



CREATIVE DEFENSE FOUNDATION

SUMMARY REPORT

LEADERSHIP FORUM

Creative Disruptors by the Lakes 2026

St. Paul RiverCentre · Saint Paul, Minnesota • 18–19 September 2026

This report summarizes proceedings held under the Chatham House Rule. Views are not attributed to individual speakers or organizations.



CREATIVE DISRUPTORS BY THE LAKES 2026

SAINT PAUL RIVERCENTRE • SAINT PAUL, MINNESOTA • SEPTEMBER 18–19, 2026

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01 OPENING REMARKS · DAY 1 LEADERSHIP FORUM OPENING

SESSION OVERVIEW

The forum host welcomed attendees to the sixth Creative Defense Foundation Leadership Forum and acknowledged event sponsors, regional hosts, and congressional co-hosts, noting that the forum serves as an analytical space to define strategic problems before transmitting solutions to the National Security Prototype to Production Consortium (NSPPC) execution vehicle.

The host also outlined the rules of engagement and analytical framework governing the forum's closed-door proceedings, which were held under the Chatham House Rule.

02 FIRESIDE CHAT · DAY 1 ACCELERATING NAVY RAPID ACQUISITION

SESSION OVERVIEW

The opening fireside chat of the CDF Leadership Forum examined how Department of the Navy acquisition authorities are restructuring procurement pathways to field operational capabilities at the pace of modern technological change. The discussion focused on maritime lessons from active conflict zones, requirements reform, and scalable production mechanisms. The discussion detailed tactical lessons from active maritime theaters, structural requirements overhauls, and goals for rapid capability delivery.

UNMANNED SYSTEMS AND ATTRITABLE WARFARE INFLECTION POINTS

Recent maritime encounters involving captured or struck uncrewed surface and underwater vessels signal a fundamental shift in naval warfare comparable to the advent of nuclear propulsion or carrier aviation. Events in the Middle East and Ukraine demonstrate that adversaries capture, reverse-engineer, and target autonomous platforms in near-real time. Naval acquisition policy must accept that uncrewed systems are inherently attritable assets designed for potential operational loss. Consequently, platforms must incorporate zeroization, anti-tamper mechanisms, and anti-reverse engineering protections from initial design, allowing fleet operators to employ cheap, scalable systems without risking sensitive technological compromise.

ACQUISITION ECONOMICS, COST-PER-KILL, AND REQUIREMENTS OVERHAUL

The financial metrics of modern warfare have diverged from traditional procurement models. While exquisite platforms and expensive interceptors like Tomahawk and Standard Missiles remain necessary for high-end threats, achieving mass requires deploying low-cost munitions evaluated on a cost-per-kill basis. The legacy military requirements process was described as too slow, with multi-year drafting cycles preventing timely technology insertion. Under statutory authorities granted by Congress, Portfolio Acquisition Executives (PAEs) are now empowered to define portfolio requirements directly, enforce Modular Open Systems Architecture (MOSA) compliance, and eliminate proprietary vendor lock. To demonstrate rapid execution, acquisition leadership has set near-term demonstration goals for integrating and launching containerized munitions from competing commercial vendors off a common platform.

PAE PERFORMANCE METRICS AND DEVELOPMENT VELOCITY

Naval acquisition is establishing new performance metrics for PAEs centered on fielding speed, production scalability, software cycle times, and expanded market competition. Peacetime iteration cycles that traditionally spanned a decade must compress into low single-digit years for hardware and months for software. By actively targeting low-cost, attritable systems, program managers are forced to innovate assembly, manufacturing, and integration processes, directly dismantling the administrative barriers that delay traditional capability fielding.

NAVY RCO EXECUTION AND THE NSPPC SCALING PIPELINE

In its inaugural year, the Navy Rapid Capabilities Office (RCO) delivered multiple operational capabilities directly to fleet units. In its second year, the RCO's primary focus shifted from initial prototyping to fleet-wide scaling. The NSPPC functions as an operational marketplace that connects naval capability gaps with commercial solutions while providing contractual mechanisms for rapid production scaling. By utilizing modular interfaces and decoupled data architectures, the consortium approach allows the Navy to replace individual software or hardware components without undertaking costly, full-system overhauls. This strategy targets the acquisition "frozen middle," converting traditional five-to-six-year development delays into two-year execution windows that align with federal budget cycles.

DIRECTIVES FOR ENTREPRENEURS AND BIPARTISAN CONGRESSIONAL ALIGNMENT

Commercial defense innovators must prioritize mass manufacturing, component regeneration, and rapid scaling over submitting bespoke, low-volume prototypes with long lead times. Furthermore, successful rapid acquisition relies on close partnership with Congress to establish flexible funding mechanisms that support attritable system portfolios. Participants emphasized that while special operations and localized drone conflicts offer useful insights, the manufacturing scale required for peer conflict in the Pacific theater is orders of magnitude larger, requiring adaptive production capacity to maintain strategic deterrence.

03

PANEL DISCUSSION · DAY 1

MANUFACTURING ATTRITABLE MASS AT SCALE

SESSION OVERVIEW

The first panel discussion at the CDF Leadership Forum evaluated the transition from traditional, single-source defense arsenals to a distributed, plug-and-play manufacturing network capable of surging during high-intensity conflict. The discussion focused on digital factory architectures, additive manufacturing scalability, regulatory bottlenecks, and procurement mechanics. The session detailed structural limitations in current production, technical advances in flexible factory lines, and necessary policy reforms to sustain long-term industrial surge capacity.

STRUCTURAL LIMITS OF LEGACY ARSENALS AND THE ATTRITION MODEL

Traditional defense manufacturing relies heavily on exquisite, highly complex platforms produced by single-source suppliers over multi-year cycles. This legacy model, developed during the Cold War, resulted in substantial industrial atrophy, exemplified by the historic closure of major shipyards and shrinking competition across core platform classes. In modern peer conflicts, adversaries iterate technology rapidly, requiring a two-tiered force structure: maintaining exquisite manned platforms for high-end missions while deploying mass quantities of low-cost, attritable robotic and autonomous systems. Because uncrewed surface, underwater, and aerial platforms will inevitably be captured, jammed, or destroyed, operational strategy must shift from risk avoidance to mass regeneration, mirroring World War II industrial models where standardized designs were produced across dozens of distributed facilities globally.

PRODUCT-AGNOSTIC DIGITAL FACTORIES AND ADDITIVE MANUFACTURING

Transitioning to a distributed manufacturing network relies on advances in additive manufacturing, digital airframe design, and automated robotic assembly. Modern digital factories utilize product-agnostic infrastructure, enabling a single high-rate facility to pivot seamlessly between producing cruise missile airframes, interceptors, and commercial automotive components without re-tooling. This flexibility alters the risk profile of capital investments by decoupling manufacturing infrastructure from single-program lifecycles. Furthermore, shifting robotic programming from relative repeatability to absolute coordinate accuracy allows software instructions to be transmitted securely over-the-air, enabling qualified designs to execute on automated lines in any location without manual on-site calibration.

