The US Military Health System (MHS) is in a state of transition. And the modeling and simulation community is finding itself in the unique position of facilitating that transition to help ensure superlative medical care across the joint services.

The transitional nature of US medical care is based on the Congressionally-directed move of Military Treatment Facilities (MTF) from being Service-owned (e.g. Naval Hospitals, Army Medical Centers, etc.) to being all owned by the Defense Health Agency (DHA). That move was directed per the 2017 National Defense Authorization Act (NDAA), Section 702.

A critical element of that pivotal transition is the Joint Product Manager for Medical Modeling and Simulation (JPM MMS). JPM MMS was created by the Assistant Secretary of Defense for Health Affairs (ASD(HA)), in partnership with the DHA and the US Army’s Program Executive Office Simulation, Training and Instrumentation (PEO STRI), to meet the Services’ shared medical training requirements across the continuum of care.

As defined in Joint Publication 4-02, Joint Health Services (dated 17 December 2017, that continuum of medical care includes four major elements: first responder; forward resuscitative care; theater hospitalization; and definitive care.

JPM MMS already has multiple programs within each of those categories. For example, programs in support of first responder care training range from Medical Simulation Training Centers (MSTCs) and the Tactical Combat Casualty Care Exportable (TC3X) system to Point of Injury and Trauma Simulation (POINTS) and Medical Health Systems Enterprise-wide Strategic Sourcing (MHSE).

Similarly, forward resuscitative care training can be tied directly to eight current programs of record, theater hospitalization can be tied to seven, and definitive care can be tied to four.

Under the new transition guidelines, JPM MMS is tasked to provide the Department of Defense a centralized total lifecycle management approach for the advanced materiel development and procurement of medical Training Aids, Devices, Simulators and Simulations (TADSS) across the MHS.

“Medical simulation is a shared service,” explained Colonel Scott McIntosh, JPM MMS at PEO STRI. “And what we mean by shared service is an opportunity to look across the enterprise and gain efficiencies; gain them by not having every single organization trying to procure and manage medical simulation on its own. There’s numerous pitfalls for why you wouldn’t want to do that. But that’s kind of what’s happening today. A good portion of the medical simulation purchases out there, whether it’s for tactical units or hospitals, is all managed and led by folks that have a passion for using simulation. So, if a given hospital...
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CONFERENCE HIGHLIGHTS

REGISTRATION HOURS
0700-1800

EXHIBIT HALL HOURS
1200-1830

OPENING CEREMONIES
0830-1000  (Hyatt Regency/Regency Ballroom)

SIGNATURE EVENTS
1030-1200  Senior Leader Panel  (Hyatt Regency/Regency Ballroom)
1400-1530  The Navy the Nation Needs  (Room S330BCD)

FOCUS EVENTS
1600-1730  Military Innovation for Learning  (Room S329)
1600-1730  Intelligent Tutoring Optimization Within Future Training Concepts  (Room S320GH)
1600-1730  Black Swan: AI Run Amok  (Room S330BCD)
1600-1730  Innovative Acquisition in the Cyber Domain Panel  (Room S310A8)

SPECIAL EVENT
1600-1730  Launch Pad Session 1: Augmented and Virtual Reality  (Booth 1086)

COMMUNITY OF INTEREST
1400-1530  Simulation Standards and SISO  (Room S330EF)

SERVICE PROGRAM BRIEF/INDUSTRY DAY
0800-0900  US Air Force: MQ-9 Training System Acquisition  (Room S230C)
0900-1030  US Air Force: KC-10 Training System  (Room S230C)
1300-1500  US Air Force: B-52 Training System  (Room S230C)
1600-1730  US Air Force: Acquisition Update  (Room S330EF)

PROFESSIONAL DEVELOPMENT:  (SEE PROGRAM GUIDE FOR TITLE/AUTHOR LIST)
1400-1530  Paper Sessions  (Rooms S320A-F)
1600-1730  Paper Sessions  (Rooms S320A-F)

SHOWDAILY

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EXHIBITOR NETWORKING EVENT

Be sure to kick off I/ITSEC 2018 with a stop by one of the participating booths at this afternoon’s I/ITSEC Exhibitor Networking Event. This is a great way to view the latest technology, while networking with exhibitors and your fellow attendees. Be sure to check the signage for updated hospitality participants.

Tuesday, 27 November, 1700-1830

PARTICIPATING BOOTHS

1914 E2M Technologies: wings and beer
871 3D perception: aquavit and beer
2101 AEgis Technologies Group: beer and popcorn
613 Aptima, Inc.: beer, wine and appetizers
283 Cole Engineering Services, Inc. (CESI): Sam Adams Boston lager and light hors d’oeuvres
1170 Improbable: cheese platter and popcorn
1710 JVC Visual Systems: flavors of Japan - Japanese beer, sake and tasty snacks

2149 Krauss-Maffei Wegmann: typical Bavarian food and drinks - weisswurst, pretzels and beer
1165 Scalable Display Technologies, Inc.: wine, beer and water
339 Soar Technology, Inc.: Bell’s Oberon and Founders All Day IPA beer, red and white wine, fresh vegetables and cheese
2641/2741 Stirling Dynamics & SGB Enterprises, Inc.: New Belgium Fat Tire draft beer, refreshments and light snacks
2619 Team Defence Australia: food, Australian wine, and beer

Booth Sales for I/ITSEC 2019

Sustaining Members of NTSA have started to make plans for I/ITSEC 2019 by booking their exhibit space onsite at I/ITSEC 2018. Regular Members receive a 5% discount on booth space and Sustaining Members receive a 10% discount. If you want to get ahead of the crowd, stop by Room 220B and inquire about NTSA Membership and booking information for next year!

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Tuesday, 1800 and Wednesday, 1730

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Army Highlights Benefits of Joint Service Approach – continued from page 1

has someone that’s a strong proponent for simulation, they’re advocating for the funding and they’re advocating for the training. What we’re suggesting is that might not be the best way to manage this enterprise. We ought to really look more holistically and consider the use of life cycle management when it comes to medical simulation.

McIntosh said that that type of life cycle management is really what the JPM MMS organization has been chartered to do by the DHA and the multiple NDAAAs.

“That charter really gives us an opportunity to look at each and every hospital and each and every clinic that has a need for medical simulation, not just the graduate medical education hospitals, but really all the hospitals that need to sustain their providers of healthcare and allow us, as an institution, as the Defense Health Agency, to make sure that we have the right type of simulation and training capabilities for each one of those hospitals,” he said.

