ASTi

WHAT'S HAPPENING

IN THIS ISSUE

AND MUCH MORE!

Advanced Simulation Technology inc. ▪ asti-usa.com

INTRODUCING

VOISUS SOLO

A QUICK CLICK FOR SLICK COMMS

This year, ASTi expanded its powerful Voisus® comms and sound product with Voisus Solo, a software-only application that installs on your desktop computer. No extra hardware required.

Perfect for small programs, single operators, or last-minute stand-up for training exercises, Voisus Solo provides instant comms at the point of need. Its intuitive interface enables administrators to configure the core communication requirements of any exercise. Quickly set up simulated radios, intercoms, and more, creating a comms environment that meets your Modeling, Simulation, and Training (MS&T) needs.

This low-cost, low-maintenance option interoperates with all ASTi products and DIS-based training applications. It doesn't just offer ready-to-go interfaces: use ASTi's software development kit (SDK) to develop custom UIs for almost any application. Integration is simple, making it easy to add high-fidelity radio simulations and comms to virtual reality (VR) devices and Next Gen training environments.

ASTi is already deploying Voisus Solo to Joint Fires Synthetic Training (JFST), a UK MOD program spanning 15 Army training sites. JFST blends standard Voisus servers in a fixed dome with software-only Voisus Solo stations in mobile vehicles, providing a level of flexibility unavailable before. To learn more about Voisus Solo at JFST, go to **Voisus: the Latest, Safest Comms Choice for JFST**.

Think Voisus Solo might be a good fit?

Contact ASTi at sales@asti-usa.com

VOISUS: THE LATEST, SAFEST COMMS CHOICE FOR JFST

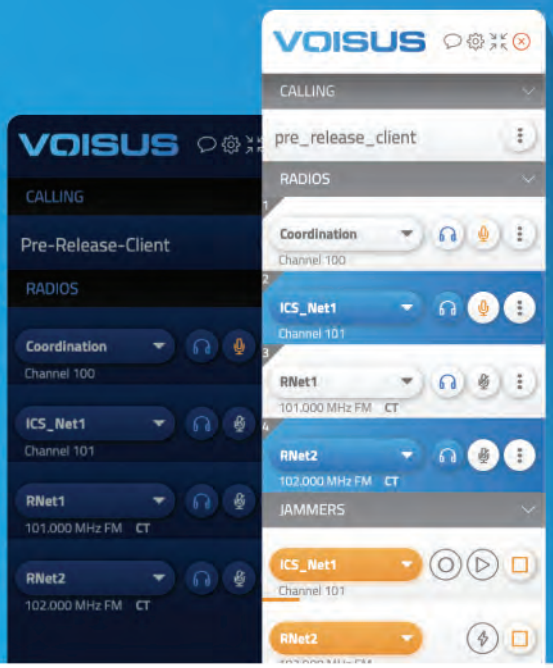
Ferranti Technologies of Elbit Systems UK recently selected ASTi's Voisus product as the communications and sound effects backbone of Joint Fires Synthetic Training (JFST). This UK Ministry of Defence program encompasses over 15 Army training sites across the UK. It includes networked, fixed and mobile training systems to train mounted and dismounted Joint Fires teams and cells, supporting exercises for reserve forces and teams deployed at sea.

ASTi's Voisus product provides a critical communications component that connects trainees in the classroom to teams representing virtual fire support from the air, land, and sea. Voisus Earshot™ creates an immersive, 3D sound environment inside the training facility, domes, and mounted vehicles. This scalable radio-modeling solution mixes hardware platforms with software stations running Voisus Solo, a software-only application providing instant comms via ASTi radios. To learn more about Solo, go to **Introducing Voisus Solo™: A Quick Click for Slick Comms**.

ASTi is providing this complete solution as a commercially available technology. System delivery will continue through 2022 as JFST equips more training sites. To learn more about JFST, contact ASTi at **sales@asti-usa.com**.

