

COMMERCIAL AVIATION AUGMENTED REALITY TOOLKIT (CAART)

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Cole Engineering Services (CESI), a By Light Company, was live at the World Aviation Training Summit in Orlando, FL, May 3-5, 2022.

The CESI team showcased our Commercial Aviation Augmented Reality Toolkit (CAART), which is an immersive environment training platform. CAART offers cost savings and improved training over traditional methods at the point of need.

We relied heavily on our expertise in distributed training to develop our CAART training platform, and to power it, we integrated our Mixed Reality Distributed Network Architecture (MR-DNA). This platform enables globally distributed individual and collective training anytime, anywhere, and delivered via desktop, web browser, augmented reality, and/or virtual reality solutions. Staff and students can train in a collaborative environment with any combination of hardware.

TRAINING & APPLICATION

We have tested CAART in 2,500 virtual classrooms of 100 students each. Furthermore, CAART's versatility is proven through applications for commercial aviation, the United States Air Force Nuclear Warfare Center, and the Department of Energy.

CAART is currently in use at Embry Riddle Aeronautical University Daytona and Spartan for FAA 141 and 142 student pilots. In a study conducted at ERAU, the restructured curriculum using CAART has shown a 34% reduction in days to solo flight. ■