“In the military medical community, a lot of what they buy involves commercial items,” added Mr. Jude Tomasello, Deputy Joint Project Manager for MMS in PEO STRI. “As a result, it’s fairly easy for someone to come around with end of the [fiscal] year ‘sweep up money’ and place an order through GSA or any of the other means out there to do that. That’s fine. And they will get a good product that is proven commercially. But they’re not always getting the best deal in terms of the total lifecycle... We can guide them in that as well. And then, significantly, once it’s bought, we could certainly support them. We have the contracts do that for the most part. The challenge, like I said earlier, is that they will come to us towards the very end of the fiscal year when, contractually, it’s either very, very difficult or impossible to help them at the last minute. And that’s kind of the culture that we need to get past, doing everything at the end of the fiscal year, because you found a bunch of money.”

In terms of the PEO STRI exhibit (Booths 439 and 1433) at I/ITSEC 2018, Mr. Mike Landers, Assistant Program Manager for Plans and Operations, referenced the continuum of care as identified in Joint Publication 4-02.

“What I/ITSEC attendees will see in the booth is that they can get a flavor for all of the capabilities that are currently associated with medical modeling and simulation, across those roles of care,” he said. “There’s a great deal of opportunity to expand the simulation effectiveness in each one of those roles of care, as well as when we see any of those roles interconnect. For example, the interconnection is there with emerging efforts to identify en-route treatment.

“In our display, you will see the care for the patient through each one of the roles as the patient is transferred,” he continued. “We’re looking at simulations that help do the transfer. We’re looking at simulations that help train the individuals providing the care at each one of those roles across the continuum of care.”

Landers pointed to the critical value of medical simulation, asserting, “A trauma surgeon, for example, has to be competent in 77 different procedures. How do you think they master those procedures? The opportunity to see every one of those procedures on an actual patient is difficult. It is simulation that provides an opportunity to help them learn that skill set. And you carry that value from the surgeon to the nurse, to the nurse practitioner, to the physician’s assistant, to an Army medic, Navy corpsmen, Air Force medical technician, healthcare provider, operating room technicians, clinician, x-ray technician

Tomasello noted that the timeline for the transition basically aligns with the Congressional NDAA directives, which transition the MTFs to the DHA under an identified schedule.

“We really see that kind of alignment to the NDAA driving our future,” he said. “We could, in fact, do that now as far as supporting the hospitals, if they came to us and wanted to buy something. We could certainly support them. We have the contracts do that for the most part. The challenge, like I said earlier, is that they will come to us towards the very end of the fiscal year when, contractually, it’s either very, very difficult or impossible to help them at the last minute. And that’s kind of the culture that we need to get past, doing everything at the end of the fiscal year, because you found a bunch of money.”

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-- when you look at the vastness of the skills that have to be mastered, simulation provides the opportunity to do it in a very efficient and effective manner.”

“I think a bottom line up front is, as a provider of medical simulation for the services, we’re saving lives,” offered Tomasello. “The products and the services we provide save lives on the battlefield and all the way up to role four, in the hospitals. And it doesn’t get any better than that.”

McIntosh said that he views I/ITSEC 2018 as “an opportunity to share that message with the community,” adding, “Our mission is different than a normal program management office. Their job is to respond to requirements and to be the managers of cost, schedule and performance. And it’s that way because the system is in place that allows them to be program managers. For medical simulation that system is not in place yet. We’re working hard with the community to put all of the pieces in place that will allow us to realize our vision of saving lives and improving healthcare through simulation.”

He characterized the I/ITSEC venue as “an opportunity to educate,” noting, “It’s an opportunity to continue to spread the word, to share our message, to work towards how we change the culture of an enterprise that approaches medical simulation as an end of year buy, as a bright shiny object seen at a trade show that someone with a passionate belief wants to take back to their hospital. We’re trying to change that culture and realize that vision of becoming a program management office that’s using centralized funding; that is planning the lifecycle of a medical simulation device, not just buying it, but how to maintain it over time, how to sustain it, how to train it, how to upgrade it when the technology changes - all those things that a life cycle manager does is where we were chartered for in the future.”
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Cubic Brings Multi-Domain Training to the Fore

The need to train for the full spectrum of operations in a multi-domain environment has become steadily ever more critical.

With the recognition that near-peer competition has reemerged as a central challenge to the US and its allies, and is thus rapidly shaping training requirements, the ability to deliver disruptive innovation for the multi-domain training environment is a central theme of Cubic’s [Booth 1748] presence at I/ITSEC 2018.

According to Cubic Global Defense President Mike Knowles, given the tensions around the world, with countries such as China, North Korea and Russia variously challenging US hegemony, many of the tenants of the Cold War were beginning to reemerge.

“There is this renewed look, if you will, at what’s going on in the world in terms of the level of adversary that the militaries in the world would be up against. That has highlighted the increased capability we need to see in our training,” Knowles argued.

“We have found ourselves facing a full multi-domain effort with adversaries that are nearly as capable as our own forces. What that means is we need to operate in an environment that brings together air, land, and sea, and can deal with the effects of electronic warfare, cyber and space effects.”

“We were notionally being trained for an air and/or air-ground war in our most recent history. But we have found ourselves facing a full multi-domain effort with adversaries that are nearly as capable as our own forces. What that means is we need to operate in an environment that brings together air, land, and sea, and can deal with the effects of electronic warfare, cyber and space effects. It’s really time to contemplate those and step up our game - and what can we do to facilitate that in terms of training."

For Cubic, one high-profile example of such work was its involvement with the US Air Force Research Laboratory’s (AFRL) Project SLATE (Secure LVC Advanced Training Environment).

A three-year effort that culminated in three months of flight tests at Nellis Air Force Base, NV, this year, Project SLATE advanced many of the enabling technologies for future large-scale LVC exercises.

“We delivered the first ever live virtual constructive instrumentation system for a live fighter aircraft. Over the course of this event, we were actually successful in putting virtual and constructive entities through the sensor fusion systems of fighter aircraft – in this case F-15s and F-18s - and were able to display those in the cockpit, in the center systems of the aircraft, as indistinguishable elements from live. This is the first time that’s ever successfully been completed,” Knowles explained.

Among the technology advances was the development of a multilevel, secure datalink able to integrate a variety of different aircraft types, which was NSA approved and accredited.

This encrypted datalink was optimized for the data throughput requirements of LVC exercises and was “co-habitable” with multiple other operational data links and waveforms in the frequency spectrum, such as TTNT, Link 16, LTE etc.

“The aircraft they are flying for training are using multiple operational networks and you don’t want the training network to be affected by that,” Knowles explained.

