WHAT'S HAPPENING!!
(the latest installation of useful information and terrible jokes)

Welcome to the Future

Every branch of the U.S. armed services has launched a technological initiative meant to create the next-generation, synthetic training environments. All of these programs call for futuristic capabilities to accomplish commendable goals:

Is there an echo in here?

- Train at the point of need
- Offer configurable levels of cognitive fidelity to fit varied learning requirements
- Deploy "soldier usable" and low-overhead training solutions that eliminate the need for an army of contractors
- Develop web-based, cloud-deployable, centralized streaming (think of it as "Netflix for Training")
- Leverage cutting-edge commercial innovation

This list of next-generation, synthetic training capabilities is remarkably similar to ASTi's current capabilities list and product development. There is one main difference between the DoD wish lists and ours:

Ours is not futuristic; it's here and now.

If your government agency or company is looking for rapidly deployable, cutting-edge innovations to meet the latest synthetic training requirements, ASTi is ready. Our capabilities include the following:

- LVC voice communications featuring a high-fidelity, physics-based radio environment
- Automated, interactive virtual role players that are voice- and AI-enabled
- Synthetic sound system that tracks entities to create directional, 3D battlefield soundscapes
- Software-only, virtualized, and cloud-deployed solutions
- Application programming interface (API) and open standards facilitate integration with COTS and GOTS
- Risk Management Framework (RMF) accreditation completed
- Enterprise license agreements (ELA), software as a service (SaaS), training as a service (TaaS)

Contact us now to discuss the future... today... or at your convenience.

ASTi Announces Membership in the TReX Consortium

Did you know that ASTi is a team member of the Training and Readiness Accelerator (TReX)?

TReX is a consortium comprising industry, academia and government agencies that serves to expedite development, delivery and evaluation of cutting-edge prototypes to increase warfighter readiness.

After 30 years as a top innovator in the modeling and simulation commercial marketplace, ASTi is perfectly suited for the TReX fast-track development environment. ASTi is a small business and nontraditional defense contractor (as defined by U.S. statute) with a reputation for agility and the ability to fill quick-reaction hardware and software development and integration tasks.

Contact us to discuss TReX teaming opportunities.

[This is a painfully obvious joke. -Ed.]

ASTi Delivered Stryker Training Equipment in Record Time

In the last year, ASTi has delivered low-cost solutions for a number of vehicle convoy simulation programs. One is the Stryker Virtual Collective Trainer (SVCT) led by U.S. Army's Aviation and Missile Research, Development and Engineering Center (AMRDEC) and the Combined Arms Center - Training Innovation Facility (CAC-TIF).

The SVCTs feature ASTi Voisus® systems supplying vehicle communications controlled in a couple of unique ways. The driver and commander access touch screen PCs displaying ASTi virtual radio skins, while remaining crew members use replicas of Full Function Crew Station (FFCS) hardware.

ASTi developed the FFCS panels' hardware switchology and software in record time to meet the Army's aggressive and unwavering fielding schedule. On-site installation and training took place less than three months after contract award.

The Army's HMMWV simulation suite for the 84th Training Command, Ft. Knox, received a similar setup, and the ASTi equipment on all of these simulators integrates directly with the Army's Games for Training (GFT). Both programs are taking advantage of ASTi's software and information assurance (IA) maintenance subscription, which ensures their systems have the latest features and security defenses.

Stryker Virtual Collective Trainer photo courtesy U.S. Army

ASTi Celebrates ELA Renewal Awards

The problem: Customers need to quickly add resources and field the latest capabilities while reducing cost of ownership and facilitating acquisition at the same time.

Our solution: ASTi's Enterprise License Agreement (ELA) is a subscription-based bundle of product software licenses and support services. It is designed to provide simplified provisioning and deployment of ASTi products to accommodate our customers' ever-changing and sometimes unforeseen requirements.

Last year, the U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) used their ASTi ELA to support their massive enterprise covering several thousand users at locations spanning the continental United States, Alaska, Hawaii, Europe and Asia.

This year, PEO STRI awarded ASTi a follow-on contract to extend their ELA subscription and adjust their level of product coverage and support. Provisions of the ELA include:

- Unlimited distribution of licenses within the program's scope
- Software and information assurance (IA) maintenance subscription
- On-site training and priority access to ASTi help desk
- Engineering services for Risk Management Framework (RMF) Authority to Operate (ATO) accreditation

Also in 2018, the U.S. Air Force Europe (USAFE) obtained an ASTi ELA to provide their Warrior Preparation Center (WPC) with the capability to expand voice services to cover communications across multiple, isolated multilevel security (MLS) networks.

Pictures of Our Dogs

We needed to fill this space so things wouldn't look weird. Here are some photos of ASTi dogs.

SERA Virtual Air Traffic Control Solution for T-X GBTS

ASTi's SERA® product provides an interactive, virtual air traffic control (ATC) environment ideal for meeting challenging military program training requirements, such as those represented in the Air Force T-X program Ground Based Training System (GBTS) specification.

