains steady as a share of GDP, reinforcing economic growth. The Pentagon is leaning into innovation, crowding in private capital for semiconductors and next-gen energy resilience, but cross-agency collaboration remains low. DOGE generated savings, though reinvestment plans remain unclear.
Inputs	4. Customer Clarity	D	D+	B-	↑	The Pentagon's modernization intent is clear and backed by renewed spending commitments with supplemental reconciliation funding and FY26 defense appropriations, as well as calls for a \$1.5T FY27 budget. SECWAR's "Acquisition Transformation Strategy" reinforces a deliberate push for faster, output-driven acquisition. Still, execution is constrained by appropriations delays, stop-gap funding, and limited visibility from appropriation to obligation.
	5. Innovation Capital	B	B+	B+	→	Private capital pools continue to grow with surge in VC, PE, and emerging scaled investments from institutional investors. While the U.S. continues to lead gross R&D expenditures globally and funding for Pentagon is projected to grow, funding for NSF and NASA—which support core NSIB priorities and basic research—is projected to decline and unlikely to be offset by private investment.

Grading Overview

Inputs	Indicator	2024 Grade	2025 Grade	2026 Grade	Trend	Grading Rationale
	6. Private Sector Innovator Base	B	B+	A-	⬆️	Dual-use and non-traditional players are expanding their footprint, capturing a small but growing share of Pentagon obligations (<1%) while channeling capital into scaling production. Investor confidence in defense tech is at an all-time high as disruptors deepen partnerships with primes and peers. Innovators are deploying internal R&D capital ahead of confirmed Pentagon demand.
	7. Public / Civil Innovation Base	C+	C	C-	⬇️	The U.S. remains the global leader in public R&D, but inflation-adjusted spending has stagnated since 2010, with China narrowing the gap. The Pentagon has sharpened research alignment through challenge-based awards, but cuts to basic research threaten long-term capability. Escalating state-backed cyber intrusions further heighten the need for stronger IP protection.
	8. Manufacturing Capacity and Industrial Base*	--	D	D+	⬆️	The U.S. is moving to increase defense manufacturing throughput, from critical mineral sourcing and refinement to advanced manufacturing and footprint expansion. Public and private capital are scaling production across the stack, but structural fragilities remain—particularly in sub-tier supply chains.
	9. International Alliances and Partnership	C	C	C-	⬇️	While the U.S. is pursuing global defense innovation and collaboration on NSIB priorities through new partnerships, tangible progress on implementation has been limited (e.g., AUKUS) amid concerns surrounding the efficacy of joint-efforts (e.g., NATO Innovation Fund). Pledges from NATO allies to increase defense spending and meet capability targets bring potential for deeper partnership across defense tech priorities.
10. Talent Base	D	C-	D+	⬇️	Significant work remains to rebuild the A&D talent base: 1.9M manufacturing jobs will go unfilled through 2033, 29% of the A&D and NSIB workforce is nearing retirement, and turnover runs 4x the national average. AI-enabled productivity tools and advanced manufacturing will help, but persistent talent attraction issues and new restrictions on international STEM recruitment pose an existential risk to production ramps and long-term innovation.	

*This was a new indicator in the 2025 NSIB Report Card



1. Defense Modernization

OVERALL GRADE: **D** TREND:

Translation of innovation into national security capabilities with production at speed and scale through agile acquisition models

TAILWINDS HEADWINDS

Summary

Defense modernization continues at a slow pace with pockets of disruptive capabilities emerging within select services (e.g., Army & Space Force). Major program misses across the services continue to hamper broader modernization efforts. Innovative procurement approaches are gaining traction; however, concerns persist around Pentagon's ability to deliver at scale and speed using new pathways (e.g., delays for MTA and MDAP programs).

At a glance...

18

Additional months needed to deliver initial capabilities to major programs

23%

Of 22 reviewed MDAPs planned to or had created a minimum viable product

10%

Frontline effectiveness of U.S. drones vs. 90% for Ukrainian drones

What Happened in 2025

- CDAO rolled-out GenAI.mil to 3M+ service personnel to augment unclassified productivity amid announcement of 7 AI pace-setting-projects (PSPs)
- Big Beautiful Bill injected \$150B in funding across core NSIB priorities (e.g., +24% growth in autonomous, +72% growth in hypersonics) for 2 years
- Production and scaling of modernized capabilities remains slow and limited
- Avg. timeframe to deliver major programs increased by 18 months since 2024 to an avg. of 12 years
- U.S. struggling to match drone capabilities demonstrated in Russia-Ukraine war with Ukrainian drones being more effective and 16-160x less expensive

What we're looking for in 2026

- Rapid fielding of capabilities funded in FY25 (e.g., UAS, hypersonics, low-cost precision munitions)
- Implementation of acquisition reform laid out in FY25

Criteria Details

Criteria Grades	Datapoints since last report card
<p>D </p> <p>1.1: NSIB innovations are converted into modernized U.S. national security capabilities.</p>	<ul style="list-style-type: none"> + Department introducing new capabilities across select services: <ul style="list-style-type: none"> • Air Force: High Accuracy Detection & Exploitation (HADES) jets operational;¹ B-21 program continues to advance through prototyping ahead of mfg. ramp² • Space Force: First launch of 21 PWSA T1 satellites for low-latency communication to support advanced missile warning and tracking^{3,4} • Army: Fielding low-cost 3D-printed attritable drones to TIC units;⁵ first LRHW battery rounds delivered to brigade combat team in December 2025^{6,7} • Broader defense: Coast Guard expanding V-BAT to nearly every ship class;⁸ DHS deploying Army systems along border for surveillance & sensing⁹ — Big program misses and cancelations continue to delay defense modernization across services: <ul style="list-style-type: none"> • Army: M10 Booker canceled after \$1.1B+ in development costs over last 5 years¹⁰ • Navy: Hypersonic Air-Launched Offensive (HALO) canceled due to rising cost concerns¹¹ • Air Force: Block-4 F-35 average delivery delays increased from 61 days in 2023 to 238 days in 2024¹²
<p>C- </p> <p>1.2: U.S. effectively adopts these capabilities through modernized models for acquisition.</p>	<ul style="list-style-type: none"> + DIU continues to prototype and field dual-use tech: Advanced Nuclear Power for Installations (ANPI) program launched in 2024, 8 commercial companies eligible for OTAs in 2025 with a goal of 2 reactors by 2030;¹³ launched Transition of Quantum Testing (TQS) which went from award to execution in <6mo's¹⁴ + OTA spend resilient through administration transition: Pentagon awarded \$17.7B in OTA contracts in FY25, down 4% from FY24 (\$18.5B), driven by a Q2 FY25 slowdown; however, OTA dollars tend to flow to consortiums that provide incomplete data, muddying full assessment of OTA program outcomes^{15,16} + Services have established initiatives to get COTS capabilities into warfighter hands faster: Army's Transformation-in-Contact (TIC) is facilitating testing of next-gen equipment in live training environments, allowing for faster capability integration and acquisition decisions¹⁷ — U.S. taking steps to modernize procurement, full impact not yet realized: ForGED Act plans to hand prototyping and acquisition power to COCOMs, requiring COTS solutions to be tested prior to procurement; SPEED Act would shrink acquisition timeline from ~26 months to ~5 months by creating a new committee (RAPID) with 60 days to assess cost and feasibility¹⁸ — MTA and MDAP pathways are struggling to deliver: 7 former MTA programs entered pathway with low tech maturity, none were production-ready at program conclusion; only 23% of reviewed MDAPs had an MVP and only 10% of reviewed MTAs tested an integrated fully digital prototype in an operational environment¹⁹
<p>D- </p> <p>1.3: U.S. effectively produces modernized capabilities at speed and scale.</p>	<ul style="list-style-type: none"> + Department continues to scale modernized capabilities: Blue UAS moved from DIU to DCMA to further expedite NDAA compliance for latest commercial UAS systems;^{20,21} DIU, AFRL, and AFWERX launching Blue Manufacturing to help advanced manufacturing companies reach scale;²² Pentagon's Drone Dominance intends to purchase 200,000 low-cost consumer drones by 2027; ^{23,24} LUCAS drone went from concept to fielding in less than 18 months²⁴ + Pentagon beginning to deploy AI capabilities at scale: Pentagon announced 7 PSPs led by CDAO to accelerate AI adoption,²⁵ including GenAI. mil, which leverages leading-frontier LLMs to provide department-wide, IL-5-compliant, generative AI licensing;^{26,27} Advana separated into 3 programs amid surging demand²⁸ (e.g., GAMECHANGER user growth);²⁹ War Data Platform (data integration), WDP Application Services (rationalizing application environments), Advana for Financial Management (audit support)²⁸ — U.S. drone capabilities lag Ukrainian capabilities: American drones continue to be ineffective on the front-lines, Ukrainian drones are 16-160x less expensive and have drastically higher battlefield success rates (90% vs. 10% for US-made)^{30,31} — Risk-averse acquisition culture continues to hamper progress: Average timeframe to deliver initial capabilities for major defense programs increased by 18 months in 2024, from 10 years to nearly 12 years^{32,33,34}



2. Innovation Leadership

OVERALL GRADE: **B+** TREND:

Overall quality of U.S. research and commercialization in priority technologies and status as a center of global knowledge networks

TAILWINDS HEADWINDS

Summary

The U.S. maintains status as a global leader in innovation; however, China is rapidly closing the gap in critical areas, including next-generation telecommunications and AI. China has seen a boom in high-quality research output, with Chinese research universities quickly climbing global rankings amid Chinese institutions outpacing U.S. institutions in quality research output.

At a glance...

8

Of the top 10 global research institutions on the 2025 Nature Index are Chinese

60%

China's lead over U.S. in respective share of top decile publications on hypersonic detection and tracking

50%+

More 6G patents filed by China than by the U.S.

What Happened in 2025

- U.S. continues to lead in number of notable machine learning models (40) & global quantum compute race
- U.S. is promoting global adoption of its AI tech stack, U.S. hardware powers >90% of Chinese LLMs
- China leads in high-quality scientific publications for advanced materials and hypersonic detection
- China continues to lead in global standards for 5G technology and innovation
- Chinese institutions (i.e., universities and other research entities) rank higher globally, and are increasingly conducting defense research

What we're looking for in 2026

- Growth in U.S. technological lead (e.g., AI, quantum)
- Adoption of U.S. AI tech stack globally through ITA's new AI American Exports program
- Output-driven, unified R&D strategy

