

SHOW DAILY



THURSDAY

4 December, 2025

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Army CPE STRI Brings Full-Force Presence to I/ITSEC

As the modeling, simulation and training community has gathered for I/ITSEC 2025, the U.S. Army is sending a clear message through the Capability Program Executive for Simulation, Training and Instrumentation. Brigadier General Christine Beeler wants attendees to know that the Army remains deeply invested in the training and simulation enterprise that supports the joint force, modern operational concepts and the future fight.

Talking to *I/ITSEC Show Daily*, she stressed, “The Army is still very much engaged in this community of practice” and that “modeling and simulation training are all extremely essential capabilities that the Army needs as part of the joint force.”

Her organization is driving toward a unified portfolio that helps the Army train and operate as it fights. Beeler noted that “we are remaining in support of the Army’s efforts to deliver modeling, simulation, live, virtual and constructive training capabilities for our Army.”

The transition to a Capability Program Executive (CPE) structure is already public knowledge, and she explained that the team “is going to align very closely with the portfolio acquisition executive for C2 counter-C2.” This alignment is intended to directly support how the Army trains for and executes multi-domain operations.

Beeler highlighted the challenge clearly, asking, “How do you train multi-domain operations, and how do you actually execute multi-domain operations? It is not enough to design a system in isolation. The Army must make sure we are not getting negative training value by having something completely separated from the way the Army executes those operations.” Ensuring training realism has become a top priority as the Army adapts to new operational concepts and prepares for complex threat environments.

Beeler emphasized that “CPE STRI is in full force at I/ITSEC,” with the organization seeking the newest ideas, the newest technologies and the most relevant solutions industry can provide. This includes “AI solutions, 3D gaming and simulation engines, and even new edge devices that can bring these capabilities to the edge faster as we work with the cloud environment.” The team aims to explore opportunities to “bring together different capabilities from across the wide variety of

Continued on page 14



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THURSDAY, 4 DECEMBER CONFERENCE HIGHLIGHTS

Registration Hours

0800-1500 (South Concourse)

Exhibit Hall Hours

0930-1500

1200-1330 **Lunch**

Focus Events

0830-1000 **Push & Pull: Science & Technology for Future Training Environments** (Room 330CDGH)

1030-1200 **Joint All-Domain Non-Kinetic Training – Connecting Live, Virtual and Constructive Environments & Ranges** (Room 330AB)

Community of Interest

0830-1000 **Common Synthetic Environment for NATO Multi-Domain Operations** (Room 330AB)

Next Big Thing

0830-1000 **Wearables and Human Sensors** (Destination Lounge, Room 222)

Program Briefs

0830-1000 **Navy Vision from Training Systems Program Managers** (Room 330EF)

1300-1600 **Army Acquisition Update (TSIS Updates)** (Room 330CDGH)

Paper Sessions

(Download the I/ITSEC app for synopses)

0830-1000 (Rooms 320ABC)

1030-1200 (Rooms 320ABC)

Professional Development Workshops

1300-1600

- PDW 1: **Leveraging AI-Enhanced Coding Tools to Rapidly Create & Deploy Web Applications for Naval Training** (Room 331A)
- PDW 2: **Serious Game Design Workshop** (Room 331C)
- PDW 4: **Foundations of Artificial Intelligence in Training and Simulation** (Room 230H)
- PDW 5: **Additive Manufacturing in Action – A Hands-On Workshop for Acquisition, Sustainment and Strategic Advantage** (Room 331D)
- PDW 7: **Navigating the Evolving Landscape of Distributed Simulation – Harnessing DDS for Secure and MOSA-Compliant LVC Training** (Room 331B)
- PDW 9: **Certified M&S Professional 3.0 – Reinvention!** (Room 230G)
- PDW 13: **Neuroscience Techniques to Accelerate and Enhance Training Through Personalization: A Focus on EEG, fNIRS and Eye Tracking Biometrics** (Room 210B)

Awards

- 1300 **Serious Games Showcase & Challenge Awards Ceremony** (EcosySTEM Discovery Den, Booth 2395)
- 1800 **Hosted Reception Sponsored by Lockheed Martin Corporation** (Hyatt Windermere Ballroom)
- 1900 **Conference Awards Banquet** (Hyatt Windermere Ballroom) Including Scholarship, Best Tutorial and Best Paper Award Presentations



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I/ITSEC 5K Highlights



Approximately 200 participants turned out at sunrise on 3 December for the annual I/ITSEC 5K Run/Walk/Roll, with runners, walkers, bikers and adaptive athletes taking on the course outside the Orange County Convention Center. The winners posted strong finishes and helped carry forward an event that continues to grow in reach and enthusiasm. Proceeds supported the Camaraderie Foundation and the I/ITSEC STEM Initiative, advancing vital services for Military Service Members, Veterans and their families, and strengthening STEM pathways for students. The 2025 field upheld a valued I/ITSEC tradition and set the tone for next year's race.

I/ITSEC SHOW DAILY

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Community of Interest Explores Army Live Training

One significant Community of Interest panel at I/ITSEC 2025 focused on the topic of “Army Live Training – Current and Future,” examining the evolving landscape of live training for the US Army, with an emphasis on emerging technologies and strategies that will shape its future.

Moderated by Major Daniel Spies, USA, Assistant Program Manager at the Program Executive Office Simulation Training and Instrumentation, the panel featured a diverse group of experts, including Ms. Liz Bledsoe, Project Manager for Training Devices (PM TRADE), Mr. John T. McCabe, Chief Contracting Officer at Army Contracting Command – Orlando, Mr. Glenn T. Nichols, Deputy Director of TRADOC Proponent-Live (TPO-LIVE) and Lieutenant Colonel Michael Calderon, US Army Capability Developer for Live Training.

Spies began the panel discussions by asking what challenges the panelists anticipated in the future of live training.

“Our biggest challenge with live training is modernizing it in an efficient and effective way,” Bledsoe said, adding that part of that modernization challenge involved balancing the integration of advanced technologies, like artificial intelligence (AI) and augmented reality (AR), with the existing, less technical live training systems on ranges. She stressed that the Army is tasked with ensuring that new tech solutions can work alongside older systems without overwhelming Soldiers with complex, heavy or unmanageable equipment.

McCabe spoke about the shift in the acquisition process, moving from bespoke solutions (custom-built systems) to more commercial off-the-shelf (COTS) products. This shift, while offering speed and flexibility, presents a challenge in adapting to a new procurement mindset that values rapid deployment and cost-effectiveness over traditionally rigorous, long-term development cycles.

Nichols addressed the challenge of managing the complexity of new technologies within live-training ecosystems. As new non-acquisition entities receive funding, the Army must ensure that these solutions fit within the overarching modernization framework, minimizing redundancy and avoiding purchases that may need to be replaced soon after acquisition. Effective

communication between all stakeholders in the acquisition process will be key.

From his perspective, Calderon pointed out that defining “good enough” when it comes to technology is an ongoing discussion, especially in live training. For example, during grenade training, innovations that simulate real-world behaviors with a product that is not an exact replica of a grenade still produce desired outcomes. This mentality applies to all live training technologies, from direct fire to sensor technology. It’s about balancing realism with cost and feasibility.

Spies shifted the discussion to how emerging technologies such as AI, AR and unmanned aerial systems (UAS) are transforming live training.