“In addition, if you look at a service like the US Navy, which will go out to sea in an operational environment, with the cohabitation capability of the waveform, now they would be able to train while at sea on a range-less range and not have interference among the signals while they’re flying and training. No other waveform and data link today does that from the training perspective.”

The joint US Air Force and Navy demonstration culminated in a large force exercise involving more than 16 live aircraft, including F-18s, F-15s and F-16s, and with well over 300 sorties flown overall.

“We consider it TRL 7+ which basically means it’s ready for production. With 20 units delivered, that would be equivalent to LRIP in multiple other types of programs. So technically, this is a huge step forward for us.

“Now we really have an excellent gateway to do that full level, multi-domain training that allows you to get significant numbers of EW, space and cyber effects into the training to make it more realistic and to start to replicate the high-fidelity environments that are anticipated with the new adversaries that we are seeing training move towards.”

Knowles said with the work his company has carried out for the US Army to integrate live and virtual weapons into land exercises for the service’s Games for Training (GFT) initiative, the ability to hold true multi-domain training - with the ability to put LVC effects into those live training domains - has been further advanced.

Echoing other firms at I/ITSEC, Cubic is also applying greater use of analytics to ensure training efforts are fully effective for the individual soldier.

“For example, one of the things that we will be showing at I/ITSEC is called our Nexus Analytics. That’s a case where we have an instrumented live soldier in the field and we’re able to pull data from performance out in the field on mission critical tasks and we can do live or after-action debriefs on their performance against identified tasks and do that in the field also.”

The company has also further developed its capabilities surrounding game-based training, to both provide a highly immersive and realistic environment, and provide data analytics for better evaluation of student performance.

“That is built into a broader learning management system framework that can ensure the best prosecution or the best movement of that student through the curriculum and optimize their training, not only for the proficiency and the skillsets they’re looking for, but also to make sure that we’re cost-effectively moving them through the training.”
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To learn more visit booth #1215
Lockheed Martin Comes Prepar3D for the Future

Lockheed Martin (Booth 2248) is using I/ITSEC 2018 to launch a significant new set of capabilities for its Prepar3D visual simulation platform. The platform allows users to create training scenarios across aviation, maritime, and ground domains, training anywhere in the virtual world, from underwater to sub orbital space.

According to Adam Breed, Engineering Project Manager for Prepar3D at Lockheed Martin, the company will officially release Prepar3D V4.4 on Wednesday, and its capabilities will be shown in various configurations in the company’s booth.

“Prepar3D V4.4 is a ‘point release,’” Breed explained. “Prepar3D V4 came out in May of 2017. And we have followed that with point releases every few months. However, although 4.4 is a point release, it’s actually a pretty big one, with lots of new capabilities and features that really make a lot of my end users pretty excited.”

He said that the underlying foundation for the Prepar3D platform was based on Lockheed Martin’s 2009 acquisition of the rights to Microsoft Flight Simulator FSX, also known as ESP, for the purposes of simulation and training.

“The reason Lockheed Martin did this was to basically take a holistic new approach to looking at simulation and training, and try to drive a lot of affordability; basically using desktop simulators to teach a lot of part tasks,” he said. “For instance, part tasks could include start procedures, shut-down procedures, and even basic flight maneuvers. All of that could be done at effectively a lower fidelity but still at a high-quality training product level.

“The Microsoft Windows-based Prepar3D features the full earth, so you can ‘fly’ anywhere on the earth in Prepar3D and train your training task at over 20,000 airports,” he added. “It’s got a fairly long history, but the big points include a fully open architecture so that people can plug in their own flight systems or they can write their own flight systems. Prepar3D takes care of about 80 percent of whatever you want to do. You just integrate the systems you care about and then you have a training and simulation tool that is super portable and super effective.”

He continued, “In May of 2017 we introduced Prepar3D V4, which was a major push forward of the platform. Specifically, we updated the entire architecture to 64-bit, which allows you to have more entities, performs faster, and looks a lot more realistic because we were able to ‘up’ the texture resolutions of things. It really was kind of a holistic new look on the simulator that pushed it forward to the next generation. We also focused heavily on virtual reality deployments, so we integrated a lot of the most popular virtual reality headsets. That way you can just plug it in and you will be sitting in an F-16 on a runway in Florida in seconds.”

That has been followed by three point releases, with Prepar3D V4.4 slated for official release on 28 November.

“We are going to start talking about it early that week,” Breed said.

In terms of 4.4 capabilities, he said that “one of the newest trends in gaming and simulation is a technique called physically based rendering. Often abbreviated as PBR, it allows you to set materials of objects, so you can basically say that a material is a metal or a plastic or concrete or glass and it will be rendered and displayed to the user based on those unique physical properties. Effectively that means you are ‘upping’ the realism of the simulator by leaps and bounds, because metal will look like metal, glass will look like glass, and dirt will look like dirt. It’s a pretty big jump forward to where the light reflects off the materials correctly, so at the end of the day the end user will look like they are sitting in a real cockpit, where the leather looks like leather and the metal switches and knobs reflect the light correctly.

“One of the goals of simulation has always been blending the real and synthetic world. And this gets us one step closer,” he said.

In addition to its release at I/ITSEC 2018, he said that third party developers are already leveraging the product and their releases should be taking place “over the next few months.”

In his takeaway messages, he reiterated that Prepar3D “provides the foundational technology to affordable and effective simulation.

In addition to Prepar3D, Breed noted that Lockheed Martin will be highlighting its investments in virtual reality and mixed reality, and will be showing that in various ways through the company’s Deploy3D devices, which he credited with “showing a fully immersive experience in a very small footprint and a very affordable price range.

“We are showing a lot of those capabilities and Prepar3D is the foundational technology for the virtual reality and mixed reality training that Lockheed Martin is pushing out of Orlando,” he concluded.
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The Future of Army Training Beyond FOCUS

As the Pentagon examines alternative procurement models, one package being restructured is the US Army’s Warfighter Field Operations Customer Support (FOCUS) program.

With Warfighter FOCUS being broken up into its constituent parts as the DoD moves away from the large ID/IQ awards widely adopted during the Afghanistan and Iraq conflicts, incumbent prime contractor Raytheon [Booth 1036] is preparing to compete for a dozen different contracts as its single-source contract concludes.

Bob Williams, Vice President of Global Training Solutions for Raytheon Intelligence, Information and Services, noted that since 2008 the company had “trained virtually every US Army soldier” under the Warfighter FOCUS mechanism, which covered various elements, including the Army’s Combat Training Centers.

“There are Combat Training Centers are where the US Army sends its brigades, battalions, and all their soldiers to certify for real missions or for a level of readiness that is high. That Warfighter FOCUS program, which was a $11.2 billion contract, is ending after 10 years. We’re still working it, but it’s being broken into about 12 different contracts and we are of course competing all of those,” Williams explained.