Criteria Details

Criteria Grades	Datapoints since last report card
<p>B </p> <p>2.1: U.S. leads knowledge output based on key indicators (e.g., patent volume/quality). America defines global tech standards and governance frameworks.</p>	<ul style="list-style-type: none"> <li data-bbox="338 239 1848 356"> + U.S. continues to lead in notable machine learning models, but gap closing: U.S. leads with 40 notable AI models, followed by China with 15, and Europe with 3; however, Chinese models are improving (performance gap against U.S. models was 1.7% in 2025, vs. 9.3% in 2024) and accelerating in development (e.g., Alibaba was a top 3 contributor with 6 notable models, behind 7 each for Google and OpenAI);¹ China outpacing U.S. in AI adoption (e.g., 60% of employees using AI weekly compared to 37% in the U.S.), with 90% integration target across key sectors by 2030² <li data-bbox="338 362 1848 584"> + U.S. maintains global leadership in quantum computing, but lags others in select areas: <ul style="list-style-type: none"> <li data-bbox="386 403 1848 463">• U.S. leads in number and diversity of quantum processing units (QPUs), as well as the number of published research (2019-2023), with 104 published reports vs. China's 61;³ U.S. continues to lead in supercomputing systems with 175 vs. China's 47;⁴ however China's participation in rankings has been decreasing⁵ <li data-bbox="386 477 1848 530">• DARPA advanced 11 companies to Stage B of its Quantum Benchmarking Initiative (QBI), marking a shift toward technical validation,⁶ including Dirac, which develops utility-scale quantum architecture using existing chip fabrication technology⁷ <li data-bbox="386 537 1848 584">• China holds technological edge in specific areas of quantum such as communications, holding 39% of total publications vs. the U.S.' 12%;³ however, U.S. leads with 34% of the most highly cited quantum computing publications³ <li data-bbox="338 591 1848 692"> + U.S. promoting global adoption of American AI technology stack: EO establishes the American AI Exports Program—managed by the International Trade Association (ITA)—to develop and deploy U.S. full-stack AI export packages globally; includes coordination with Small Business Administration's Office for development of AI infrastructure, hardware, and Department of State for foreign service officers and ambassadors⁸ <li data-bbox="338 698 1848 772"> - U.S. continues to trail in 5G/6G standards but is ramping up efforts to bridge the gap: China holds 6,001 6G patents compared to U.S.' 3,909;⁹ the Patent Asset Index, a measure of innovative strength of a patent portfolio, ranks Qualcomm ahead of Huawei in 5G patents families granted; however, Huawei leads in overall 5G patents filed and granted¹⁰ <li data-bbox="338 779 1848 826"> - China is rapidly accelerating pharmaceutical development:^{11,12} China leads in number of clinical trials and is on pace to reach 35% of global clinical trials by 2040;¹² the value of drugs licensed from China to the West has surged to \$48B in 2024, 15 times higher than in 2020¹³
<p>B+ </p> <p>2.2: U.S. is a net knowledge exporter (e.g., global citations, research university rankings).</p>	<ul style="list-style-type: none"> <li data-bbox="338 893 1848 1068"> - China surpasses U.S. in quality scientific publications: China leads in the top decile of high-quality scientific publications across critical domains, with a >50% share lead over the U.S. in subfields like nanoscale materials, electric batteries, hypersonic detection and tracking¹⁴ <ul style="list-style-type: none"> <li data-bbox="386 947 1848 981">• U.S. holds greater share of top 10% publications in select subfields (e.g., quantum computing, small sats, genetic engineering)¹⁴ <li data-bbox="386 987 1848 1021">• China's share of top 10% quality publications for hypersonic & tracking publications is 60 p.p. higher than the U.S.' share¹⁴ <li data-bbox="386 1028 1848 1068">• China may continue to increase its lead in publications as it expands defense-related research contracts in critical tech areas to further improve resourcing for universities (e.g., 55 Chinese universities won at least two AI-related contracts)¹⁵ <li data-bbox="338 1075 1848 1229"> - China outpacing U.S. institutions in scientific research quality and output: <ul style="list-style-type: none"> <li data-bbox="386 1108 1848 1142">• China leads globally in research output, with 42 universities ranked among the top 100, ahead of the U.S. (36) and the UK (4)¹⁶ <li data-bbox="386 1149 1848 1196">• Of the top 10 research institutions according to the 2025 Nature Index (measures research output across high-quality scientific journals), 8 are Chinese; Chinese Academy of Sciences ranked first, followed by Harvard in second¹⁷ <li data-bbox="386 1202 1848 1229">• U.S. retains a strong foothold in corporate research output, with six U.S. based companies in the top 10 while China only has one¹⁷



3. Pull-Through for Broader National Priorities

“Multiplier” effect of NSIB on broader economy and government effectiveness

OVERALL GRADE: **B** TREND:

TAILWINDS HEADWINDS

Summary

U.S. defense spending remains steady as a share of GDP, reinforcing economic growth. The Pentagon is leaning into innovation, crowding in private capital for semiconductors and next-gen energy resilience, but cross-agency collaboration remains low. DOGE generated savings, though reinvestment plans remain unclear.

At a glance...

5.4% Growth in A&D contribution to U.S. GDP

\$600B Pledged in private investment from ~130 companies for U.S. semis & electronics manufacturing

\$1.5B Allocated to OSC by Big Beautiful Bill

What Happened in 2025

- SBA expanded first round of SBICCT awardees, supporting 15 states and DC
- U.S. government bolstering critical tech output through CHIPS, Genesis, and increased OSC lending authority
- Department expanding advanced nuclear energy development through Project Janus
- Early-stage national security funding diminished through the lapse of SBIR funding
- Limited documented impact on increasing cross-government collaboration per FY25 National Defense Industrial Strategy Implementation Plan (NDISIP)

What we’re looking for in 2026

- Increased output resulting from 2025 OSC funding
- Documented increase in cross-governmental collaboration
- Early outputs from Genesis Mission & Janus Program

Criteria Details

Criteria Grades	Datapoints since last report card
<p>B+ </p> <p>3.1: NSIB innovation improves American economic and competitiveness outcomes.</p>	<ul style="list-style-type: none">  A&D contribution to nominal GDP rises, but share consistent: A&D’s total contribution to nominal GDP rose +5.4% from 2023 to 2024 to \$443B¹ (greater than the 2% increase from 2022 to 2023),² but share of nominal GDP was consistent at 1.5%¹ (1.6% in 2023);² A&D accounts for 1.4% of U.S. workforce with salaries 56% higher than the national average¹ (previously 50% higher)²  U.S. government semiconductor investments continuing to benefit broader economy: CHIPS Act resulted in semiconductor companies announcing 130+ projects³ (up from 90+ in 2024)⁴ across 28 states now totaling over \$600B in private investment³ (up from \$450B in 2024)⁴ for U.S. semiconductors and electronics manufacturing, creating >500,000 American jobs; Department of Commerce announced \$32.5B in grant awards and \$5.9B in loans to 32 companies across 48 semiconductor projects,³ in addition to taking an \$8.9B equity stake in Intel⁵  Pentagon expands advanced nuclear energy development: Following EO 14299,⁶ Army announced JANUS Program to build commercial microreactors in-partnership with commercial providers and DIU across 9 sites amid expanding need for resilient energy production^{7,8}  SBIR/STTR drives economic impact: Since 2020, top 25 awardees have generated \$1.5B in commercialization contracts, frequently leading to acquisition by larger firms, while producing outputs across priority sectors (e.g., 12% of new drug approvals)⁹  OSC lending authority scaling to improve security and economic resilience: The Big Beautiful Bill allotted \$1.5B to the Office of Strategic Capital (OSC), enabling OSC to lend out \$200B over four years¹⁰ to improve economic chokepoints (e.g., reliance on foreign suppliers for rare earth metals and magnets) and support production of critical tech areas¹¹  Genesis Mission established: Executive Order 14363 directs DOE and national lab system to accelerate scientific discovery leveraging AI; the initiative is still in its very early stages, but its stated goal is to double U.S. scientific productivity over next 10 years is ambitious^{12,13}  Legislation pushing for broader industrial policy focused on winning across key sectors: NDAA establishes Civil Reserve Manufacturing Network (CRMN) to remove the red tape between commercial companies and the DIB (e.g., \$177M for qualification and testing expediting)^{14,15}  Early-stage national security funding diminishes: Senate failed to pass a bill that would have extended the Small Business Innovation Research (SBIR) program, leading to the program’s lapse during the government shutdown¹⁶
<p>C </p> <p>3.2: NSIB innovation advances government efficiency/effectiveness across non-defense priorities.</p>	<ul style="list-style-type: none">  Small Business Administration (SBA) expands licensed and Green Light Approved funds for Small Business Investment Company Critical Technology (SBICCT) Initiative: Pentagon published the names of 18 funds¹⁷ (expanded from 13 in 2024)¹⁸ expected to invest >\$4B¹⁷ (up from \$2.8B in 2024)¹⁸ across 1,700 portfolio companies¹⁷ (previously 1,000),¹⁸ focusing on critical technology areas¹⁷  Defense initiatives strengthening other critical sectors: ROK’s \$150B investment fund and Hanwha’s infrastructure commitments for Philadelphia Shipyard to upskill U.S. shipbuilding personnel, boost LNG export capabilities, and introduce robotic welding¹⁹  DOGE provided savings, but reallocation of savings still unclear: Pentagon and DOGE proposed an 8% budget cut target over each of the next five years (\$50B per year)²⁰ to be executed with the support of AI;²¹ by August, DOGE announced \$13.8B in savings (AEI analysis attributed \$11.1 billion to DOGE); however, long-term impacts and where savings could be reinvested remain unclear²²  Limited documented progress on increasing cross-government collaboration via FY25 National Defense Industrial Strategy Implementation Plan: Partnership opportunities identified in the plan (e.g., Departments of Commerce, Energy, Justice, State, and Treasury collaboration across production and supply chain, cybersecurity) have shown limited demonstrated progress (e.g., no follow-up announcements or explicit outcome metrics tracked yet)²³



4. Customer Clarity

OVERALL GRADE: **B-** TREND:

Demand signal for customer (government) innovation priorities, including funding and acquisition pathways to match aspiration

TAILWINDS HEADWINDS

Summary

The Pentagon’s modernization intent is clear and backed by renewed spending commitments with supplemental reconciliation funding and FY26 defense appropriations, as well as calls for a \$1.5T FY27 budget. SECWAR’s “Acquisition Transformation Strategy” reinforces a deliberate push for faster, output-driven acquisition. Still, execution is constrained by appropriations delays, stop-gap funding, and limited visibility from appropriation to obligation.

At a glance...

\$839B	Base discretionary defense funding for FY26
\$150B	Supplemental reconciliation funding for defense – \$130B for FY26
15	Fiscal years since last on-time full appropriation

What Happened in 2025

- SECWAR announced acquisition reform incentivizing agility and prioritizing capabilities over programs; established SWP, CSO, & OTAs as preferred pathways
- AI established as critical national security priority via WH AI Action Plan, Eos, and Pentagon AI Strategy
- Innovation ecosystem streamlined under CTO
- New programs using faster acquisition pathways facing ongoing delays
- CR and government shutdown hindered new awards and delayed delivery schedule for major programs

What we’re looking for in 2026

- Elevated defense spending (e.g., \$1.5T Pentagon funding)
- Implementation of the White House AI Action Plan
- Utilization of SWP and CSO, impact on acquisition speed

