

HSL-37 TRAINS LSEs FOR SHIPBOARD OPERATIONS

By Lt. Johnathan Rockwood



The work of a landing signalman enlisted (LSE) is not easy, nor is it the safest profession. On the dynamic flight deck of a ship with unpredictable pitches and rolls, an LSE will stand just feet away from the powerful helicopter he or she is directing. An H-53, for example, is capable of producing 50–120 knots of rotor downwash, which is more than enough to push an inattentive sailor overboard. As the pilots must be warned of any unsafe condition that may occur, LSEs must remain calm at all times and execute hand signals with crisp accuracy. To prepare for the rigors of shipboard flight operations, LSEs receive training at Light Helicopter Antisubmarine Squadron 37, one of the four LSE schools Navy-wide.

Based at MCAS Kaneohe Bay, Hawaii, HSL-37 teaches more than 200 LSE students a year. To provide top-notch training for its students, the Easy Riders entered the digital age with the acquisition of the first Virtual

Flight Deck Training System (VFDTs). Designed by the Science and Technology division of Alion, this simulator is expected to save the Navy hundreds of man hours and thousands of dollars by eliminating the need to use actual aircraft to qualify LSEs. The simulator is now also in use at the other LSE schools—HSC-3, HSC-28, and HSL-40.

In the safe environment of a VFDTs classroom, LSE-hopefuls don a virtual reality headset, float coat, elbow pads, and gloves. Through the headset the student sees a color computer-digitized display of the flight deck as if standing onboard the ship. Sounds of an approaching helicopter pervade the room through surround-sound speakers, making the training feel life-like. Reflective panels with sensors on the float coat, elbow pads, and gloves are read by a camera placed 15–20 feet in front of the student. The camera detects the student's movements and sends a signal to the main computer console. If the



hand movements are accurate, the helicopter will respond. In this manner students are able to practice maneuvering, landing, and launching the helicopter.

Two instructors run the VFDTS. One posts directly behind the student, to assist with correct hand signals. The other stands at a touch screen monitor called the Instructor/Operator Station to load the scenario, monitor the helicopter's response, or pause the session if additional instruction is necessary. In selecting the scenario, the instructor can choose from nine different helicopters, seven classes of ships, and six environmental conditions. Emergencies such as a fouled deck or an unsafe helicopter approach test the student's knowledge and reaction time. The system is also capable of simulating night operations through night vision devices.

Prior to the VFDTS the only practical experience pupils gained before standing under a real helicopter was from instructors holding model helicopters over their heads. With the addition of the VFDTS to its classroom training tools, the Easy Riders make an excellent program even stronger. Since the simulator's first use in October 2006, student critiques frequently comment on the value of the simulator and how it enhanced their training. After graduating, these students go to the fleet to become fully qualified LSEs, directing real helicopters with the confidence gained from rigorous procedural and emergency training with the Easy Riders. ✈

Lt. Rockwood is a pilot with HSL-37.

Above, an LSE directs an HS-3 SH-60F Seahawk onto *Harry S. Truman* (CVN 75) during deck certifications on 21 January. Photo by MC3 Kristopher Wilson. Below, ABHC Thomas L. Williford guides ABH2 Reginald Hobson through an LSE training simulation at MCAS Kaneohe Bay, Hawaii. Photos by Lt. Johnathan D. Rockwood.

