

Air National Guard Advanced JTAC System

Advanced CAS simulation & training

We chose the Barco FS35 IR projector for two main reasons: the longevity, and the close partnership that we get with Barco



George Forbes,
President & CEO of
Immersive Display Solutions (IDS)



Barco solutions:

- 14 x FS35 IR WQXGA LED Projectors

Benefits:

- High resolution solid state projection
- World-class support
- Low Total Cost of Ownership

The Air National Guard Advanced Joint Terminal Attack Controller Training System (AAJTS) is a state-of-the-art immersive partial dome developed to support Close Air Support (CAS) training for Joint Terminal Attack Controllers (JTACs). The AAJTS is the only advanced training simulator to offer JTAC-specific mission training. The AAJTS located at Joint Air Base San Antonio, Texas, is one of currently 12 of its kind operating across the USA – each device featuring 14 Barco FS35 IR LED projectors to deliver a level of reality never before achieved in CAS simulation training.

BARCO

Visibly yours



The Air National Guard (ANG) Advanced Joint Terminal Attack Controller Training System (AAJTS) is a high fidelity, fully immersive night mission capable partial dome simulator developed specifically to provide JTACs with improved CAS training. The AAJTS at Randolph Air Force Base, San Antonio, Texas can simulate most aircraft and weapons used by the JTACs and virtually any scenario that they may face in real world missions, including dawn, day, dusk and night sorties, Night Vision Goggles (NVGs) and laser-capabilities. The system is accredited by the Joint Fire Support Executive Steering Committee to replace a number of JTAC live controls in accordance with the JTAC Memorandum of Agreement (MOA). There are currently 12 AAJTS domes operating in the USA, with plans for a further 10 to be installed over the next 12 months.

AAJTS has been running for over a year now, and throughout that year we have had no maintenance issues at all



Armando Alvorado Jr,
Contractor
Logistics Support at QuantaDyn,
the lead integrator for the project

The value of the AAJTS can be seen in its ability to provide JTACs with almost unlimited training hours and to increase JTAC proficiency. "Rehearsing JTAC missions in the field costs approximately USD 53,100 per training hour," explains Keith Seguin, the 502 Trainer Development Squadron AAJTS Program Manager. "In the second half of 2014, three Air Force units with 4 AAJTS devices and the four Air National Guard units with 4 AAJTS devices logged a total of 565 training hours and 627 training hours, respectively. By comparison, the 565 training hours used to train the Air Force JTACs to a higher level of proficiency in the accredited simulator would equate to a savings of \$30M or \$7.5M per device, and the 627 training hours used to train the Air National Guard JTACs would equate to a savings of \$33M or \$8.3M per device. The AAJTS continually provides major cost savings and extremely positive impacts for the JTAC communities."

Partners in excellence

"AAJTS as a system is the result of many different companies and vendors all supplying different capabilities and expertise. "One of the key reasons we chose Barco is the high level of trust that has developed into a deep partnership," says George Forbes, President & CEO of Immersive Display Solutions (IDS), one of the companies responsible for developing the partial dome simulator. "We spent a lot of time working with Barco to further develop capabilities of the projector to tie into the custom software of the system so that we could use these projectors in ways we have not used a projector before this."

Ground-breaking technology

As Charles Martin, Director of Business Development and JTAC SME at IDS puts it, "In the past, creating NVG scenarios required us to put an IR filter in front of a day scene, which meant that without the NVGs all you saw was a black screen. With the IR capability in the Barco projectors, combined with custom-developed software to optimize the solution, the simulation becomes much more realistic. When you put on your NVGs you see things just as you would at night, and when you take the NVGs off, your eyes need time to readjust. It is extremely realistic."

Lower total cost of ownership

For Forbes, another benefit of the FS35 IR was the LED technology. "Using a solid state projector gives us longevity; that was a very important factor in the ANG's choice of projectors. Our maintenance costs have gone down by virtue of picking the FS35 IR projector," he concludes.