Criteria Details

Criteria Grades	Datapoints since last report card
<p>B+ </p> <p>4.1: U.S. gov't clearly communicates critical technology priorities needed to support national security missions.</p>	<ul style="list-style-type: none">  Pentagon consolidates innovation ecosystem under CTO control and streamlines innovation priorities: DIU, CDAO, OSC, SCO, TRMC, DARPA all fall under new CTO innovation umbrella; DISG, DIWG, CTO Council replaced by single CTO Action Group (CAG); DIU and SCO designated Pentagon “Field Activities” amid deduplication effort;¹² NSS highlights AI, biotech, quantum computing as focus areas;³ Pentagon consolidated previous 14 critical tech areas to 6⁴  Administration and Department leadership codifies AI as a major development initiative: White House’s AI Action Plan establishes near-term policy goals;⁵ White House memo mandates agencies appoint chief AI officers;⁶ DIB clarify CDAO’s role and agency collaboration^{7,8}  Armed Forces increase collaboration with commercial entities on tech priorities through streamlined offices: Space Force relaunched Front Door to engage commercial entities;⁹ CDAO Tradewinds Solutions Marketplace growing and launched SBIR/STTR Aisle;¹⁰ Navy announced new Naval Rapid Capabilities Office (NARCO);¹¹ Army announced FUZE¹² and introduced PIT office focused on warfighter-centered tech development and integration¹²  No future year defense plan (FYDP) in FY26 PBR: No FYDP FY26 raises long-term funding questions amid surge in supplemental funding¹³  Structural realignment causing disruptions: CDAO reporting line changed twice in the last three years, decreasing clarity of the role;^{14,15} new reporting structure aims to further CDAO alignment with DARPA under USW R&E, with ~70% of DARPA programs benefiting from AI/ML technology^{16,17}
<p>B </p> <p>4.2: U.S. gov’t provides sufficient and stable funding to acquire and scale critical tech solutions, while making needed tradeoffs.</p>	<ul style="list-style-type: none">  CDAO deploying capital at scale and enhancing transparency across efforts: CDAO providing contracts with \$200M ceilings to frontier AI companies (i.e., Anthropic, Google, OpenAI, xAD);¹⁸ CDAO obligations increased ~4x to \$170M in FY25;¹⁹ reallocated funds (+\$489M) to Alpha-1 Development and (+\$393M) to Software Pilot Program, providing greater visibility to CDAO programs and strengthening a joint-force AI and autonomy effort^{20,21}  Pentagon directing long-term funding for Golden Dome to stabilize demand: Pentagon signed seven-year agreement with Lockheed Martin to ramp PAC-3 production;^{22,23} Pentagon investing \$1B in L3Harris’s solid rocket motors business to accelerate production on multi-year procurement agreements²⁴  Department providing clear and definitive funding to address critical munition shortages: RTX awarded five up-to-seven-year framework agreements to increase critical munitions (e.g., Tomahawk, AMRAAM, SM-6, SM-3 IB acceleration, SM-3 IIA output) by 2-4x²⁵  Government shutdown impacting critical programs: Government shutdown for 43 days; no contracts awards unless designated an excepted activity during shutdown;^{26,27} shutdown caused delays to major programs (e.g., CCA);²⁸ SBIR & STTR programs lapsed;²⁹ 15 years since last on-time full appropriation³⁰  FY26 funding allocations remain unclear & reconciliation leaves long-term questions: Some priorities (e.g., quantum, space systems integration) received strong discretionary funding (up 2.5x and 3.1x);^{21,31} other priorities (e.g., space-based interceptors) received mandatory funding with no established PORs;³² Golden Dome budget lacks spend plans and justification, leaving resource allocation unclear²¹
<p>C+ </p> <p>4.3: Acquisition pathways that operate at the speed of relevance are available and well-utilized.</p>	<ul style="list-style-type: none">  SECWAR announces “Warfighting Acquisition System”: Proposes implementing portfolio acquisition executives across Pentagon with greater decision-making power, incentivizing performance through pay, and directs maximum utilization of MOSA for critical systems;³³ thinned contracting workforce amid Great Resignation hindering immediate implementation efforts³⁴  Continued expansion and availability of other acquisition pathways to address speed and scale: <ul style="list-style-type: none"> • EO 14265 mandates reform and review of defense pathways (e.g., for MDAP);³⁵ EO 14275 pushes to overhaul FAR, led to 16 legislative proposals^{36,37} • Pentagon established software acquisition pathway (SWP) as preferred pathway, with Commercial Solutions Openings (CSOs) and Other Transactions (OTs) as default for solicitation and awards;³⁸ Pentagon FY25-26 software modernization implementation plan updated, though impact remains to be seen³⁹ • Pilots launched for Anything-as-a-Service programs (e.g., Mission Network–aaS);^{40,41} nontraditional acquisition models being explored for major programs (e.g., Golden Dome prize competition)^{42,43} and accelerated (e.g., Navy S²MARTS awarded \$1B over four years (2023), now >\$3B in 2025)⁴⁴  High CUAS cost-per-shot prompting shifts to cheaper, reusable alternatives: Executive Order 14186 ordered the development of non-kinetic CUAS capabilities⁴⁵  New programs using faster acquisition pathways still face delays: DAWG (formerly Replicator) and PWSA have attempted to increase speed and seen some progress (e.g., Project G.I., T1 launches), but are delayed, remaining in early stage while lacking transparency in results^{46,47,48,49}



5. Innovation Capital

OVERALL GRADE: **B+** TREND:

Holistic set of public and private financial capital—along with non-financial assets and infrastructure—available to resource the NSIB

TAILWINDS HEADWINDS

Summary

Private capital pools continue to grow with surge in VC, PE, and emerging scaled investments from institutional investors. While the U.S. continues to lead gross R&D expenditures globally and funding for Pentagon is projected to grow, funding for NSF and NASA—which support core NSIB priorities and basic research—is projected to decline and unlikely to be offset by private investment.

At a glance...

83%

Increase YoY in defense tech VC investment – *excluding OpenAI* investment, ~164% growth when included

2.3x

Increase in Pentagon defense tech funding for startups

3.3%

Projected FY26 ratio of defense spending to GDP, considerably lower than Cold War era of 9-11%

What Happened in 2025

- U.S. continues to lead the world with highest gross domestic expenditures on R&D with \$823B
- Pentagon alternative contracting mechanisms obligated >\$17B, a sharp increase from <\$5B five years ago
- Defense tech VC accelerating, 84% YoY investment increase and 38% YoY median deal size increase
- Budget declines for NSF (-3.4%) and NASA (-1.1%) limit early-stage research even as cuts smaller than expected
- Private capital continues to focus on late-stage innovation, unlikely to offset cuts to basic & applied R&D
- Defense VC highly concentrated; 82% of total VC investment flowed to AI and AI-adjacent companies

What we're looking for in 2026

- Protection of basic sciences and initiatives to bridge critical technology gaps
- Private investment in Pentagon infrastructure

Criteria Details

Criteria Grades	Datapoints since last report card
<p>A- ↗</p> <p>5.1: Economy-wide R&D investment is sufficient to drive desired national security outcomes.</p>	<ul style="list-style-type: none"> + U.S. leads the world in total R&D expenditure: U.S. PPP-adjusted GERD in 2023 was \$823B (China in 2nd place with \$781B); from 2019 to 2023, China experienced an 8.9% average growth rate vs. the U.S.’ 4.7% (China now 96% of U.S. GERD, up from 72% in 2013)^{1,2} — Expected budget cuts at key agencies impacting R&D efforts: NSF and NASA budgets projected to decline by 3.4% and 1.1%, respectively, in FY26, following rejection of proposed reductions of 57% and 23%, respectively; R&RA at NSF to decline by 14%, while Space Tech at NASA to decline by 16%; reinstatement of STEM programs is notable, though reductions in basic research can impact longer-lead research cycles^{3,4,5,6} — Defense spending, as a ratio of GDP, remains historically small in age of renewed great power competition: FY26 defense spending is projected to be 3.3% of GDP, in line with FY25;⁷ ratio low relative to Cold War era’s 9-11% amid continued global security concerns⁸
<p>B+ ↗</p> <p>5.2: Ample capital exists across sources for incremental and “breakthrough” R&D.</p>	<ul style="list-style-type: none"> + Public funding enabling innovation across priorities: Pentagon alternative contracting mechanism (e.g., OTAs and CSOs) surpasses \$17B annually, up from <\$5B five years ago, in bid to reach non-traditional disruptors;⁹ 70% of U.S. R&D funding flows to universities and labs, enabling private sector R&D activity that drives leadership across critical tech areas (e.g., semiconductors, AI)¹⁰ + Private capital re-accelerates to new peak: Defense tech¹ VC investment reached \$56B in 2025, up 83% YoY (when including OpenAI, VC investment increased 158% to \$96B), surpassing 2021’s \$43B peak; median deal size grew 38% YoY to \$30M, and median pre-money valuation grew 36% YoY to \$264M; private capital momentum shifting towards later-stage VC with 89% growth amid 58% YoY seed funding decline^{11,12} — Defense tech VC investment concentrated in AI, gaps emerging in other critical areas: Advanced computing and software, including AI, leads defense tech segments in total investment value since 2015, more than double the next segment;¹³ AI-related investments increased to 82% of total defense tech funding (72% in 2024); share of AI-related defense tech fundraising rounds >\$1B rose to 56% in 2025, from 37% in 2024¹¹
<p>B ↗</p> <p>5.3: Sufficient capital and other resourcing (e.g., infrastructure) is available to scale companies with national security applications.</p>	<ul style="list-style-type: none"> + Significant private capital mobilization underway, with some limitations to impact: JPMorgan plans to invest \$1.5T over 10 years offering VC and direct equity investments up to \$10B to enhance growth and accelerate strategic manufacturing;¹⁴ U.S. government funds 19% of R&D, including R&D deemed too risky for private capital;¹⁰ federal reductions expected to weaken STEM workforce and reduce quantity of patented technology, threatening early-stage startups¹⁰ + Defense primes investing in innovators: Corporate VC (CVC) coverage by primes grew 4% to \$1.3B in 2025, but slowed from 79% growth in 2024;¹¹ Oracle created Oracle Defense Ecosystem for defense startups;¹⁵ Lockheed invested in Venus Aerospace & X-Bow Systems for scaling rocket motor production and Saildrone for USV;^{16,17,18} RTX provided strategic capital to Vatn for UUV development¹⁹ + Department takes steps to address non-financial barriers facing disruptors: Pentagon mandates new software acquisition pathway (SWP) and flexible contracting tools;²⁰ Executive Order 14265 aims to scale Department procurement through alternative pathways;²¹ DNI updates ICD-705, the standard for SCIFs, to address growing radio frequency and electromagnetic threats;²² Big Beautiful Bill allocates \$100M for development of shared secure facilities, enabling increased collaboration across government and private sector²³ — Defense awards for innovators, while growing, remain a fraction of defense spending: Pentagon spending on defense tech startups increased 2.3x from 2023 to \$4B, but is only 0.4% of total defense budget, with more than 50% of that concentrated just in SpaceX²⁴



6. Private Sector Innovator Base

OVERALL GRADE: **A-** TREND:

Broad-based, self-innovating, forward-leaning ecosystem of traditional defense firms, startups, and commercial hyperscalers engaged in NSIB-relevant efforts

TAILWINDS HEADWINDS

Summary

Dual-use and non-traditional players are expanding their footprint, capturing a small but growing share of Pentagon obligations (<1%) while channeling capital into scaling production. Investor confidence in defense tech is at an all-time high as disruptors deepen partnerships with primes and peers. Innovators are deploying internal R&D capital ahead of confirmed Pentagon demand.

At a glance...

