



Advanced Simulation Technology inc.

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# SERA



## Simulated Environment for Realistic ATC

**Eliminate the need for instructor role-play, introduce real-world communication demands, increase training value all while decreasing training costs.**

ASTi's SERA creates a dynamic, artificially intelligent environment filled with other aircraft and air traffic controllers. From pushback to shut down, pilots receive and read back customized ATC interactions amid generated traffic, creating a realistic training experience on the ground and in the air.

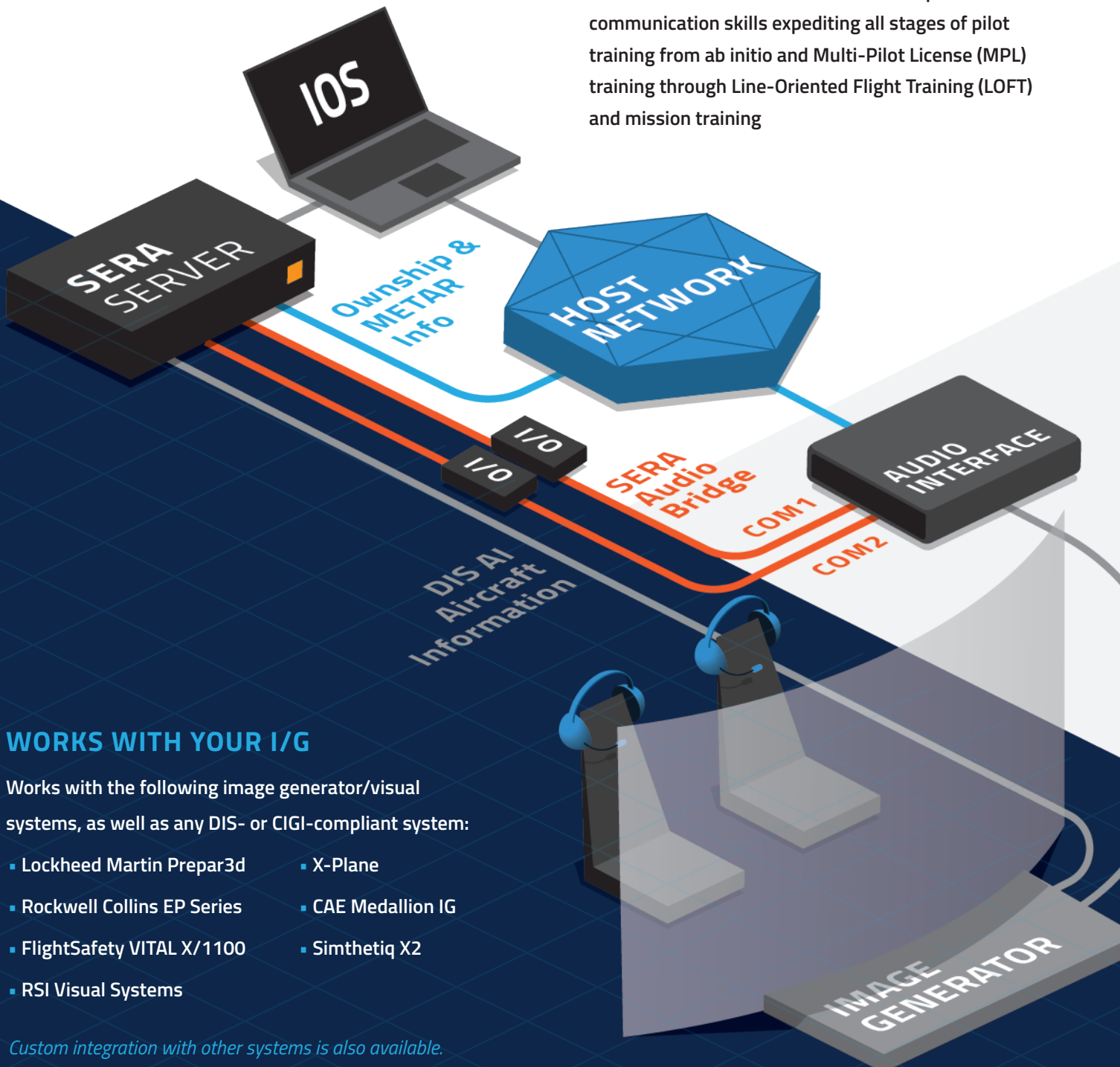
[seraatc.com](http://seraatc.com)