Bledsoe emphasized the importance of integrating drones into training environments, reflecting the reality that drones are now being used not only for tracking but also as adversary threats that Soldiers must learn to counter. Similarly, she noted that the Army is exploring how to integrate new tech to create more realistic training scenarios, especially as real-world conflicts, like those in Ukraine, illustrate the growing importance of these systems.

McCabe noted that shorter technology development cycles are forcing a shift in acquisition strategies, emphasizing the need for flexibility and rapid adaptation in areas like drones.

Nichols highlighted the small UAS threat, noting that the Army is working to integrate sensors that can track these systems on the battlefield and that this integration will allow for better management of live fire exercises and ensure that soldiers are not wasting ammunition on drones that have already been neutralized.

Asked by Spies about cost-effective strategies for adapting to technological change, Bledsoe explained that those strategies in live training need to focus on delivering technology that meets the end training goals while considering affordability. “It’s not always about finding the most complex solution but understanding the desired end state, such as improving Soldier readiness,” she said. Defining clear, outcome-based requirements, rather than overly specific technology requirements, will allow for more flexible and cost-effective solutions.

McCabe underscored that, offering that, as acquisition processes evolve, there will be

a shift away from asking for extensive documentation. The Army is increasingly focused on finding solutions that meet immediate training needs without overburdening itself with unnecessary data and analysis. Industry partners should remain patient as the Army adjusts its approach to procurement and prioritizes speed and efficiency.

The complexity of modern soldier systems was another key concern. Bledsoe emphasized the challenge of incorporating realism into live training without overloading soldiers with complex systems.

Calderon echoed this point, noting that as technology evolves, the Army needs to balance the need for realism with the practical realities of Soldier performance. Training solutions should avoid adding too much weight or complexity to the soldier’s loadout, and decisions must be made about what constitutes “good enough” in training scenarios to avoid overburdening the Soldier.

Reflecting on past training experiences, the panel identified a critical lesson: the importance of staying agile and avoiding attachment to a single solution. Bledsoe pointed out that as technology and operational environments change, sticking with an outdated solution just because it’s been heavily invested in can be detrimental. Instead, the Army should be willing to abandon ineffective systems in favor of new approaches that may offer a strategic advantage.

Looking to the next 5-10 years, the panel discussed the potential of AI and AR to revolutionize live training.

Bledsoe envisioned a future where augmented reality would enhance the training environment by allowing Soldiers to experience simulated explosions or other battlefield effects while still maintaining awareness of their physical surroundings. This would allow for more immersive and safer training scenarios, especially in situations where live munitions may not be feasible.

McCabe also highlighted the potential of AI to streamline administrative processes in training and acquisition. By automating routine tasks, AI could reduce the time spent on paperwork, making it easier for industry partners to engage with the Army more efficiently and for the Army to acquire the technologies it needs.



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Navy Flag Officer Panel Explores Training and Readiness Concepts

I/ITSEC 2025 attendees at Wednesday morning's Navy Flag Officer Panel heard a broad-ranging discussion on training and readiness topics from a US Navy perspective.

The panel was moderated by NTSA President Vice Admiral Sean Buck, USN (Ret.) "I think we're going to have a really good discussion today with three representatives from the US Navy who have portfolios that are very targeted to training, modeling and simulation and improving the readiness of all of their Sailors and their warfighters and their teams," he said, adding his hope that the panel session continues to add value for attendees at I/ITSEC.

Vice Admiral Robert Gaucher, Commander, Naval Submarine Forces; Commander, Submarine Force, US Atlantic Fleet; Commander, Allied Submarine Command centered his opening remarks on three projects in the submarine force: training, unmanned underwater vehicles, and advanced modeling and simulation.

First, on training, he contrasted past methods: "We had a tape recorder... and we would write [data] on a piece of paper" with today's "exquisite trainers." Yet he noted the qualification process "hasn't really changed much" and often delays new Sailors. To fix this, the Navy launched the "Day One Ready Sailor" initiative, shifting qualification to the schoolhouse so Sailors can "come aboard... and stand watch on day one." Early results, especially in sonar and plots operator roles, are reducing workload at sea and integrating Sailors faster.

Second, Gaucher highlighted progress in unmanned underwater vehicles (UUVs), emphasizing their need for true autonomy since "undersea... you don't have GPS, you don't have communications." He described creating an underwater confidence course in Washington State where UUVs are run weekly to compare performance with predictions, refine software and develop a rich "common development environment" of data enabling predictive maintenance and better mission planning.

Finally, he discussed modeling and simulation, saying current planning relies too heavily on averages. The Navy is building a digital twin of an operational area to run scenarios "a million times," optimizing lethality and survivability and moving toward data-driven operational decisions.

Rear Admiral Anthony Carullo, Director, Warfighting Development, began his remarks by praising the conference theme, emphasizing the need to refocus on "operational dominance."

"For the last several years, we've drifted away from that last word, 'dominance,'" he said, and used terms like "advantage" or "pacing threat." Instead, "We want to dominate," he asserted, "so I appreciate getting re-focused on that."

He then discussed the changing character and nature of war, especially as autonomous and remotely operated systems become central. He questioned long-held assumptions, noting that as humans become "separated from the battlespace," the very "nature of war" may shift. This separation raises new challenges in "how you manage risk... biases, heuristics, decision-making," urging the community to improve its foresight.

Carullo stressed that future dominance will depend on decision superiority, requiring systems designed to reduce cognitive bias. He encouraged deeper integration of behavioral science, saying, "I am an engineer... but I think we all need to become expert" in human factors.

He also highlighted flaws in current acquisition practices, especially the reluctance to design for obsolescence: "We don't even want to talk about this... like that's a dirty word."

Carullo concluded by thanking participants for their role in building the Navy's future and reaffirming that Sailors remain the "asymmetric advantage" that ensures continued superiority.

"No Navy out there can touch today the level of training that our Sailors have," he said. "But we want to keep that superiority. So again, thank you for what you do."

Rear Admiral Todd Evans, Commander, Naval Air Warfare Center Aircraft Division (NAWCAD) opened his remarks by admitting he had avoided attending I/ITSEC for years, thinking it was "just another trade show," but

quickly realized this audience was different. "As I walked around the floor yesterday, what I talked to a bunch of folks about was not about getting business cards in my hand. It was about, 'What are we doing for Sailors, Soldiers, Marines, Airmen, Guardians.'"

He urged the audience to rethink the term warfighter, grounding it in real people doing extraordinary things, and using the example of an 18-year-old Airman who pre-flighted helicopters in brutal conditions so missions could launch safely.

Evans framed acquisition work through that human lens: "How do we in the acquisition world," he said, "support them and make sure they have all the equipment, tools and training to make those missions come off successfully? How do we make sure that that aircraft goes over the horizon and comes back so that those crews can come back safely to their families? To me, that is a very tangible way of looking at what we do in the acquisition world."

He described Warfare Centers as "very bespoke, talented people with very bespoke facilities" supporting dozens of program offices by closing gaps, accelerating disruptive technologies and improving logistics and training.

He contrasted older simulators focused on "aviate, navigate, communicate" with modern systems like JSE—a "hyper accurate physics-based digital model" that imposes such cognitive load that pilots "forget they're in the simulator." Evans stressed the need to overcome parochialism and focus on what truly matters to operators.