- Fully immersive and interactive virtual ATC environment
- Radio interaction between student and virtual ATC
- Accurate ground, clearance, tower, departure, and en route ATC center and terminal communications
- Realistic ground and air traffic density and behavior
- Single-ship/multi-ship operations training support
- Training maneuvers (e.g., high key/low key, touch-and-go)
- Instructor handoff and takeover
- Live-Virtual training support

SERA offers training system providers an easily integrated solution that meets or exceeds these requirements. Its features and capabilities include:

- Robust speech recognition supports FAA and ICAO standard phraseology
- Dozens of high-quality, synthetic voices with diverse accents
- Behavior, recognition and response extensions for military maneuvers including base and training area operations
- Ground, tower, approach/departure, SID/STAR, weather/ATIS, FSS/ Terminal/Center ATC facilities and operations support
- Simulated air and ground traffic with realistic density, flight, navigation, and radio communications
- Worldwide airport database, operating bases, specific and generic airfields, shared airport/airspace
- DAFIF data support
- Instructor hand-off, take-over, and environment customization

Whaddya want from me?

Do you know what film this graphic is spoofing? Email info@asti-usa.com with the right answer, and we'll send you a shirt. Middle image is courtesy Secretary of the Air Force Public Affairs office.

Check out the SERA website (seraatc.com) for more information. Better yet, call us to learn how SERA can bring realistic background comms and ATC training to your application.
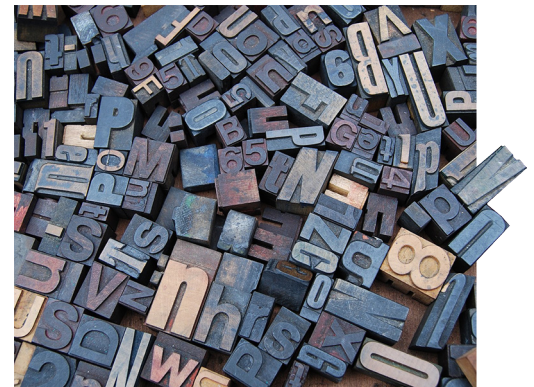
PEO STRI, DoD RMF ATO, CDS, IA, EIEIO, LMNOP

ASTi's Voisus® products achieved Authority to Operate (ATO) status in full compliance with the DoD's Risk Management Framework (RMF). The U.S. Army's Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) approved the RMF ATO.

The latest RMF ATO package includes supporting configurations for a Classified to Unclassified Voice Cross-Domain Solution (CDS). This accreditation proves ASTi's commitment to develop and maintain security and information assurance (IA) product features, safeguarding valuable information critical to the warfighter's mission.

Contact ASTi to inquire about an ELA that is customized to meet your programs' current and future requirements.

This Year in ASTi Tactical Communications

It's been over 20 years since the first ASTi radio-over-IP (RoIP) system was installed at Naval Surface Warfare Center Dahlgren Division. That DOS-based system (fondly referred to as a "coal burner") provided critical links between shipboard tactical systems and shore-based trainees and test operators. Since that humble beginning, ASTi has shipped several thousand tactical voice interfaces to the U.S. armed services, other federal agencies and foreign militaries.

Now that you're up to speed, let's talk about tactical comms in 2018.

U.S. Marine Corps

Combined Arms Command and Control Training Upgrade Systems (CACCTUS): ASTi Voisus® systems replaced an obsolete government-off-the-shelf (GOTS) system called Virtual Tactical Bridge (VTB) located at all of the Marine Expeditionary Forces (MEFs) training sites. The Marines selected ASTi's commercial product over funding another GOTS development because we alone could meet program requirements for technical performance, feature set, scalability, extensibility and total cost of ownership.

Federal Aviation Agency (FAA)

William J. Hughes Technical Center: ASTi oversaw the rapid integration of a Voisus system configured as a network audio bridge, connecting a legacy voice communications system with the facility's IP network. Voisus expanded voice services to scores of scientists, engineers and technical experts conducting test and evaluation events at the air transportation system laboratory.

U.S. Air Force Research Lab

Secure Live, Virtual and Constructive Advanced Training Environment (SLATE): A Voisus system installed at Nellis AFB interfaces voice traffic from combat aircraft to DoD networks for long-haul distribution to simulators and computer-based operators.

SLATE photo by William Graver

The SLATE program marked the first fielding of an ASTi innovation: direct digital interface to tactical radios providing a 100% software solution for voice bridging and remote control, eliminating the need for radio interface hardware.

The ASTi system also provides cross-domain (CDS) links between unclassified and classified DoD network domains.

Royal Canadian Navy (RCN)

Distributed Mission Training (DMT): The RCN fielded ASTi systems that provide tactical voice interfaces connecting combat ships docked at Maritime Forces Atlantic (MARLANT) in Nova Scotia and Maritime Forces Pacific (MARPAC) in British Columbia with land-based military networks to facilitate distributed, live-virtual training.

Naval Sea Systems Command (NAVSEA)

Surface Combat Systems Center (SCSC), Wallops Island: ASTi expanded our footprint at Wallops Island by delivering a system that bridges tactical communications from shipboard Single Audio System Secure Voice Switches (SA-2112s) to DoD simulation networks for intercommunication with other ASTi systems at remote networked sites.

We also installed an additional 30 operator stations featuring Voisus clients running on touchscreen tablets. The solution also features a networked Comms Logger that can simultaneously process up to 1,500 communications channels with a storage capacity of 28,000 channel-hours.

Government of Egypt

Armed Forces Combat Training Center (AFCTC): ASTi will replace legacy systems in a large scale, multisite modernization effort that features the following:

- ASTi servers operating in a virtual machine environment
- Voice traffic logging
- RoIP gateways
- Comms software clients operating on customer-furnished PCs and ASTi-furnished touchscreens