“And in the last 12 months we won the National Training Center [Fort Irwin] contract. It’s worth about $161 million over five years. It allows us to continue supporting training as US Army sends its brigade combat teams to prepare for missions around the world.”

The company was also selected in June as one of the contractors for the Army’s Enterprise Training Services Contract (ETSC), which is worth up to $2.4 billion over five years.

ETSC provides core training services to combatant commands and their training of security cooperation partners. The contract will see Raytheon provide training services for individual, unit, crew and collective training, from troops through joint task force levels.

Despite such successes, and while Raytheon is still providing Warfighter FOCUS training services under a bridging contract, the door is clearly now open to other large primes as well as more niche training providers.

In an early example, Lockheed Martin won a potential seven-year, $3.5 billion contract to support fielded Training Aids, Devices, Simulators and Simulations (TADSS), including instrumentation systems and live-fire ranges.

Also known as the Army TADSS Maintenance Program (ATMP), the win for Lockheed Martin was announced in March and sees the company collaborate with PULAU Corporation and Cubic Global Defense on the contract.

Nevertheless, in competing for further elements, Raytheon retains the advantage of being able to call on some 160 partner companies it had gathered under its Warrior Training Alliance (WTA), which accounted for roughly 30% of the work delivered through Warfighter FOCUS.

“We’re still using those partners, the WTA is still in play. As the US government takes the Warfighter FOCUS and pushes it into 12 different contract vehicles, we will use some of those partners where it’s appropriate and some of those partners of course are teaming with other organizations, other companies to compete for those 12 different contracts.”

He noted that the previous use of the ID/IQ mechanism to deliver training allowed Raytheon to provide “quick and flexible services” to the Pentagon, particularly when the US was so heavily committed to operations in Afghanistan and Iraq.

“Our perspective they [ID/IQ contracts] were very empowering not only for us but also the US government, particularly with the 160-some companies that we had in the WTA. And we were able to deliver task orders from the government in 30 days,” Williams outlined.

“So, the government has taken some of what was good about Warfighter and they’re using them as an example in ETSC to try and make sure that they maintain that flexibility and agility, I would say. But in other cases, I think they’ve decided to open the aperture to more small, different companies after 11 years of great success.”

Other training services provided by Raytheon include UAS training out of Fort Huachuca and pilot training for the Afghan Air Force.

“In fact, we help run three flight schools, two in Europe and one in the Middle East, and we train all the Afghan pilots for their air force, and that’s in support of the United States Air Force. The Afghan Air Force is a real entity - it is actually quite capable right now and it’s growing more capable by the day as a result of the work between PEO STRI and ourselves in that arena.”

Taking a wider look at training technology trends, Williams said there was an “enormous desire” to bring commercial capability with respect to synthetic training environments into a whole host of areas where in the past training, and education was done in the classroom or through fairly rudimentary virtual training devices.

“There is a great desire to bring forward the technologies available in the synthetic arena and embed them in training devices as well as actual combat equipment. So theoretically the soldier draws his weapon and a switch can be pushed on it and it can be taken into a small synthetic theater that can be set up easily either in the unit area or at any location. That gives him near perfect fidelity with respect to how his weapon would operate in a real environment, and it’s his own weapon.

“When that is coupled with augmented reality, you can build all kinds of scenarios without a specialized training facility and you can interact with your squad or your company. There’s a great aspiration to see that.”
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Fly the Fallon Range Familiarization Solution at I/ITSEC Booth #1249
Forward Deploy with L3 Link Blue Boxer

L3 is highlighting several key products and programs at I/ITSEC. Lenny Genna, President of L3 Link Training & Simulation (Booth 1449) told the Show Daily, “Among them are our brand new, portable, high fidelity mixed reality trainers. These are high-fidelity 3D training simulators that deliver a full range of aviation skills, including tactical tasks, mission preparation and joint training.”

The Blue Boxer Extended Reality is an Operational Flight Program (OFP) utilizing mixed reality simulation - a virtual reality headset and touch-sensitive gloves that provide a high human interface and respond accurately to movement and directional commands. “Designed for ready-rooms aboard aircraft carriers and land environments with limited space, this system unifies the functionality of mission equipment and training to rehearse or fight in the simulated virtual environment,” said Genna.

“We are highlighting other key solutions at I/ITSEC, including the L3 Doss pilot training center, which continues to expand and grow, as well as our Universal Mission Simulator and UAV system. Of course, our new Arlington, TX, pilot training center will be highlighted.”

Completed in October, the expansion of the L3 Arlington Training Center (LATC) adds approximately 40,000 square feet, more than doubling the size of the facility and includes six additional full-flight simulators, classrooms incorporating augmented and virtual reality, and customer-dedicated spaces.

“Our proximity to Dallas Fort Worth International Airport makes this an appealing location for the airlines, which continue to work to address the commercial pilot shortage and build a robust next generation of trained pilots,” said Genna. “As for a formalized split - the majority of our training at the LATC is military and the smaller portion is commercial air transport. Our customers include the US Army, Navy and Air Force – and in addition, L3 serves several allied militaries.”

L3 is under contract to the US Air Force to provide 73 Predator Mission Aircrew Training System (PMATS) full mission training systems in multiple configurations. Most of those already are fielded, with upgrades and fidelity improvements delivering through the life of the contract. “We are fully concurrent with the aircraft for both hardware and software,” said Genna. “PMATS runs the operational flight program used by the aircraft and also uses actual ground control station hardware to ensure the highest fidelity training experience possible. PMATS also is approved to operate on the USAF Distributed Mission Operations (DMO) network and give MQ-9 crews the ability to integrate training events with other simulator players across DoD.”

L3 also provides on-site support. Genna noted that “over the past 10 years, we have averaged 99%+ availability with PMATS. We are now in the fourth iteration of the Sensor Operator Fidelity Improvement program, which improves the realism of the simulation environment, makes the system easier to use, and provides instructors with the ability create a truly complex environment for training events.

“L3 continues to expand the capability of the PMATS system in several ways, continue with concurrency modifications to ensure the devices remain concurrent, and improve the training effectiveness of the device. We continue to enhance the fidelity and capability of the system so it can offload training from live platforms. Our goal is to make PMATS capable of performing 100% of the training on the device and believe we are very close to that.”

Genna said “there is export potential for PMATS, as General Atomics continues to sell its MQ-9 platform and its variants. In addition to the export potential of PMATS we are also seeing increased demand for virtual intelligence, surveillance and reconnaissance training internationally.”