Much of the session was devoted to the panelists answering submitted questions from attendees and exploring topics that included: their thoughts on AI and machine learning in acoustic analysis; ways that Warfare Centers and industry can accelerate training and simulation systems delivery without sacrificing safety evaluation and testing; and expanding on the state of trust by senior leadership of AI and machine learning.

All panelists thanked attendees in the audience for their work and strongly reinforced the need for continued partnerships.



Looking Ahead

As representatives of the lead service for next year’s I/ITSEC 2026, the US Army, Capability Program Executive Simulation, Training and Instrumentation (CPE STRI) is excited to share the supporting theme:

“Beyond the Battlefield: Training and Threat Readiness and Lethality for All-Domain Dominance!”

“As the Service lead for I/ITSEC 2026, the Army is committed to work jointly in delivering cutting-edge simulation and training solutions that prepare Soldiers to dominate across all domains—land, air, sea, space and cyber,” offered Brigadier General Christine Beeler, CPE STRI. “By leveraging the Synthetic Training Environment (STE), we ensure Soldiers are equipped with the tools, skills and data-driven decision-making capabilities needed to be agile and succeed in complex, contested environments.”

Elaborating on elements of the 2026 theme, Beeler said that achieving dominance

across all domains—land, air, sea, space and cyber—requires seamless collaboration and interoperability among all services. As such, she said that the Army, Navy, Air Force, Space Force and Marines are committed to developing joint training and threat systems that prepare warfighters to operate effectively in complex, contested environments.

“Sweeping acquisition reform will dramatically accelerate the delivery of critical warfighting, testing, training and threat capabilities to rapidly increase readiness across all services,” she said, noting that all services are working together to integrate training systems that enable synchronized operations and communication across domains and allied forces.

She pointed to the fact that emerging technologies like artificial intelligence (AI), machine learning, augmented reality (AR), virtual reality (VR) and digital twins are transforming how we train and prepare our forces, emphasizing how, across all services, we are integrating cutting-edge technologies into training and threat systems to enhance adaptability, situational awareness and mission success.

“Additionally, training systems must focus on enhancing individual and collective lethality,

ensuring warfighters are equipped to respond decisively in any operational environment,” she said. “We deliver solutions that sharpen skills, improve reaction times and foster mission-critical decision-making.”

Further setting the stage for I/ITSEC 2026, she highlighted the need for readiness through realism, offering that realistic training environments are key to building readiness and resilience, allowing our forces to rehearse missions under conditions that mirror real-world challenges.

“We are committed to delivering high-fidelity simulations and modular training solutions that prepare warfighters for the complexities of modern warfare,” she said.

She concluded, “For I/ITSEC 2026, the content and events will focus on featuring realistic, immersive training, testing and threat environments, which are essential for building lethality, resilience and readiness. As the 2026 I/ITSEC service lead, the Army—along with their partners in service—will highlight delivering high-fidelity training solutions that replicate real-world challenges, enabling warfighters to rehearse missions, refine skills and respond decisively in any operational scenario.”

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A First Look Back

As I/ITSEC 2025 moves toward its closing day, *Show Daily* met with Debbie Langelier, Senior Vice President, NTSA, to get her perspective on this year's event.

"As Vice Admiral Buck noted earlier this week, I/ITSEC came together because of the efforts of people who compressed 42 days of work into a 10-day period," she said. "And while we expect that our final attendance numbers might be down around 10-12 percent, that is pretty impressive given the shutdown.

"In fact, it's amazing when you consider that one of the armed services was only approved to attend the Friday after Thanksgiving. Yet they were then willing to rush to get their travel arrangements completed. To me that speaks volumes regarding the importance they place on I/ITSEC. Those service members could have said, 'It's too hard. I'm just not doing it.' But every single service put in the effort to get here. To me that speaks to their loyalty to NTSA, to I/ITSEC and to the larger training and simulation community," she said.

She offered one specific instance where a Government entity had to cancel part of a booth. But the rest of the planned participants showed up and the booth remained open as another attendee point of Government contact.

"Now the Government may be down somewhat in numbers. We're not going to hide anything. But I think the individuals who did make the effort and did show up provided those key contact points that industry is hoping to reach."

"We had participation by two Under Secretaries," she enthused. "In this day and age, that shows incredible support for I/ITSEC."

Reflecting on participation by industry, she observed, "Look at how they have shown up across the Exhibit Hall. They are clearly here to support I/ITSEC. In fact, NTSA even expanded into another hall 30 days out from the show. We signed that contract in mid-October and it was filled by 20 November."

In terms of attendee registration, Langelier highlighted the registration of 10,000 people in the two-week period beginning 10 November.

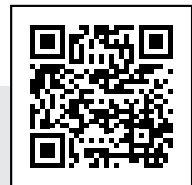
"We typically have a late registration churn, but it's nowhere near that much," she said. "Fortunately, the NTSA staff was professional and resilient enough to step up and make it happen."

Reiterating that one of the incredible strengths of I/ITSEC is its army of volunteers, she observed, "They are great. In fact, they are amazing. But another key strength that we don't talk enough about is our professional NTSA Staff of seven individuals. Kudos to that staff. I don't think many people are aware of that machine behind the machine."

"The Air Force and Space Force were exceptionally good partners to us this year," she concluded. "And next year promises to be bigger and better. The US Army will be the lead service and I know they are going to deliver!"



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Thales Showcases Next Generation Training and Simulation at I/ITSEC 2025

At I/ITSEC 2025, Thales [Booth 2309] is presenting one of its most comprehensive demonstrations of land training, simulation and digital engineering technologies to date. According to Bruno Delacourte, Director of Strategy, Marketing and Product Policy for the company's Training and Simulation business line, Thales arrived in Orlando with a clear message for the global defense training community: fidelity matters, and training is not a game.

Thales draws on more than 75 years of experience delivering training and simulation solutions across live, virtual and constructive environments. Its 1,500 training and simulation specialists are distributed across five countries and have delivered large-scale, high-reliability training centers for customers around the world. These include the tactics training center in the Netherlands for armored fighting vehicle crews and major live training centers in Switzerland and France.

That history sets the stage for what the company is unveiling at this year's show.

The highlight of the Thales exhibit is the launch of a new drone training solution designed to meet the rapid evolution of unmanned systems on the modern battlefield. Delacourte observed that drones have changed tactical realities in every theater, which means forces must learn not only how to use them effectively but also how to defend against them. This applies to intelligence gathering missions, target neutralization with weaponized or kinetic drones and protection against adversary drones through jamming, directed energy systems or kinetic means.

Thales developed its new drone solution to address these demands in a way that reflects how quickly the drone landscape is changing. The system is drone agnostic, a capability Delacourte described as essential for future proof flexibility. A single kit can be installed on almost any drone, including new models that may emerge in the coming years. Forces can therefore train with the actual platforms they field rather than rely on surrogates that may not accurately mirror performance, payload or signature characteristics.

The solution also fits a broad range of training needs. It can operate as a standalone system for small scale or mobile training

events, and it can integrate into large live exercises through full connectivity with Thales land live simulation architecture. When connected, the system feeds real time updates to exercise control, creating a unified representation of drone effects and interactions within the battlespace.

Rolf Gasser, Technical Director and Head of Engineering for Training and Simulation, explained how this integration works during an exercise.

