Sea Air and Space 2025

What You Missed

SeaAirSpace 2025 | Navy League of the United States

April 6 – 9, 2025

STEM Expo: April 6 | Conference and Exposition: April 7–9

Gaylord National Resort & Convention Center
National Harbor, Maryland

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Executive Summary

Sea-Air-Space, the premier maritime exposition of the United States, is an educational hub for defense industry leaders, Government leaders and top military decision-makers to network and discuss the latest insights and advancements in the maritime and space domains.

As the Navy pursues the goals of Project 33 laid out by Admiral Franchetti, speakers highlighted their efforts to field a Navy ready to meet a peer threat by 2027. 2027 is the target date for a number of IT goals such as Zero Trust deployment, but it is also the year the Navy believes the People's Republic of China (PRC) will have the capacity to invade Taiwan.

Speakers discussed comprehensive strategies to achieve 80% combat surge readiness by 2027, emphasizing the Navy's focus on increasing lethality and operational rediness. Key initiatives include reducing maintenance delays, improving training, and enhancing production and sustainment capabilities. Achievements to date include a 59% reduction in maintenance turnaround time and a 30% decrease in operational maintenance hours, with the Navy aiming to sustain 341 ready aircraft annually.

Project 33 is key to unlocking agility, speed, and mission-focused innovation across the Navy. By moving away from traditional procurement models and embracing modern, iterative approaches, the Navy can deliver warfighter capabilities at the pace of relevance. Project 33 empowers operational commands and developers to co-create solutions in real-time, fostering a dynamic ecosystem rooted in open architecture, data accessibility, and user-centered design. With a focus on integration, rapid experimentation, and outcome-driven metrics, this initiative aims to reduce time-to-field, cut through bureaucracy, and establish a new paradigm for delivering trusted, scalable solutions at speed.

Specific metrics were highlighted, such as a 100% on-time completion rate for 100-day availabilities and a 92% on-time rate for 150-day availabilities. Combat surge readiness levels currently stand at 67% for submarines, 68% for surface ships, and 70% for CVNs and air wings. To reach the 80% goal, the Navy emphasized the need for industry collaboration, data-driven decision-making, and focused leadership.

The submarine force continues to face challenges related to shipyard capacity and material procurement, including efforts to increase torpedo inventories. Operational challenges such as long cycle times, test interruptions, and procurement delays were also discussed. In response, improvements have been made, including the realignment of NAVSEA's emergency operations center and the implementation of regional support contracts for carriers.

Speakers underscored the importance of a readiness recovery playbook focused on affordability, safety, and performance outcomes. Additionally, strategies such as shorter maintenance cycles, improved material management, and world-class training for sailors were identified as essential components to achieving long-term readiness goals. Reaching the 80% threshold will require alignment of expectations, measurable outcomes, and the ability to identify and resolve bottlenecks throughout the system. The focus of the Sea Services is on having everything needed for war immediately, without impacting training or production. The Navy has deployed seven of 11 aircraft carriers in 2024, showcasing the fruits of their labor.

For further questions or information please reach out to Joshua.Iseler@carahsoft.com and Trevor.Rogers@carahsoft.com on the Market Research Team or Lars.Lindland@carahsoft.com Navy Inc Rep and Mike.McCalip@Carahsoft.com Navy Customer Executive.

Artificial Intelligence

U.S. Marine Corps

- **Disaster Resilience & Prevention:** Major General Matthew Glavy, USMC, discussed the Marine Corps' strategic application of artificial intelligence to accelerate kill chains and enhance battlefield awareness. Key focus areas include fusing data from diverse sources, advancing unmanned and sensor systems in contested environments, and developing AI-informed logistics systems to support distributed operations. He described a "campaign of learning" designed to align doctrine, training, and acquisition with evolving AI capabilities, ultimately shaping future budget decisions. Glavy emphasized that AI tools must be mission-adaptive, responsive, and capable of reducing the cognitive burden on warfighters. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**

U.S. Navy

- **AI Integration in Harsh and Tactical Environments:** Vice Admiral Jeffrey Trussler, USN (Ret.), Chief of Naval Research, emphasized the Navy's need for artificial intelligence capable of operating in harsh maritime environments, describing AI as a ubiquitous force across warfighting, business processes, logistics, and readiness. He highlighted the Navy's distributed learning approach, which fosters collaboration between fleet commanders and system commands to rapidly field effective solutions. Trussler also underscored the importance of strong industry partnerships, drawing on commercial innovation cycles, and implementing agile acquisition processes that enable rapid iteration and deployment. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**