\$876B

Combined market cap of top 3 defense disruptors as of January 2026

16%

Growth in Pentagon awards for top 15 defense tech companies

42x

Obligation value of top 5 primes vs. top 15 disruptors

What Happened in 2025

- Contract awards for non-traditional players grew by 16%
- Defense primes continue to partner with disruptors for novel capabilities (e.g., Shield AI, Anduril, Hadrian + Primes)
- Market cap/valuation of top 3 tech disruptors larger than market cap of top 5 traditional primes
- Obligation value of top 5 primes is still 42x larger than the top 15 tech disruptors
- Sub-tier suppliers continue to face financial distress amid ongoing supply-chain chokepoints

What we're looking for in 2026

- Continued momentum in defense tech investment
- Substantial increase in non-traditional contract awards

Criteria Details

Criteria Grades	Datapoints since last report card
<p>A- </p> <p>6.1: There exists sufficient breadth and depth in the NSIB to spur innovative outcomes.</p>	<ul style="list-style-type: none">  Funding for nontraditional players continues to grow: Awards to top 15 defense tech disruptors (e.g., Palantir, Anduril, Saronic, Skydio) increased by 16% from \$3.7B in FY24 to \$4.3B; defense tech seed funding rounds grew 9% annually from 2002-2025, with a notable spike in funding 2021-2022 followed by a 42% p.a. decline from 2022-2025, driven by a shift in VC investment toward later-stage deals^{1,2}  Investor confidence in defense disruptors reaching all-time high: SpaceX, Palantir, and Anduril have a combined market cap or valuation greater than the traditional primes combined (Lockheed, RTX, Boeing, General Dynamics, Northrop Grumman, L3Harris)^{1,2}  Non-traditional disruptors remain a small fraction of total obligated spending: Top 15 disruptors still only account for 0.84% of total obligations in 2025; Anduril, SpaceX and Palantir alone account for 0.71% of total obligations; traditional 5 primes command 35% of obligated spend in FY25¹  Venture-backed, non-traditional players are narrowly focused: 71% of NatSec Top 100 private defense companies are concentrated in AI & autonomy, advanced computing & software, space tech, and integrated sensing & cyber; other Department priorities (hypersonics, quantum, directed energy, biotech) only account for 7%³  Vendor base remains highly concentrated, yet total number of prime contractors growing: Top 100 contractors accounted for 67.5% of obligated dollars in FY25, a 2.3% increase from FY24;¹ total number of Pentagon prime contractors increased by 1% in FY25 from 9,599 to 9,726¹  Sub-tier suppliers continue to face financial stress and instability: 50% of publicly held suppliers showed declining revenue or moderate-high financial risk, decreasing from 64% in FY24;⁴ many critical systems (e.g., munitions, aircraft engines) continue to source from a single supplier, threatening to shut down operations when suppliers face distress;⁵ Pentagon priorities continue to be delayed by supply chain issues (e.g., T1 satellites)⁶
<p>A- </p> <p>6.2: The NSIB is self-catalyzing innovation ecosystems ahead of direct demand.</p>	<ul style="list-style-type: none">  Disruptors investing their own R&D capital in new capabilities ahead of firm demand: Public disruptors (e.g., Palantir, AeroVironment) are investing capital into R&D at levels higher than primes;⁷ private companies are also investing heavily, including: <ul style="list-style-type: none"> • Shield AI builds X-BAT, the first VTOL with both landing capability and supersonic speed, designed for Air Force's CCA program⁸ • SpaceX successfully launched and landed its Starship launch vehicle, the largest spacecraft ever launched⁹ • Saronic building large-scale USV designed to support dual commercial and defense missions¹⁰ • Cerebras Systems developed advanced AI prompting a \$45M DARPA contract for battlefield simulation applications¹¹  Innovators are partnering with traditional and non-traditional partners: Shield AI partnering with RTX on integrating AI with munitions and aerial swarm targets;¹² Shield AI partnering with L3Harris for demonstration combining Shield's UxS system with L3Harris' EW software;¹³ Anduril partnering with General Dynamics on armored vehicle detection¹⁴ and with Meta on XR;¹⁵ Palantir partnering with BDS to accelerate AI adoption across BDS programs¹⁶ and with Lear to leverage Palantir Foundry/software,¹⁷ Hadrian partnering with Lockheed Martin to scale missile component production¹⁸  Defense primes are growing R&D slower than U.S. industry average: Five-year compound annual growth rate (CAGR) for total R&D across top defense primes (i.e., Boeing, General Dynamics, Lockheed, Northrop, and RTX) was 3.0% from 2019-2024;⁷ five-year CAGR for scientific R&D across U.S. industries was 4.9% between 2020-2025¹⁹



7. Public/Civil Innovation Base

OVERALL GRADE: **C-** TREND:

Defense/national labs, other FFRDCs/UARCs, and academic institutions developing (and protecting) national security-oriented research

TAILWINDS HEADWINDS

Summary

The U.S. remains the global leader in public R&D, but inflation-adjusted spending has stagnated since 2010, with China narrowing the gap. The Pentagon has sharpened research alignment through challenge-based awards, but cuts to basic research threaten long-term capability. Escalating state-backed cyber intrusions further heighten the need for stronger IP protection.

At a glance...

0%

Growth in publicly-funded R&D expenditures since 2010 (inflation adjusted PPP)

1%

Reduction in public/civil R&D funding 2024-25 – adjusted for inflation

What Happened in 2025

- Bipartisan IP protection policy momentum continues with the introduction of the RESTORE Patent Rights Act
- Pentagon implemented 20+ DIB-recommended changes to align research on emerging capabilities
- Inflation-adjusted federal R&D funding expected to decline by ~1%
- U.S. lead in federal R&D is quickly eroding with China closing the funding gap to just 15%
- IP threats from China persist while new, more sophisticated attacks are coming from Russia

What we're looking for in 2026

- Protective measures and enforcement of security laws to counteract IP theft and mitigate risky academic partnerships
- Funding increases for agencies that support U.S. basic research & STEM (e.g., NASA, DOE, NSF)

Criteria Details

Criteria Grades	Datapoints since last report card
<p>C+ </p> <p>7.1: There is sufficient funding for public sources of innovation (e.g., government labs, FFRDCs) and research alignment to national security priorities.</p>	<ul style="list-style-type: none"> + Department taking action to support and fund research on emerging capabilities: 2024 Defense Innovation Board report that called for research alignment saw signs of early adoption (1/3 of 65 total recommendations implemented by early 2025)¹ + U.S. universities and federally-funded R&D centers (FFRDCs) see continued R&D expenditure growth: University R&D spend increased to \$118B in 2024, an 8.1% increase over 2023;² U.S.' 42 FFRDCs spent \$31.7B in 2024, \$2.4B (+8.2%) more than 2023³ - U.S. total federal R&D funding growth stagnating: FY25's federal R&D estimate of \$197B is a +1.5% YoY nominal increase from FY2024 but a 1% shrinkage accounting for inflation;⁴ 2019-2025 nominal CAGR of +4.65% p.a. is down from +5.06% p.a. in 2018-2024⁴ - U.S. lead in federal R&D expenditures is quickly eroding: U.S. maintains lead in federal R&D expenditures in constant PPP dollars, but China has closed the gap from 66% to 15% since 2010 while growing by 7% p.a. since 2010; in 2023, China grew R&D expenditure 8.7% YoY, more than 5x U.S. growth⁵
<p>D+ </p> <p>7.2: Defense/civil labs catalyze scalable NSIB advances, and the research is adequately protected.</p>	<ul style="list-style-type: none"> + Pentagon increases technology transfer (T2) activity and academic grants: Army T2 saw 81 new patent applications in FY24 and grew to 287 university partnerships (EPAs), up from 260 in FY23;^{6,7} Air Force T2 executed 92 new EPAs in FY24, increasing total to 416⁸ + Bipartisan IP protection policy momentum continues, but no results yet: Following 2024 Protecting American Innovation and Development (PAID) Act, bipartisan efforts introduced the Realizing Engineering, Science, and Technology Opportunities by Restoring Exclusive (RESTORE) Patent Rights Act of 2025 to protect U.S. IP from foreign court interference; bills not yet passed^{9,10} - Department technology license utilization transparency lags behind other departments: Central reporting of federally-developed technology license usage in the Pentagon ceased in FY22;¹¹ other departments (e.g., NIH, DOT, and DOI) continue to report annually^{12,13,14} - IP threats from China persist: DIA report identifies China as most active threat to U.S. critical infrastructure networks¹⁵ <ul style="list-style-type: none"> • Licit and illicit IP acquisition campaigns identified in 2024;¹⁶ Congress estimates total theft of IP by China up to \$600B¹⁷ • House Select Committee on the CCP found U.S. public R&D dollars furthering Chinese military research through ~150 risky academic partnerships with China's military and defense industrial base¹⁸ - IP threats from Russia grow in sophistication: FBI issued warning on new forms of Russian cyberattacks, state and non-state, across critical infrastructure and public sectors (e.g., Cyber Army of Russia Reborn conducted several low-level attacks against U.S. water and energy infrastructure), confirming November 2024 National Counterintelligence and Security Center warnings^{16,19}



8. Manufacturing Capacity and Industrial Base

OVERALL GRADE: **D+** TREND:

Resilient, innovative production base and infrastructure that enables innovators to deliver on NSIB modernization and other strategic priorities

TAILWINDS HEADWINDS

Summary

The U.S. is moving to increase defense manufacturing throughput, from critical mineral sourcing and refinement to advanced manufacturing and footprint expansion. Public and private capital are scaling production across the stack, but structural fragilities remain—particularly in sub-tier supply chains.

At a glance...

\$100B

In loans available for critical mineral production partnerships

12

Of 50 USGS critical minerals are at 100% import reliance, unchanged from 2023

3

Estimated days until U.S. maritime missile depleted in a theoretical conflict with China

What Happened in 2025

- U.S. A&D real production output recovering towards highest levels since pre-COVID
- Pentagon deploying capital to build and repurpose mfg. infrastructure (e.g., SkyFoundry, Ohio ammo plant)
- Primes and disruptors investing their own capital to scale production (e.g., Anduril's \$1B investment in Ohio)
- U.S. share of global manufacturing growing, but China is still 60% larger on a relative basis
- Pockets of manufacturing innovation (e.g., additive mfg.), but widespread optimization still lagging

What we're looking for in 2026

- Substantial outputs as a result of investments made
- Expanding investment in minerals beyond extraction
- Progress in shipbuilding

Criteria Details

Criteria Grades	Datapoints since last report card
<p>D+ </p> <p>8.1: The industrial base has sufficient capacity to respond to NSIB needs.</p>	<ul style="list-style-type: none"> + U.S. actively diversifying and nearshoring supply chain: Defense Production Act awards grew from \$588M to \$856M in FY25;^{1,2,3} Big Beautiful Bill makes available up to \$100B in loans for critical minerals production for public-private partnerships;⁴ U.S. leveraging allies for critical minerals and rare earths deals (e.g., Australia, Japan, Kazakhstan, Malaysia, Thailand, Saudi Arabia)^{5,6,7} + Defense production hits all-time high in 2025: Gross value of U.S. defense and space equipment real production output grew 5% YoY to highest level since pre-COVID^{8,9} + Public and private investments bolstering manufacturing capacity at scale: <ul style="list-style-type: none"> • Army: Announced SkyFoundry with the goal of producing 1M+ drones at full-rate, 10,000 drones per month by 2026;¹⁰ investing \$635M to build Iowa Army Ammunition Plant¹¹ • Pentagon: Taking a 15% stake and providing a \$150M loan to MP Materials for magnet “10X Facility” while guaranteeing stable demand¹² • DIB: Northrop Grumman invested \$500M in B-21 production ramp ahead of formal demand from USAF and potential order expansion;^{13,14} Anduril spending \$1B of its own capital on Ohio autonomous weapons factory¹⁵ - Sub-tier supply chain risks persist: U.S. remains 100% import reliant on 12 of 50 USGS critical minerals (unchanged from 2023) and >50% net-import-reliant for 28 of 50 (down from 29 in 2023);^{16,17} China expanded 2023 REM processing tech ban (e.g., 31% drop in China REM exports in September);^{18,19} recent U.S.-China trade deal eases some restrictions, long-term results remain to be seen²⁰ - U.S. manufacturing capacity is outpaced by China despite growth: In 2024, China held 27.7% of global manufacturing output, steady with 28% in 2018;²¹ U.S. 2024 share was 17.3%, up from 15.9% in 2023 but steady with 18% in 2018 (China is 60% larger on relative basis);²¹ China captured 53% of world’s shipbuilding in 2024 compared to U.S.’ 0.1%;²² SHIPS Act to grow shipbuilding base yet to be passed²³ - U.S. supply chain remains unequipped for a potential conflict with China: War games reveal that in the event of such a conflict, the U.S. would expend its maritime strike missiles in three days and its land attack weapons within two weeks²⁴
<p>D+ </p> <p>8.2: Industrial base is modernizing manufacturing techniques to respond to NSIB needs, shocks and global competition.</p>	<ul style="list-style-type: none"> + DIB embracing novel manufacturing techniques in bid to augment capacity through efficiency: <ul style="list-style-type: none"> • MANTECH program launched to improve manufacturing modernization through public-private partnerships in new manufacturing technology²⁵ • Pentagon requested \$3.3B for projects involving AM in FY26 (+83% YoY);²⁶ Naval Undersea Warfare Center Division implemented AM, cutting costs on tow cables by 75-80%;²⁷ Navy’s Southeast Regional Maintenance Center built rotors for ~3000x cheaper (\$131 vs. \$316,000)²⁸ • Hadrian launched additive manufacturing division to strengthen domestic production for priority defense programs amid surge in partnerships²⁹ • HII announced deal with C3 AI to implement agentic AI to optimize workflow automation;³⁰ HII ordered 12 large-format additive manufacturing systems, becoming first U.S. shipyard with AM capabilities³¹ - The U.S. outsources critical manufacturing to China, with limited transparency: Department has limited visibility in subsystems origins and no visibility in parts and equipment; 2025 GAO report reveals Department found China-manufactured magnets on F-35³²