The drone interacts with targets and personnel through standard interfaces already used across Thales land live systems. If a drone attacks a vehicle, the system shows effects on that vehicle. If it engages soldiers, simulated effects are displayed as well. The system also supports counter-drone engagements. When forces shoot down the drone in the exercise, the drone operator receives immediate feedback, just as they would in a real mission. Gasser emphasizes that this creates an authentic interaction loop for both Red and Blue Forces and supports realistic operational behavior during training.

The new drone solution was not developed overnight. Thales built several prototypes in previous years before moving into full product development. According to both Gasser and Delacourte, customer interest is strong. Early feedback highlights the value of the drone agnostic approach and the ability to use the system outside of a fully equipped Thales range. Several customers see the solution as useful not only for training but also for doctrine development. With drones still relatively new as widely deployed battlefield assets, some militaries are using the system to test, refine and validate tactics and operational concepts so that units do not improvise in real combat.

Beyond the new drone solution, Thales is showcasing a range of other land training technologies. Attendees will see examples of land live equipment and demonstrations of the company's digital twin capabilities. These

digital engineering tools support system design, test and evaluation and distributed simulation.

Virtual mission training for the land domain is another focal point in the booth. Thales was recently contracted to upgrade the tactics system in the Netherlands, the largest training center of its kind in Europe. The center connects 76 simulators within a rich synthetic environment powered by Thales computer generated forces (CGF).



While the full system cannot be transported to the show floor, the company is demonstrating key elements including its CGF and synthetic environments. Delacourte noted that artificial intelligence now plays a significant role in supporting instructors by automating complex parts of exercise management.

Small arms training represents another capability area Thales is displaying. The company places strong emphasis on high fidelity replicas that prevent negative training. Replicas include fully instrumented weapon models equipped with sensors that monitor how trainees operate them.

Across all these offerings, Delacourte stressed the same core principle. High fidelity simulation is essential because real lives depend on the accuracy of training. If fidelity is poor, negative training can result, and trainees may lose confidence in the value of the exercise. Thales views its role as delivering training tools that reproduce operational reality as faithfully as possible so that forces enter the field ready for the demands they will face.

"Training is not a game," Delacourte concluded. "It is serious, and realism is essential."

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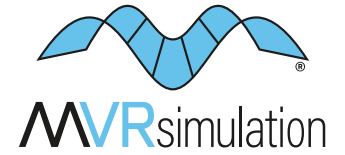


GLOBAL HAWK SENSOR VIEW



Red Force amphibious vehicles depart the Landing Helicopter Dock (LHD) and make their way toward Ishigaki Port.

Blue Force Global Hawk sensor view of Ishigaki Port streams to JTAC and FPV UAV teams on the ground.



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Red Force Landing Craft Air Cushion (LCAC) delivers Unmanned Ground Vehicles (UGV) into Ishigaki Port.

MISSILE BOAT

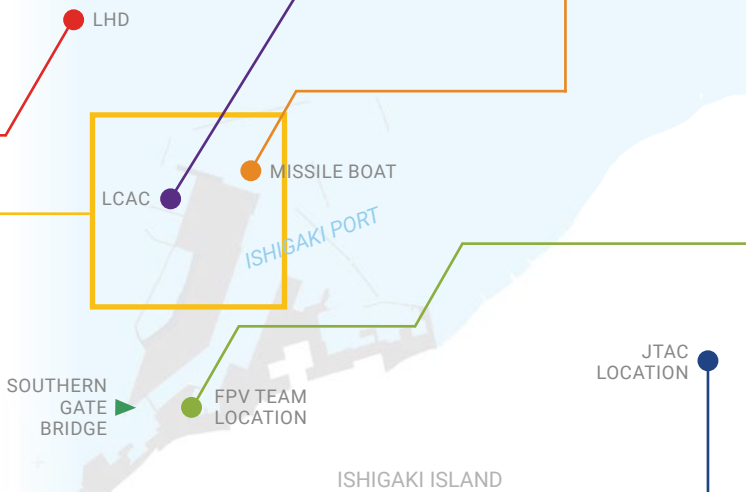


A Red Force missile boat in Ishigaki Harbor.

FPV UAV TEAM



FPV UAV team on rooftop prepares to strike Red Force vehicles on the shore.



JTAC



JTAC looks out over Red Force vessels in Ishigaki Port as amphibious vehicles make their way ashore.

View through the JTAC's Type 163 as he acquires targeting information to share with incoming CAS aircraft.

SCAN ME: Discover the full scenario in detail.



Army CPE STRI Brings Full-Force Presence to I/ITSEC ...continued from page 1

industry partners, both small business and large, to get the biggest training effect at the fastest pace.”

Affordability remains a key driver. “Budgets are static,” Beeler notes, “so affordability is key.” She ties this directly to the Secretary’s “Rebuilding the Arsenal of Freedom” guidance, emphasizing that “speed and delivery have to be the number one arbiter of success.” She acknowledges that cost and performance must still be balanced, but within Agile development, “those two things can adjust over time.”

Beeler has spoken repeatedly about the Army’s need to “simulate the fight, replicate the threat and win decisively.” All three demands are linked, and each leads naturally to a dependence on advanced simulation.

First, she asserted that “we have to absolutely simulate the fight.” Within her organization, she references an old flag that reads, “Only war is real. All other things are simulation.” That phrase captures the mindset that drives CPE STRI. If simulation is the proxy, it must be as close to reality as possible. Beeler rejects outdated methods, noting, “we cannot train the old way.” Instead, soldiers must receive experiences that are “not Atari” but closer to “Fortnite version 6352.” The analogy underscores the pace of technological change and the need for training systems to evolve with it.

She pointed out that Army leaders today operate with “so many capabilities at the fingertips of theater Army and corps level commanders that resolve themselves in ways we can only practice in a simulated environment.”



These must be shown to affect “actual units and actual capabilities on the ground.

“If we are expected to fight in a degraded electromagnetic environment, how do we do that?” she asked. Simulation must allow such effects to “resolve inside the actual mission command platform.”

Replicating the threat is equally essential. “If what we are putting our leaders up against does not replicate what we think our adversaries have, we are not giving them the full reps and sets they need,” she warns. Soldiers must explore how adversary systems behave, how they impose risk and how their effects can be mitigated. Bringing accurate threat representations together with realistic friendly capabilities is what enables decisive training outcomes.

Beeler states plainly that CPE STRI is committed to “keeping the training and test community well informed in both of those spaces and delivering those products as fast as we can at an affordable price.”

Across the services at I/ITSEC, the need for concurrency between platforms and training devices is a common theme. Beeler acknowledged that the Army faces the same challenge. “There is no doubt that is part of the challenge,” she says. Every platform program manager must confront the tension between

resourcing the platform itself and resourcing its training capabilities. Leaders make difficult decisions. As she frames it, “Do I buy five more tanks, or do I get a particular update out to the training community?”

The Army’s long-term goal is embedded training on the platform. To achieve this, the Army is working hard to articulate “the training environment architecture well, so that no matter what the platform is, it just becomes another sensor producing the right data and receiving the right data.” She explained that a sensor could be “an edge device,” “a soldier wearing MILES,” “a Bradley” or “a mission command platform.” What matters is that these sensors “collect data,” “pass that data back and forth” and allow the simulation engines and constructive models to resolve the battlefield accurately. This framework, she says, is how the Army intends to “get closer to maintaining concurrency.”