U.S. Coast Guard

- **Coast Guard's Data-Driven AI Adoption:** Mr. Brian Campo, Deputy Assistant Commandant for C4 & IT, Deputy Chief Information Officer at United States Coast Guard, highlighted the service's dual role as both a military and law enforcement agency, which necessitates flexible and adaptive technology. He discussed the use of autonomous systems to gather data in areas where cutters are less efficient, with a focus on translating that data into actionable insights. Emerson emphasized the importance of rapid fielding, close collaboration with industry to develop fit-for-purpose platforms, and enhancing decision-making capabilities. He also underscored the need for robust training programs to build AI and data literacy across the force, enabling personnel to effectively leverage emerging technologies and recognize natural talent. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**

"Training is not just technical—it's about building a cultural foundation for innovation and trust in automation. [Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]

AI Adoption and Cultural Transformation in the Public Sector

- Mr. Mr. Justin Fanelli emphasized the need for the public sector to reduce hesitancy and adopt private-sector agility. He advocated for standardizing terminology and using innovation adoption kits. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**
- RDML Todd Weeks, USN described cultural and technical barriers within acquisition and sustainment, calling for scalable implementation beyond pilots. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**
- Troy Demmer called for specific, outcome-driven conversations around data and application to build trust and momentum. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**

Scaling AI and Overcoming Challenges

- Dr. Adi Zolotov pointed out that many AI projects stalled due to poor analysis of ROI and lack of user engagement from the start. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Ms. Colleen Graham stressed the importance of involving users from day one and redesigning processes to integrate new technology. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Ms. Margie Palmieri emphasized creating experimental environments that mirrored real-world problems to ensure successful AI integration. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**

Risk Management and Responsible AI

- Ms. Margie Palmieri emphasized the need for users to have justified confidence in AI capabilities, ensuring robust testing and evaluation. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Dr. Yisroel Brummer discussed the cultural gap between Silicon Valley's "move fast and break things" mentality and the DOD's risk-averse approach, stressing the importance of balancing tactical and strategic risks to avoid catastrophic failures. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**

Competitiveness and Geopolitical Challenges

- RDML Todd Weeks, USN linked the adoption of AI to broader geopolitical competitiveness, particularly with adversaries like China. He urged accelerated scaling and deployment of proven AI tools. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**
- Mr. Justin Fanelli echoed this by framing AI integration as a strategic imperative, requiring public-private collaboration and clearly demonstrated outcomes. He also underscored the "era of conversion"—a time for operationalizing previous research and standing on past successes to achieve military readiness. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**

Barriers to Delivering AI Outcomes

- Ms. Colleen Graham highlighted the cultural shift experienced by private sector professionals transitioning to the DOD and the need for better compensation to retain technical talent. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Leadership courage to champion AI initiatives and the need for iterative learning and experimentation to overcome barriers to AI adoption were emphasized. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**

AI's Impact on Force Readiness and Lethality

- ADM Bill Lescher introduced the problem statement, focusing on how stakeholders collaborated to leverage AI to improve service readiness and lethality, particularly in force development and generation. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Dr. Adi Zolotov discussed how AI posed both opportunities and distractions, highlighting the DOD's strength in integrating revolutionary technology for operational insight. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Ms. Colleen Graham emphasized the challenges of building AI competency, stressing the need for multidisciplinary teams to address real-world problems with AI solutions. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Dr. Yisroel Brummer underscored the importance of integrating evolving technologies and establishing common channels between technologists and operators to drive impact. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**

AI and Robotics in Sustainment and Modernization

- The RDML Todd Weeks, USN emphasized AI's potential to enhance the availability and reliability of critical military assets, extend service life, and enforce rigorous build quality standards.