SOFTWARE-DEFINED ARCHITECTURE AND TECHNICAL DATA PACKAGES

To prevent production delays, hardware designs must incorporate software-defined architectures and open system standards, such as Weapons Open System Architecture. Rather than locking programs into rigid, hardware-centric specifications that become obsolete before fielding, software-defined systems permit continuous over-the-air capability updates post-deployment. Industry and government alignment relies on clear digital threads where the government retains Government Purpose Rights or Unlimited Data Rights over Technical Data Packages. If a prime contractor fails to

meet production rates or quality metrics, open digital architectures allow the military to transfer the complete design package to an alternate qualified manufacturing line immediately.

REGULATORY FRICTION, ITAR CONTRADICTIONS, AND CYBERSECURITY

Expanding distributed manufacturing introduces significant regulatory and administrative hurdles. Current International Traffic in Arms Regulations (ITAR) create operational paradoxes; for example, manufacturing processes developed by allied engineers in Europe automatically become ITAR-restricted upon landing in the United States, legally blocking the original foreign creators from viewing their own process code. Additionally, complex Cybersecurity Maturity Model Certification (CMMC) requirements and facility clearance timelines create multi-year barriers for non-traditional technology entrants. Modernizing industrial throughput requires streamlining cybersecurity accreditation and replacing slow, manual inspection protocols with automated, parameter-locked digital verification.

SUSTAINED DEMAND SIGNALS AND PROCUREMENT CONTRACTING

The primary obstacle preventing private capital from expanding defense manufacturing capacity is the absence of durable, multi-year demand signals. Single-year federal budget cycles force volatile purchasing patterns, where production rates spike temporarily before dropping to zero in out-years, preventing suppliers from making long-term capital investments. In contrast, commercial sectors rely on multi-year, take-or-pay contracts that provide decade-long visibility. Defense acquisition authorities can address this friction by utilizing multi-year framework agreements under Program Objective Memorandum (POM) planning and issuing Requests for Proposals that explicitly contract for production mass and supply chain velocity rather than purchasing discrete hardware units.

04

FIRESIDE CHAT · DAY 1

FRONTLINE LESSONS FROM UKRAINE TO FIELDED CAPABILITY

SESSION OVERVIEW

The second fireside chat at the CDF Leadership Forum examined how the Department of War can adapt commercial technology pathways by synthesizing operational lessons from active foreign conflicts into Defense Innovation Unit (DIU) procurement mechanisms. The discussion evaluated geopolitical risk through fat-tail distribution models, noting that the probability of major theater conflicts has elevated significantly. Strategic instability is further compounded by three simultaneous revolutions in military affairs: the scaling of low-cost unmanned mass that challenges traditional power projection, unpredictable advancements in artificial intelligence, and a commercial space race driven by falling launch costs. The discussion provided critical insights into how the Defense Innovation Unit is updating its operational metrics and harvesting lessons from frontline conflicts.

DIU TRANSFORMATION AND TRANSITION METRICS

DIU is undergoing a structural realignment focused on fielded capability rather than initial technology solicitation. Historically, the agency struggled to incentivize private sector participation in defense; today, an influx of private capital and commercial entrepreneurship has shifted DIU's mandate toward filtering and transitioning existing commercial capabilities into operational units. Key operational shifts include:

- **Conversion Factor Tracking:** DIU measures success through its transition rate (the percentage of launched projects that receive service funding and reach operational forces).
- **Military Leadership Alignment:** To bridge the gap between civilian innovation efforts and military budgeteers, DIU established a permanent two-star Military Deputy position to anchor long-term service relationships and align prototype projects with formal force design.
- **Operational Problem Ingestion:** Project selection has shifted from pushing commercial tech into the military to responding directly to operational problem sets generated by combatant commands and service branches.

FRONTLINE ADAPTATION: LESSONS FROM THE UKRAINIAN THEATER

Analysis of the war in Ukraine demonstrates how a severe demand signal forces rapid technological adaptation. When conventional artillery and 155mm ammunition supplies faced depletion early in the conflict, frontline forces pivoted toward massed unmanned aerial systems, resulting in heavy adversary casualties and reduced friendly infantry exposure. Concrete lessons for U.S. acquisition include:

- **Auditable Points Systems:** Frontline innovation utilizes gamified tracking software that assigns point values to high-value targets, creating direct incentive structures for drone operators.
- **Compressing Iteration Cycles:** The core lesson of Ukraine is not a specific drone model, but the speed of adaptation. Counter-drone adaptations (such as intercepting Shahed strike drones) initially took more than a year to field, but iterative edge engineering has compressed countermeasure cycles down to a few weeks.
- **Unscripted Force-on-Force Range Testing:** To replicate battlefield conditions, defense leadership emphasizes the need for large-scale, unscripted joint exercise ranges where forces can test edge adaptation against active electronic warfare and unmanned systems.

MACROECONOMIC PRESSURES AND BUDGET COMPRESSION

Structural financial constraints severely restrict the Department's ability to pivot toward new technologies. While the 1981 defense buildup operated under a budget equal to 6.2 percent of GDP, current defense spending sits near 3 percent of GDP, with expanding federal debt service consuming increasing shares of national revenue. Rising military pay and healthcare overhead have increased real personnel costs, causing procurement spending as a percentage of GDP to decline by roughly 75 percent compared to 1980s baselines. Because legacy acquisition programs leave little budgetary maneuver room, defense analysts advocate granting tactical commanders (such as O-6 brigade and regimental leaders) direct authority over a portion of their operational budgets to fund rapid, iterative technology purchases locally.

COMMERCIAL ENGAGEMENT MECHANISMS AND SCALING UNMANNED SYSTEMS

To scale unmanned systems beyond their current 1 to 2 percent share of total service procurement, DIU is deploying standardized commercial intake pathways. Through competitive Commercial Solutions Openings (CSOs), the agency issues non-prescriptive problem statements that allow commercial firms to present novel technical solutions. The agency is expanding its physical presence through regional on-ramp hubs—including signing a formal Memorandum of Understanding for a Minneapolis location—to connect local technology ecosystems with defense requirements. Furthermore, structured multi-stage competitions like the Drone Dominance initiative establish clear price targets and demand signals, allowing commercial manufacturers to build long-term production roadmaps while the military selects suppliers based on their demonstrated ability to adapt and scale.

05 SIGNING CEREMONY · DAY 1 MOU SIGNING CEREMONY: DIU AND THE MINNESOTA NATIONAL GUARD

SESSION OVERVIEW

The Defense Innovation Unit (DIU) and the Minnesota National Guard formally executed a Memorandum of Understanding (MOU) during the CDF Leadership Forum to expand defense testing capacity and accelerate technology transition. The agreement addresses critical bottlenecks in the defense acquisition cycle by establishing a structured framework to validate commercial prototypes in realistic field environments. The signing establishes a concrete pathway to move commercial prototypes out of administrative testing backlogs and onto active military ranges.