NEW VOISUS DESKTOP CLIENT, WHO DIS?

It's been almost a decade since ASTi released its original desktop client. After years of support on multiple operating systems, ASTi is excited to announce the biggest upgrade yet, brimming with new features and improvements.

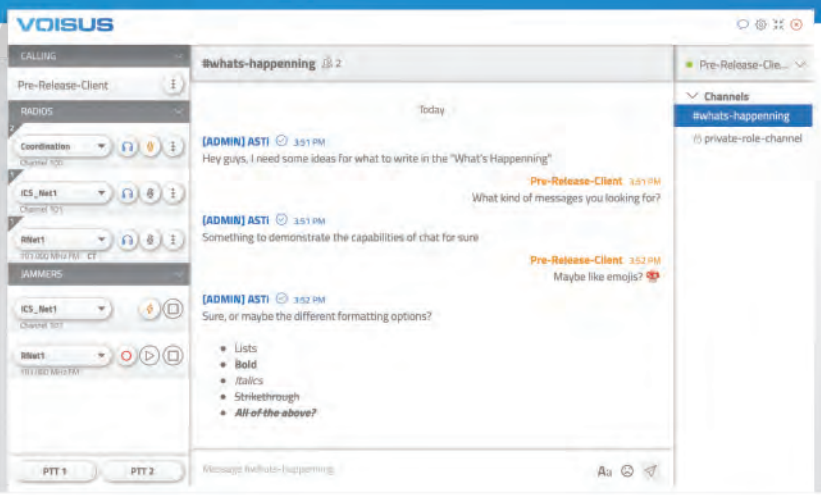


A Modern Interface for Modern Platforms

The Voisus Desktop Client's interface has a fresh look, complete with an elegant, contemporary GUI. Communication assets now provide real-time updates and simple configuration widgets. The client also supports Mac OS X in addition to the latest Windows and Red Hat releases.

Other features include:

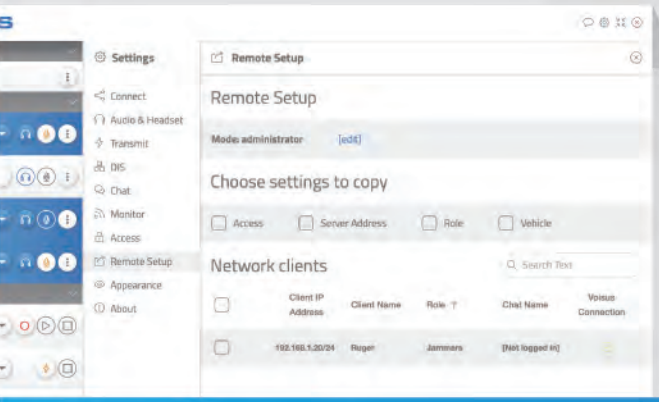
- Dark mode for dim environments
- Improved access control settings
- Enhanced calling



Expanded Chat Capabilities

This upgrade completely revamps the client's chat capabilities:

- Multiple chat channels
- Formatted text (e.g., bold, italic, emojis)
- Per-role access to channels