Furthermore he discussed shipyard modernization and the importance of digital transformation to fully leverage AI and robotics. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**

- Mr. Justin Fanelli noted the acquisition challenges posed by horizontal technologies like AI, and called for board-adjustable strategies tied to clear value propositions. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**

Leveraging Data and Analytics for Operational Superiority

Data Analytics, High-Fidelity Datasets, and Implementation

- Troy Demmer and RDML Todd Weeks, USN both stressed the critical need for high-fidelity, trustworthy datasets and structured pilots to train and implement AI solutions effectively. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**
- Mr. Justin Fanelli addressed the data management challenge, stating that current public sector data often isn't structured for AI use and highlighted the importance of codifying human experience to make legacy data more usable. Furthermore explaining the issue of converting analog and PDF-based historical data into actionable digital insights using AI tools. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**

Precision Readiness: Leveraging Metrics, LVC Training, and Innovation

Admiral Norman Dudley – Training & Operational Readiness

- Emphasized Live Virtual Constructive (LVC) training as critical for strike group readiness and explained LVC's evolution into a complex, realistic training environment combining live, simulated, and synthetic assets. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Highlighted future advancements, including encrypted comms, space-based data, and carrier integration. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Stressed the importance of assessing readiness across maritime operations centers through large-scale exercises. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**

Captain Dave Jones – Logistics & Sustainment

- Outlined how the Naval Sea Logistics Center used data to support equipment availability for sailors and ships. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Manages a $12B inventory with metrics focused on readiness-based sparing and inventory accuracy. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**

- Advocated for integrated dashboards (e.g., TICOM) to improve real-time tracking and decision-making. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Supported predictive modeling to prioritize sustainment investments and address obsolescence. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**

Roy Harris – Aviation Readiness & Metrics Integration

- Shared how naval aviation transformed its readiness through collaboration and performance metrics. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Cited the Super Hornet Charging 341 initiative as a model for improving mission-capable rates.
- Introduced tools like mock maintenance centers, reliability boards, and usage data to drive proactive maintenance. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Stressed the need for funding models tied directly to measurable readiness outcomes. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**

Justin Wolf – Industry, Data & Predictive Analytics

- Highlighted industry's role in providing tools for integrating supply chain, maintenance, and mission relevance. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Promoted predictive analytics and scenario planning for long-term readiness forecasting. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Emphasized the need for defensible, transparent data and user-friendly dashboards. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**
- Called for agile, strategic approaches to readiness metrics beyond snapshot assessments. **[Session: Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape]**

Doing Business

Force Design & Modernizing the Marine Corps

- Brigadier General Robert Brodie emphasized the importance of clear requirements and open communication to avoid proprietary stop points and ensure timely delivery of products, solutions, and services. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**

- Major General Jason Woodworth discussed the need for better definition of problems and the willingness to pilot new technologies to solve them. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Lieutenant General Benjamin Watson highlighted the importance of understanding the problems to be solved and the need for open systems and modular solutions. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Lieutenant General Eric E. Austin emphasized the importance of concept-based capability development and continuous dialog with industry to ensure alignment with Marine Corps concepts and requirements. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Lieutenant General Eric E. Austin discusses the need for adaptation based on the changing character of warfare and geostrategic security situations and the progress made in modernization, including the fielding of new equipment and the need to go faster. He outlined key priorities, including logistics, mobility, and the medium landing ship, and emphasized the importance of a system of systems approach to modernization. He discussed the importance of responsible modernization with industry and the need for continuous adaptation based on campaign learning. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Lieutenant General Eric E. Austin highlighted the role of institutional humility in making corrections and the importance of viewing the Marine Corps as an ecosystem. Furthermore, he discussed the audit process and its impact on the Marine Corps' approach to resource allocation and accountability mentioning the importance of maintaining transparency and trust in the modernization process with industry partners. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**

Operationalizing AI: Partnering with Industry to Accelerate Force Generation

- Ms. Margie Palmieri emphasized the importance of mission-outcome-based requirements, ensuring data accessibility and interoperability to facilitate AI development. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- The discussion included the need for core principles and architectural standards to enable flexible, responsive AI solutions, along with the role of experimentation in refining industry requirements. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Shield AI's vision is to scale AI pilots across millions of systems by 2045, redefining force structures. He emphasized the importance of DoD being a "good buyer", favoring short, iterative acquisition cycles over long-term commitments, enabling commercial R&D to flourish. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**

Leveraging Commercial Space Assets for Maritime Security: A Government–Industry Partnership