EXPANDING TEST CAPACITY AND TRANSITION INFRASTRUCTURE

The agreement supports DIU's strategic shift beyond initial prototype delivery toward deep operational transition across the Department of War. Under transition programs such as Project Bridge, commercial vendors face significant administrative hurdles in securing full security clearances, software Authorities to Operate (ATOs), and access to secure compartmented facilities. By linking DIU's transition initiatives with active military ranges, the partnership provides non-traditional defense companies with the ruggedized operational testing needed to achieve software and hardware accreditation.

CAMP RIPLEY INTEGRATION AND NATIONAL GUARD RANGE ACCESS

Central to the MOU is the integration of Camp Ripley, a 53,000-acre Minnesota National Guard training facility that offers a climate-rigorous environment for evaluating autonomous systems, sensors, and field equipment. The partnership leverages the Minneapolis-area DIU On-Ramp Hub, established within the preceding twelve months, as a national entry point for commercial technology firms. Companies nationwide can utilize the on-ramp hub to access Guard testing grounds, enabling soldiers and airmen to evaluate emerging capabilities directly in the field.

JOINT FORCE ITERATION AND REGIONAL ECOSYSTEM GROWTH

The MOU establishes a collaborative framework between defense innovation agencies, state military forces, and private industry to shorten technology iteration cycles. Placing commercial prototypes into the hands of operational units allows developers to refine capabilities rapidly based on direct warfighter feedback. Formally witnessed by regional congressional leadership, the agreement strengthens the Minnesota national security ecosystem while providing the broader Department of War with expanded range capacity to maintain tactical advantage in future multi-domain conflicts.

06

PANEL DISCUSSION · DAY 1

TRANSFORMING THE INNOVATION ECOSYSTEM

SESSION OVERVIEW

The second panel discussion at the CDF Leadership Forum examined the ongoing structural unification of the Department of War's innovation enterprise, focusing on how organizations like the Defense Innovation Unit (DIU), the Office of Strategic Capital (OSC), the Chief Digital and Artificial Intelligence Office (CDAO), the Strategic Capabilities Office (SCO), and the Defense Advanced Research Projects Agency (DARPA) are being aligned under single technical leadership. The discussion explored how this consolidated ecosystem intends to deliver clearer demand signals, bridge acquisition transitions, update legacy military specifications, and secure sustained funding. The discussion detailed concrete initiatives across enterprise governance, real-time supply chain data tracking, commercial IRAD activation, qualification reform, and workforce infrastructure.

UNIFICATION OF OSW INNOVATION ENTITIES AND SERVICE-LEVEL INTEGRATION

The Department is executing policy directives from defense leadership to integrate approximately 300 disparate innovation entities spread across military branches and defense agencies into a coordinated innovation pipeline. Under the statutory oversight of the Under Secretary of War for R&E acting as the Department's Chief Technology Officer, the Office of the Secretary of War (OSW) level now links early-stage, high-risk research at DARPA directly to commercial capital scaling at the OSC, with DIU and CDAO functioning as execution arms. To extend this synchronization into service-level acquisition, the Department is also examining ways to give program offices more execution-year flexibility to absorb integration, accreditation and certification costs without re-competing contracts. Such reserves would give program offices executable capital during execution years to cover unexpected software integration, cyber accreditation, and hardware flight certification costs without requiring multi-year contract re-solicitations.

SUPPLY CHAIN VISIBILITY AND REAL-TIME PRODUCTION DATA

To overcome historical blind spots regarding manufacturing capacity and component inventory, R&E and Acquisition and Sustainment (A&S) leadership established a data-sharing initiative. The program creates secure, automated data pipelines that feed real-time information from contractor enterprise systems directly into senior leadership dashboards.

Initial implementations with major propulsion and missile prime contractors now provide acquisition authorities with real-time visibility into bills of materials, sub-tier component inventories, and active production throughput for critical precision-guided munitions.

COMMERCIAL SHIFT: PRODUCT-DRIVEN MANAGEMENT AND IRAD ACTIVATION

Major systems integrators are shifting away from passive reliance on government specifications toward proactive, product-driven commercial management. Prime contractors are assigning dedicated "Capability Development Managers," functioning essentially as commercial product managers, to audit internal research and development (IRAD) "shelves" and commercialize dormant technologies. Highlights of this commercial transition include:

- **Activating Long-Term R&D:** Prime contractors are pulling mature technologies out of laboratory environments, such as quantum-enhanced sensing hardware developed over 15 to 20 years, and utilizing internal capital to build fieldable prototypes in Pelican cases to demonstrate operational utility to military buyers ahead of formal requirements.
- **Expanding Venture Capital Deployment:** Major defense integrators are substantially expanding their internal venture capital funds to invest directly in early-stage commercial dual-use startups and non-traditional tech firms.
- **Dual-Use Commercial Supply Chains:** Directed energy and autonomous hardware vendors are actively integrating commercial electric vehicle (EV) battery packs and automotive cooling components directly into mobile tactical laser architectures, reducing production costs while expanding domestic supplier bases across nearly every U.S. state.

NON-TRADITIONAL ACCELERATION, DEMAND SIGNALS, AND OTAS

Non-traditional vendors and venture-backed firms emphasized that while rapid prototyping competitions validate technology, commercial scaling requires firm purchase commitments rather than non-binding expressions of interest. For example, autonomous drone developers entering the U.S. market in 2019 spent years navigating traditional research and development contracts before the Drone Dominance initiative compressed requirements, testing, and volume ordering into a three-month window. Expanding the use of Other Transaction Authorities (OTAs) allows program offices to extend initial research contracts directly into low-rate production and field evaluation without forcing vendors to pause operations during lengthy contract re-competitions.

MANAGING MULTIPLE VALLEYS OF DEATH AND LEGACY DIVESTMENT

Defense technology transition faces sequential hurdles rather than a single acquisition gap, moving from science and technology (S&T) into research, development, test, and evaluation (RDT&E), onward to qualification, low-rate initial production, and eventual fleet-scale procurement. Successfully navigating these transitions requires balancing immediate operational demands ("the now") against 5-to-10-year strategic technology horizons ("the future"). Because the national defense budget remains finite, scaling modern directed energy systems, counter-UAS platforms, and autonomous swarms requires the Department and Congress to make deliberate choices to off-ramp and divest from legacy hardware platforms that have consumed procurement budgets for decades.

OVERCOMING "FROZEN MIDDLE" BOTTLENECKS AND MIL-SPEC REFORMS

Administrative delays in updating military specifications (mil-specs) and securing Authorities to Operate (ATOs) remain severe points of friction during technology fielding. Participants urged Congress to utilize its legislative oversight to help

streamline qualification, certification, and mil-spec amendment cycles, leveraging AI-assisted analytics to compress review timelines from years down to weeks.

