

The Aviation Combined Arms Tactical Trainer: Update

By MAJ James F. Dougherty

Ssg Vernon McNabb, UH-60 MTPC instructor assigned to 110th Avn. Bde., conducts door gunnery evaluations during initial testing and evaluation of the NCM3 in Orlando, FL, May 23-25, 2011.

It has been a busy year for the aviation virtual collective trainer – AVCATT. In 2010, all twenty-three suites received a combined retrofit, essentially applying several much needed engineering change proposals (ECP) which greatly enhanced the overall system performance.

Some highlights of the retrofit include new helmet mounted displays (HMD), faster host computers, and improved image generators. If it has been awhile since you have been in and around an AVCATT, we encourage you to stop by your local suite and rate the improvements for yourself.

2011 continues to be an enhancement year for the program. As budget constraints tighten, we are encouraged and thankful to our airframe program managers (PM) for ensuring that necessary funding is identified and allocated towards keeping the AVCATT cockpit configurations usable and relevant to the aviation community.

As you know, these last couple of years has seen an accelerated fielding of live aircraft platforms (UH-60M, CH-47F, AH-64D BLK II 13, etc.) across the aviation fleet. What you may not know is that behind the

scenes system and non-system training aids, devices, simulators, & simulations (TADSS) try to play catch-up with the live systems, often times unable to begin development until post fielding and software contractual issues are resolved.

As of right now, the AVCATT OH-58D BLK II configuration is complete and awaiting accreditation in August 2011. In addition, preliminary work has begun on the AVCATT UH-60M, CH-47F and AH-64D BLK II Lot 13 configurations with expected suite fieldings in FY13.

NCM3

The Nonrated Crewmember Manned Module (NCM3) is a mobile, transportable, multi-station virtual simulation device designed to support training of nonrated crewmembers (NCM) in crew coordination, flight, aerial gunnery, hoist and slingload related tasks. Essentially a third AVCATT trailer, the NCM3 is reconfigurable to either a UH or CH backend, which enables two complete lift crews (RCM and NCM) to train in the virtual environment. Unique to the NCM3 system is the ability to operate

in three separate modes.

In the first mode, the NCM3 is tethered to an AVCATT suite with correlated visual and audio cues. All crewmembers utilize their HMD and fly and fight their platform as they would in a live environment.

The second mode, allows the NCM3 to operate in a standalone mode where the instructor/operator (I/O) is able to perform the role of the pilot(s).

The third mode, enables the NCM3 to operate under a 'white-light'. Crewmembers are not submersed in the virtual world, but rather are able to work through weapon and hoist tasks with actual demilitarized weapons and an operational hoist. This mode is compatible to sitting in an actual aircraft on the ramp and working through weapon and hoist procedures in the crawl phase of learning.

The first NCM3 is currently scheduled to arrive at Fort Campbell, KY in September 2011, with the second arriving on station at Ft. Campbell in December 2011. As a mobile trainer, the NCM3 will be able to be scheduled by aviation brigades for crewmember training in support of training requirements.