- Mr. Chris Adams discussed the need for improved integration between government entities and industry, emphasizing that while progress has been made, more momentum is required. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- He pointed to mechanisms like the Joint Requirements Oversight Council (JROC) as critical for aligning commercial and defense space needs. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- RADM Heidi Berg explained how international and commercial partners can be brought into U.S. space architecture using shared standards, though she acknowledged the challenges of testing and certifying external systems. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- Dr. Sandhoo added that successful integration of commercial providers like SpaceX requires clear frameworks and an understanding of how to align commercial innovation with military operations. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- RADM Heidi Berg addressed the importance of using well-established international standards to bring foreign partners into U.S. space architectures in a way that ensures interoperability, resilience, and survivability. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**

Naval Enterprise and Industry Partnership in Maintenance for Operational Readiness

- VADM Carl Chebi, USN discussed the importance of understanding numbers and running a better business across all five North Stars by applying best practices to affordability, safety, and training. **[Session: Ready Our Platforms]**
- ADM Jim Kilby, USN emphasized how the Navy has seen significant improvements in safety and training through partnership with industry. **[Session: Ready Our Platforms]**
- VADM Rob Gaucher, USN discussed how the Navy has simplified problems by condensing references for planning milestones and stacking hands-on planning sessions and how the investment in service crews and advanced engineering instructors has paid off in improved maintenance availability. **[Session: Ready Our Platforms]**
- VADM James Downey, USN emphasized how weekly meetings with industry to discuss each availability and performance plans are and have been crucial for success. **[Session: Ready Our Platforms]**
- The Navy has seen improvements in surface maintenance and is focused on predictable data to show trends. **[Session: Ready Our Platforms]**
- VADM Daniel Cheever, USNV spoke about how the Navy has seen significant improvements in material ordering and is codifying contingent material and how there is a focus on having the right material and planning for years ahead to ensure successful maintenance. The importance of having spare material on hand and the need for dedicated personnel for ordering material was emphasized. **[Session: Ready Our Platforms]**

Cybersecurity and Software Supply Chain Resilience

- Ms. Margie Palmieri discussed the need for broader access to DOD networks and data to help software providers innovate. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Dr. Yisroel Brummer highlighted the importance of better communication and feedback to encourage innovation and risk-taking within the software industry. The need for reducing barriers for smaller, non-traditional companies to access DOD business was also addressed. **[Session: From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation]**
- Mr. Justin Fanelli addressed the complexity of managing software supply chains, particularly the risk of U.S. technologies being used by adversaries. He advocated for commercial off-the-shelf (COTS) solutions and enterprise services to monitor cyber and supply chain integrity. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**
- The need to demonstrate operational resilience and cost savings in cybersecurity investments was also highlighted by Mr.Justin Fanelli. **[Session: Modernizing Mission-Readiness and Strategic Deterrence]**
- LtGen Melvin "Jerry" Carter, USMC stressed the need for decentralize software development and acquisition, giving operational teams the authority and tools to drive mission-specific solutions. **[Session: Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions]**
- VADM Nathan Moore emphasized the need to leverage agile methodologies and continuous delivery pipelines to field software rapidly, learn fast, and adapt even faster. **[Session: Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions]**
- Build Open, Modular Systems: Establish architecture standards that prioritize interoperability, open APIs, and scalable design to future-proof solutions. **[Session: Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions]**
- Involve end users early and often, ensuring solutions are rooted in operational needs and refined through real-world feedback. **[Session: Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions]**
- Collapse development timelines by removing bureaucratic friction, enabling faster delivery of high-impact capabilities. **[Session: Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions]**
- Provide persistent, mission-aligned funding streams that support innovation and allow for experimentation without risk aversion. **[Session: Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions]**
- Cultivate a culture that champions bold thinking, accepts measured risk, and supports transformative software initiatives. **[Session: Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions]**

Industrial Space Assets in Maritime Security

Proliferated and Differentiated Space Architectures:

- Mr. Chris Adams described the ongoing migration of missions from other domains to space, emphasizing the need for affordable, proliferated systems that can be deployed at scale. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- He also stressed the critical importance of maintaining a parallel investment in differentiated, higher-value systems that provide resilience and durability against emerging threats. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- The discussion underscored the need for a balanced approach between the wide fielding of cost-effective assets and the development of high-end, mission-specific technologies to ensure layered capability. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- Dr. Gurpartap 'GP' Sandhoo echoed this approach by highlighting Naval Space Command's commitment to incorporating commercial capabilities like SpaceX's proliferated architecture while maintaining balance with government-owned systems. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**