Beeler is enthusiastic about progress over the last year, highlighting “our next gen constructive contract acquisition strategy that just got off the ground in FY 25.” She describes herself as “absolutely thrilled” with the strategy and early effects. The approach emphasizes best of breed integration and modular open systems. She notes that this effort “was ahead of all the announcements that have come out, because a lot of it is commercial.” Battle Road, a commercial company,



If what we are putting our leaders up against does not replicate what we think our adversaries have, we are not giving them the full reps and sets they need.

was selected for the gaming engine. She sees this as a healthy mix of commercial and traditional vendors.

She believes that the lessons from this acquisition strategy “will continue to drive how other program managers may seek to do it in the future.” She also highlights the importance of work with digital engineering communities and the Army CIO to develop architecture and workflows for connectivity. She asserts that these technical building blocks “are what is going to continue to drive innovation in this space forward.”

The Army’s I/ITSEC display features a mix of live, virtual and constructive systems.

One highlight has been a threat drone and related demonstrations, with Beeler emphasizing that while the drone is “on an individual basis great,” but that its real power is that “it does swarm.”


The booth also includes representation from “all three of our major programs,” including the PM Synthetic Environment, PM Training Devices (TRADE) PM Cyber, Test and Training (CT2), which leads cyber test and threat capabilities.

Industry attendees with new technologies can approach the team in several ways. Beeler recommends that companies “hit us up on our link at PEO STRI” or visit the Army’s presence on the show floor. She highlighted two key locations: “the Quad Booth is 1333, and our actual display booth at 2135,” emphasizing that her team is committed to meeting participants, but adding that connecting with the right technical experts is far more beneficial than simply speaking with leadership. “Having the PEO come talk to you is probably mildly interesting,” she said. “Having an engineer or someone who

is involved in the technical aspects is far better.” She and her senior leaders, including her Deputy Program Executive Officer, Mr. Lee James, her APO, Dr. Jeremy Lanman, and the Chief Technology Officer, Mr. Marwane Bahbaz, will all be circulating “to get around to absolutely as many participants as we can.”

Beeler summarized, “We are all still in on delivering capabilities,” and reminded attendees that the Orlando community plays a crucial role, but that the national network of industry partners is equally essential. “Just about every industry partner in Orlando has extensions throughout the United States. The strength of the community lies in its ability to connect platform developers with training system developers and test organizations.”

“At the end of the day, it is really going to be about the data,” she concluded. The goal is to ensure the Army obtains “the right data off the right platform to the right mission command systems into the training system and back out.” This focus on data integration, training realism and rapid delivery is what defines CPE STRI’s mission. Beeler summed up the Army’s commitment simply: “We are all in, and we are here to deliver.”



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Mass Virtual Spotlights Accelerated XR Training Development

I/ITSEC visitors to Mass Virtual, Inc. [Booth 849] will witness a showcase of extended reality (XR) training solutions shaped by real operational urgency and proven through rapid delivery to multiple branches of the US military.

Chief Executive Officer and Founder John Brooks and Chief Operating Officer David Dwyer describe a company defined by its ability to take on difficult problems, meet tight deadlines and focus relentlessly on human performance outcomes.

Brooks emphasizes that Mass Virtual is a human performance company first; XR is only the medium. The goal is improved readiness, whether that means faster aircraft maintenance, better firefighting decisions or more effective ship operations.

Brooks explained that modern aviation and intelligence missions are accelerating and new aerial platforms are being fielded faster and with greater complexity, which forces a shift in how training is developed. Historically, units waited for aircraft to arrive before building training pipelines. Mass Virtual has changed that

model by virtualizing aircraft early and using XR to deliver full training environments years before the physical platforms are available.

In one recent example, Brooks described how the Army approached Mass Virtual with an urgent requirement for a prototype and field training for a new aircraft on a compressed timeline. The company produced a rapid prototype that allowed stakeholders to review human factors, system layouts and cargo bay configurations long before the platform existed in hardware, with this early visualization not only accelerating training development but also helping refine how the aircraft would be used operationally.

In another recent example, he described how Mass Virtual demonstrated similar agility in support of the US Navy in a Navy shipyard prize challenge following the fire aboard USS Bonhomme Richard [amphibious assault ship LHD-6] in July 2020. He said that the Navy realized that it needed an effective way to train shipyard personnel to identify and respond to

onboard emergencies. After a competitive down select to six teams, Mass Virtual delivered two highly-polished scenarios on an aggressive timeline. These scenarios ran not only in VR but also on tablets and game pads. He said that the company won the challenge and is now working closely with multiple Navy organizations as they explore broader adoption.

Across all programs, Brooks said that Mass Virtual emphasizes its commitment to building solutions in what he calls the “time of relevance.” Long development timelines can cause training content to lose value before it is even deployed. To prevent this, the company maintains processes and talent designed to deliver accurate, high-fidelity training as soon as it is needed.

Central to this ecosystem is Mass Virtual's government license-free Virtual Hangar platform. Originally built for the Air Force, it now serves as a shared environment that manages XR content across branches. Because there are no seat licenses or recurring software fees, government users can adopt and share content freely.

ECS Showcases Global Training and Sustainment Expansion at I/ITSEC 2025

With operations now spanning a growing number of timezones and countries, Engineering & Computer Simulations (ECS) is utilizing I/ITSEC 2025 to spotlight its expanding international training and sustainment capabilities around the world.

In an interview with *Show Daily*, Greg Kane, Chief Operating Officer of ECS, and Andrea Rodriguez, the company's International Services and Compliance Manager, shared how ECS is meeting the increasing demand for global support, training and logistics integration.

ECS is a dual-purpose company—half of its work centers on software development and immersive simulation technologies, while the other half focuses on training services, logistics and sustainment. “We have instructors, contract logistics support and maintenance for training devices overseas,” said Kane. “We also provide staff augmentation to Army North for chemical, biological, radiological and nuclear (CBRN) exercise support, as well as course

development for the Defense Logistics Agency.”

With operations in multiple countries, ECS recently took steps to bring more of its overseas life-support operations in-house. Rodriguez's addition to the team has been key to that transition. “Previously, we had to use third-party vendors for housing, visas, vehicles and host-nation compliance,” Kane explained. “Now, with Andrea's expertise, we sponsor and coordinate those services directly. That gives us greater control, cost efficiency and compliance.”

He continued, “For a small business, managing overseas operations comes with risk,” Kane noted. “We need to ensure compliance with international arms regulations and labor laws. But bringing these services internal allows us to expand responsibly and support our teams wherever they are.”

Rodriguez added that the company's growth aligns with rising global interest in US defense technologies and training. “Foreign militaries are investing heavily in US systems and

simulation tools,” she said. “We're seeing that interest firsthand through foreign military sales programs and international collaborations. It's an exciting time to be building these partnerships.”

At their I/ITSEC booth, attendees will see both ECS's legacy and new technologies. The company is the original equipment manufacturer for the Army's Tactical Combat Casualty Care simulator—an interactive tool that trains medics to treat battlefield injuries. ECS is also the prime contractor on the One Semi-Automated Forces (OneSAF) program, a six-year, \$127 million effort supporting the Army's constructive training systems. Additionally, ECS continues to develop CH-47 Chinook maintenance trainers for both US and allied militaries, including Germany and South Korea.

