

NATTC LAKEHURST INTRODUCES HIGH-TECH TRAINING

By Kathleen Bozan



PH3 Angela Virnig

Naval Aviation has come a long way since its beginnings in 1911. Technological advancements have provided not only new aircraft and ships, but progressive training for the personnel who operate the equipment. With the development, installation and unveiling of a state-of-the-art electronic aviation classroom and a one-of-a-kind catapult launch system simulator, the Naval Air Technical Training Center (NATTC) Detachment, Naval Air Engineering Station Lakehurst, N.J., has made a quantum leap forward in combining the latest technologies with aircraft launch and recovery equipment education.

"We've taken Navy training into the 21st century," explained Lieutenant Alan Chuderski, the det's training officer. "We're not just ropes and swabs anymore."

The 11F12 Catapult Launch System Trainer Device simulates catapult launch operations in a safe and secure environment that incorporates 3-D graphics and surround sound into a virtual reality classroom. "We can simulate

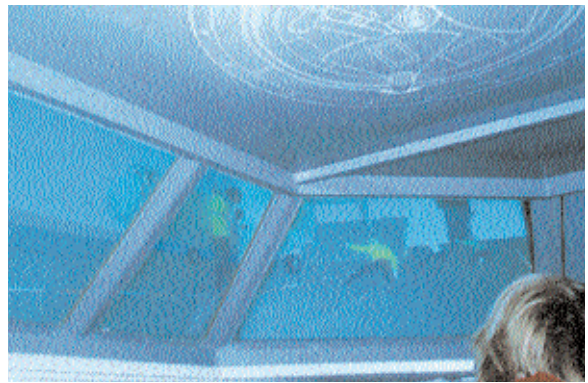
all types of weather, wind conditions and aircraft weights," Chuderski said. "We can also do nighttime operations. About the only thing we don't do is spray the students with saltwater to simulate mist coming in over the bow."

The new trainer incorporates 122 core scenarios covering all carrier-based aircraft. "There's no way to interact with video, so we had to get smarter," the lieutenant continued. "We knew the technology was out there. Why not use it to create a better, more realistic environment?"

The interactive nature of the new device is a big help to instructors, who can now program in faults, change scenarios and more closely monitor students' progress as each phase in their training progresses. "When you push that fire button, you have to get it right," he said. "It's not just an aircraft we're launching; it's someone's son or daughter. That's what we teach."

The development of the \$1.3 million training device was an 18-month-long "labor of love," Chuderski

Opposite, “shooters” on board *Theodore Roosevelt* (CVN 71) observe preflight checks of a VF-102 F-14 *Tomcat*. Bottom, an F/A-18 *Hornet* of CVW-17 launches from *George Washington* (CVN 73). To more accurately reflect real-world flight deck scenarios like these, NATTC Lakehurst has developed two digital training systems. Right, the catapult launch system trainer provides a shooter’s-eye-view of flight deck operations, while an electronic aviation classroom, below right, is used to instruct students in the use of visual landing aids.

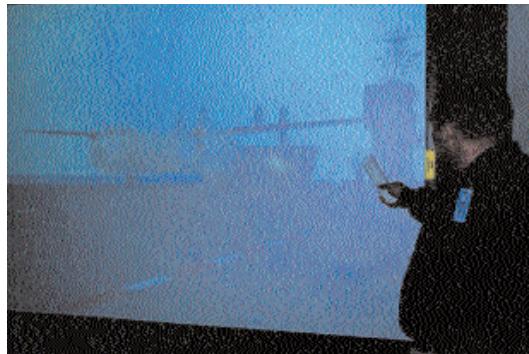


commented, but it was not without difficulties. “Getting the animation right was the hardest part. The graphics people really needed our coaching.

We had to make them understand that a half step off or a hand gesture made the wrong way would have a totally different meaning.” Overall, NATTC is happy with the final product, which was unveiled during the first training class in February.

In addition to the catapult launch trainer, the first of six electronic aviation classrooms at NATTC was recently opened and ready to accept 11 students for instruction in visual landing aids (VLAs). The classroom was designed to enhance instruction for the interior communications electricians (IC) who maintain and operate the improved fresnel lens optical landing system, the long-range lineup system and landing signal officer (LSO) heads-up display systems.

“We give instruction in these VLAs to pilots and LSOs so that they can safely execute landings aboard aircraft carriers at sea,” NATTC instructor IC1 Thomas Murdock said. The classroom’s components include



computer terminals and a large display screen, which projects equipment views and actual operations of individual aircraft.

“By inserting multimedia technology into our instruction, the students rely less on their imagination. Instead, they get to see what really goes on,” Lt. Chuderski added. Not only

will the training be easier and more efficient, it will be more interactive. Individual keypads mounted on each desktop require students to electronically answer questions posed by instructors. “In this way, we’ll get instant recognition of each student’s comprehension level.

“When they leave here,” Chuderski concluded, “they’ll be ready to walk out on that deck and become an immediate asset to their ship. It’s a big deal.”

Kathleen Bozan is editor of *Air Scoop* at NAES Lakehurst, N.J.

PHAN Jessica Davis