Innovation and Industrial Readiness:

- Mr. Chris Adams emphasized the industry's readiness to scale and innovate at the pace required by the Department of Defense, acknowledging existing challenges while expressing confidence in the industrial base's adaptability. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- He further highlighted the importance of consistent government commitment, stable requirements, and support across the defense industrial base to stimulate investment and innovation. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- Mr. John Hill added that the defense sector must shift from reactive, defensive market demands to a model driven by proactive innovation, leveraging industry momentum to accelerate capability development. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**

Policy and Strategic Integration:

- Mr. John Hill discussed the evolution of space policy, particularly as the U.S. faces rapidly advancing threats from competitors like China. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- He called for a strategic shift that balances mission-driven requirements with commercial opportunity, positioning space as a fully integrated domain within the broader national security framework. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- Mr. Hill also outlined five foundational space mission areas: generating, processing, storing, transporting, and protecting data—emphasizing that all must be strategically aligned across

Space Force, Space Command, and the other services. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**

SDA's Rapid Delivery and Architectural Resilience:

- Dr. Gurpartap 'GP' Sandhoo explained the Space Development Agency's mission to move fast and deliver capabilities by building resilient, proliferated space systems quickly and efficiently. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- He discussed the impact of testing challenges—including those related to US government restrictions, requiring a lot of testing to occur through allies first before testing and deploying with the DoD—and highlighted the SDA's focus on maintaining development momentum while adapting to changing mission requirements. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- Dr. Gurpartap 'GP' Sandhoo Berg emphasized that building resilience into space architectures requires agile processes, scalable systems, and ongoing refinement. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**

Naval Space Command and Multi-Domain Integration:

- RADM Heidi Berg, USN described the establishment of Naval Space Command and outlined its role in integrating space capabilities with cyber and maritime operations. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- She discussed the operational and organizational challenges associated with cross-domain integration, underscoring the value of exercises and fielding initiatives to better align with warfighter needs. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- She noted that balancing commercial and government capabilities will be essential to supporting dynamic maritime operations, particularly in leveraging emerging commercial architectures. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**
- She discussed the difficulties in vetting and approving international systems but reinforced the necessity of global collaboration to maintain a strong, resilient space posture. **[Session: The Critical Role of Industrial Space Assets in Maritime Security]**

National Maritime Strategy & Legislative Efforts

Naval Aviation and Carrier Strike Groups

- Representative Trent Kelly reaffirmed the central role of the carrier strike group in force projection and emphasized the need to maintain aircraft availability. He noted the importance of platforms like the F-35C and future systems like F/A-XX, as well as maintenance facilities like NAS Oceana. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

Consistency in Shipbuilding and Decommissioning

- Representative Jen Kiggans and Representative Trent Kelly stressed the importance of keeping ships operational and avoiding premature decommissioning. He highlighted the need for consistency in shipbuilding plans and maintaining a balanced, ready fleet. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

- The bipartisan *Ships for America Act*, introduced by Senators Mark Kelly and Marco Rubio, and Representatives John Garamendi and Mike Waltz, was highlighted by Mark Vlaun as potentially the most comprehensive maritime legislation to date. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- The panel stressed the importance of a comprehensive national maritime strategy that incorporates shipbuilding, shipping logistics, and workforce development, drawing lessons from the pandemic-induced supply chain crisis and China's market distortion tactics. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**

Maritime Industry Programs & Policy Tools

- Dave Heller detailed core support programs: **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
    - Small Shipyard Grant Program – strengthening regional shipyards.
    - Title XI Loan Guarantee Program – improving financial access for shipbuilders.
    - Vessel Construction Program – enhancing shipbuilding capacity.
- These programs were framed as critical tools for supporting a resilient and competitive maritime industrial base. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**

U.S. vs. China – Maritime Competitiveness & Global Strategy

- Rob Hurd detailed how China's scale and government backing severely distort global maritime markets, calling for realistic, pragmatic U.S. policy solutions. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- The panel called for a balanced response—one that remains competitive without compromising broader economic and strategic goals. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**

International Partnerships & Best Practices

- Mark Vlaun noted the value of leveraging international best practices while preserving a strong U.S. shipbuilding footprint. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- Dave Heller discussed the benefits of foreign investment in U.S. shipbuilding and the potential for collaborative innovation. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**