Beyond the technology, Kane emphasized ECS's reputation for reliability and integrity. “If we say we'll get it done, we get it done,” he said. “That's why our customers trust us. We solve problems, deliver on time and do it with honesty.”

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JF Taylor Showcases Advanced Training Systems at I/ITSEC 2025

At this year's I/ITSEC, JF Taylor Inc. [Booth 1900], a long-standing leader in the defense training and simulation industry, is set to highlight its expanding capabilities, innovative products and future growth strategies.

In a recent interview, Chris Wasniak, JF Taylor's Chief Operating Officer, shared insights into the company's impressive track record and what attendees can expect from their exhibit at the event.

Founded 43 years ago, JF Taylor remains a family-owned small business, headquartered near NAS Patuxent River in Maryland. Over the years, the company has evolved from a flight test engineering firm to a full-fledged developer of advanced training systems for military and defense applications. Today, JF Taylor employs approximately 625 people and has recently expanded its operations through two key acquisitions. The company now has a larger presence in Dayton, Ohio as well as a new facility in Union, Missouri, thanks to the acquisition of Bug Eye Technologies earlier this year.

While JF Taylor's roots are deeply embedded in aviation systems, particularly in support of naval and aerospace platforms, the company has broadened its scope to include ground systems as well. This expansion includes the delivery of Abrams maintenance trainers and Bradley equipment simulators as well as US Army maintenance trainer systems.

At I/ITSEC 2025, JF Taylor is showcasing two of its flagship systems: the MUTT (Mission Utilization Tactical Trainer) and the RAMT (Reconfigurable Advanced Mission Trainer).

The MUTT is a high-fidelity trainer for the F-35, deployed globally in a Joint Simulation Environment (JSE), offering a realistic, immersive training experience for pilots.

The RAMT is designed to be modular and reconfigurable, allowing rapid switching between different platforms such as the F-16, F-22, and F-35, all within a compact footprint.

Both systems are integrated with XR Varjo headsets and Next Generation Threat System (NGTS) software, enhancing the real-

ism and effectiveness of training scenarios.

In addition to these systems, JF Taylor has a private demonstration area where they will showcase a six-ship setup, demonstrating the interoperability between various trainers in a JSE environment. This demonstration will highlight the high-fidelity, high-threat capabilities of their training systems, which are vital for ensuring that military pilots are prepared for real-world combat scenarios.

Wasniak emphasized that JF Taylor's primary focus is on supporting the US Air Force, Navy and Marine Corps, particularly their forward-deployed training bases. He noted that the company's systems are designed to meet the evolving needs of modern military training, ensuring that pilots and ground forces maintain peak operational readiness.

For those unable to attend their booth at I/ITSEC in person, he said that the company invites follow-up visits at their facilities in Maryland or Ohio to discuss specific training requirements.

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Scholarship Spotlight

A representative sample of I/ITSEC 2025 scholarship recipients explained how they plan to utilize their field of study in their future endeavors, what this award means for them and what they hope to derive from attending I/ITSEC.



Ted Birkland
Old Dominion University
Barbara McDaniel Undergraduate Scholarship

I plan to apply my modeling and simulation engineering studies toward developing innovative solutions to defense and training-related issues.

Receiving this award is an honor and reinforces my commitment to pursue M&S and contribute to the community.

I'm looking forward to connecting at I/ITSEC with industry professionals, learning about the latest developments in the industry and gaining insights that'll guide my future career interests.



Rose Kiriazes
University of Florida
RADM Fred Lewis Postgraduate Scholarship

As an industrial engineering student, I'm all about making systems more efficient. I hope to apply my growing expertise that I'll gain from my studies at the University of Florida to the industry through the NREIP [Naval Research Enterprise Internship Program], helping strengthen programs and support our missions.

Without this scholarship, I would have had to pause my education. With it, I can continue seamlessly into my master's program, accelerate my progress and deepen my understanding of data analytics and operations research before entering industry. This award opens the door for me to grow without interruption.

At I/ITSEC, I'm excited to gain a deeper understanding of the industry and its direction, especially as I plan to stay in this field long-term! I'm looking forward to connecting with peers and professionals beyond my university, exploring foundational tutorials on simulation and human performance, and taking full advantage of the workshops and learning opportunities offered throughout the conference.



Samuel Barber
Shenandoah University
RADM James A. Robb Scholarship Program

I plan to utilize my simulation engineering background to create high-impact models of real-world problems in the area of sports performance, being a college baseball player; also in the motor industry with cars, heavy machinery and aerospace. My goal is to reduce errors, enhance safety and push for innovation through realistic, data-driven simulations.

Receiving this award is truly meaningful to me. As I am graduating early with a degree in Simulation Engineering from Shenandoah University, this honor showcases the hard work I've put in. It will help me take the next step working towards pursuing a master's in Aerospace or Mechanical Engineering, while also expanding my ability to contribute to high-impact simulation research and industry innovation.

By attending I/ITSEC, I hope to learn more about the range of opportunities that my field of study offers. I want to gain hands-on exposure to emerging technologies experience real-world applications of simulation, and build connections that can guide my future research and career development. This experience will help me expand my understanding and broaden my perspective on the impact as well as the potential of simulation in solving environmental issues and expanding capacity in the area of technology and transportation.



Michael Holm
Purdue University
RADM Fred Lewis Postgraduate Scholarship

I plan to use my field of study to develop data-driven models of mechanical systems in energy infrastructure, helping improve the efficiency of next-generation energy systems.

This award is especially meaningful because I/ITSEC was the first conference where I published a paper, and being recognized by the same community now reflects my growing involvement in the field.

By attending I/ITSEC, I hope to strengthen my ties within the community and stay up to date with current research in modeling and simulation.



Maia Rohmer
Wright State University
RADM Fred Lewis Postgraduate Scholarship

My goal is to use my research in aviation human factors to improve safety and training across both general aviation and commercial operations. I am especially interested in how better training design, simulation, and decision making frameworks can support pilots at every experience level. Ultimately, I hope to make contributions that will benefit operators across the aviation domain, including those in the cockpit, in the control tower and on the ramp.

I became a glider pilot in 2018, and even as a student pilot, I knew I wanted to contribute something meaningful to the aviation community. At the time, I did not know what form it would take. A few years later, while training to become a flight instructor, I discovered the field of aviation human factors and recognized it as my path forward.

Receiving this award feels like the culmination of hundreds of flight hours, thousands of takeoffs and landings and years of working with pilots and passengers. Through all of it, I have become fascinated by the relationship between people, the worlds they perceive and the machines they operate. This award affirms that the work I want to do in aviation safety and training matters, and it gives me the support to continue pursuing it.

I am looking forward to seeing the most current developments in training and simulation technology. I/ITSEC brings together industry, academia and government in a way that makes it possible to see where the field is heading and how different sectors approach the same challenges. I am especially excited to understand how my own research interests fit into emerging trends in training, human-machine interaction and decision-making. I hope to bring that insight back into both my graduate work and my future contributions to aviation safety.

NTSA Modeling & Simulation Awards

Each year, NTSA presents awards for outstanding achievement in the development or application of models and simulations. Awards are given for outstanding achievement in the following categories: Education and Human Performance, Training and Simulation and Training Systems Acquisition. Award nominees may come from government, industry or academia. In addition, NTSA awards a Lifetime Achievement in Modeling and Simulation Award.