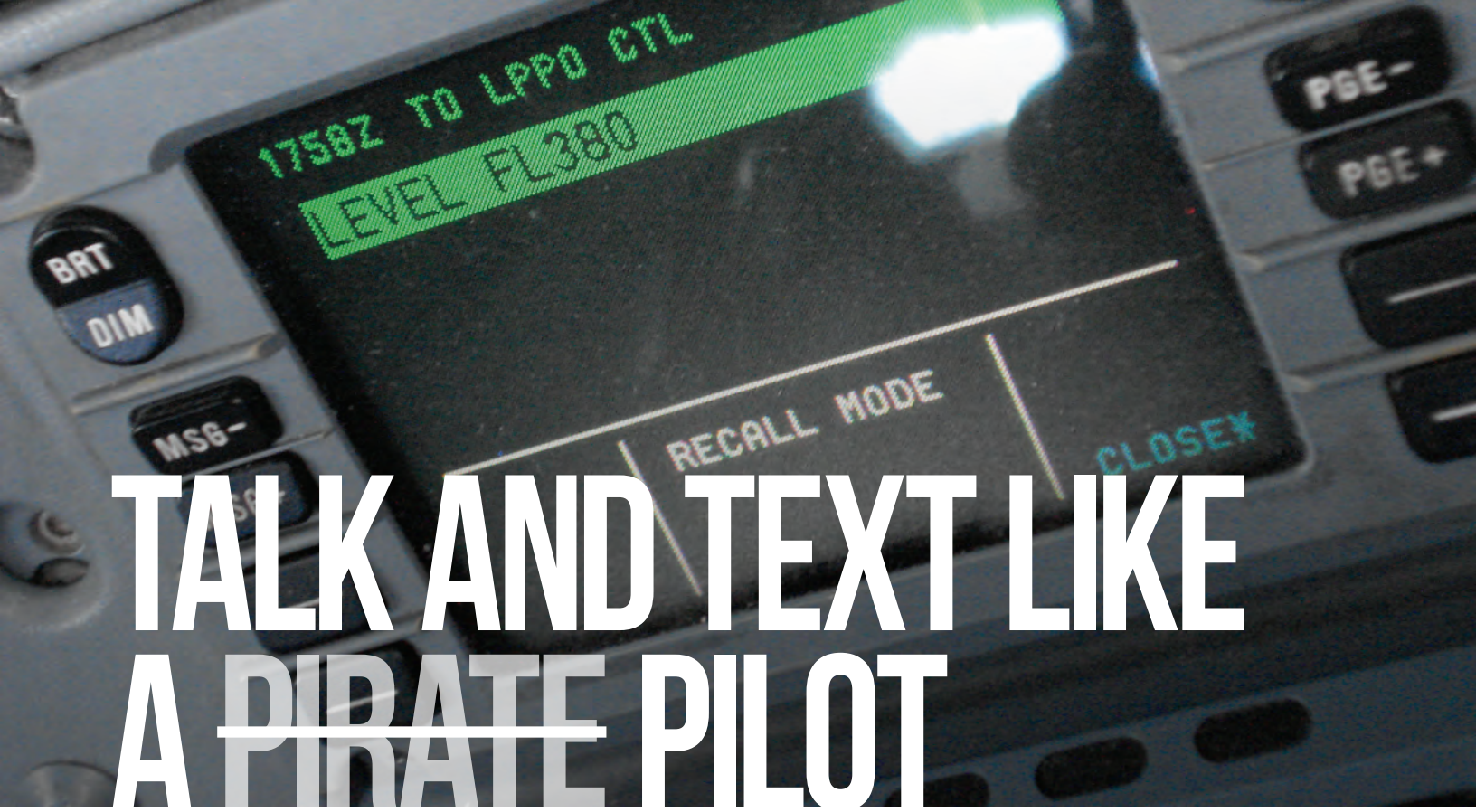


Remote Configuration

Administrators can now remotely configure settings directly from any client. Before an exercise, push configurations to multiple clients from one central location.

To receive the upgrade immediately upon release, subscribe to ASTi's software maintenance plan.

Contact ASTi at sales@asti-usa.com for more information.



TALK AND TEXT LIKE A ~~PIRATE~~ PILOT

ARRR! AUTOMATE ROLE-PLAYERS WITH DATA LINK AND VOICE

As a communications simulation provider, ASTi products support both voice and data link simulations. Our most recent addition to SERA®, ASTi's Simulated Environment for Realistic ATC (SATCE) product, brings Controller Pilot Data Link Communications (CPDLC) simulation capabilities to our aviation training customers.

While many pilots communicate with ATC over voice, data link is the future of ATC. CPDLC allows ATC and pilots to share text messages, which alleviates congested radio frequencies and enables aircraft to communicate more efficiently. As aviation CPDLC support requirements expand, so does the need to train these important communications capabilities.