INFRASTRUCTURE MODERNIZATION, PIVOT FUNDING, AND WORKFORCE CONSTRAINTS

Long-term defense innovation relies on modernizing the Department's 60-plus organic laboratories and test facilities, which perform defense-unique science but suffer from severe physical infrastructure degradation. To sustain rapid technological adaptation, panelists advocated establishing permanent "pivot funds" within programs of record, enabling acquisition authorities to adjust technical requirements and reallocate funding as operational threats evolve. Ultimately, panel participants concluded that all legislative, financial, and technical reforms depend entirely on building, retraining, and retaining the nation's technical, engineering, and blue-collar manufacturing workforce, which remains the foundational enabler of the national security enterprise.

07

FIRESIDE CHAT · DAY 1

SHAPING THE FUTURE OF NATIONAL SECURITY

SESSION OVERVIEW

The third fireside chat at the CDF Leadership Forum evaluated the legislative outlook, oversight mechanisms, and budgetary mechanics governing defense appropriations for Fiscal Year 2027. The discussion addressed the status of the House defense appropriations bill, strategies for avoiding long-term Continuing Resolutions (CRs), the budget reconciliation process, and methods for expanding regional industrial bases. The session covered legislative timelines, funds execution, multi-year contracting oversight, trade workforce investments, and bipartisan defense cooperation.

FISCAL YEAR 2027 BUDGET OUTLOOK, CR AVOIDANCE, AND RECONCILIATION FRICTION

Participants emphasized the necessity of enacting full-year defense appropriations bills prior to the conclusion of the congressional session, avoiding extended Continuing Resolutions that freeze program starts and damage defense industrial planning. Key legislative dynamics include:

- **House Base Bill Progression:** The House Defense Appropriations Subcommittee has reported its base defense bill, designed to stabilize military procurement and maintain readiness.
- **Bipartisan Anti-CR Strategy:** There is bipartisan agreement that pushing defense appropriations into the next calendar year creates severe administrative paralysis, particularly during an election year when new congressional members lack committee assignments.
- **Reconciliation Considerations:** Participants discussed the trade-offs of using budget reconciliation packages to move large defense top-line increases, noting that regular order provides fuller committee oversight and more predictable funding across accounts.

CONGRESSIONAL OVERSIGHT AND FUNDS EXECUTION

Participants discussed the relationship between legislative Article I budget authority and Executive Branch execution. The defense subcommittee operates with a relatively small professional staff overseeing a trillion-dollar portfolio spanning all military services and intelligence agencies, and timely execution of appropriated funds is essential to congressional intent:

- **Timely Funds Release:** Participants stressed that the timely release of appropriated funds is essential to legislative intent and to financial predictability for defense contractors, municipalities, and research universities.
- **Contracting Capacity:** Staffing changes and reorganizations within defense contracting offices have made it harder to obligate two-year procurement funds on time and to execute multi-year contracts.

MULTI-YEAR PROCUREMENT TRANSPARENCY AND SUBCONTRACTOR STABILITY

To address critical munition supply deficits and rebuild depleted stockpiles, Congress has granted the Department multi-year procurement authorities for key missile and ammunition lines. Participants emphasized that multi-year contracting authority requires transparency from the Department regarding delivery timelines, production costs, and supply chain health, and that the stability of multi-year awards should flow down to sub-tier suppliers rather than stopping at the prime contractor level.

WORKFORCE REBUILDING, TRADE EDUCATION, AND RETRAINING

Rebuilding the national security industrial base requires reversing a 30-year decline in manufacturing capacity caused by post-Cold War "managed decline" policies that cut military force structure and research budgets. Addressing labor shortages requires targeted federal investments across trade education, higher education, and workforce re-skilling:

- **Skilled Trades and Apprenticeships:** Congress allocated several billion dollars within the defense bill for workforce development, targeting union apprenticeship programs, community college trade tracks, and high-school vocational pipelines for electricians, plumbers, welders, and pipefitters.
- **STEM and Higher Education Incentives:** To attract talent into electrical engineering, physics, biochemical engineering, and defense research, lawmakers advocated reviving national defense student loan forgiveness models to incentivize students to enter critical defense technical fields.
- **Mid-Career Worker Retraining:** Expanding industrial capacity requires public-private partnerships to retrain mid-career workers (ages 28 to 58) to transition into advanced defense manufacturing, naval shipbuilding, and aerospace production lines.

BIPARTISAN GOVERNANCE AND REGIONAL ECOSYSTEM GROWTH

The session concluded with a reaffirmation that national defense remains an inherently bipartisan obligation where courteous compromise and Article I oversight take precedence over partisan division. Participants stressed that robust national defense must be paired with active diplomacy, development funding, and comprehensive veteran healthcare support. Regional innovation networks, such as the Minnesota defense ecosystem and the Disruptors Conference series, play a vital role in connecting commercial entrepreneurs, academic researchers, and small businesses directly with congressional appropriators, establishing the collaborative foundation required to maintain national technological superiority.

08

REMARKS & PANEL · DAY 2

DAY 2 WELCOME REMARKS & HONORARY CO-HOST PANEL

SESSION OVERVIEW

Day 2 of the CDF Leadership Forum opened with a focus on translating legislative policy, industrial strategy, and regional innovation ecosystems into rapidly fielded defense capabilities. To contextualize how regional innovation networks coalesce into formal national security assets, the panel examined the genesis of Minnesota's defense ecosystem. The non-profit Minnesota National Security Ecosystem originated when Army Futures Command issued a broad solicitation to regional municipalities. Local congressional staff and business leaders rapidly assembled an informal commercial network, establishing a regional innovation hub that now serves as a primary model for National Guard range partnerships and public-private defense collaboration.

CIVIL RESERVE MANUFACTURING NETWORK AND DUAL-USE INFRASTRUCTURE

Rebuilding domestic industrial base capacity requires structural policy mechanisms that leverage commercial manufacturing capacity for national defense needs. Panelists detailed how federal programs and international alliance commitments are structuring this industrial expansion:

- **Civil Reserve Manufacturing Network (CRAMN):** Established in defense legislation to counteract 30 years of post-Cold War industrial atrophy and offshored manufacturing stemming from post-1992 defense budget reductions. CRAMN pre-identifies and partners with commercial firms to provide pre-designated surge production during high-intensity conflicts while serving as an entry point for commercial vendors entering defense markets.
- **NATO Infrastructure Allocation:** In support of NATO's 5% defense spending commitment, the 1.5% infrastructure allocation can be directed toward dual-use manufacturing facilities, addressing critical defense supply vulnerabilities across both civilian and military sectors.
- **Dual-Use Economic Resilience:** Dual-use technologies, such as biotechnology, defense healthcare, microelectronics, and advanced computing, provide financial stability for commercial firms and state economies during defense procurement lulls, supported by tax and financing mechanisms like capital equipment expensing.

