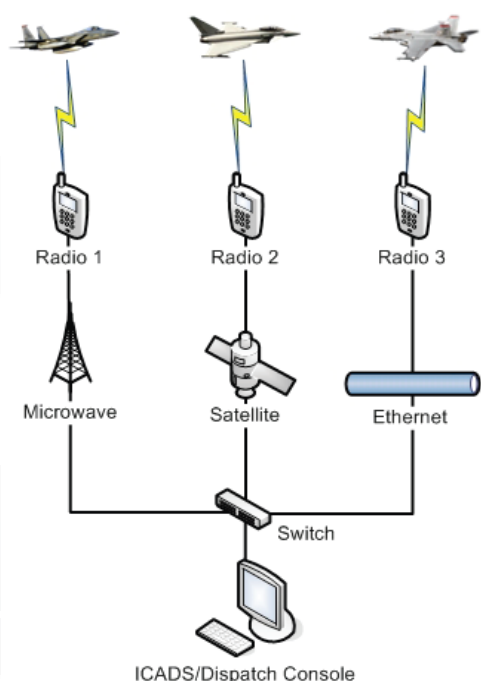


ADVANCED VOICE COMMUNICATIONS SYSTEM

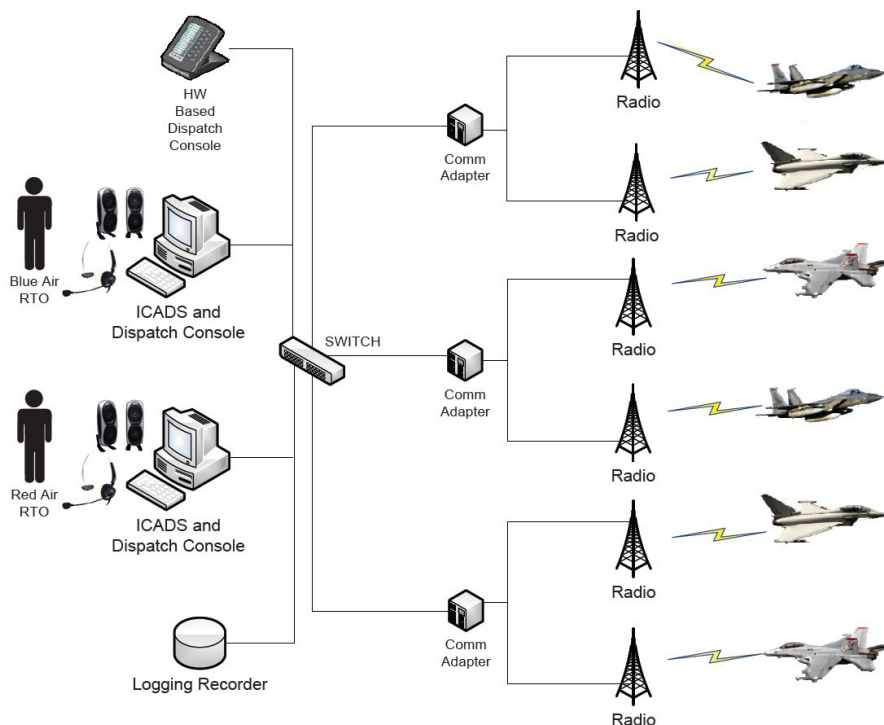
ICADS is designed to add up to 16 channels of live audio. Communications from small to large exercises can be monitored, recorded, and played back during debriefs. A majority of the current live systems use Range Training Officers (RTO) and Ground Control Intercept (GCI) controllers to monitor and control information to the aircraft within a live exercise. This live interface with pilots greatly increases the realism of the exercise and enhances pilot training.



Top Right, Notional Architecture.

The Advanced Voice Communications System provided both hardware and software IP-based dispatch console integration with ICADS.

Above, IP-Based Architecture. Packetizing the analog data stream provides flexibility in architecture to meet site specific needs.



An Advanced Voice Communications System can be installed in each squadron and integrated with the ICADS to enhance pilot training. The radios are co-located with the live monitor equipment within the squadron and antennas are mounted alongside the RF data link antennas that communicate with the Airborne Subsystem (AS) pods. Analog audio from the radios is digitized and integrated into the ICADS network for monitoring and recording the live voice communications during live exercises.

The RTO-pilot voice communications is paramount in any air combat training environment. Integrating and synchronizing voice communications into an air combat training mission is a key element that enhances the overall training mission for ground controllers and pilots. Three key features highlight the benefits of voice communications integration with ICADS:

Real-time/Postmission Synchronized Voice Communication

- RTO-pilot voice communications is injected into ICADS for audio during live training missions.
- Voice communications are automatically synchronized and recorded for listening during mission playback.

IP Based Radio Architecture

- VOIP provides a flexible and scalable environment that allows the use of up to 16 channels to be synchronized with ICADS missions.
- Standard analog voice communications are converted to VOIP and piped into ICADS during live missions and recorded for mission debriefs.
- Voice communications are automatically synchronized to ICADS.
- Each ICADS workstation can communicate on any of the radios.
- VOIP provides a scalable environment that allows the use of 2 to 200 radios.
- IP architecture accommodates both audio and control data to be transported via LAN/WAN, 802.11 wireless, microwave, or satellite link.

Radio Control From Anywhere

- Control software supports multiple attached radios to configure, control, and monitor the remote radios through an intuitive graphical user interface.
- Control software provides the same control capabilities just as a radio operator would control the local radio.
- Control parameters:
 - Monitor/Control RX/TX Frequencies
 - Monitor/Control Modulation Modes
 - Monitor/Control Power State
 - Monitor/Control Squelch Levels
 - Monitor/Control AGC
 - Monitor/Control RX Gain
 - Monitor/Control TX Power Levels
 - Select Channel Presets

Cubic's experience fielding air combat training systems around the world ensures you receive the highest quality voice communications integrated with ICADS.

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