9. International Alliances and Partnerships

OVERALL GRADE: **C-** TREND:

Level of linkage between U.S. and international partners (e.g., IP rights, data sharing)

TAILWINDS HEADWINDS

Summary

While the U.S. is pursuing global defense innovation and collaboration on NSIB priorities through new partnerships, tangible progress on implementation has been limited (e.g., AUKUS) amid concerns surrounding the efficacy of joint-efforts (e.g., NATO Innovation Fund). Pledges from NATO allies to increase defense spending and meet capability targets bring potential for deeper partnership across defense tech priorities.

At a glance...

39%

Decrease in U.S. FMS vs. 2024

\$150B

Direct investment in U.S. & ROK shipbuilding partnership

5%

NATO allies commit to annual GDP allocation to meet capability targets

What Happened in 2025

- U.S. expanded international partnerships to include manufacturing (e.g., ROK)
- U.S. passing additional legislation to help guard IP while streamlining ally tech transfer processes
- FMS, DCS, and ITAR processes still lack efficiency to expedite cooperation with foreign partners
- Despite U.S. recommitment to AUKUS, milestones continue to be delayed

What we're looking for in 2026

- Reacceleration and delivery of key milestones in international partnerships (e.g., AUKUS, U.S.-ROK shipbuilding)
- Expedited FMS/DCS process
- NATO partners meeting spending commitments and capability targets

Criteria Details

Criteria Grades	Datapoints since last report card
<p>C- </p> <p>9.1: There are strong linkages between the U.S. and allies/partners in priority technology areas.</p>	<ul style="list-style-type: none">  U.S. pursuing international partnerships to accelerate cutting-edge technologies & build production capacity: DIU and Tawazun Council (UAE) accelerating adoption of COTS tech for defense through nontraditional processes (e.g., bilateral challenges, new pathways for startups to access labs);¹ U.S. and India signed 10-year deal to fortify industrial cooperation, increase tech transfers;^{2,3} U.S. & ROK announced shipbuilding partnerships including \$150B in direct investment and multiple partnerships among companies (e.g., HII & HD Hyundai; GD NASSCO & Samsung)^{4,5,6}  NSS prioritizes defense output amid expanded expectations from allies: Allies expected to increase their share of security burden with emphasis on output & readiness; NATO countries to spend 5% of GDP on defense and assume primary responsibility for respective regions; NSS elevates critical allies (e.g., Japan, ROK) and expands economic partnership with India⁷  U.S. seeks to advance defense innovation with Indo-Pacific allies, but progress still only provisions in NDAA: 64th annual National Defense Authorization Act (NDAA) includes provisions on prioritized tech areas for Indo-Pacific (e.g., \$300M for Taiwanese ship building and drone technology, partnership with Japan and AUKUS on UAS and missile production/development);⁸ tangible impact remains to be seen  2025 U.S. Foreign Military Sales (FMS) decreased year-over-year: FMS totaled \$88B, down 39% from 2024 levels, with 3-year and 5-year CAGRs of -10% and -18%, respectively^{9,10}  Limited battlefield testing of NSIB innovations is slowing learning cycles: Collaboration between U.S. companies and Ukrainian forces remains ad hoc and limited to a handful of startups; no formal framework for sharing contested, real-world operational data is slowing U.S. UAS innovation cycles¹¹  Allies investing in critical tech areas, however significant turnover in leadership and strategy lacks clarity: NATO Innovation Fund increased spending¹² and investment in critical tech (e.g., global biosecurity, AI innovation, space technology);^{13, 14, 15, 16} however, the fund has lost 80% of original partners since 2024¹⁷ amid growing concerns surrounding mission articulation and execution¹⁸  Concerns growing around AUKUS ability to deliver: U.S. missing Pillar I production targets, with significant backlog of boats funded but not built;¹⁹ Pillar II has not delivered tangible results in producing priority technologies at speed or scale, only early experiments^{20, 21}
<p>C- </p> <p>9.2: U.S. balances protection of national security and IP while fostering innovation.</p>	<ul style="list-style-type: none">  U.S. enhancing national security via export restrictions: BIS finalized “Affiliates Rule,” automatically extending export restrictions to any foreign entity that is 50% or more owned by a company on the Entity List or Military End-User (MEU) List²²  U.S. pauses new Affiliates Rule: U.S. delayed implementation of affiliates rule for 12 months with new U.S.-China trade agreement²³  BIS currently does not have a long-term workforce plan to determine resource needs: Despite BIS funding growing by \$97M, almost doubling from 2013 to 2024, GAO found no long-term workforce plan to support long-range planning and resourcing—staffing needs are determined on an annual basis as a part of the budget request²⁴  Foreign Arms Sales Task Force’s measures to improve FMS processes stall in Senate but added to NDAA: Task Force helped pass several measures in the House to codify reforms to the FMS process with the goal of improving transparency, efficiency, and ease cooperation with foreign partners,²⁵ however, these measures are awaiting further action from the Senate Committee on Foreign Relations, and have yet to be passed;²⁶ NDAA includes several pieces of legislation (e.g., ARMOR, Made-in-America Defense Act) that reduce bureaucratic FMS burden on select defense products, but stop short of fully revamping FMS and DCS process²⁷



10. Talent Base

OVERALL GRADE: **D+** TREND:

Pipeline of domestic and foreign-born talent trained and working in NSIB-relevant fields across the public and private sector

TAILWINDS HEADWINDS

Summary

Significant work remains to rebuild the A&D talent base: 1.9M manufacturing jobs will go unfilled through 2033, 29% of the A&D and NSIB workforce is nearing retirement, and turnover runs 4x the national average. AI-enabled productivity tools and advanced manufacturing will help, but persistent talent attraction issues and new restrictions on international STEM recruitment pose an existential risk to production ramps and long-term innovation.

At a glance...

2x

More STEM PhDs graduate annually in China compared to U.S.

60%

Of manufacturers view inability to attract and retain talent as their top challenge

17%

Average A&D industry turnover versus national industry average of 3.9%

What Happened in 2025

- USG scaling AI talent base (e.g., GigEagle, Tech Force) through partnerships with private players
- 3.8M manufacturing jobs to be created (2024-2033) with >50% expected to remain vacant
- 13% drop in top researchers at U.S. universities (2020-2024), while China nearly doubled research workforce
- Retirement bubble concerns continue with 29% of workforce nearing retirement age amid high turnover
- H-1B new employment approvals decreased by 19%, with professional & technical services dropping 35%

What we're looking for in 2026

- Reform and updating of national talent strategy (e.g., new criteria for Schedule A, expansion of EB-1 visa), including implementation of STEM talent strategy
- Reversal of PhD “brain-drain”
- Improvement in A&D/NSIB workforce turnover rate

Criteria Details

Criteria Grades	Datapoints since last report card
<p>C ↗</p> <p>10.1: U.S. attracts, retains, and develops domestic public and private NSIB talent (e.g., availability, quality, diversity), particularly in STEM and skilled trades.</p>	<ul style="list-style-type: none"> + A&D public and private workforce* growth above industry average, but slowing: A&D workforce grew 3% from 2023-2024, outpacing national average growth of 2%; growth slower than post-Covid period (+5% in 2022-2023, +4% in 2021-2022)¹ + Uptick seen in number of apprenticeships in advanced manufacturing: 96,500 registered apprentices served in the advanced manufacturing industry in 2024, up from 92.5K in 2023 (3.5% YoY increase), and an overall 27% increase over the past 5 years² + Department continues investment in AI talent management: DIU's AI app 'GigEagle' awarded \$5.3M to build agile talent network; user base grew from 4.5K to 10K (100% YoY);^{3,4} Pentagon to provide no-cost training for GenAI.mil to all employees;⁵ CDAO rebuilding AI talent pipeline⁶ + Department building alternative programs to attract top talent from industry: Army announced creation of Executive Innovation Corps;⁷ WH OPM established 'Tech Force' with big tech to recruit 1,000+ early-career tech professionals and experienced managers to augment AI talent⁸ - A&D/NSIB-relevant jobs postings fill-rate improvement slows: Median job posting duration across A&D/NSIB-relevant industries* was 26 days from August 2024 to August 2025, unchanged from 2024 following a 10% improvement to 2023 (median of 29 days); A&D/NSIB industry median job posting duration remains marginally higher than tech industries** (26 days vs. tech's 24 days)⁹ - Retirement bubble concerns persist: 29% of A&D workforce is at or nearing the age of retirement (55+) compared to 18% in tech** and the national average of 24% (2024);⁹ 2.8M of the 3.8M new manufacturing jobs (>73%) through 2033 will be from retirees¹⁰ - Trade skills labor market loosens but future shortages remain a concern: Manufacturing labor market is the loosest it has been since May 2021;¹¹ 60% of U.S. manufacturers view talent attraction and retention as their top challenge;¹¹ 3.8M manufacturing jobs will be created from 2024 through 2033, of which 50% are projected to remain vacant unless current skills gap is closed¹⁰ - Industry turnover is more than four times the national average: A&D experiences a 17% turnover rate in 2024, excluding retirements, which is considerably higher than the national average of 3.9%^{9,12}
<p>D- ↘</p> <p>10.2: U.S. leads in attracting and retaining a robust pipeline of foreign talent with in-demand skills needed for national security missions.</p>	<ul style="list-style-type: none"> - H1B approvals across all NAICS codes decreased by 19%: 113k approvals in 2025 vs. 139k in 2024; total new employment H-1B applications declined by 18%; however, total continuation applications increased by 20%, with continuation denials increasing by 35%¹³ <ul style="list-style-type: none"> • Professional, scientific, & technical services approvals shrank 36%; share of total approvals shrank 11% (38% in 2025 vs. 49% in 2024)¹³ • Manufacturing approvals shrank 12%; share of total approvals increased by 1% (10% in 2025 vs. 9% in 2024)¹³ - Top scientists leave the U.S., while China scales as talent center: Top researchers at U.S. universities fell from 36,599 to 31,781 (2020-2024), whereas China's nearly doubled to 32,511 in the same period;¹⁴ international students account for ~50% of all STEM master's and PhD graduates, and ~60% of U.S.-trained international AI PhDs cited visa issues as primary reason for leaving;¹⁵ new international student enrollment at U.S. universities declined by 17%¹⁶ - U.S. international talent attraction falling as China, India, EU launch talent poaching initiatives: 33% reduction in foreign STEM graduated from U.S. universities is expected to reduce annual productivity by 3%, resulting in a loss of \$200B+ annually after 10 years;¹⁷ global powers (e.g., China, India, EU) launching initiatives to poach talent from U.S., specifically targeting scientists and researchers¹⁸

* Industries classified as A&D / NSIB-relevant: Aerospace products and parts manufacturing; ship and boat building; engine, turbine, and power transmission equipment manufacturing; computer and peripheral equipment manufacturing; navigational, measuring, electromedical, and control instruments manufacturing; electronic component and product manufacturing
 ** Telecom, media, and technology (TMT) industries classified as Tech: software publishers; data processing, hosting, and related services, computer systems design and related services

Recommendations for Improvement

1. **Expand Advance Market Commitments to Strengthen Demand Signals**

Congress should provide clear legislative authority and appropriations flexibility to expand the Pentagon's use of advance market commitments (AMCs) for priority national security technologies, enabling multi-year demand signals tied to validated operational requirements. Predictable AMCs would unlock private capital for capital expenditures, manufacturing scale-up, and workforce investment while reducing the financing risk that currently constrains non-traditional defense suppliers.