NTSA 2025 Lifetime Achievement Award

Dr. Margaret L. Loper

Georgia Tech Research Institute

Dr. Margaret Loper's extraordinary career is marked by 40 years of significant and substantial contributions in the field of modeling and simulation (M&S). Dr. Loper is currently a Regent's Researcher and Associate Director at the Information and Communications Laboratory (ICL) at the Georgia Tech Research Institute (GTRI). Dr. Loper's appointment to this esteemed rank is a result of her dedication and impact to the M&S community as indicated by technical contributions, professional leadership, service and educational impact.

Dr. Loper's impact on M&S is profound, particularly in her groundbreaking work on parallel and distributed systems. An early notable achievement came in 1992 when she led the first live demonstration of the IEEE 1278.1 Distributed Interactive Simulation (DIS) standard at the Interservice/Industry Training Simulation and Education Conference (I/ITSEC). This event offered unprecedented

insight into the practical applications of distributed simulation, setting a foundation for future advancements in this domain.

Overall, Dr. Loper has led over 44 programs worth more than \$39M for a variety of Federal government and industry sponsors and has overseen \$18.4M of internal investments while serving as Chief Scientist of ICL. A cornerstone of Dr. Loper's contributions to the M&S industry is her involvement in international standards development.

Throughout her career, Dr. Loper has displayed exceptional dedication to M&S education. She played a fundamental role in developing and teaching the core M&S course for Georgia Tech's Professional Masters in Applied Systems Engineering Program, serving as the lead instructor from 2010 to 2022.

Dr. Loper's substantial contributions across academia, industry and government; her leadership in standards development and educational innovations; and ongoing commitment to advancing the M&S field underscore her worthiness for the NTSA Lifetime Achievement Award. Her career is a paradigm



of lasting impact, marked by repeated, outstanding achievements that have indelibly shaped the M&S profession.

Education and Human Performance

Ms. Moza Juma Ahli

Dubai Police

Despite considerable investments in training, many organizations in the GCC [Gulf Cooperation Council] – including ours – struggled to measure the real-world impact of learning initiatives. To address these gaps, we introduced a behavior-focused, KPI-aligned evaluation model, led by Ms. Moza, the first woman in the GCC and Middle East to become a Gold-Level Kirkpatrick Certified Assessor.

Our solution focused on applying the Kirkpatrick Evaluation Model, tailored to our organizational and regional context. Ms. Moza, the primary stakeholder in our department, designed and implemented all forms, processes and strategies. Her work facilitated the generation of real-time, structured data that empowered our management team to make data-driven decisions about the impact of training – both within and beyond the organization.

A key innovation was the integration of behavioral assessment tools that moved beyond traditional metrics to evaluate how

learning translated into workplace performance. This enabled accurate measurement of ROE and ROI, providing stakeholders with clear evidence of training effectiveness.

Over five years, our training program for traffic officers delivered measurable, transformative improvements in emergency response performance. This initiative not only enhanced the operational effectiveness of traffic officers but also established a new regional benchmark for how training can directly contribute to life-saving outcomes, cost efficiency and alignment with the Dubai Police's strategy for reducing vehicular accidents.

Simulation and Training

ASSET Team

Center for Technical Intelligence Studies & Research, Air Force Institute of Technology



In the evolving domain of space-based surveillance, the ability to develop and test next-generation capabilities for the Department of Defense and Intelligence Community is paramount. A critical challenge is the need for volumes of labeled data to accelerate R&D and validate algorithms, especially for future threats.

ASSET Team, a collaborative group from the Air Force Institute of Technology (AFIT), has developed a national M&S capability that directly addresses this need. ASSET is a government-developed, variable-fidelity, physics-based image-chain model designed to generate high-fidelity, synthetic electro-optical and infrared sensor data with realistic artifacts. What began as an AFIT student research project has matured into a cornerstone

technology for the Overhead Persistent Infrared community.

The ASSET team's achievement lies in creating a simulation tool that bridges the gap between overly simplistic models and computationally expensive ray-tracing tools. ASSET balances physical realism with the speed needed to generate large data volumes, allowing users to configure the model's speed vs. fidelity to suit their needs.

The ASSET team has delivered an essential, enterprise-wide M&S capability indispensable to the success of the nation's most advanced space surveillance programs. Their work provides a verifiable, government-owned solution that reduces cost, accelerates schedules and enhances system performance.

Training Systems Acquisition

Future Long-Range Assault Aircraft (FLRAA) Virtual Prototype Team

PM FLRAA, Bell Helicopter, TRU Simulation, CAE

The Future Long-Range Assault Aircraft (FLRAA) program is a cornerstone of the Army's modernization efforts, aiming to replace the aging Black Hawk fleet with a revolutionary capability flying "twice as far, twice as fast." Recognizing the challenges of traditional acquisition timelines and the need for early operational insight, the PM FLRAA adopted a groundbreaking approach by prioritizing the development and deployment of Virtual Prototypes (VPs). The FLRAA VPs consist of a self-contained, transportable container,

immersive crew station – a fully functional cockpit replica – coupled with a sophisticated flight model operating within a visually rich virtual world projected onto a large field of view dome.

While these components will mature alongside the actual aircraft design, the current VPs provide an invaluable learning tool, allowing Soldiers to begin familiarizing themselves with the unique characteristics and challenges of tilt-rotor flight today.

The FLRAA VP program is a collaborative effort that brings together engineers, pilots, maintainers and operational experts. PM FLRAA's strategic investment in Virtual Prototypes represents a paradigm shift in military acquisition. By embracing this innovative approach, the program is mitigating risk, accelerating development and ensuring that the FLRAA



will be a truly transformative capability for the US Army. The lessons learned from this program will inform future acquisition efforts, paving the way for a more agile, efficient and user-centric approach to delivering cutting-edge technology to the warfighter.

NTSA Top Under 40

Congratulations to the following NTSA Top Under 40 for 2025

NTSA is very pleased to announce our NTSA Top Under 40 awardees for this year. These awardees are being recognized for significant impact to the modeling, simulation and training (MS&T) community via their leadership, professionalism and volunteerism. Our MS&T community is in great shape for the future as indicated by what these individuals have and continue to achieve. These individuals reflect the organizations that they represent, and we thank them for enabling their contributions to our community.

- **Dr. Shannon Bailey**, *Center for Advanced Medical Learning and Simulation, USF Health*
- **Dr. Alexxa Bessey**, *Aptima, Inc.*
- **Steffan Camarato**, *NAWCTSD*
- **Candace Croughwell**, *Engineering & Computer Simulations, Inc.*
- **Daniel Hetteema**, *OUSD (R&E), Digital Engineering, Modeling & Simulation*
- **Dr. Victoria Lew**, *Florida Southern College*
- **Jacob Miracle**, *AFSC/SWC*
- **Dr. Ada Mishler**, *NAWCTSD*
- **Dr. Samantha Perry**, *Aptima, Inc.*
- **Eleanor Ross**, *ExpertTheory (formerly Valens Games)*



News in Brief

Kopin Unveils Virtual Binoculars

Kopin Corporation [Booth 2423] has unveiled a prototype of its new wireless simulated binoculars at I/ITSEC 2025. The virtual binoculars, powered by a computer image generator, will feature integrated positional and directional tracking sensors to deliver highly realistic simulations of fielded counterparts. Leveraging Kopin's high-resolution color OLED displays—and paired with proprietary viewing optics, the prototype offers exceptional visual fidelity and immersive performance.