The USAF operates seven F-16 Mission Training Centers (MTC) in the USA, Italy, Germany, Japan and South Korea with an eighth scheduled for delivery to the Oklahoma Air National Guard in 2019. In August 2018, L3 received a $48.1 million contract for MTC production units nine and ten. They will be delivered about 18 months after contract award to Air National Guard locations in Duluth and Toledo.

L3 Link leverages its experience with such projects to support the training of America’s allies and partners. L3 is providing the F-16V Peace Phoenix Rising MTC to the Republic of China Air Force with the first suite scheduled to be completed in late 2019.

“Taiwan’s MTC will support basic pilot, pilot conversion and advanced skills training,” explained Genna. “Each simulator has a dedicated instructor/operator station integrated with L3 Link’s SimuSphere HD 9-facet visual system display, giving pilots a 360° field-of-view.”

Genna said that interest from other F-16V users and potential users remains high.

“We have a number of opportunities we are tracking and have either submitted proposals or in the process of proposing.”

L3 is working on a December 2017 contract for the Service Life Extension of the Swiss Hornet Operational Training Systems (SHOTS) which supports the Swiss Air Force’s 30 F/A-18C/D fighters. The program will upgrade four fully networked mission simulators with the latest Operational Flight Program (OFP) and include a complete technology refresh to ensure the trainers are supportable through 2030.

Scheduled for delivery in 2020, the project will upgrade the current visual system to L3 Link’s SimuSphere HD 9-facet visual system display, update the high-definition database and install the Aural Cueing upgrade kit to provide aircrews with a fully immersive training environment.

In October, it was announced that Harris Corporation (Booth 606) will combine with L3 Technologies in 2019 to form L3 Harris Technologies, which will be the sixth largest defense company in the USA and among the 10 largest in the world. Genna said that until the expected close in mid-2019 he could not discuss details.
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Congressional Caucus Emphasizes Bipartisan Success

As the first official event of I/ITSEC 2018, Monday morning’s Congressional Modeling and Simulation Caucus event drew an overflow crowd to hear from training and simulation leaders in the US Congress.

“The Congressional event is always a great starter for us and we are blessed to have four members here today,” said RADM James Robb, USN (Ret.), President, National Training and Simulation Association. “Their presence is a great demonstration of their support for the community and for the modeling, training and simulation businesses.”

Robb described the purpose of the event as “allowing the perspectives of the Congressional members to be presented to the training and simulation community and for the community to get some feedback through your opportunities to pose questions.”

The bipartisan Congressional panel of two Democrats and two Republicans included: Caucus Chair Bobby Scott (Virginia 3rd District); Caucus Co-Chair Stephanie Murphy (Florida 7th District); LtGen Jack Bergman, USMC (Ret.) (Michigan 1st District); and John Rutherford (Florida 4th District).

“This is my second consecutive year attending this conference and I just continue to marvel at how impressive this industry is,” Murphy began. “And this conference does a great job of showcasing the most cutting edge, the most useful, and the most exciting work that the modeling, simulation, and training community has to offer. And it also provides a forum for leaders in this important and growing field, whether they work in the private sector or the public sector, to exchange ideas and make personal connections.”

Emphasizing the importance of bipartisan cooperation, Murphy described the role of the Caucus as “to educate lawmakers and their senior staff on the benefits of MS&T, so that they are as excited about it as we are.”

Emphasizing the criticality of government investments in education, Scott offered, “It is important that the institutions of higher education are encouraging our students to study and pursue careers in the STEM fields, including modeling and simulation, so that we won’t have to rely on talent from other countries.

“In order to do that, men and women in this room must make sure that your voices are heard in Washington,” he added. “You don’t need to convince those of us on the stage about the importance of modeling and simulation, but our other colleagues need to know how important it is that those investments can be made.”

Pointing to his own background in the Marine Corps, Bergman offered, “We’re all here for the right reason. And the right reason is to create a training environment that will allow successful execution of the operations that we conduct as the United States military, around the world, on a daily basis. That’s serious business.”

Bergman shared some additional supporting vignettes from his post-service career as a commercial airline pilot, and lessons learned during his exploration of the application of simulation technologies in traumatic brain injury scenarios.
“If in your training and your simulation, if you don’t ‘get into the head’ of the individuals who are undergoing that training, then you are already off the mark,” he said. “The sooner you get into their head, to make them think that simulation is as real as it can be, the better the outcome is going to be. So when it becomes real, their ability to prevail in the fight is unparalleled.”

Bergman also issued a call to “drive innovation from the lowest levels,” explaining, “Whatever mission you are on, who is that most junior person performing parts of those mission critical steps? What do they think? What do they have to add for the next generation of simulation and training?”

Rutherford also began by sharing his background and experiences with evolving modeling and simulation technologies.

A former Jacksonville Sheriff with 41 years in law enforcement, Rutherford said that he “saw firsthand how these tools that you developed can be used to protect our officers, equip our officers, and to strengthen and make our communities safer.”

He continued, explaining that following his election to Congress he quickly learned how the latest generations of these tools and technologies are being used to augment today’s military forces.

He offered the representative example of the new immersive training program packages for the Navy’s Littoral Combat Ships (LCS).

“We are building those new facilities finally, those training facilities at Jacksonville and Mayport for our LCSs, and we can quit sending those Sailors out to San Diego for that training.”

He expressed “amazement” at the detail provided in the immersive training environment, summarizing, “These tools show us how we should rethink how we are preparing our forces. And I want to say that we in Congress need to make it easier and more common for all of you to bring what you have on the table forward. And my commitment to you is to continue to work in a bipartisan fashion in this effort to make modeling and simulation increasingly more involved in our training.”
I/ITSEC Delegates Invited to Europe’s 30th ITEC in 2019

ITEC 2019 will be the 30th edition of Europe’s annual simulation, training and education event, which brings together representatives from a broad international community. I/ITEC 2018 provides an excellent opportunity for the ITEC 2018 team to brief colleagues on Europe’s premier simulation and training event.

ITEC 2019 will take place in Stockholm, Sweden from May 14-16, 2019. “Our conference theme of ‘Interoperability by Design: Connecting People, Technology, and Nations’ could not be more timely and relevant,” said Elaine Raybourn, ITEC 2019 Committee Chair and Sandia National Laboratories research scientist. “Current challenges across the globe require military, civil defense, industry, and research communities to cooperate like never before. Integrated solutions, advancing interoperability and global peace at every level will be key. The ITEC 2019 program reflects diverse approaches and novel thinking that connect fresh ideas across domains to encourage cross-cutting innovation.”