2. **Create a Digital Foreign Military Sales (FMS) and Direct Commercial Sales (DCS) Fast-Track Pipeline**

The Pentagon, Department of Commerce, and Department of State should pilot a digitally integrated and AI-enabled FMS and DCS fast-track pathway for allied and partner nations purchasing U.S. systems, with standardized requirements, real-time status tracking, and multi-year, multi-country standing licenses to eliminate repetitive licensing, enable iterative delivery, and accelerate timelines across both channels. While continued reform of the FMS process remains important, more than two-thirds of U.S. arms exports now flow through Direct Commercial Sales, making modernization and streamlining of the DCS process essential to sustaining U.S. defense competitiveness and meeting allied demand at speed. This approach would materially reduce transaction costs while increasing accountability, predictability, and trust for partners navigating both FMS and DCS.

3. **Refocus Labs, FFRDCs, and UARCs on Uniquely Governmental Gaps**

Congress should direct the Science, Technology, and Innovation Board to conduct a greenfield review of the Pentagon's service laboratories, FFRDCs, and UARCs to assess mission alignment, duplication, and relevance to current and future operational needs. The Board should provide concrete recommendations to the Pentagon and Congress identifying which efforts are uniquely governmental and underserved by commercial markets and private investment, and which activities should be consolidated, restructured, or transitioned to commercial or hybrid models. The review should explicitly evaluate how the research enterprise can better accelerate the transition of commercially developed technologies to the warfighter by aligning incentives, authorities, and funding toward rapid experimentation, scaling, and fielding.

Recommendations for Improvement

4. Accelerate a Nationwide Network of Shared Commercial Classified Facilities

The Pentagon must urgently accelerate the establishment of a nationwide network of shared commercial classified facilities and networks, as authorized in the FY25 NDAA, to support execution of the Golden Dome initiative and other sensitive missions. It is estimated that over half of current SCIFs in the United States do not meet TEMPEST standards, creating significant vulnerabilities and impeding the availability of SCIF space. Absent rapid action, the existing ICD-705 compliance cliff and SCIF capacity shortfalls will become a binding constraint on program execution by slowing deployment timelines and exacerbating an already critical infrastructure gap.

5. Modernize Shared Budget and Portfolio Performance Data between Congress and the Pentagon

The Pentagon and Congress should jointly prioritize the modernization of acquisition and budget data systems by adopting interoperable commercial software platforms that provide visibility into program execution and portfolio performance. Congress should pair new acquisition authorities with clear expectations for data transparency and shared reporting, while the Department should demonstrate full use of these tools to enable timely oversight, reprogramming requests and approvals, early identification of risk, and evidence-based decision-making.

6. Create a National Defense Manufacturing Apprenticeship Pipeline

Congress should establish a nation-wide National Defense Manufacturing Apprenticeship Pipeline that funds paid, employer-backed apprenticeships with defense manufacturers, prioritizing high-need trades and providing federal cost-sharing for wages during early training periods. The program should focus on critical defense sectors and regions with workforce shortages—like the Accelerated Training in Defense Manufacturing program for Navy shipbuilding—to drive participation at scale.

7. Prioritize and Resource Edge AI for Contested Environments

The Pentagon's accelerated adoption of artificial intelligence is a critical step toward maintaining technological superiority, but current investments remain overly concentrated on permissive, connected environments. Additional resourcing and prioritization are needed to operationalize AI at the edge, ensuring systems can function in degraded, disconnected, and contested conditions central to future conflict.

Sources (1/4)

1. Defense Modernization

1. Aviation Week, [U.S. Army Outlines Real-World Test Plan for New Surveillance Fleet](#), October 2025
2. National Security Journal, [New B-21 Raider Stealth Bomber](#), December 2025
3. Air & Space Forces Magazine, [Lawmakers Push Funding Boost for Space Force Data Transport and Polar Missile Warning](#), December 2025
4. U.S. Space Force, [Space Development Agency Completes Successful Launch of First Tranche 1 Satellite](#), September 2025
5. WSJ, [U.S. Army Changes Tools and Tactics to Prepare for the Next Pacific War](#), December 2025
6. National Security Journal, [U.S. Army Mach 5 Dark Eagle Hypersonic Missile](#), December 2025
7. Defense News, [U.S. Army's first hypersonic battery to be fully equipped by December](#), October 2025
8. Defense News, [This Drone is Helping the Coast Guard Track Down Drug Smugglers](#), November 2025
9. Defense Scoop, [U.S. Military Deploys 4 Army-built Surveillance and Reconnaissance Systems for Southern Border Missions](#), December 2025
10. U.S. Army, [Army to Cease Procurement of M10 Booker Combat Vehicles](#), June 2025
11. Naval News, [U.S. Navy Cancels Critical HALO Hypersonic Missile Citing Cost Concerns](#), October 2025
12. GAO, [F-35 Joint Strike Fighter](#), September 2025
13. ANS, [U.S. Advanced Microreactor Program for Military Sites](#), April 2025
14. DIU, [DIU's Transition of Quantum Sensing](#), March 2025
15. Federal Procurement Data System
16. GAO, [Other Transaction Agreements](#), September 2025
17. U.S. Army, [Transforming in Contact Alters Army in Unexpected Ways](#), March 2025
18. IDGA, [Defense Acquisition Reform Takes Center stage with SPEED and FORGED Acts](#), September 2025
19. GAO, [Weapon Systems Annual Assessment](#), June 2025
20. DIU, [BLUE UAS to Evolve to Meet Broader Department Needs](#), May 2025
21. DIU, [DIU's Blue UAS List To Transition to DCMA](#), December 2025
22. IDGA, [DIU Set to Launch Blue Manufacturing Unit](#), March 2025
23. Drone Dominance, [Drone Dominance Initiative](#), December 2025
24. WSJ, [Pentagon Deploys New Kamikaze Drone](#), December 2025
25. Breaking Defense, [Pentagon Rolls Out Major Reforms of R&D, AI](#), January 2026
26. Breaking Defense, [Pentagon rolls out GenAI platform to all personnel, using Google's Gemini](#), December 2025
27. Pentagon, [War Department Launches AI Acceleration Strategy to Secure American Military AI Dominance](#), January 2026

28. Pentagon, [Transforming Advana to Accelerate Artificial Intelligence and Enhance Auditability](#), January 2026
29. Brookings, [GAMECHANGER: A Case Study of AI innovation at the Department of Defense](#), December 2025
30. Drone Sense, [Overengineering and Attrition: Why U.S. Drones Are Failing in Ukraine](#), November 2025
31. CSIS, [Unleashing U.S. Military Drone Dominance: What the United States Can Learn from Ukraine](#), July 2025
32. USNI, [Navy's 'Risk Averse' Culture Hampering Shipbuilding. Ship Repair, Says Panel to HASC](#), February 2025
33. Defense Post, [U.S. Picks Damen's LST-100 Design for Amphibious Missions](#), December 2025
34. GAO, [Defense Acquisition Reform](#), June 2025

2. Innovation Leadership

1. Stanford University, [2025 AI Index Report](#), April 2025
2. Edelman, [2025 Edelman Trust Barometer](#), November 2025
3. MIT, [Quantum Index Report 2025](#), June 2025
4. Top500, [Global Supercomputer List](#), June 2025
5. Data Center Dynamics, [China Publishes List of its Most Powerful Supercomputers](#), January 2025
6. Quantum Insider, [DARPA Advances Quantum Computing Initiative](#), November 2025
7. Quantum Insider, [Illinois Quantum and Microelectronics Park and DARPA QBI Performer Diraq Sign Letter of Intent](#), May 2025
8. ITA, [Executive Order 14320](#), October 2025
9. SCSP, [Gaps Analysis 2025 Report](#), January 2025
10. LexisNexis, [Who is Leading the 5G Patent Race](#), January 2025
11. Harvard University, [Critical and Emerging Technologies Index](#), June 2025
12. Forbes, [The Next Great Race](#), October 2025
13. CSIS, [The U.S. Cannot Afford Disarray as China Strengthens Its Biopharmaceutical Industry](#), March 2025
14. ITIF, [How China is Outperforming the U.S. in Critical Technologies](#), September 2025
15. CSET, [Pulling Back the Curtain on China's Military-Civil Fusion](#), September 2025
16. FPIF, [China Displaces U.S. As Global Leader in Research](#), March 2025
17. Nature, [Nature Index 2025 Research Leaders](#), June 2025

3. Pull-Through for Broader National Priorities

1. Aerospace Industries Association, [2025 Facts and Figures](#), June 2025
2. Aerospace Industries Association, [2024 Facts and Figures](#), September 2024

3. Semiconductor Industry Association, [America's Chip Resurgence: Over \\$630 Billion in Semiconductor Supply Chain Investments](#), July 2025
4. Semiconductor Industry Association, [STATE OF THE U.S. SEMICONDUCTOR INDUSTRY 2024](#), August 2024
5. Intel, [Intel and Trump Administration Reach Historic Agreement to Accelerate American Technology](#), August 2025
6. The White House, [Deploying Advanced Nuclear Reactor Technologies for National Security](#), May 2025
7. U.S. Army, [Army announces Janus Program for next-generation nuclear energy](#), October 2025
8. U.S. Army, [Army announces next steps on Janus Program for next-generation nuclear energy](#), November 2025
9. National Defense Magazine, [Letter to the Editor: Small Business Are the Pentagon's Engine of Innovation](#), July 2025
10. The Washington Post, [Inside the Office of Strategic Capital, the Pentagon's new \\$200 billion lending powerhouse](#), July 2025
11. Pentagon, [Office of Strategic Capital Announces Release of Fiscal Year 2025 Investment Strategy](#), January 2025
12. The White House, [Launching the Genesis Mission](#), November 2025
13. CSIS, [The Genesis Mission: Can the United States' Bet on AI Revitalize U.S. Science?](#), December 2025
14. Breaking Defense, [Rep. Ken Calvert: How to maximize American manufacturing capacity](#), January 2026
15. U.S. House of Representatives, [Department of Defense Appropriations Act, 2026](#), January 2026
16. House Committee on Small Business, [House Small Business and Science Committee React to Imminent Lapse of SBIR/STTR Programs](#), September 2025
17. Pentagon, [Department of Defense and U.S. Small Business Administration Publish Names of First 18 Licensed and Green Light Approved Funds for the Small Business Investment Company Critical Technologies Initiative](#), January 2025
18. Pentagon, [Department of Defense and U.S. Small Business Administration Announce First Licensed and Green Light Approved Funds for the Small Business Investment Company Critical Technology Initiative](#), October 2024
19. Forbes, [How Hanwha Philly Shipyard Is Supporting America's Maritime Resurgence](#), September 2025
20. NPR, [Pentagon proposes \\$50 billion in annual cuts and identifies priorities to expand](#), February 2025
21. Brookings, [How DOGE is using AI in government](#), April 2025
22. Breaking Defense, [Mining for DOGE: Defense budget docs show \\$11B in 'efficiencies,' but what are they?](#), August 2025
23. Pentagon, [DOD Releases First Defense industrial Strategy](#), January 2024