MULTI-YEAR PROCUREMENT EXPANSION AND MUNITIONS CAPITAL SURGE

Providing the defense industrial base with predictable, long-term demand signals has unlocked significant private capital commitments across primary munition suppliers and non-traditional vendors. The session highlighted the operational and financial impact of expanding multi-year contracting authorities:

- **Seven-Year Procurement Option:** Based on direct industry feedback, multi-year procurement (MYP) options were extended from traditional 5-year terms to 7-year horizons, providing the duration and predictability required for corporate boards to justify large-scale capital investments.

- **Private Capital Deployment:** In response to 7-year MYP demand signals, munition contractors across prime and sub-tier levels have committed significant private capital to expand production capacity for critical missile and interceptor lines.
- **Inclusion of New Entrants:** Defense acquisition authorities are expanding multi-year procurement structures beyond traditional prime contractors to include emerging defense tech firms.
- **Congressional Oversight and Transparency:** Expanded multi-year authorities require full Department transparency regarding contract execution, supply chain distribution, and delivery timelines to satisfy Article I legislative oversight.

STRATEGIC CAPITAL LOANS, APFIT SCALING, AND COMBAT FIELDING

Overcoming traditional two-year budget cycles requires specialized financial programs that bridge early-stage technology development directly into scaled manufacturing. Defense acquisition leaders detailed specific deployment metrics and fielding successes across federal loan programs and rapid procurement vehicles:

- **Office of Strategic Capital (OSC) Scaling:** OSC has closed multiple major transactions, deploying billions of dollars in federal loans and leveraging substantially larger private capital investments for critical technology sectors.
- **Rare-Earth Material Processing:** Highlighted among OSC investments is a loan to Niron in Sartell, Minnesota, to build a commercial facility scaling the production of rare-earth-free permanent magnets.
- **APFIT Program Throughput:** The Accelerated Procurement Funding for Innovative Technologies (APFIT) program has awarded over \$1.4 billion in current cycles, with individual awards up to \$75 million to bypass the traditional two-year budget lag for mature technologies ready for procurement.
- **Operational Fielding:** More than 10 APFIT-funded systems have been fielded to operational forces, including low-cost one-way attack drones.

CONSORTIUM PRIORITIES, OPEN ARCHITECTURES, AND DEPARTMENT-WIDE AI ADOPTION

Defense leadership is prioritizing modular composability and enterprise-wide software scaling. The panel outlined operational priorities across open system architectures and artificial intelligence deployment:

- **NSPPC Speed and Standardization:** The Navy RCO-sponsored National Security Prototype to Production Consortium (NSPPC) focuses on rapid contract execution and eliminating operational fragmentation, such as establishing universal charging standards for autonomous field drones.
- **Open System Architecture (MOSA):** Major platform acquisition programs, such as the 6th-generation F-47 fighter, incorporate modular open system architectures from inception, ensuring mission computers, radars, and sensors can be swapped out seamlessly to maintain continuous vendor competition.
- **Enterprise AI Scaling:** Enterprise generative AI deployment has expanded rapidly from an initial pilot population to a large share of the Department's workforce.
- **Maven Smart System Expansion:** Driven by operational demonstrations, the active user base for the Maven Smart System has grown rapidly, increasing demand for high-performance compute infrastructure.

09

FIRESIDE CHAT · DAY 2

CONGRESS AND A&S: PARTNERING TO MOVE CAPABILITY FASTER**SESSION OVERVIEW**

The fourth fireside chat at the CDF Leadership Forum evaluated how defense acquisition authorities and congressional oversight committees can streamline procurement to field combat capabilities rapidly. The discussion focused on abandoning Cold War procurement timelines, empowering single-point acquisition leads, expanding commercial supply chains, and hardening domestic defense infrastructure. The session detailed key operational priorities across four core areas: accelerating the 85 percent solution, disrupting legacy systems commands, expanding portfolio acquisition authorities, and safeguarding domestic industrial infrastructure.

THE 85 PERCENT SOLUTION AND COMMERCIAL RISK-TAKING

Defense acquisition must move away from Cold War-era procurement mindsets that treated development time as infinite and demanded 100 percent exquisite technical specifications before fielding. In modern threat environments, speed is a primary metric of value. Deploying an 85 percent functional capability immediately allows operational units to field equipment, while enabling logistics, manufacturing, and technical adjustments to occur iteratively in parallel. This acceleration is increasingly fueled by private equity and venture capital firms investing in defense manufacturing ahead of formal requirements or solicitations. Highlighted as a case study was a defense technology company that developed a long-range, low-cost strike munition from initial concept to production in roughly two years, moving ahead of a formal requirements document.

SYSTEMS COMMAND DISRUPTION AND TESTING OVERHAUL

Congressional oversight must support fielding 85 percent solutions while curbing the zero-risk bias inherent in traditional Operational Test and Evaluation (OT&E) processes, which frequently leads to program cancellations if prototypes encounter test setbacks. Historical fighter aircraft developments—such as transitioning straight-wing naval jets to swept-wing configurations or upgrading legacy Hornets to Super Hornets, demonstrate that airframe and system iterations can be executed while platforms are fielded in quantity. Reforming this process requires restructuring defense systems commands, reducing middle-management administrative barriers, and re-examining test requirements that add time without adding confidence in established designs.

PORTFOLIO ACQUISITION EXECUTIVES (PAE) AND SCHEDULE-DRIVEN CULTURE

Implementing the Department's Acquisition Transformation Strategy relies on the Portfolio Acquisition Executive (PAE) structure to drive internal culture change. PAE's function as singularly accountable officials possessing authority over systems engineering, testing, requirements, contracting, and resource allocation, reporting directly to Department leadership and Congress rather than legacy systems commands. Under this model, schedule is elevated to a primary

technical requirement. PAEs are empowered to make explicit technical trade-offs, such as accepting minor reductions in platform range or payload, to guarantee that capabilities deliver 100 percent on time to meet operational timelines.

LEGISLATIVE ALIGNMENT, COMMERCIAL EXPANSION, AND HOMELAND PROTECTION

Aligning defense procurement with congressional appropriations requires maintaining a wartime posture across legislative and executive branches. While budget reconciliation mechanics can introduce funding flow delays, close bipartisan coordination between House appropriators and Department leadership helps sustain program momentum. Rebuilding the industrial base requires addressing physical production constraints by drawing commercial manufacturing giants into the defense supply chain, exemplified by 3M's defense participation and General Motors supplying componentry to Lockheed Martin. Acquisition authorities are working to incorporate total industrial base expansion as an active selection criterion in defense contract awards. Finally, addressing the proliferation of adversary drone threats to the domestic homeland, supported by initiatives like JIATF 401, requires hardening domestic manufacturing facilities, encouraging contractors to construct non-descript, security-hardened production sites to protect critical defense industrial capacity.