The conference speakers will discuss issues across three main streams. ‘Human Factors and Performance in a Connected Age’ will consider core human, social, cultural and behavioral aspects of the training space, including the utility and design of joint, interoperable military and civil exercises, and human-machine collaboration and teaming. ‘Technologies and Architectures’ will represent the core technical theme for ITEC, focusing on technical developments advancing the use of collaborative, cooperative, or innovative processes. The ‘Core Applications’ theme will include ‘Today’s Challenges, Tomorrow’s Needs, Emerging Solutions’ where presentations will focus on advances in large-scale, distributed collaboration and training, cyber and physical security training and education, and the application of mixed, augmented, and virtual reality in high risk or high security training environments.

To celebrate the 30th edition of ITEC, the ITEC team will be hosting a reception today at Booth 2725 at 1700. The Chairman of Clarion Defence and Security, Rear Admiral Simon Williams, RN (Ret.), and Raybourn will be on hand to provide the latest developments and news about ITEC 2019.

Williams told the Show Daily “ITEC has proven its worth to its core defense and...”
security audience; an event does not thrive for 30 years unless the community it supports believe in its value to them. In 2019 we are making a concerted effort to reach out to the civil protection community to enlarge and enrich the ITEC audience. The last two decades have seen considerable efforts in developing multi-agency approaches to challenges at home and abroad. Training and education are key to success in this, and the modeling and simulation industries that support both training and education have a vital role to play in supporting their delivery. In 2019, ITEC is setting out to explore and encourage how these efforts can be harnessed to deliver not just technology that is interoperable, but more importantly people who are truly interoperable, and a modeling and simulation industry that is ready, engaged and able to deliver into the 21st Century.”

ITEC is jointly owned by Clarion Events and the National Training and Simulation Association.

For more information see https://www.itec.co.uk/ or contact Georgia.Pickering@cmsstrategic.com.

ECS Demonstrates CH-47F Chinook Trainer Upgrades

Engineering & Computer Simulations, Inc (ECS) is highlighting cockpit capabilities and future upgrades to the CH-47F Chinook at Booth 1135.

The company was selected by the US Army Program Executive Office - Aviation (PEO Aviation) in April to design upgrades for CH-47F Chinook heavy lift and AH-64E Apache Guardian attack helicopter training systems.

The US Army plans to upgrade more than 500 CH-47Fs to the new CH-47F Block II configuration, which features numerous enhancements, including greater lift capacity. As these enhancements will require additional user training, ECS is developing a customized program to ensure pilots, other crew members, and maintainers understand the differences and capabilities provided by the new aircraft.

ECS is designing an integrated program of performance-based blended learning environments, desktop cockpit and maintenance trainers, and interactive courseware.

The company opened an office in Huntsville, AL in 2017 to enhance services offered to PEO Aviation and other aerospace clients.
“Call to Action” in Today’s Industry Keynote

In his keynote industry address on Tuesday morning, Stan Deal, Executive Vice President of The Boeing Company and President and Chief Executive Officer of Boeing Global Services, plans to issue an industry “call to action.”

Speaking to the I/ITSEC Show Daily, Deal described the bulk of his background as “classically focused on the commercial side of the business,” adding that he was named to his current role in November 2016, when Boeing announced the establishment of Boeing Global Services as a third business unit of the company.

Deal acknowledged that 2018 marks his inaugural I/ITSEC experience, explaining, “I took on this role to combine both the commercial and the defense side of our services at Boeing. And this is my first opportunity to get out to I/ITSEC.”

He said that his “call to action” will be directed “around how we as an industry continue to get ahead of the problem at hand, which is the demand for pilots.

“There’s also a demand for technicians,” he added. “And those are problems both on the government side of the house as well as commercial.”

He said that the demand situation is a rallying cry for industry to invest in the appropriate technologies and direct those technologies toward solving the shortages.

“We need to enable the warfighter and enable airlines to be successful, by having qualified, trained people,” he said. “In the case of Boeing, for example, I think the focus for Boeing tends to be around how we drive practices that have been successful commercially into the defense environment. How do we use technology investments like virtual reality or big data input to enhance the effectiveness or the cycle time it takes to train a pilot or a technician? I mean, those are big focus areas.”

As one example of the impact of combining technologies, he pointed to the U.S. Air Force’s selection of the Boeing T-X as its new advanced pilot training system, asserting that the combination of technologies going into T-X was a differentiator and will shape how pilots learn and perform for decades to come.

Deal said that his keynote address won’t be “an advertisement for Boeing,” but rather a call to action focused “as an industry, rallying together to put the best investments forward to solve these problems.”
Game Changing Innovations on the Launch Pad

The NTSA is always exploring new things at I/ITSEC. “One of the things we created this year is called the “Launch Pad,” Beth Biddle, Ph.D., I/ITSEC ‘18 Conference Chair, told the Show Daily. “We’re using a space on show floor to let organizations come in and highlight lower maturity level technologies that aren’t usually demonstrated at I/ITSEC.”

A call was made to the training, education, and simulation community of practice to demonstrate their game changing innovations to key government decision makers and procurement officials at I/ITSEC 2018.

The community submitted white papers describing their innovations, which were reviewed via a competitive process, where the best of the best were selected by a panel of government and industry members, primarily from Team Orlando. The selected demonstrators employ technological innovations, re-define training and simulation processes, or create something entirely new that is going to change the way the armed services train, simulate and educate.

The Launch Pad Special Event (Booth 1086), today and tomorrow, targets both I/ITSEC attendees and select government acquisition stakeholders. Biddle said “NTSA also offered companies the opportunity to present to government representatives only – again another way to try and bring new capabilities and get them seen by military customers.”

Launch Pad will provide an opportunity to highlight technology that may be appropriate for rapid prototyping/rapid fielding acquisition initiatives.

### LAUNCH PAD SCHEDULE

**Today - Session 1: Augmented and Virtual Reality**
- **1600** Improving Aircraft Readiness with the Augmented Reality Maintenance Aid (ARMA) – AVATAR Partners, Inc.
- **1630** Immersive Pilot - Synthetic Teammate for Training Crew Coordination Competencies - The Boeing Company, SoarTech, and University of Central Florida

**Wednesday - Session 2: Interoperability and LVC**
- **0945** Utilizing ASI’s Transport Delay Test Kit to Measure Your Device’s Latency – Aero Simulation, Inc.
- **1015** Simulation Configuration and Environment Control (SimChEC) – Enhancing LVC Training Readiness – Trideum
- **1045** Challenge Accepted: Automating Cybersecurity Compliance with Cybernet Security Advisor – Cybernet Systems

**Wednesday - Session 3: Performance Measurement**
- **1600** SAIL3: The Sailor Adaptive Intelligent Life-Long Learning System – Aptima, Inc., in partnership with Adobe and MARi LLC
- **1630** Human Behavior: Next Generation Training – Thales AVS France
- **1700** Counter Bias Training Simulation (CBTsim): Revolutionizing Implicit Bias Training – Washington State University

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MASA Puts CBRN Training to the SWORD

MASA (Booth 2459) is using I/ITSEC 2018 to showcase the latest iteration of its SWORD constructive simulation product, which now integrates a chemical, biological, radiological & nuclear (CBRN) module for more realistic CBRN scenarios.