Sources (2/4)

4. Customer Clarity

1. Pentagon, [Transforming the Defense Innovation Ecosystem to Accelerate Warfighting Advantage](#), January 2026
2. Breaking Defense, [Pentagon rolls out major reforms of R&D, AI](#), January 2025
3. National Security Strategy, [National Security Strategy](#), November 2025
4. Air & Space Forces Magazine, [Pentagon Research Chief Tightens List of Top Technology Priorities](#), November 2025
5. GovCon Wire, [Emil Michael's 6 DoD Tech Priorities](#), November 2025
6. The White House, [America's AI Action Plan](#), July 2025
7. Reuters, [Expanding AI use, White House orders agencies to develop strategies and name leaders](#), April 2025
8. Congressional Research Service, [The Defense Innovation Ecosystem](#), January 2025
9. Defense Innovation Board, [Scaling Nontraditional Defense Innovation](#), January 2025
10. U.S. Space Force, [Space Force renames 'Front Door' to reflect broader impact on industry collaboration](#), September 2025 ([Front Door website](#))
11. CDAO, [Tradewinds Solutions Marketplace](#), 2025 ([SBIR/STTR Aisle website](#))
12. Breaking Defense, [SECNAV orders new Naval Rapid Capabilities Office, shuts down offices](#), August 2025
13. The White House, [FY26 Presidential Budget Request](#), July 2025
14. U.S. Army, [Army calls for innovation](#), September 2025 ([FUZE website](#))
15. Congressional Research Service, [Realignment of DOD's Chief Digital and AI Officer \(CDAO\)](#), September 2025
16. Breaking Defense, [Pentagon moves AI office under R&D](#), August 2025
17. DARPA, [Reimagining the Future of Artificial Intelligence for National Security](#), December 2024
18. CDAO, [CDAO Announces Partnerships with Frontier AI Companies](#), July 2025
19. FPDS
20. DACIS
21. U.S. House of Representatives, [Department of Defense Appropriations Act, 2026](#), January 2026
22. Space News, [Golden Dome is forcing the Pentagon to confront missile defense economics](#), January 2026
23. Pentagon, [Department of War Establishes New Acquisition Mode to More than Triple PAC-3 MSE Production in Partnership With Lockheed Martin](#), January 2026
24. Breaking Defense, [Pentagon to invest \\$1B in L3Harris solid rocket motor spin-off](#), January 2026
25. RTX, [RTX's Raytheon partners with DoW on five landmark agreements to expand critical munition production](#), February 2026

26. BBC, [Is The U.S. Government Shutdown Over, and Why Did it Happen?](#), November 2025
27. CSIS, [How Does the Government Shutdown Impact the U.S. Industrial Base](#), October 2025
28. Breaking Defense, [Shutdown will delay Air Force drone wingman's first flight](#), October 2025
29. Air & Space Forces Magazine, [Space Acquisition Leaders Concerned SBIR Lapse Could Hurt Innovation Pipeline](#), December 2025
30. Pentagon, [DoD Continues Work With Congress to Get Appropriation](#), February 2024
31. CSPS, [FY26 Defense Space Budget](#), August 2025
32. Defense One, [Despite Golden Dome, Space Force Budget Would Shrink Again Under 2026 Spending Plan](#), June 2025
33. Pentagon, [Transforming the Defense Acquisition System into the Warfighting Acquisition System to Accelerate Fielding of Urgently Needed Capabilities to Our Warriors](#), November 2025
34. Space News, [Space Force's Acquisition Arm Races to Rebuild Contracting Workforce After Civilian Cuts](#), January 2026
35. U.S. Government Publishing Office, [Executive Order 14265](#), April 2025
36. Federal Register, [Restoring Common Sense to Federal Procurement](#), April 2025
37. Covington, [FAR Overhaul: OMB Sends 16 Legislative Proposals to Congress](#), July 2025
38. DIU, [Advancing DoD Operations with Software Acquisition Reform](#), March 2025
39. Pentagon, [Software Modernization Implementation Plan FY25-26](#), April 2025
40. DefenseScoop, [Pentagon moves to implement 'Anything-as-a-Service' pilot program](#), May 2025
41. DefenseScoop, [Pentagon CIO working on new program to break down disparate IT networks](#), September 2025
42. CSIS, [The Golden Dome as a Service](#), June 2025
43. CSIS, [Can Prize Competitions Deliver Golden Dome's Space-Based Interceptors](#), September 2025
44. National Security Technology Accelerator, [\\$3B and Counting: The S²MARTS OTA's Impact on Defense Technology](#), March 2025 ([2023 progress article](#))
45. National Defense Magazine, [Directed Energy in Air Base Defense Can Save the Arsenal](#), August 2025
46. Breaking Defense, [DIU launches Project G.L.](#), June 2025
47. Space Development Agency, [Space Development Agency Completes Successful Launch of First Tranche 1 Satellites](#), September 2025
48. SpaceNews, [York Space delivers 21 satellites for first deployment of U.S. military network](#), August 2025
49. Congressional Research Services, [DOD Replicator Initiative: Background and Issues for Congress](#), September 2025

5. Innovation Capital

1. OECD, [R&D spending growth slows in OECD, surges in China; government support for energy and defence R&D rises sharply](#), March 2025
2. Information Technology & Innovation Foundation, [China Is Catching Up in R&D—and May Have Already Pulled Ahead](#), April 2025
3. U.S. House of Representatives, [Division A - Commerce, Justice, Science, and Related Agencies Appropriations Act, 2026](#), January 2026
4. NASA, [Fiscal Year 2026 Budget Request](#), May 2025
5. NSF, [Fiscal Year 2026 Budget Request to Congress](#), May 2025
6. Aerospace America, [If government R&D spending is reduced, can industry take up the mantle?](#), October 2025
7. TD, [The Economic & Fiscal Impacts of U.S. Defense Spending in 2026 and Beyond](#), October 2025
8. CSIS, [China Outpacing U.S. Defense Industrial Base](#), March 2024
9. Baker Hostetler, [DoD Expands Opportunities for Startups and Emerging Defense Innovators](#), October 2025
10. ITIF, [How Reducing Federal R&D Reduces GDP Growth](#), September 2025
11. Pitchbook
12. McKinsey FY25 Budget Analysis
13. JPMorgan, [Tapping the United States' greatest weapon: innovation](#), September 2025
14. JPMorgan, [JPMorganChase Launches \\$1.5 Trillion Security and Resiliency Initiative to Boost Critical](#), October 2025
15. Oracle, [Oracle Launches First-of-its-Kind Defense Ecosystem to Redefine National Security Innovation](#), June 2025
16. PR Newswire, [Strategic Investment by Lockheed Martin Ventures in Venus Aerospace](#), October 2025
17. PR Newswire, [X-Bow Systems Announces Final Closing of Over \\$105 Million Series B Funding to Deliver State-of-the-Art Defense Technologies at Speed and Scale](#), May 2025
18. Lockheed Martin, [Lockheed Martin Invests \\$50M in Saildrone to Advance Unmanned Surface Vehicle Capabilities for U.S. Navy](#), October 2025
19. RTX, [RTX Invests in Vatn](#), April 2025
20. Pentagon, [Modern Software Acquisition to Speed Delivery, Boost Warfighter Lethality](#), March 2025
21. The White House, [Modernizing Defense Acquisitions and Spurring Innovation in the Defense Industrial Base](#), April 2025
22. Holland & Knight, [Leasing SCIF Space: How the New ICD-705 Affects Leases](#), October 2025
23. House Armed Services Committee, [One Big Beautiful Bill](#), July 2025
24. Silicon Valley Defense Group, [SVDG Releases 2025 NatSec100 Report, Highlighting the Nation's Top Dual-Use and Defense Tech Startups](#), July 2025

Sources (3/4)

6. Private Sector Innovator Base

1. Federal Procurement Data System, Accessed via DACIS
2. Pitchbook
3. Silicon Valley Defense Group, [National Security 100 Companies](#), July 2025
4. CapIQ
5. National Interest, [Why the Defense Industrial Base Is So Hard to Fix](#), August 2025
6. Breaking Defense, [Space Supply Chain Gaps: Propulsion, Hardened Electronics and Laser Links](#), March 2025
7. 2024 Annual Reports
8. Air and Space Forces Magazine, [A New Kind of CCA?](#), October 2025
9. SpaceX, [Startship's Eleventh Flight Test](#), October 2025
10. Naval News, [Saronic Unveils Two New Autonomous Vessels](#), April 2025
11. Cerebras, [Cerebras Systems, Ranovus win \\$45M U.S. Military Deal to Speed Up Chip Connections](#), April 2025
12. RTX, [RTX and Shield AI Partner to Develop New Defense Capabilities](#), July 2025
13. L3Harris, [L3Harris and Shield AI Team for Breakthrough in Autonomy](#), February 2025
14. Anduril, [Anduril Partners with General Dynamics Land Systems](#), October 2025
15. Anduril, [Anduril and Meta Team Up to Transform XR for the American Military](#), May 2025
16. Boeing, [Boeing Defense, Space & Security Partners with Palantir to Accelerate AI Adoption Across Defense, Classified Programs](#), September 2025
17. Lear Corporation, [Palantir and Lear Announce Five-Year Partnership Expansion to Accelerate Automotive Technology Transformation](#), September 2025
18. Lockheed Martin, [Lockheed Martin And Hadrian Collaborate To Advance Manufacturing Capabilities](#), December 2025
19. Alexander Govdysh, [Scientific Research & Development in the U.S.- Market Research Report \(2015-2030\)](#), IBIS World, October 2015