10

PANEL DISCUSSION · DAY 2

ALLIED PRIORITIES AFTER THE ANKARA SUMMIT

SESSION OVERVIEW

The fourth panel discussion at the CDF Leadership Forum evaluated the implementation of commitments established at the NATO Ankara Summit, examining how transatlantic defense initiatives are converting shared strategic priorities into operational military capabilities. The discussion addressed the geopolitical consequences of Russia's invasion of Ukraine, historical patterns of state-on-state aggression (including Georgia in 2008 and Crimea in 2014), and expanding defense spending benchmarks across the alliance. Estonia leads NATO defense spending with a 5.4% core defense allocation complemented by 1.5% in security-related expenditures (totaling nearly 7% of GDP), while Norway has elevated defense spending to 3.4% of GDP. The session covered five themes: frontline deterrence in the High North and Baltics, reciprocal procurement frameworks, co-production pipelines for critical munitions, enterprise-wide cyber defense, and dual-use venture capital integration.

FRONTLINE DETERRENCE IN THE BALTICS AND THE HIGH NORTH

Allied representatives emphasized that European security requires maintaining forward military presence and sustained long-term assistance to Ukraine. In the Baltic region, NATO's Forward Land Forces framework maintains rotating allied troop deployments, including British troop commitments in Estonia. In the High North and Arctic theaters, Norway and Canada provide maritime domain awareness, harsh-climate equipment testing, and strategic monitoring of Russian

naval activity in the High North. Joint Canada-U.S. NORAD modernization and Arctic infrastructure investments further reinforce North American homeland defense and NATO's northern flank.

RECIPROCAL PROCUREMENT MOUS AND INDUSTRIAL INTEGRATION

Transitioning defense procurement from simple bilateral purchasing toward transatlantic co-development, co-production, and co-sustainment relies on established legal mechanisms. Panelists highlighted the role of Reciprocal Defense Procurement (RDP) Memoranda of Understanding (MOUs) maintained between the United States and 28 qualified allied nations. Under the Defense Federal Acquisition Regulation Supplement (DFARS), these MOUs waive the Buy American Act of 1933, allowing prime contractors to treat partner-nation defense suppliers as domestic sources. Alliance representatives urged defense buyers to leverage frameworks like AUKUS—including upcoming Maritime Big Play operational demonstrations, while noting the importance of keeping transatlantic defense markets open to qualified suppliers on both sides of the Atlantic.

PRODUCTION CAPACITY, STOCKPILES, AND CO-PRODUCTION PIPELINES

Meeting alliance capability targets requires moving beyond financial pledges to establish high-rate manufacturing capacity. Panelists advocated utilizing the NATO Support and Procurement Agency (NSPA) to aggregate multi-national purchase orders and issue unified demand signals to industry. Specific co-production achievements and active feasibility initiatives include:

- **PAC-3 Missile Sustainment:** Establishing a dedicated European sustainment facility for PAC-3 interceptors, substantially compressing certification and maintenance turnaround times.
- **Stinger Missile Co-Production:** Setting up European production lines for Stinger air-defense missiles through joint industrial partnerships between the United States and European allies.
- **AMRAAM Manufacturing Feasibility:** Exploring multi-national feasibility studies to establish secondary component supply chains and assembly lines for critical air-to-air missiles and reduce multi-year procurement backlogs.
- **Munition Standardized Requirements:** Standardizing technical specifications across critical munitions, such as 155mm artillery rounds, ensuring that separate national factories can produce interchangeable inventory during high-intensity operations.

ENTERPRISE CYBER DEFENSE, SOCIETAL RESILIENCE, AND RANGE INFRASTRUCTURE

Cyber warfare represents a pervasive threat targeting civilian infrastructure, municipal water systems, power grids, and democratic processes, with software vulnerability exploits increasing by 20% year-over-year. Estonia's paperless digital government, governed by a national Cybersecurity Act establishing mandatory legal reporting and compliance standards for critical infrastructure, serves as an operational model for societal resilience. Specialized cyber defense infrastructure across the alliance includes the NATO Cyber Centre of Excellence in Tallinn, the CR14 cyber range, and the annual Locked Shields exercise involving over 4,000 international participants. However, panel participants cautioned that defense authorities must balance strict cybersecurity compliance protocols against small-and-medium enterprise (SME) capacity, ensuring that administrative security hurdles do not crowd non-traditional technology innovators out of the defense ecosystem.

DUAL-USE INNOVATION, DIANA HUBS, AND PRIVATE VENTURE CAPITAL

Connecting private venture capital with military procurement priorities is essential for scaling commercial dual-use technologies, including artificial intelligence, quantum computing, space systems, and Arctic transport infrastructure. The NATO Defence Innovation Accelerator for the North Atlantic (DIANA) operates regional technology hubs, including a major Canadian facility in Halifax supported by a substantial national allocation for dual-use tech development. Commercial startups entering defense markets must focus on solving specific operational military challenges, while venture capital investors must recognize that defense procurement timelines require greater financial patience than standard commercial markets. Ultimately, panelists reaffirmed that mutual defense treaties ensure Western democracies maintain shared economic, technological, and military deterrence against global autocratic threats.

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PANEL DISCUSSION · DAY 2

PLUG AND PLAY COMPOSABLE SYSTEMS FOR ARMY MODERNIZATION

SESSION OVERVIEW

The fifth panel discussion at the CDF Leadership Forum evaluated the U.S. Army's modernization strategy, focusing on how emerging commercial capabilities must compose with existing force structures to accelerate field deployment. The session established that lasting acquisition transformation requires four structural elements: clear goals, stakeholder alignment, firm enterprise direction, and sustained behavioral change.

Institutional reform centers on breaking down traditional stovepipes between requirements generators and acquisition offices, placing transformation commands and Portfolio Acquisition Executives (PAE) in parallel alignment. The discussion outlined a roadmap spanning division-scale operational touchpoints, commercial capital integration, software oversight tools, and regulatory streamlining.

OPERATIONAL RISK-SHARING AND DIVISION-SCALE PROTOTYPING

The Army is rebalancing its risk model by bringing operational formations directly into early prototyping phases, allowing military units to assume shared developmental risk rather than inheriting operational risk from prolonged laboratory testing. This collaborative approach was demonstrated through the iterative scaling of Next Generation Command and Control (NGC2) technologies across Project Convergence Capstone (PCC) events:

- **PCC-4 (2024):** Executed as an unclassified proof-of-concept evaluating commercial applications at a small scale.
- **PCC-5:** Expanded testing to a battalion-level formation of 800 soldiers, integrating software applications directly onto tactical vehicles.
- **PCC-6 (August 2026):** Scaled capability evaluation to a full division level across multiple brigade formations. Operating in extreme desert heat with thousands of active radios, the exercise surfaced real-world network scaling challenges that could not be replicated in synthetic laboratories.

- **Bi-Monthly "Sting Events":** To maintain momentum between major annual exercises, the Army introduced bi-monthly operational evaluations. These rapid touchpoints force industry software vendors to address top-priority items within 30-day windows, shifting development away from static testing toward continuous, iterative prototyping.

