

Monitoring Unmanned Aerial Vehicles

Army Aviation Warfighting Simulation Center (AWSC), Fort Rucker, Alabama

Background

The use of Unmanned Aerial Vehicles (UAV) has become an essential element to ground commanders by providing them up-to-date situational awareness on the battlefield. The AWSC started implementing the use of UAVs in the spring of 2006 during the Aviation Training Exercises (ATX). Video feeds from the UAV to the Tactical Operating Centers (TOCs) gave the commanders the capability to observe the battlefield.

The Problem

Although the initial testing was successful, the capability was limited due to the fact that only one feed could be used at a time and the video quality was not very good. It was determined that video over IP would be the solution for the problem.

After several months of testing various hardware/software solutions, the Digital Capture Card from NCast finally provided the functionality needed to solve the problems. This was accomplished by broadcasting video streams via UDP using the DCC inside a Streaming Video Server, which was based on Windows Media Encoder software. This configuration afforded the commanders inside the TOCs the ability to view multiple high quality video feeds from any location within the building.

The Results

Due to its overwhelming success, the video feeds are



not just used for live exercises anymore but are also saved and played back for the After Action Reviews (AARs) and for V.I.P. demonstrations. “The new UAV streaming video capability has quickly become the showcase of the organization and an invaluable asset to the AWSC. Thanks NCast.” says Rob Mote, Director of simulation for AWSC.

About NCast

NCast Corporation provides industry-leading solutions for the capture, distribution, and archiving of high-resolution, mixed-media content such as rich-media presentations or high-resolution graphics and multimedia. NCast's 3rd-generation Telepresenter M3™ simplifies the mixing of audio, high definition (HD) video, and any high resolution RGB/DVI source, with PIP capability, into one rich-media file for webcasting or playback. The Telepresenter M3™ is used in applications such as presentation capture, live and on-demand training, multi-source videoconferencing, telemedicine, distance learning, and podcasting. For more information, call NCast at 800-541-9230 or visit <http://www.ncast.com>.

About Fort Rucker DOS

The Directorate of Simulation (DOS) serves as the single point of contact for aviation Training Aids, Devices, Simulators and Simulations (TADSS) development, fielding, and accreditation worldwide.

DOS contains the resident expertise in instrumented live, virtual, and constructive simulations supporting Army Aviation from individual to joint level training.

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