- The panel supported measured global partnerships to strengthen the domestic industrial base and ensure strategic alignment with allies. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- Representative Trent Kelly called for stronger integration between public and private shipyards, modernization of public yards, and greater workforce attraction strategies. **[Session: Congressional Panel - 2027: Will We Be Ready?]**
- Representative Jen Kiggans discussed opportunities in modular shipbuilding, particularly using inland facilities, and suggested incentivizing allied partners to participate in these efforts. She noted the burdens placed on ship repair companies by current government contracting models and emphasized the need to leverage their capacity. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

Maritime Security & Resilience

- The panel explored the effects of global maritime security threats, including recent events in the Red Sea. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- Mark Vlaun urged strategic planning for global maritime threats and force protection. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- Rob Hurd emphasized the need for resilient, redundant maritime systems capable of enduring future challenges. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- A comprehensive security approach—including fleet resiliency, cybersecurity, and reliable logistics—was deemed essential for national readiness. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**

Workforce

U.S Navy

Enabling AI Integration through Training Talent

- Both Mr. Brian Campo and MajGen Glavy stressed the need for cultivating talent pipelines, training warfighters to trust and adopt AI, and embedding these technologies into daily operations. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**
- Mr. Brian Campo focused on identifying and empowering AI-savvy individuals, ensuring systems are user-friendly and mission-relevant. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**

- MajGen Glavy advocated for human-in-the-loop systems, minimizing overload while enabling smart decisions. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**
- Mr. Brian Campo noted the importance of scalability, ensuring systems support fast decision-making without sidelining human judgment. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**
- The panel recognized the potential of fully autonomous platforms, but emphasized that in the near term, success lies in tight human-machine integration. **[Session: Transforming Defense: The Power of AI and Robotic Autonomous Systems]**

Unmanned Aviation and Training

- Representative Jen Kiggans emphasized the importance of investing in unmanned systems and pilot training to ensure flight proficiency. She advocated for effective integration of manned and unmanned systems to enhance mission capability and highlighted the need for steady funding to support training and readiness. She also noted the challenge of keeping pilots current and prepared for deployment. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

Naval Fleet Growth and Cost Management

- Representative Trent Kelly emphasized the importance of investing in both exquisite platforms like the Virginia and Ford classes, as well as more modular, expendable vessels to augment the fleet. He advocated for integrating the home enterprise to avoid layoffs and maintain continuity in the shipbuilding workforce. **[Session: Congressional Panel - 2027: Will We Be Ready?]**
- Representative Rob Wittman addressed the challenge of high sustainment costs and advocated for modular construction to create more economical ships that support workforce development. stressed the need to manage operational and sustaining costs while exploring ship designs with lower personnel requirements to grow the fleet efficiently. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

Modular Construction and AI in Shipbuilding

- Representative Trent Kelly highlighted modular construction as a means of achieving cost-effective fleet expansion and sustaining high-quality jobs. He also stressed the value of predictive maintenance enabled by AI to minimize downtime and improve efficiency. **[Session: Congressional Panel - 2027: Will We Be Ready?]**
- Representative Rob Wittman underscored the benefits of adapting commercial ship designs for military purposes and called for consistent demand signals to keep private yards engaged. He reiterated the importance of merging private and military partnerships to preserve a skilled workforce and prevent layoffs. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

Civilian Mariners and Supply Ships

- Representative Jen Kiggans highlighted the vital role of civilian mariners in Navy operations, particularly in logistics and supply. She called for improved quality of life for mariners, investment in workforce development, and their integration into broader naval readiness conversations. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

Workforce Development & Industry Awareness for Maritime Industrial Capacity

- Rob Hurd emphasized the importance of developing a consistent pipeline of skilled maritime professionals and the need to create opportunities for the next generation of mariners. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- Dave Heller highlighted the need for greater public awareness of maritime careers and improving the training and certification process. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- The panel advocated for long-term investment in workforce development to ensure readiness and sustainability. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**
- Reducing barriers to entry, offering hands-on experience, and providing clear career pathways were highlighted as essential priorities. **[Session: Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls]**