Many instructors find it challenging to role-play both text and voice during an exercise. ASTi's SERA product solves this problem by fully simulating and automating ATC data link messages and radio comms, letting instructors focus on what they do best: training. Pilots learn to respond to both formats in real time, and AI entities react like actual controllers: if a pilot doesn't respond via data link, ATC calls on the radio.

ASTi is the only company to support stimulated and simulated CPDLC solutions. SERA's CPDLC package integrates with aircraft avionics: its built-in API supports FANS 1/A+ and ATN B1 requirements. Simulated activities and services include Data-Link Initiation Capability (DLIC), ATC Communications Management Service (ACM), Departure Clearance (DCL), and ATC Clearances Service (ACL).

ASTi has already deployed this new capability to a major DoD simulation program. To learn how CPDLC fits into your application, go to **CPDLC**, or contact **info@seraatc.com**.

GRAB YOUR GOGGLES

TRANSFORM VR TRAINING WITH SERA

Many next-generation programs are transitioning from full-flight simulators (FFSs) to VR devices, now higher fidelity and more affordable. Both the Army and Air Force are investing heavily in these technologies to increase pilots' skills with faster turnaround.

That's where ASTi comes in. ASTi's SERA product generates ATC, aircraft traffic and other synthetic entities, making VR training applications more realistic, immersive, and challenging. Barren landscapes transform into bustling runways and airspaces. Trainees can see aircraft out the window and hear realistic background radio chatter just as they would in the real world.

Thanks to SERA, VR and low-cost devices can teach and enforce proper ATC phraseology and etiquette. SERA simulates controllers, reducing instructor workloads and enabling students to train alone. ASTi's customized speech recognition understands pilot accents, providing simulated controllers that respond accurately and appropriately. Synthetic radio communications support over 30 English accents, providing accurate transcriptions worldwide. A worldwide airport database means training exercises can occur anywhere in the world. The result is more efficient training, increased realism, and challenging environments that better equip students for real-world communications.

To see how SERA fits into your VR platform, go to seraatc.com, or contact info@seraatc.com.