PRIVATE VENTURE CAPITAL, MARKET MECHANICS, AND COMMERCIAL TEAMING

The influx of private venture capital and private equity into defense technology represents a major strategic advantage, provided the Department rewards private capital with timely contract awards. While aggressive venture valuations in defense tech may trigger market consolidation or business failures among overvalued startups, a healthy commercial ecosystem generates a broad layer of specialized merchant suppliers. Similar to the expansion of commercial space launch infrastructure, emerging defense tech firms are forming durable supplier bases that support major traditional integrators and "neo-primes." Furthermore, commercial startups are actively teaming with established defense manufacturers, such as pairing solid rocket motor propellant innovators with legacy ammunition producers, while leveraging Midwest commercial automotive Tier 1 and Tier 2 manufacturing lines capable of high-diversity, low-volume production.

PORTFOLIO MANAGEMENT, FORCE CATEGORIZATION, AND AUTONOMY

Under the re-oriented PAE structure, program offices manage broad capability portfolios rather than isolated hardware platforms. In software-intensive programs like NGC2, commercial developers team directly with acquisition offices to provide objective targeting and airspace management applications, utilizing operational field exposure as commercial value rather than billing the government for basic software development. Enterprise autonomy efforts are categorized across three operational force tiers:

- **Protected Tier:** Manned combat platforms engineered with maximum armor and defensive systems to safeguard human crews.
- **Expendable Tier:** Unmanned platforms possessing high individual value where loss is acceptable under specific mission conditions, exemplified by MQ-1 class systems.
- **Attritable / Affordable Mass Tier:** Unmanned, fully autonomous platforms manufactured at low cost and high volume, designed specifically for high-loss contested environments.
- **Specialized Autonomy Formations:** Army autonomy teams are collaborating with engineer brigades to field autonomous breaching systems that clear obstacle belts without placing soldiers in enemy engagement zones. Production scaling for these systems is supported through Industrial Base Analysis and Sustainment (IBAS) funding.

SOFTWARE OPERATIONS, ENTERPRISE VISIBILITY, AND REGULATORY STREAMLINING

Modernizing defense procurement requires treating software operations as an active warfighting function rather than an administrative support expense. To satisfy congressional oversight requirements while maintaining software agility, the Army deployed a digital platform that consolidates its research, development, and science and technology (S&T) portfolio, layering artificial intelligence workflows over disparate financial, contracting, and program management databases to provide real-time expenditure tracking. Leadership conducts regular executive reviews of the S&T portfolio, eliminating misaligned projects and reallocating capital to frontline requirements.

To improve legislative communication, the Army consolidated its legislative liaisons, program managers, PAEs, and budget officers to present unified 10-to-15-year modernization roadmaps organized by domain, including tactical wheeled vehicles, tracked combat vehicles, aviation, and next-generation command networks. However, regulatory frameworks like Cybersecurity Maturity Model Certification (CMMC) continue to present severe financial hurdles, often requiring small non-traditional firms and commercial automotive entrants to spend upwards of \$1 million on compliance protocols that quickly become outdated. Streamlining these cybersecurity barriers and expanding trial-boss acquisition authorities remain essential steps to sustaining the Army's commercial-first modernization strategy.

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FIRESIDE CHAT · DAY 2

ALIGNING NAVY POLICY WITH BEST PRACTICES

SESSION OVERVIEW

The fifth fireside chat at the CDF Leadership Forum evaluated how the Department of the Navy is restructuring its acquisition, requirements, and budgeting frameworks to align with commercial technology velocity and industry best practices. The discussion drew on both private-sector commercial defense experience and senior executive leadership inside the Pentagon. Reflecting on the 25th anniversary of 9/11, the session underscored that defense procurement reform must ultimately serve sailors and Marines on the front lines. The session detailed critical policy shifts across four primary areas: aligning budget cycles with capability delivery, decoupling software from hardware, reforming contracting workforce culture, and establishing commercial intake pathways.

ALIGNING PPBE, ACQUISITION, AND THE PAE MODEL

The Navy's traditional acquisition framework operates at the intersection of three distinct systems: requirements generation, the Planning, Programming, Budgeting, and Execution (PPBE) process, and formal contracting. A fundamental systemic flaw is that PPBE is a rigid, calendar-driven process, whereas emerging operational threats and commercial technology cycles are event- and capability-driven. Re-engineering this system requires shifting authority from contracting offices back to Program Managers (PMs). Through the Portfolio Acquisition Executive (PAE) model, the Navy is embedding budget execution and contracting leads directly into PAE structures. This integration ensures that middle-tier programs, enabling technologies, and non-major defense acquisition programs (non-ACAT I) receive dedicated financial and administrative alignment to adapt rapidly to emergent fleet requirements.

DECOUPLING HARDWARE/SOFTWARE AND PLUG-AND-PLAY ARCHITECTURE

A significant obstacle in naval modernization is the mismatch between technological time constants. Physical platform hulls, power plants, and structures remain in service for 30 to 50 years, whereas microprocessors and software applications double in capability every few years. Historically, integrating new C5ISR technologies onto legacy hulls

required tying up capital warships—such as Aegis cruisers—for two years of manual integration testing. To eliminate these bottlenecks, naval policy is enforcing the decoupling of software from underlying hardware:

- **Modular Open Systems Architecture (MOSA):** Requiring standardized reference architectures and open interfaces at the point of contract award, ensuring mission software can be upgraded independently of physical platform overhauls.
- **Composability Declarations:** Mandating that commercial vendors commit up-front to delivering open interface specifications and integration support as an enforceable contractual deliverable.
- **Digital Engineering and Digital Twins:** Requiring commercial contractors to deliver digital twins alongside physical hardware, allowing naval engineers to validate software interoperability synthetically in digital operational models before physical shipboard installation.

OVERCOMING THE "FROZEN MIDDLE" AND REFORMING CONTRACTING WORKFORCE CULTURE

Executing acquisition transformation, which encompasses 38 distinct Navy policy initiatives, requires overhauling the execution layer, often referred to as the "frozen middle." Historically, contracting officers operated independently of program success metrics, applying rigid, ship-building regulations to agile software procurements. Reforming this workforce involves structural and administrative changes:

- **PAE Chain of Command Alignment:** Contracting leads for specific capability areas now report directly to PAEs and capability Program Managers rather than isolated contracting heads, tying contracting performance directly to program schedule and fielding velocity.
- **Specialized Agreements Officers:** The Navy is establishing a dedicated cadre of Agreements Officers distinct from traditional FAR-based contracting officers, specializing specifically in Other Transaction Authorities (OTAs) and rapid prototyping vehicles.
- **FAR Supplement Streamlining:** Naval policy is actively eliminating redundant, internal FAR supplements that add unnecessary administrative guardrails to commercial procurements.
- **Mandatory Innovation Tours:** Through the Naval Acquisition Development Program, new contracting personnel are required to complete at least one rotation within rapid capability offices (such as DIU, RCOs, or RCCs) to gain hands-on experience executing agile, non-traditional contracts.