"We developed this technology for a multi-billion dollar defense company that focuses on drones," explained Michael Murray,

Kopin CEO. "I can't tell you which company. It's also for a foreign nation. But we can't tell you which one. But this system provides all scenarios of training in nighttime and low-light scenarios. So this is a new product entrance for us, and we're really excited that we're able to show it at I/ITSEC this year."

He added, "We think it has tremendous potential for many binocular systems in terms of simulation and test. It's a new platform for us, leveraging our legacy Scout 35 and Ranger 35 products. So we're very excited for the product. I do think you'll see other simulation systems from us, mainly in the drone market

and first-person viewer market, so we can train troops on how to control drones in the field. That's a key aspect of the next generation of technology that we're putting out, and you'll hear more about that from us, I'd say."

Murray concluded, "I think it is by far the most versatile wireless binocular 3D headset in the market. Period. Full stop. And if you're simulating any sort of binocular type of weapon system, this is going to be absolutely perfect for that application, as well as any sort of binocular first-person viewer for drone control. This is the device that I think the industry is going to want."

Aechelon Highlights Project Orbion Expansion

Aechelon Technology, Inc. [Booth 1301] a leading provider of advanced geospatial and visual simulation solutions, announced the successful proof-of-concept integration of Vantor's 3D operational terrain into Aechelon's Project Orbion.

According to company representatives, the new collaboration allows Aechelon to transform ICEYE's high-resolution space-based synthetic aperture radar (SAR) imagery into high-fidelity, physics-accurate 3D terrain visualizations. That capability will be demonstrated interactively at I/ITSEC 2025.

They add that, through this partnership,

Aechelon's SkyBeam AI exploitation system visually fuses ICEYE's SAR detections of changes and objects on the ground with Vantor's highly accurate, global-scale 3D spatial foundation—which is updated continuously to reflect the operational terrain—to create a mission-ready synthetic environment. This integration unlocks 24/7, all-weather updates to Project Orbion's living 3D environment.

"Aechelon and Vantor have sustained a decades-long partnership—we've been continuously integrating Vantor's high-resolution imagery and advanced 3D data into our products and delivering them at scale across a range

of defense programs," said Nacho Sanz-Pastor, Co-Founder and Chief Executive Officer (CEO) of Aechelon Technology Inc. "This marks the first integration of Vantor's software-enabled spatial intelligence capabilities with Project Orbion, expanding the roster of industry leaders we've brought together to advance next-generation geospatial intelligence."

Project Orbion represents the industry's first AI-enabled Digital Twin of the Earth—a continuously updated, sensor-fused 3D environment that integrates satellite imagery, radar intelligence, photogrammetry, and real-time detections into a single exploitable picture.

CymSTAR Launches CymLITE-ATLAS XR

CymSTAR LLC [Booth 1466] a provider of innovative and mission-driven training solutions, has announced the launch of CymLITE-ATLAS XR, a scalable, deployable, mixed-reality training ecosystem that delivers high-fidelity simulation across multiple missions, aircraft and environments. CymLITE-ATLAS XR comprises modular, customizable training elements that can stand alone or be integrated into a single interoperable network to meet the evolving training demands of the Air Mobility community.

CymSTAR unveiled CymLITE-ATLAS XR at I/ITSEC 2025, underscoring the company's commitment to supporting global aviation

training efforts. Ideal for self-paced, on-demand individual training or full-scale, networked, cross-crew scenarios, CymLITE-ATLAS XR enables anytime, anywhere training for fundamental procedures and complex tactical operations, such as formation flying, aerial refueling, threat response, weather avoidance and low-level navigation.

"CymLITE-ATLAS XR showcases our continuous-innovation efforts by delivering a value-driven training solution that provides the capability of a weapon systems trainer without the associated cost, facility changes or infrastructure demands," said Daniel Marticello, President and CEO of CymSTAR.

"This scalable solution has the fidelity and capability necessary for tactical and mission-level rehearsals that ensure full operational readiness."

Key features and benefits of CymLITE-ATLAS XR cited by company representatives include: full Immersion using extended reality (XR), unmatched fidelity and concurrency through certified aircraft and weapon systems trainer data, scalability with modular physical and virtual components customized to user needs, multiplatform interoperability, including the C-5, C-17, C-130, KC-46, KC-135, and more and easy deployability and upgradability for evolving mission profiles.

XRT

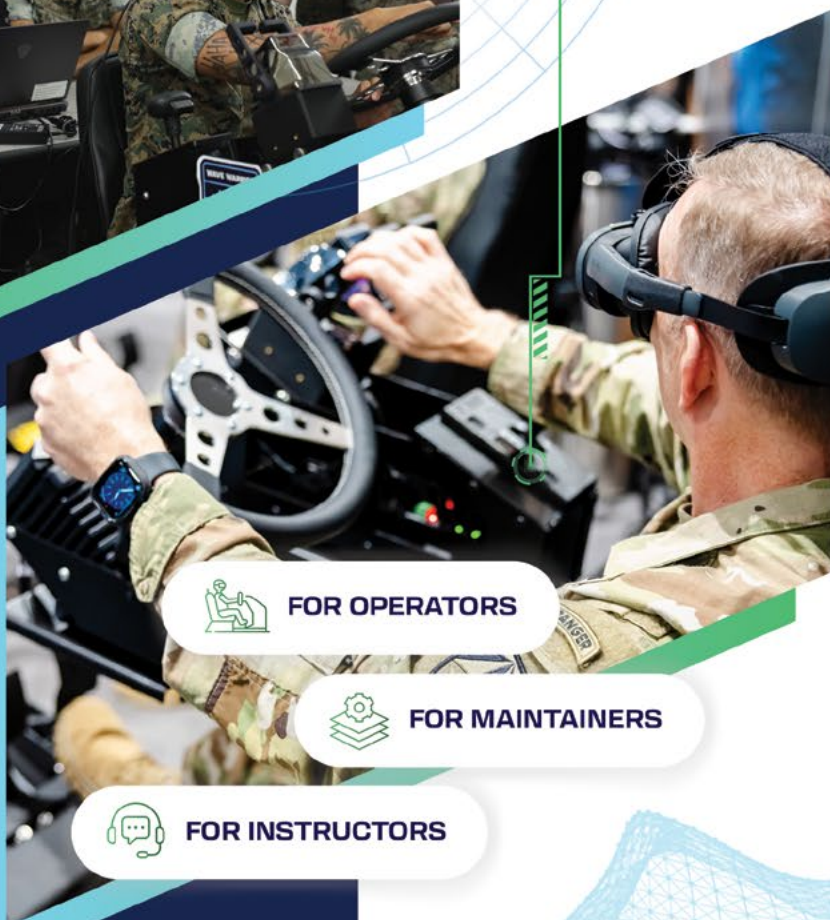
PRISM

FOR DRIVER TRAINING

XRT'S PRISM FOR DRIVER TRAINING IS A FIELD-PROVEN AND CONTINUOUSLY UPDATED DIGITAL TWIN XR PLATFORM

built on a future-proof, reusable modular architecture designed to scale across all tactical vehicle types.

Suitable for operators, maintainers, and instructors, this agile driver training system simulates fault-injection scenarios and vehicle operation across various terrain - increasing student throughput and readiness before they ever set foot in a real tactical vehicle.



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