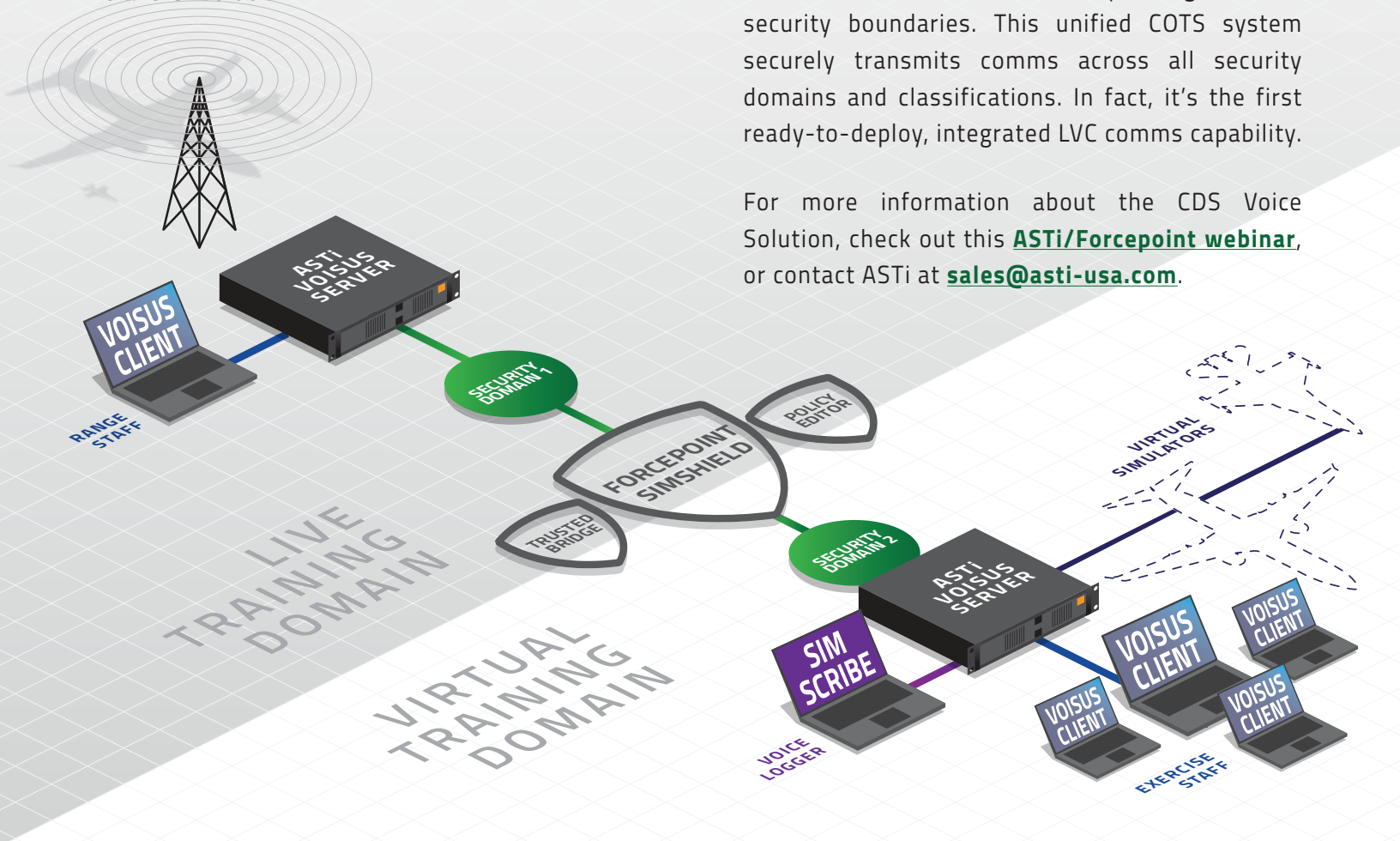
SUPERIOR SUPPORT LEADS TO A SUPERIOR CROSS-DOMAIN SOLUTION

One day, ASTi received an intriguing support call from the Polygone Multinational Aircrew Electronic Warfare Tactics Facility. ASTi first began working with Polygone through its 20-year relationship with the Warrior Preparation Center, who expanded its **ASTi Enterprise License Agreement** to cover Polygone. The range conducts distributed, LVC training exercises for live fighter jets in a simulated, electronic warfare environment. They use ASTi's Voisus product with Forcepoint's SimShield product, which meets NSA Raise-the-Bar guidelines for a cross-domain transfer solution.

Polygone called about a comms issue while ASTi and Forcepoint were both at the Ramstein AF base for a marketing expo. This call led to an innovative joint solution unlike anything ASTi had ever accomplished.

ASTi, Forcepoint, and the customer collaborated in Germany to troubleshoot. After solving the problem, we formed a strategic alliance with Forcepoint offering the first integrated, cross-domain solution (CDS) for military training. Together, ASTi and Forcepoint provide a communication infrastructure spanning network security boundaries. This unified COTS system securely transmits comms across all security domains and classifications. In fact, it's the first ready-to-deploy, integrated LVC comms capability.

For more information about the CDS Voice Solution, check out this **ASTi/Forcepoint webinar**, or contact ASTi at **sales@asti-usa.com**.



FROM THERE TO HERE AND HERE TO THERE, ASTI HELPS YOU ANYWHERE!

Near or far, ASTi's got you covered. We offer flexible support packages to evaluate and remotely tune simulators, ideal for fixed-wing and rotary-wing customers. Despite recent travel restrictions, ASTi has met every tight deadline and accommodated every demanding schedule. Remote support also eliminates travel overhead, which often costs more than actual support.