The new release of SWORD, version 6.12, allows users to model such aspects as CBRN plumes and their effects during exercises, facilitating the training of officers and the development of adapted responses.

MASA Group Sales and Marketing Director Enrico Raue said the new CBRN module could be used for any kind of toxic agent while practicing a variety of different scenarios, including homeland security and disaster response exercises.

“The special CBRN module improves the capability of SWORD to train the CBRN branch of the army in events or scenarios including nuclear, chemical, biological clouds, liquids, the way they may be spreading or how they are dissolving, how they are contaminating the simulated units and how that will affect them,” Raue explained.

“So, for instance, if you get contaminated, how long does it take to react to that contamination, how long will it take for you to get very ill, how long would it take to get treated, how long until you die - all those aspects are taken into consideration in the simulation when you’re simulating scenarios including these kinds of events.”

Given the complexities in accurately modeling phenomena such as volcano eruptions, earthquakes, floods, wildfires and CBRN plumes, MASA has made it possible to model and import disaster scenarios from external simulation models.

SWORD is in use with more than a dozen militaries around the world for the training of commanders and headquarter staff as well as operations research, decision support, specification development and the evaluation of new equipment.

Raue explained that earlier in 2018 the Belgian Army had fully introduced SWORD as its constructive simulation solution in only three months.

MASA Group will also take part in the I/ITSEC conference with two presentations:

• Smart Simulation for Decision Support at Headquarters, presented by Dr. Yann Prudent, Chief Technology Officer, MASA Group. Tue, Nov. 27 – 2:30-3:00pm - Room: S320F
• Crisis Decision-making with M&S Support in Complex Urban Environments, presented by Col. Orlin Nikolov, Crisis Management and Disaster Response Centre of Excellence (CMDR COE). Wed, Nov. 28 – 9:30-10:00am – Room: S320B

MASA (Booth 2459) is using I/ITSEC 2018 to showcase the latest iteration of its SWORD constructive simulation product, which now integrates a chemical, biological, radiological & nuclear (CBRN) module for more realistic CBRN scenarios.
Today’s Black Swan Event Considers AI Run Amok

Black Swan events such as these, whether natural or man-made, are difficult to predict and cause a massive impact. NTSA believes modeling and simulation can play a major part in exploring these events in a very cost-effective manner.

Since it was launched as a multi-year initiative at I/ITSEC 2015, the Black Swan special event has proven highly popular. Its purpose is to highlight the value of modeling and simulation in helping governments, emergency responders, armed services, aid organisations and other groups prepare for high impact/low probability events.

Today’s Focus Event, from 1600–1730 in Room S330BCD, will focus on artificial intelligence (AI) in a challenging scenario called ‘AI Run Amok’. Attendees will observe AI from perspectives which will be sure to test their perceptions.

The discussion will examine the potential far-reaching impacts of AI as we integrate it into our daily lives, consider the unintended consequences of applying AI to our defense, commercial, and electoral infrastructures, and debate whether society can control AI’s long-term effects.

The panel of military, industry, and academic experts consists of: Justin Fessler, Artificial Intelligence Strategist, IBM Federal; Johann Soto, Sensor Fusion Branch Head, Naval Air Systems Command, US Navy; James Lester, Ph.D., Director of the Center for Educational Informatics, North Carolina State University; and, Michael van Lent Ph.D., President and CEO, Soar Technology, Inc.

The session will be moderated by Mark Silbert, Ph.D., Data Fusion Engineer/SME AM Pierce & Associates and Consultant, Naval Air Systems Command; and, chaired by Liegh Yu, Deputy Director, Defense Modeling and Simulation Coordination Office.

They will define and discuss the broad technical and societal challenges in dealing with unintended consequences of AI, and will highlight how modeling techniques can assist planning to help make our infrastructure and society more resilient.

Recent months have seen almost unprecedented disasters such as the Indonesian earthquake and tsunami, Hurricanes Florence and Michael, and the massive wildfires which have ravaged Australia and California.
ECS and FN Modernize FN Expert Marksmanship Trainer

Engineering & Computer Simulations (ECS) is demonstrating the updated FN Expert marksmanship training system in Booth 1135.

The Orlando-based company was contracted by FN America and its Belgian parent company, FN Herstal, to modernize the FN Expert with updated software that offers more sophisticated features for evaluating shooting performance.

FN America told the Show Daily that “since initial development about 15 years ago, thousands of FN marksmanship training devices have been sold worldwide. The upgrade has been developed by FN in response to feedback from law enforcement and military customers.”

The FN Expert is a wireless system capable of dry-fire and live-fire training on virtually any rifle or carbine, as well as selected pistols. It can be mounted on a MIL-STD-1913 Picatinny rail or attached directly to the barrel of the trainee’s weapon without interfering with optics or accessories. The system performs equally indoors with simulated shooting distances or outdoors with targets at ranges up to 300 meters.

The FN Expert is used to develop and improve the fundamentals of shooting – hold, aim, and trigger control – while also building muscle memory and providing feedback on the shot to the trainee and the instructor. The hardware sensor measures weapon movement, detects the shot, tracks the location of both hits and misses, and the software visualizes the shot trace and analyzes the shooter’s performance in real time.

The improvements introduced by ECS also make the system compatible with multiple hardware platforms, including PC and Android.

Shane Taber, Vice President of Orlando Operations, said: “When you watch this system and the updated software in action, the benefit to the trainee and trainers is clear to see. It gives instant insight into your shooting technique that even the untrained eye can recognize and respond to.”

The new capability will not be commercially available until the second quarter of 2019. The system is entirely produced in the USA.

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OpSim to Get Plugged in to the System

Cole Engineering Services, Inc. (CESI Booth 183 and 283) is using I/ITSEC to demonstrate its Operationally-Focused Simulation (OpSim) product integration for Systematic’s Sitaware mission command product.

SitWare is currently being fielded by the US Army as part of the Common Operating Environment version 3 (COEv3) and is also used in more than 20 other countries.