U.S Marine Corps

Training and Education Innovations

- Lieutenant General Benjamin Watson introduced three key initiatives: Project Tripoli, Project Trident, and Project Triumph, focusing on operationalizing a Live, Virtual, and Constructive training environment. He emphasized the need for adaptive training and education to keep up with the evolving threat landscape and technological advancements. He discussed the importance of learning quickly from contemporary conflicts and incorporating those lessons into training and education. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Lieutenant General Benjamin Watson introduced Project Triumph, focused on leveraging technology to tailor instruction and improve efficiency and effectiveness in training. He emphasized the importance of building instructors who can guide diverse groups of students towards common goals. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**

Infrastructure & Family Readiness

- Major General Jason Woodworth emphasized the importance of Warrior and Family Readiness and the role of bases and stations in supporting this readiness. He discussed the challenges of force protection and counter UAS capabilities, and the need for upgrading facilities and control systems. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Major General Jason Woodworth highlighted the Barracks 2030 initiative, aimed at improving the quality of life for young Marines and demonstrating commitment to their well-being. He mentioned the importance of modernizing the communication grid and other infrastructure to support current and future needs and the need for adaptive and agile facilities and programs to support the diverse needs of Marines and their families. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**

UAS/ Counter-UAS (C-UAS)

Acquisition Programs and Unmanned Systems

- Representative Trent Kelly called for a reimagining of acquisition programs to better support the integration of emerging technologies, especially unmanned platforms. He advocated for a balanced approach between manned and unmanned systems and emphasized consistent funding to maintain readiness. **[Session: Congressional Panel - 2027: Will We Be Ready?]**

Counter UAS and Signature Management

- Lieutenant General Eric E. Austin discussed the importance of counter UAS capabilities and the need for agile funding to field prototypes and protect deploying units. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Lieutenant General Benjamin Watson emphasizes the need for signature management and the importance of basic tactics, techniques, and procedures to stay survivable in an era of ubiquitous surveillance. Furthermore, he discussed the importance of task organization and manpower in managing new capabilities and the need for continuous adaptation. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Major General Jason Woodworth highlighted the challenge of defending against guided hand grenades and the need for technology and training to address this threat. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**
- Lieutenant General Benjamin Watson discussed the importance of task organization and manpower in managing new capabilities and the need for continuous adaptation. **[Session: Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force]**

Appendix: Sea Air and Space 2025 Sessions Attended

Monday, April 7th

Ready our Platforms

- *Moderator, ADM Jim Kilby, USN Acting Chief of Naval Operations at United States Navy*
- *VADM Carl Chebi, USN Commander, Naval Air Systems Command at United States Navy*
- *VADM Daniel Cheever, USN, Commander, Naval Air Forces/Commander, Naval Air Force, U.S. Pacific Fleet at United States Navy*
- *VADM James Downey, USN, Commander, Naval Sea Systems Command at United States Navy*
- *VADM Rob Gaucher, USN, Commander, Naval Submarine Forces; Commander, Submarine Force, U.S. Atlantic Fleet; Commander, Allied Submarine Command at United States Navy*
- *VADM Brendan McLane, USN, Commander, Naval Surface Forces Commander, Naval Surface Force, Pacific Fleet at United States Navy*

The Critical Role of Industrial Space Assets in Maritime Security

- *Moderator, VADM Jeffrey Trussler, USN, (Ret.)*
- *Mr. Chris Adams, Vice President and General Manager, Strategic Space Systems Division at Northrop Grumman*
- *RADM Heidi Berg, USN, Deputy Commander, Fleet Cyber Command, Deputy Commander, Navy Space Command at United States Navy*
- *Mr. John Hill, Assistant Secretary of Defense for Space Policy and Deputy Assistant Secretary of Defense for Space and Missile Defense (PTDO) at Department of Defense*
- *Dr. Gurpartap 'GP' Sandhoo, Senior Advisor and the Scientific Review Official at Space Development Agency*

Transforming Defense: The Power of AI and Robotic Autonomous Systems

- *Moderator, Dr. Katherine McGrady, President & CEO at CAN*
- *Mr. Brian Campo, Deputy Assistant Commandant for C4 & IT, Deputy Chief Information Officer at United States Coast Guard*
- *RADM Kurt Rothenhaus, USN, Chief of Naval Research at United States Navy*
- *MajGen Farrell Sullivan, USMC, Director, Capabilities Development & Integration at United States Marine Corps*
- *RADM Christopher Sweeney, USN, Director, Integrated Warfare at United States Navy*
- *Mr. Brandon Tseng, President and Co-Founder at ShieldAI*