We've virtually supported over 50 simulators qualifying for all phases of hardware-software integration testing, in-house acceptance, and final FAA, EASA, and CAAC acceptance. Our engineers handle everything from calibrating and tuning sound models to producing compliant Qualification Test Guide (QTG) plots. All you need is the Internet and a technician to position the cockpit microphone.

SAFER, MORE FLEXIBLE TRAINING OPTIONS

ASTi also overhauled its training curriculum to prioritize safety. Our in-house courses now feature air purifiers and increased air flow, UV lights, an improved layout, and sanitized training stations with plexiglass barriers. During remote sessions, ASTi engineers leverage platforms like Zoom, Microsoft Teams, and Webex, complete with screen-sharing, remote access, and a live video feed from our facility.

ASTi

To discover how ASTi can remotely support your program, contact ASTi at sales@asti-usa.com.

REDSIM™ DIS TOOLKIT

BETTER EVERY YEAR

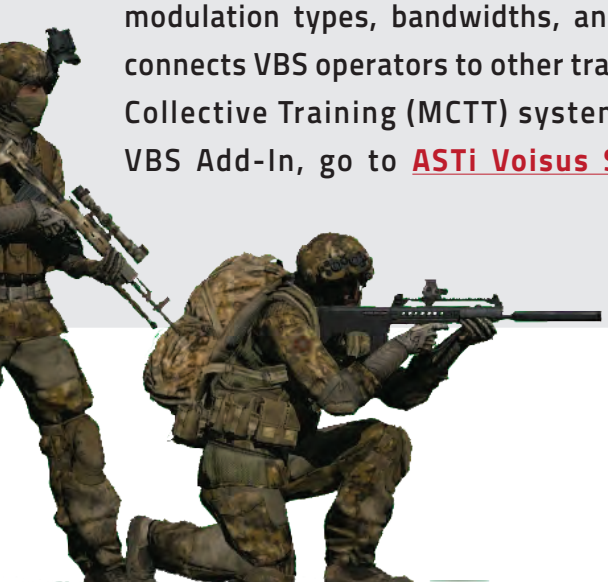
ASTi's Redsim product just keeps churning out improvements. First up, the Air Force Operational Training Infrastructure (OTI) certified DIS Link Monitor to operate in the OTI environment and appear on the OTI Evaluated/Approved Products List.

DIS Link Monitor also offers a shiny, new feature: PDU Monitor Plus. This exciting improvement expands advanced filtering, capturing a scrolling list of protocol data units (PDUs). Store and select from up to 500 PDUs to easily build an exercise or diagnose issues. Now you can access information when you want it, where you want it.

Redsim also supports DIS, v7 and newer PDU types, including Link-16 Signal PDUs. Snag your free trial today, compatible with Windows 10. To learn more about Redsim, go to **redsim.com**, or contact ASTi at **sales@asti-usa.com**.

LEVEL UP VBS3™ WITH ASTI'S POWERFUL, AUGMENTED RADIOS

ASTi's robust, simulated radio environment has enhanced Virtual Battlespace (VBS) since the early days of serious gaming. We recently upgraded our Voisus clients to seamlessly integrate with v19.1.6, VBS3's latest release. Now operators may continue to enjoy radio enhancements, such as encryption, anti-jamming, modulation types, bandwidths, and radio propagation effects. Voisus also connects VBS operators to other training devices in the Army's Mission Command Collective Training (MCTT) system portfolio. To learn more about ASTi's Voisus VBS Add-In, go to ASTi Voisus Serious Games, or contact sales@asti-usa.com.



ONE MQ-9 TOUCH SCREEN TO RULE THEM ALL

ASTi has an outstanding reputation for developing simulated GUIs of military comms equipment. Our latest example showcases the Medium Control Audio Panel (MCAP), a comms panel on the MQ-9 Ground Control Station (GCS) and other Unmanned Aerial System (UAS) platforms. ASTi custom-developed the MCAP for Joint Technology Center/Systems Integration Laboratory (JSIL) at Redstone Arsenal. The simulated panel is a Voisus client that connects to the Voisus server, a powerful audio-processing platform hosted on customer-furnished equipment, a virtual machine, or a standard chassis. Our solution tightly integrated with JSIL's existing equipment, eliminating their need to develop and maintain complex middleware for a host computer.