The OpSim plug-in provides a set of tools that assists with course of action (COA) comparison, analysis and selection of mission planning tasks and can run at speeds of more than a million times real-time for a battalion-sized scenario, simulated to the entity level.

Bryan Cole, CESI’s CEO, said OpSim was data driven, so the behavior of the system can be modified by updating data files rather than re-writing code.

“One of the beautiful parts of this is that it’s plugged directly into the SitWare API (Application Program Interface). So, you’re not having to do anything extra special, you’re actually natively using SitWare and the interface they are used to,” Cole explained.

“The Army’s intent, I believe from PM Mission Command, is to field SitWare as part of the COE Version Three. So, it’s still on the rollout for that, they’re still in process of going through that, but the OpSim capability will connect directly to that.”

Beyond the US Army’s fielding of the OpSim integration, international users of SitWare can also take advantage of the new functionality, with Cole noting those discussions had started already.

OpSim contains intuitive tools to help operators explore and understand the results of the simulation runs to facilitate decision support.

These tools enable operators to set evaluation criteria, change the weights on the criteria, set thresholds for the criteria, and compare courses of action based on selected criteria.

As well as building an engine that ran exceptionally fast to facilitate course of action analysis, Cole said they worked to ensure that OpSim was intuitively embedded within the SitWare interface and that the user did not have to interact with the simulation, just the results of the simulation.

“We’re not going out and translating anything, we’re reaching directly into SitWare, grabbing the plan that someone has created and then executing that plan. And we can run those multiple times so you get good statistical representation of the quality of the plans. Then we present a representation of that so that people can see very quickly how those plans compare against multiple applications,” Cole explained.

“This is all built with publicly available models of data. And the beauty is that any customer can open an Excel spreadsheet and tune the data to reflect the performance of their equipment - it’s a highly customizable interface.”

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Operation Coalition Warrior Takes the Stage at I/ITSEC 2018

Clear evidence of I/ITSEC support from the Office of the Secretary of Defense and across coalition partnerships can be found this year in the NATO exhibit (Booth 2471). ‘Operation Coalition Warrior: Building Global Readiness...with lightweight, low-cost, innovative learning solutions’ events are scheduled Tuesday afternoon, Wednesday morning and afternoon, and Thursday morning.

According to Ulf Jinnestrand, a contractor representative participating in the events, OCW reflects an outgrowth from the Operation Blended Warrior (OBW) events that were a key part of I/ITSEC over the last few years.

“We had a first last year in OBW, which was a coalition piece, the first time we created a community where international and US partners could work [modeling and simulation] together,” he said. “Unfortunately, the coalition piece was not fully implemented into OBW, so it was more or less two different environments, a US environment and a coalition environment.”

Jinnestrand said the environment was also related to a US/Swedish initiative called the Viking exercises.

“We have done a number of exercises through the years, which are really coalition, proof of principle exercises in training and simulation,” he said. “And one of the things that we really try to achieve across industry and government agencies is a training center kind of environment that is prepared to address operational and training capability requirements.”

He noted that the exercises, which have been underway for approximately 20 years, focus on the creation of virtual and constructive simulation environments. The most recent event, Viking 18, occurred last April and included 2,500 participants located at 10 sites around the world doing a distributed computer assisted simulation exercise.

“We left Operation Blended Warrior [at I/ITSEC 2017] saying that the coalition piece is here to stay and we now have a networking piece where lots of people can work together,” he added. “That was reinforced at Viking 18. But then suddenly we learned early this year that OBW was put on hold for 2018.”

In response, the Office of Secretary of Defense, Force Education and Training Directorate encouraged the participants to focus efforts on this year’s OCW, which Jinnestrand broadly described as “a low budget effort” that provides an environment where coalition demonstrations can occur.

“Coming out of the OBW from last year we really wanted that,” he said. “So we kept that networking piece of it, since there were a number of organizations, centers and industry participants that wanted to continue to keep up the spirit.”

“Again, this ties to the networking piece of OBW,” he continued. “It’s about learning the language and understanding the requirements of what is needed. For example, NATO has put together 2,000 operational and training requirements. You can probably realize what kind of challenges need to be satisfied to meet those requirements. And we need to have an industry that understands those challenges and also understands that we cannot go on as we have done before. We need to have something that is easier, faster, more lightweight, more off the shelf, and ready to deliver.”

He added that interested industry participants are not just “the big dragons” but also include small companies coming to I/ITSEC “because they have a smart prototype to show that is lightweight and is for coalition [forces]. It’s a solution that is an easy tool to take forward.”

“So now we have the Viking innovation event, we did the OBW together, and we are starting to form a kind of a coalition industry community and partner community and we are now starting to get into a phase where we think that we can have some kind of innovation, like an ‘innovation cloud,’ he continued. “And the members of that community are just looking for industry partners and other partners to play in that cloud.”

That search for partners is part of what is driving the OCW demonstrations at I/ITSEC 2018. Moreover, the development process for OCW was deliberately designed to lower the cost of participation, through features like remote planning conferences over the past several months that eliminated the requirement for small companies to commit resources for physical travel.

Jinnestrand summarized by saying that the networking demonstrations conducted to date have caused people to realize what is possible and what can be done.

As a result, the plan behind OCW is “to draw attention and increase situational awareness, causing more actors – both official actors and more commercial actors - to realize that playing together will provide the awareness of where we fit in and what we can contribute. For some of the industry in the end, hopefully it means that they will receive some business,” he said.

Operation Coalition Warrior is sponsored by NATO and the Office of the US Secretary of Defense. The first of four scheduled OCW demonstrations and discussions, focused on ‘Advanced Distributed Learning,’ will occur this afternoon, 1400-1530, in the NATO Booth 2471.
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The CAE Medallion MR e-Series Visual System is a cost-effective, turnkey visual system designed specifically for military fighter and fast-jet training. It includes a back-projection 360-degree dome display system, laser projectors and CAE’s proven CAE Medallion image generators in a fully-integrated visual solution. Available for new training systems as well as for updates to existing systems, the CAE Medallion MR e-Series is designed to deliver the industry’s most realistic and immersive virtual environment. Innovations such as electronic collimation, 3D depth perception, and unmatched brightness provides fast-jet pilots with the ideal visual solution for a range of training tasks, including formation and low-level flying, air-to-air refueling, and target identification.

As a globally recognized training systems integrator, we are proud to support the training and readiness of military aircrews around the world.

Learn more about our breakthrough CAE Medallion MR e-Series visual system by visiting our booth (#1734) during I/ITSEC in Orlando, Florida from November 26-29, 2018.

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