Modernizing Mission-Readiness and Strategic Deterrence

- *Moderator, RDML Jim Butler, USN, (Ret.) Cyber Innovation Lead (ICON) at ManTech International*
- *Mr. Troy Demmer, Co-Founder and President at Gecko Robotics*

- *Mr. Justin Fanelli, Chief Technology Officer and Technical Director, PEO Digital and Enterprise Services at Department of the Navy*
- *RDML Todd Weeks, USN, Program Executive Officer, Strategic Submarines at United States Navy*

Tuesday, April 8th

Readiness Redefined: Metrics for Measuring What Matters in a Complex Global Landscape

- *Moderator, RADM Sinclair Harris, USN, (Ret.), Senior Executive Director for Navy Business Development at ManTech International*
- *Mr. Roy Harris, Executive Director Commander, Fleet Readiness Centers, Naval Sea Systems Command at Department of the Navy*
- *CAPT David Jones, USN Commanding Officer, Naval Sea Logistics Center at United States Navy*
- *RDML Cassidy "Dudley" Norman, USN, Director, Joint/Fleet Operations Maritime Operations Center (N3/N5/N7), U.S. Fleet Forces Command at United States Navy*
- *Mr. Justin Woulfe, Chief Technology Officer at Systecon North America*

Enhancing Enterprise Agility: Leveraging Commercial off the Shelf Software Solutions

- *Moderator, Mr. Jared Serbu, Deputy Editor at Federal News Network*
- *LtGen Melvin "Jerry" Carter, USMC, Deputy Commandant, Information at United States Marine Corps*
- *VADM Nathan Moore, USCG, Commander, Atlantic Area at United States Coast Guard*
- *Ms. Tara Murphy Dougherty, CEO at Govini*
- *Ms. Jane Rathbun, Chief Information Officer at Department of the Navy*

Modernizing the Marine Corps: Building an Agile, Lethal and Resilient Force

- *Moderator, Mr. Francis Rose, Co-Founder and Host at Fed Gov Toda*
- *LtGen Eric Austin, USMC, Deputy Commandant, Combat Development & Integration at United States Marine Corps*
- *BGen Robert Brodie, USMC, Director, Expeditionary Warfare N95 at United States Marine Corps*
- *LtGen Benjamin Watson, USMC, Commanding General, Training and Education Command at United States Marine Corps*
- *MajGen Jason Woodworth, USMC, Commander, Marine Corps Installations Command Assistant Deputy Commandant, Installations & Logistics (Facilities) at United States Marine Corps*

From Promise to Performance: Accelerating Warfighting Advantage with AI-Enabled Force Generation

- *Moderator, ADM Bill Lescher, USN (Ret.), 41st Vice Chief of Naval Operations at United States Navy*
- *Dr. Yisroel Brummer, CEO at DEFCON AI*
- *Ms. Colleen Graham, Chief of AI & Digital Innovation at HII NSS*
- *Ms. Margie Palmieri, Principal Deputy CDAO at CDAO*

- *Dr. Adi Zolotov, Managing Director and Partner at BCG*

Wednesday, April 9th

Congressional Panel - 2027: Will We Be Ready?

- *Moderator, Mr. Bryan Clark, Senior Fellow and Director, Center for Defense Concepts and Technology at Hudson Institute*
- *Representative Trent Kelly, Congressman, Mississippi's First Congressional District in the U.S. House of Representatives, at House of Representatives*
- *Representative Jen Kiggans, Congresswoman, Virginia's Second Congressional District in the U.S. House of Representatives at House of Representatives*
- *Representative Rob Wittman, Congressman, Virginia's First Congressional District in the U.S. House of Representatives, at House of Representatives*

Approaching Maritime Industrial Capacity: Legislative and Executive Remedies Maritime Shortfalls

- *Moderator, Ms. Sara Fuentes, Vice President, Government Affairs at Transportation Institute*
- *Mr. Ian H. Bennitt, Special Assistant to the President and Senior Director of Maritime & Industrial Capacity at National Security Council, The White House, Mr. Dave Heller*
- *Associate Administrator for Business and Finance Development at Maritime Administration, Department of Transportation*
- *Mr. Mark Vlaun, Deputy General Counsel at American Roll-On Roll-Off Carrier*