INTERNATIONAL CONTRACTING, INTEROPERABILITY, AND SMALL BUSINESS STRATEGY

A substantial share of the Navy's annual platform and system contracting involves international spend, Foreign Military Sales (FMS), or direct allied industrial participation. Foreign partner purchases sustain critical domestic manufacturing lines, such as maritime patrol aircraft, requiring acquisition offices to design international data interoperability into systems up-front rather than retrofitting platforms post-fielding. For non-traditional commercial firms and small businesses navigating the Navy's federated organizational structure, executive guidance emphasized several operational strategies:

1. **Utilize PAE Front Doors:** Navigate the Navy's decentralized structure by engaging PAE entry points mapped to specific capability portfolios.
2. **Understand Physical Platform Integration:** Account for operational environment constraints early in product design, including integration requirements for Aegis combat systems and operation in GPS-denied environments.

3. **Strategic Teaming:** Enter the defense ecosystem as a sub-tier partner to prime contractors to gain operational experience, understand government contracting mechanics, and build long-term corporate partnerships.
4. **Commercial Price Reasonableness:** Collaborate directly with government agreements officers to construct transparent, non-FAR commercial pricing models that justify price reasonableness for off-the-shelf commercial technologies.

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PANEL DISCUSSION · DAY 2

RESHAPING NATIONAL SECURITY INVESTMENTS

SESSION OVERVIEW

The sixth and final panel discussion at the CDF Leadership Forum evaluated how the Department of War, defense innovation agencies, and congressional committees can align defense budget execution with private capital to scale non-traditional technology entrants. The discussion examined the proposed expansion of the defense budget top-line toward \$1.5 trillion, strategies for navigating budget reconciliation packages, mechanisms for leveraging private venture capital, and tools for modernizing legacy financial systems. The discussion also detailed key strategic themes across budget prioritization, private capital leverage, supply chain credit bridges, commercial intake velocity, and real-time expenditure visualization.

BUDGET PRIORITIZATION, RECONCILIATION, AND CAPITAL ALIGNMENT

The FY2026/2027 defense budget landscape represents a major structural shift, incorporating a proposed \$1.5 trillion top-line budget alongside unprecedented private capital flows into national security. A significant share of major investment funding, encompassing the Defense Production Act (DPA), Industrial Base Analysis and Sustainment (IBAS), munition scaling, OSC loan programs, the Accelerated Procurement Funding for Innovative Technologies (APFIT) program, and the Golden Dome initiative, is tied to legislative reconciliation or supplemental funding packages. This makes close prioritization with congressional authorizers and appropriators essential to preserve critical operational capabilities, field delivery timelines, and munition lines.

OFFICE OF STRATEGIC CAPITAL (OSC) AND SUPPLY CHAIN FINANCING

OSC utilizes its loan authority to provide credit bridges for critical national security supply chains that cannot secure traditional commercial financing. The office targets 34 covered technology categories, concentrating investments across six core industrial groups: industrial technology, microelectronics, space and satellites, shipbuilding, energy and batteries, and critical minerals—with critical minerals representing a large share of current deal flow. Key supply chain financing strategies include:

- **Battery Anode Financing:** OSC financed a domestic facility manufacturing silicon battery anodes to replace foreign graphite dependencies, with the federal loan matched by private equity and paired with formal corporate board governance and multi-stakeholder oversight.

- **Midwest Mom-and-Pop Scaling:** A significant portion of the defense supply chain relies on risk-averse, family-owned manufacturers built during the Apollo era. To help these component suppliers expand plant capacity without taking on unmanageable debt, OSC and A&S deploy Business Operations and Network Design (BOND) professionals to provide on-site manufacturing expertise alongside DPA and IBAS funding.
- **Purpose-Built Component Capacity:** OSC is financing specialized supply chain entrants, such as loan partnerships to construct purpose-built manufacturing facilities dedicated exclusively to producing sub-tier drone parts, motors, and electronic components.

CONTRACT ALLOCATION GAPS AND LEGACY BACKLOG TENSIONS

A major point of friction in defense financial policy is the disparity between private capital investment and formal defense contract awards. While private venture capital investment in defense technology now far exceeds the internal research and development spending of the largest prime contractors, defense technology startups currently receive only a small fraction of total defense contract dollars. Meanwhile, traditional prime integrators continue to receive multi-billion dollar contracts for long-lead legacy platforms, creating significant financial tension between modern commercial innovators and established defense procurement channels.

- **Unexecutable Backlog Delays:** Panelists noted that multi-billion dollar allocations for long-lead platforms that will not field until the 2040s obligate large appropriations before delivering operational capability. In contrast, low-cost cruise missiles and autonomous systems offer 12-to-18-month production lead times but struggle to secure proportional funding velocity.
- **Expanding Non-Traditional Top-Lines:** Defense officials emphasized that the FY2027 budget allocates tens of billions of dollars specifically for drone dominance, counter-UAS, and space architectures, where non-traditional market entrants represent over half of active program competitors.

COMMERCIAL FIRST INTAKE AND RAPID FIELDING EXECUTION

DIU executes its "Commercial First" mandate by pulling commercial technology via concise, two-paragraph problem statements issued through Commercial Solutions Openings (CSOs) rather than traditional 600-page specification documents. CSO procedures utilize 10-day industry response windows, two-week pitch evaluations, and rapid down-selects to minimum viable products (MVPs), compressing contract award timelines from 240 days down to 178 days. Fielded case studies highlighted during the session include:

- **Expeditionary Strike Program:** Addressing combatant command requirements for runway-independent maritime strike UAS, DIU evaluated nearly 100 commercial applicants and placed three MVP contractors on contract.
- **Mine Countermeasure Prize Challenge:** In response to an emergent maritime mine threat, DIU issued a mine countermeasure challenge and placed commercial vendors on contract within roughly three months.
- **Drone Dominance Gauntlet 2:** Field trials evaluated FPV and Group 1 drone vendors, including Ukrainian partner firms, operated directly by special operations personnel, resulting in immediate large-volume purchase orders.
- **Uncrewed Surface Vessel Scaling:** One vendor founded in 2022 and placed on an initial prototype contract in 2023 was awarded a major production contract in 2026 after demonstrating autonomous operations in theater.

PPBE REFORM, FINANCIAL VISUALIZATION, AND 2030 FORCE METRICS

Reforming the 1960s-era Planning, Programming, Budgeting, and Execution (PPBE) system requires replacing static PDF expense reports with real-time financial tracking. The Department is building a real-time obligation and execution visualization dashboard on the Advana data platform. By providing Congress with a "glass house" view linking financial execution directly to active contracts, the Department seeks to build legislative trust to secure higher below-threshold transfer (BTT) authorities, consolidated budget line items, and flexible reprogramming thresholds.

Looking toward 2030, panelists identified primary metrics for evaluating defense financial transformation, including calculating fully burdened lifecycle cost-per-kill metrics across operational kill chains, accelerating overall capability fielding velocity, and achieving a 75% manned / 25% unmanned force mix, exemplified by a single manned F-35 pilot commanding three Collaborative Combat Aircraft on high-risk strike missions.