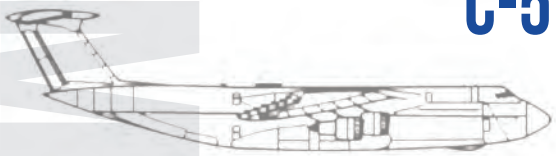
The simulated panel mirrors the MCAP's functionality in almost every way, supporting eight DIS radios, intercoms, clear/secure communication modes, and more. ASTi also developed multitouch capabilities for two clients on a single tablet. As a result, two operators can simultaneously interact with their own clients, halving the customer's hardware requirements. ASTi also selected commercial Windows tablets over custom equipment for additional savings.

To learn more about ASTi's custom radio solutions, contact ASTi at sales@asti-usa.com.

USCG MH-65E

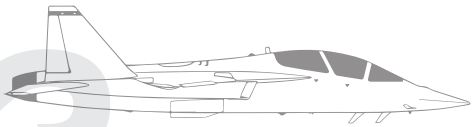
ASTi is integrating SERA into a MH-65E Cockpit Avionics Procedures Trainer at the Aviation Training Center in Mobile, AL. SERA populates the training environment with voice-enabled, virtual entities that role-play ATC. ASTi is adding custom phrases to speech recognition and developing automated tests that ensure SERA meets training requirements. To learn more, go to **ASTi Receives Award to Integrate Simulated ATC System into Coast Guard Flight Simulator**.

USAF C-5



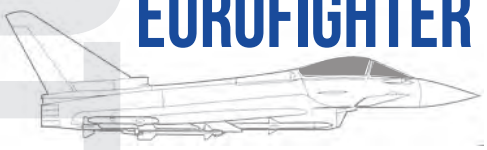
C-5 Aircrew Training System (ATS) Mobility Air Forces (MAF) Distributed Missions Operations (DMO) contracted ASTi to provide sound and communications for six C-5M trainers at multiple bases. ASTi's Telestra product replaces the trainers' sound systems with high-fidelity comms and Level-D equivalent sound effects. Telestra advances the program's effort to make the trainers DMO-compliant, enabling connection to a centralized instructor control station.

USAF T-7A



ASTi's Telestra will integrate into dozens of T-7A Red Hawk trainers in several AF bases. Telestra provides high-fidelity audio comms and Level D aural-cue effects to the Advanced Pilot Training (APT) Ground-Based Training System (GBTS), which will train future fighter and bomber pilots. ASTi's Voisus product is also in test as a solution for the live radio bridging and LVC training component. Among many LVC features and capabilities, Voisus supports ED-137 radio-over-Ethernet for direct network connection to live radios with no additional hardware.

KUWAIT AF EUROFIGHTER



ASTi is integrating Telestra into multiple Kuwait Eurofighter Typhoon trainers in Kuwait. Telestra provides advanced comms capabilities for environmental cues and text-to-speech. ASTi added support for HLA Evolved (HLAe) and ASTi's COTS speech recognition solution enabled the customer to create and tune custom speech models.

NAVAL SURFACE WARFARE COMMAND SCSC

ASTi is expanding networked, voice communications at the Surface Combat Systems Center (SCSC) in Wallops Island, VA. Since 1989, the Naval Surface Warfare Command (NSWC) awarded ASTi 100+ contracts to modernize equipment that facilitates training across live and simulated domains. Our systems replaced outdated, tactical secure voice switches and operator consoles linking Naval Sea Systems Command (NAVSEA) facilities. For this award, ASTi is upgrading first-generation DOS products to fifth-generation Linux systems. To learn more, go to **Naval Surface Warfare Command Selects ASTi to Expand Voice Infrastructure**.