

COMMUNICATION SIMULATION

sonomarc is radio communication simulation at its best. The sonomarc communications systems is a powerful client/server, audio distribution and effects software package that provides training realism for fighter cockpits, civilian aviation, and ground-based communications with high-fidelity, low-latency performance. This comprehensive communications system addresses live and virtual communication training needs across multiple platforms through the use of instructor role player, virtual people, record and replay, and scripted events.

- **COCKPIT/PLATFORM COMMS**
- INSTRUCTOR ROLE PLAYER
- RADIO ENVIRONMENT REALISM
- VIRTUAL PEOPLE
- RECORD & REPLAY
- SCRIPTED EVENTS
- Intuitive User Experience
- LIVE RADIO BRIDGE
- **MULTIPLE INTERFACES**



sonomarc is a registered trademark of PLEXSYS Interface Products Inc.® The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement. ** ASIO is a trademark and software of Steinberg Media Technologies GmbH.

















sonomarc can interface with simulators, as well as real-world systems, providing a robust and realistic training environment.

INSTRUCTOR ROLE PLAYER

- Manage and assign all radios from one location
- Monitor what students say & hear on their radios, their switch positions, and panel indicators...all in real-time
- Talk directly to one or more students during a session
- Link specific students/platforms to unique sessions
- Multiple & simultaneous instructor terminals possible

SCRIPTED EVENTS

- Record audio files or use pre-recorded audio files to schedule scripted or dynamic audio events.
- Uses <u>sonomarc</u> radios to transmit recording on high fidelity radio models.
- Scenario files are saved for reuse

INTUITIVE USER EXPERIENCE

- Automatic discovery of servers and clients
- Automatic updates ensure software compatibility
- Help screens explain commands, features & data entry
- Versatile: both touch screen or windows-based interface
- Modern software interface: intuitive, swipe actions, etc.
- Instructor profiles can be created & shared for efficiency

RADIO ENVIRONMENT REALISM

- Adds background noise unique to platform types
- Pilot in simulator hears a/c systems, engine noises, etc.
- Radio transmissions include environmental sounds mic would normally "pick up"
- Associate sound profiles to platform types
- Add/edit environmental sound files & associations

VIRTUAL PEOPLE

- Can do most things a real person can do on a radio
- Provide automated services like ATIS
- Listen for & verbally respond to commands
- Editable lexicon, speech speed & pitch, etc.
- Text-to-speech & speech-to-text conversation history
- Customize how words are pronounced (accents)
- Will talk & listen only on specifically assigned radios

RECORD AND REPLAY

- Simple record and review of voice communications
- Record internal and external comms (DIS/HLA/VOIP...)
- Select audio to listen to with a single touch
- Event flagging & notes for after-action review & analysis
- Find specific radios quickly & easily: display filtering, grouping and intelligent quick info
- Distributed review redirect audio to others over DIS
- Time-based and event-based searches
- Export recordings to disk as standard WAV format

LIVE RADIO BRIDGE

- Bridge simulated communications with "live" radios and real world communications systems.
- Uses custom hardware to send and receive contact closure and/or voltage to key live and simulated radios
- Converts analog to digital and visa versa
- Integrated with several industry communications systems (Frequentis, Mission Voice Platform and others)

MULTIPLE INTERFACES

- DIS compliant (now up to DIS version 7)
- HLA compatible (multiple RTI's)
- Interface w/systems using industry std. VoIP protocol
- Integrates with your existing push-to-talk system

COCKPIT/PLATFORM COMMUNICATION

- Create radio, intercom and other platform specific elements to simulate complete communications systems
- Creates comprehensive simulation of the actual platform communications capability for air/land/surface simulators
- Remote Protocol API allows for system integration for messaging between host systems and the <u>sonomarc</u> server for many functions such as PTT, frequency changes, aural queuing and instrument lighting
- Multiple radio types (UHF, VHF, HF, SatCom...)
- Integrated terrain server
- Entity attachment: propagation loss & line-of-site realism





Camas, WA 98607 USA



www.plexsys.com



(877) 4-PLEXSYS (360) 838-2500



info@plexsys.com