



## FEATURES

- **Commercial-Off-The-Shelf (COTS) Hardware**
- **Portable**
- **Modular Software Design**

## BENEFITS

- **Low Cost**
- **Realistic Aircraft Sounds**
- **Low Maintenance**
- **Expandable**

## AURAL CUEING SYSTEM (ACS)

COMPRO's PC-based Aural Cueing System (ACS) is a low-cost hardware and software system used to control and mix voice and digitally stored sounds. It includes COMPRO's real-time software and off-the-shelf computer and audio components.

COMPRO uses the ACS in its flight training devices. It is also applicable to a wide variety of applications in the simulation, training, research, and entertainment industries.

The basic ACS consists of COMPRO's control software running on a specially-configured PC system providing four output channels, each capable of 32 independent tracks. The ACS software handles the selection, volume, pitch, priority, and repetition of the digitally-stored sounds based on commands it receives from an Ethernet® or serial interface.

Transducers, speakers, headsets, jacks, and volume controls can be added to meet the needs of specific installations. The ACS also can be enhanced with an optional mixer board that integrates two microphone/headphone sets with one of the sound board channels.

The ACS plays WAV files from start to finish that can be repeated indefinitely if needed. There is no time limitation per sound.

### Features

The ACS PC is a rack-mounted Pentium®-class CPU with a keyboard, mouse, video board, monitor, Ethernet® board, and two Open Sound System (OSS)-compliant sound boards. COMPRO's ACS software reads control messages from the Ethernet® or serial port, loads the designated sounds and configuration information from disk into memory, and mixes and plays the requested sounds using the four output channels of the sound boards.

The Mixer option adds the COMPRO mixer board, one intercom station jack and volume control box, and two headsets. The mixer board combines the voice input from two headset channels (A and B) and optionally a telephone line (Voice Network Interface) with the output of one of the sound boards.

Remote potentiometers control the microphone levels. On-board potentiometers control the output levels of the B headset channel and the second sound board channel.





**AURAL CUEING SYSTEM (Cont'd)**

**Library**

The ACS is a set of libraries that developers can use to create their own application. The ACS includes a library of generic aircraft sounds such as:

- Jet engine
- Inlet buzz
- Wind
- Compressor stall
- Propeller
- Air conditioning
- Explosions
- Missile tones
- Gun bursts
- Traffic advisories
- NAVAID tones:
  - Ident
  - Marker Beacon
- Warning tones:
  - Stall
  - Landing gear
  - Autopilot
- Voice messaging cues:
  - Low altitude
  - Low fuel



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