## PLUG AND PLAY INTEGRATION

SERA works with the majority of large flight simulator manufacturers right out of the box, eliminating the need for expensive and time consuming integration efforts. The SERA audio bridge facilitates linking an existing communications solution to the SERA system with minimal impact.

## INCREASED TRAINING REALISM

- Automated ATC responds to pilot voice transmissions with appropriate regional phraseology
- Audible radio transmissions correlate to generated traffic in the visual system
- Natural-sounding TTS system that generates high-fidelity voices with accents based on location
- Immersive radio environment exercises pilot communication skills expediting all stages of pilot training from ab initio and Multi-Pilot License (MPL) training through Line-Oriented Flight Training (LOFT) and mission training



## WORKS WITH YOUR I/G

Works with the following image generator/visual systems, as well as any DIS- or CIGI-compliant system:

- Lockheed Martin Prepar3d
- X-Plane
- Rockwell Collins EP Series
- CAE Medallion IG
- FlightSafety VITAL X/1100
- Simthetiq X2
- RSI Visual Systems

*Custom integration with other systems is also available.*



## REDUCED INSTRUCTOR WORKLOAD

- Automated controllers issue commands allowing instructors to focus on training
- SERA monitors aircraft movements and communications providing real-time feedback
- Speech transcription and captured audio recordings enhance after-action review
- Customizable scenarios enable instructors to address training objectives

## AUTOMATED ATC

Meets stringent Line-Oriented Flight Training (LOFT) fidelity demands with custom configurations.

## EXTENSIVE AIRPORT DATABASE

Navigation database includes more than 10,000 airports and helipad facilities providing global system operation, and more than 100 high fidelity certification standard airports suitable for airline LOFT scenarios.

## FLEXIBLE TRAINING

Supports real-time flight plan modifications due to traffic conflicts, inclement weather, and training events triggered by a pilot or instructor.

## CPDLC SUPPORT

AI fully supports CPDLC data link messaging with the simulator and can seamlessly switch between data and voice communications, allowing for more thorough training of the aircraft's avionics system.



## SATCE INTERNATIONAL STANDARDS COMPLIANT

Meets or exceeds all the features and requirements defined for SATCE systems in both the ICAO "Manual of Criteria for the Qualification of Flight Simulation Training Devices" (ICAO Doc. 9625, Ed. 4) and the updated ARINC Specification 439b "Simulated Air Traffic Control Environments in Flight Simulation Training Devices".

## SIMULATED TRAFFIC

Recreates some of the world's busiest airspaces with adjustable simulated traffic levels.

## STATE-OF-THE-ART SPEECH RECOGNITION

ASTi-developed speech recognition, focused on aviation English phraseology, provides a robust accent tolerant system, proven with both native and non-native English pilots around the world.

## EASY INTEGRATION

Outputs AI aircraft in both standards-compliant and vendor-specific formats for easy integration with existing simulators.

## TRAINING DEVICE AGNOSTIC

Integrates with all classes of flight training devices, from low-level desktop trainers to the highest fidelity Level D full-flight simulators.

## 24/7 AVAILABILITY

Does not require you to schedule a specific time slot to begin training. Just load up a scenario, and go!



# SERA

To set up a demo or learn more about SERA, email us at [info@seraatc.com](mailto:info@seraatc.com) or visit [seraatc.com](http://seraatc.com)