7. Public / Civil Innovation Base

1. Department of Defense Manufacturing Technology Program, [Defense Innovation Board Recommendations Continue to Advance National Security Efforts](#), January 2025
2. National Science Foundation, [Ranking by Total R&D Expenditures](#), December 2025
3. National Center for Science and Engineering Statistics, [R&D Spending at Federally Funded R&D Centers Surpassed \\$31 Billion](#)

in FY 2024, August 2025

4. American Association for the Advancement of Science, [Federal R&D Budget Dashboard](#), October 2025
5. OECD, [R&D spending growth slows in OECD, surges in China: government support for energy and defence R&D rises sharply](#), March 2025
6. U.S. Army, [Army Technology Transfer Program 2024 Annual Report](#), April 2025
7. U.S. Air Force, [Department of the Air Force Technology Transfer and Transition FY2024](#), May 2024
9. U.S. Congress, [All Information \(Except Text\) for H.R.8924 - PAID Act of 2024](#), August 2024
10. U.S. House of Representatives, [Congressman Moran, Colleagues Reinroduce Legislation to Strengthen Patent Protections, Restore Injunctive Relief](#), February 2025
11. National Institute of Standards and Technology, [Federal Laboratory \(Interagency\) Technology Transfer Summary Reports](#), January 2025
12. National Institutes of Health, [Technology Transfer Annual Reports](#), July 2025
13. U.S. Department of Transportation, [DOT Tech Transfer Annual Reports](#), May 2024
14. U.S. Department of the Interior, [Annual DOI Reports on Technology Transfer](#), March 2025
15. Office of the Director of National Intelligence, [Annual Threat Assessment of the U.S. Intelligence Community](#), March 2025
16. Defense Intelligence Agency, [2025 Worldwide Threat Assessment](#), May 2025
17. House Committee on Homeland Security, [CCP Threat Snapshot](#), February 2025
18. House Select Committee on the CCP, [Joint Institutes, Divided Loyalties](#), September 2025
19. Federal Bureau of Investigation, [Russian Government Cyber Actors Targeting Networking Devices, Critical Infrastructure](#), August 2025

8. Manufacturing Capacity and Industrial Base

1. Pentagon, [Department of War Awards \\$43.4 Million to Further On-Shore Antimony Trisulfide Production](#), September 2025
2. Pentagon, [Department of War Awards \\$33.5 Million to Increase Solid Rocket Motor Capacity and Capability](#), September 2025
3. Global Electronics Association, [On First Anniversary of Biden Action on Defense Electronics](#), March 2024
4. Pentagon, [Office of Strategic Capital Announces First Loan Through DoD Agreement With MP Materials to Secure Critical Materials Supply Chain](#), August 2025
5. The White House, [Fact Sheet: President Donald J. Trump Closes Billion-Dollar Deals with Australia](#), October 2025

6. CNBC, [Trump's rare earth deals target China's dominance — here's why change won't come soon](#), October 2025
7. Reuters, [Cove Capital to mine Kazakhstan tungsten in Trump-announced deal](#), November 2025
8. Federal Reserve Bank of St. Louis (FRED), [Industrial Production: Equipment: Defense and Space Equipment \(IPB52300S\)](#), September 2025
9. Federal Reserve, [Industrial Production and Capacity Utilization - G.17](#), September 2025
10. Defense Scoop, [Army aims to manufacture 10,000 drones per month by 2026](#), October 2025
11. U.S. Army, [Army invests \\$635M in cutting-edge artillery ammunition production facility](#), August 2025
12. Federation of American Scientists, [Unpacking the Department of Defense and MP Materials Critical Minerals Partnership](#), July 2025
13. Northrop Grumman, [Northrop Grumman Reports Third Quarter 2025 Financial Results](#), October 2025
14. Defense News, [Northrop eyes more B-21 contracts, Air Force deal to speed production](#), October 2025
15. Anduril Industries, [Anduril Building Arsenal-1 Hyperscale Manufacturing Facility in Ohio](#), January 2025
16. U.S. Department of the Interior, [Mineral Commodity Summaries 2025](#), March 2025
17. U.S. Department of the Interior, [Mineral Commodity Summaries 2024](#), January 2024
18. Reuters, [China is making it harder to get rare earth magnet export licenses, sources say](#), October 2025
19. CSIS, [China's New Rare Earth and Magnet Restrictions Threaten U.S. Defense Supply Chains](#), October 2025
20. The White House, [Fact Sheet: President Donald J. Trump Strikes Deal on Economic and Trade Relations with China](#), November 2025
21. World Bank, [Top 10 manufacturing countries in the world in 2024](#), August 2025
22. CSIS, [Are U.S. Policies Eroding China's Dominance in Shipbuilding?](#), September 2025
23. U.S. Senate, [SHIPS for America Act](#), April 2025
24. Foreign Policy, [Is the U.S. Ready for War With China?](#), October 2025
25. Pentagon, [DOD ManTech Program Grows U.S. Military Industrial Base](#), July 2025
26. 3D Printing Industry, [Analysis of U.S. Military Budget Shows Increased Commitment To Additive Manufacturing](#), July 2025
27. Pentagon, [Additive Manufacturing Brings Money-Saving Innovations to Life at NUWC Keyport](#), February 2025
28. Military.com, [Reshaping Military Logistics Through Additive Manufacturing](#), October 2025
29. PR Newswire, [Hadrian Launches Additive Manufacturing Division to Expand U.S. Defense Production Capacity](#), January 2026

Sources (4/4)

8. Manufacturing Capacity and Industrial Base (cont'd)

30. Defense One, [Task orders and bottlenecks: how the largest U.S. shipbuilder is putting AI to work](#), September 2025
31. Metal AM, [U.S. Navy shipbuilder HII orders twelve-laser NXG 600E from Nikon SLM](#), December 2025
32. GAO, [Defense Industrial Base 2025 Defense Industrial Base Actions Needed to Address Risks Posed by Dependence on Foreign Suppliers](#), July 2025

9. International Alliances and Partnerships

1. Pentagon, [U.S. Defense Innovation Unit and United Arab Emirates Partnering to Enhance Defense-Tech Ecosystems](#), May 2025
2. Pentagon, [US, India Talk 10-Year Cooperative Framework, Defense Cooperation, Shared Priorities](#), July 2025
3. BBC, [India-U.S. sign 10-year defence pact amid tariff turmoil](#), October 2025
4. Reuters, [US, South Korea unveil details on shipbuilding investment and subs in trade deal](#), November 2025
5. General Dynamics, [General Dynamics NASSCO and South Korean Shipbuilding Leaders DSEC Co. and Samsung Heavy Industries Co. Sign Tri-Party Memorandum of Agreement](#), December 2025
6. HII, [HD Hyundai Heavy Industries and HII Execute Memorandum of Agreement to Collaborate on Distributed Shipbuilding and Pursue Teaming on Auxiliary and Commercial Vessels](#), October 2025
7. The White House, [National Security Strategy of the United States of America](#), November 2025
8. Bruegel, [US Foreign Military Sales](#), November 2025
9. DCSA, [Major Arms Sales](#), February 2026
10. American Enterprise Institute, [Five Notable Items for Asia Watchers in the 2025 National Defense Authorization Act](#), December 2024
11. Defense One, [Ukraine is helping the US catch up with modern warfare—for now](#), December 2025
12. NIF, [Inaugural Dealroom and NATO Innovation Fund Report Reveals Record-Breaking Investing in Startups in European Defence, Security, and Resilience Sector](#), February 2025
13. Pentagon, [DoW Critical Technology Areas](#), November 2023
14. NIF, [NATO Innovation Fund leads \\$35 Million Series A in Portal Biotech alongside Earlybird to deliver world's first full-length single-molecule protein sequencer](#), June 2025
15. NIF, [NATO Innovation Fund invests in CamGraPhIC](#), March 2025
16. NIF, [The NATO Innovation fund invests in Kreios Space](#), September 2025

17. Tech Funding News, [Why can't Europe's 1B NATO Innovation Fund keep its talent?](#), July 2025
18. Sifted, [Inside the unravelling of the 1bn NATO Innovation Fund](#), June 2025
19. Foreign Policy Research Institute, [AUKUS Still Has a Virginia Problem](#), October 2025
20. Australian Strategic Policy Institute, [If AUKUS Pillar Two isn't focused, it may become just a pile of good intentions](#), August 2025
21. CSIS, [The AUKUS Inflection: Seizing the Opportunity to Deliver Deterrence](#), August 2025
22. Bureau of Industry and Security, [Department of Commerce Expands Entity List to Cover Affiliates of Listed Entities](#), September 2025
23. Skadden, [BIS Suspends Affiliates Rule for One Year as Part of US-China Trade Deal](#), November 2025
24. GAO, [Export Controls: Commerce Should Improve Workforce Planning and Information Sharing](#), June 2025
25. House Committee on Foreign Affairs, [House Passes HFAC-led Reforms to Foreign Arms Sales Process](#), September 2025
26. Congress.gov, [House Bill 4216](#), September 2025
27. House Committee on Foreign Affairs, [HFAC-Led Foreign Military Sales Reforms Pass in the NDAA](#), December 2025

10. Talent Base

1. Aerospace Industries Association, [2025 Facts & Figures: U.S. Aerospace & Defense](#), June 2025
2. U.S. Department of Labor, [ApprenticeshipUSA Advanced Manufacturing](#), January 2025
3. Defense Innovation Unit, [GigEagle and the DoD's Agile Talent Ecosystem Receives Scaling Investment from CDAO](#), December 2024
4. Defense Scoop, [What's next for the Pentagon's AI-enabled GigEagle talent matching tool](#), April 2025
5. Pentagon, [The War Department Unleashes AI on New GenAI mil Platform](#), December 2025
6. Defense Scoop, [An Early Look at the Pentagon's Plan to Deliver AI at Scale under Trump](#), December 2025
7. U.S. Army, [Army Launches Detachment 201: Executive Innovation Corps to Drive Tech Transformation](#), June 2025
8. OPM, [OPM Launches US Tech Force to Implement President Trump's Vision for Technology Leadership](#), December 2025
9. Lightcast
10. Manufacturing Institute and Deloitte, [Taking charge: Manufacturers support growth with active workforce strategies](#), April 2024
11. Deloitte, [2025 Manufacturing Industry Outlook](#), November 2024

12. U.S. Bureau of Labor Statistics, [Industry turnover 3.6 national average, Table 10. Total separations levels and rates by industry and region, not seasonally adjusted](#), September 2025
13. USCIS, [H-1B Employer Data Hub](#), 2025
14. CSIS, [Competing with China's Public R&D Model](#), September 2025
15. CSIS, [Innovation Lightbulb: Not Just Attracting But Retaining International STEM Students](#), April 2025
16. BBC, [New international student enrolment drops 17% at U.S. universities](#), November 2025
17. IFP, [Brain Freeze: How International Student Exclusion Will Shape The STEM Workforce and Economic Growth In The United States](#), September 2025
18. AAU, [International Talent: Essential to America's Innovation Economy and National Security](#), January 2026



The Ronald Reagan Foundation and Institute's Board of Trustees is comprised of members of the Reagan Administration, including former Cabinet members, and prominent business and civic leaders who are dedicated to promoting the legacy of our nation's fortieth president.

Board of Trustees

The Honorable Frederick J. Ryan, Jr.
Chairman

Mrs. Catherine G. Busch
Secretary

Mr. Ben C. Sutton, Jr.
Treasurer

Mr. David Trulio
President and Chief Executive Officer

Mr. Roger Zakheim
Director, Ronald Reagan Institute

Rick J. Caruso
Michael P. Castine

Elaine L. Chao
Steve Forbes

Bradford M. Freeman
Andrew J. Littlefair

Joe Lonsdale
Susan R. McCaw
John Momtazee

Lachlan Murdoch
Peggy Noonan

Gerald L. Parsky
Condoleezza Rice

John F. W. Rogers
Paul D. Ryan

Alia Tutor
Robert Tuttle
Pete Wilson



The Ronald Reagan Institute, the Washington, DC office of the Ronald Reagan Presidential Foundation and Institute, promotes our 40th President's ideals, vision, and leadership example through substantive, issue-driven forums, academic and young professional programming, and scholarly work.



Ronald Reagan Presidential Foundation & Institute
RonaldReaganInstitute.org | ReaganFoundation.org/NSIB

40 Presidential Drive, Suite 200
Simi Valley, CA 93065

805.522.2977

850 16th Street NW
Washington, DC 20006

202.667.1980

