



AVIATION COMPUTER-BASED TRAINING SYSTEM (LSO), DEVICE 2H139

TRAINING CATEGORY:

AIRCRAFT RECOVERY

ORIGINATING AGENCY:

DCNO/AIR

SECURITY CLASSIFICATION:

Device 2H139 is unclassified.

PURPOSE OF DEVICE:

Provides cognitive training in a classroom environment for Landing Signal Officers (LSOs).

INTENDED USE:

Classroom instruction in LSO School to provide LSOs, with varying degrees of proficiency in aircraft recovery, computer based instruction with interactive video representations of aircraft recovery at a shore, or aircraft carrier, runway.

FUNCTIONAL DESCRIPTION:

Device 2H139 is comprised of 16 work stations and a network control station. A work station is comprised of one 80386 based computer using MSDOS 3.3 as the operating system, two 13 inch color monitors, one of which contains a touch screen, one 104 key alphanumeric keyboard, one mouse, one graphics generator, a head phone set, and a videodisk player. This equipment is housed on or in a computer desk. The network control station contains a 40MB tape backup unit and a color graphics printer housed in a peripheral cabinet, an 80386 computer, one color monitor, a keyboard, mouse, and head set.

NETWORK CONTROL - Each station contains an Ethernet circuit card mounted to the computer motherboard. I/O networking data, controlled by the Tapestry 8 operating system, is fed to and from each station through BNC connections on the Ethernet card through BNC T connectors on the network data bus. This allows student data to be transferred to the main data storage disk for archiving or to the printer for hard copy reports.

DIRECTORY OF NAVAL TRAINING DEVICES

WORK STATIONS - Each work station is controlled by an 80386 microcomputer using the MSDOS operating system. The computer controls all operations based on firmware instructions, software program routines, and student or instructor interaction. The software generated scenarios provide the student LSO Glide Slope geometry problems, aircraft approach presentations of landings on a shore facility runway or a carrier flight deck, various aircraft types such as the A-6, E-2, F-14, F/A-18, A-7, and EA-6B, daytime or nighttime operations, and various weather patterns. The student reacts to these scenarios by calculating geometric approach math and providing course corrections to the pilot/navigator (computer). All student responses are entered via the keyboard or the touch screen. As a lesson is selected, the graphics generator and/or the videodisk player respond to computer instructions to present the proper imagery. The student is also asked to respond to questions for each scenario presented and enters the response. The system controller on the network control station records all student responses and saves them for grading and record keeping. The student or instructor can request a hard copy of each performance via the printer and the tape backup unit saves all work accomplished.

PHYSICAL INFORMATION:

Computer:	21W x 16D x 7H	36 pounds
Keyboard:	21W x 7D x 1H	4 pounds
Mouse:	2W x 4D x 1H	.3 pounds
Videodisk		
Player:	17W x 16D x 5H	24 pounds
Monitor:	15W x 16D x 13H	32 pounds
Graphics		
Generator:	19 W x 17D x 6H	30 pounds
Tape Unit:	7 W x 10D x 4H	7 pounds
Printer:	15 W x 11D x 4H	11 pounds

POWER REQUIREMENTS:

120 VAC, 60 Hz, 20 Amps, single phase.
 Temperature: 70 to 90 degrees
 @ 50° to 90° relative humidity
 noncondensing

PUBLICATIONS FURNISHED:

Commercial Computer Documentation (U);
 Instructor Utilization Handbook NTSC P-5998 (U)
 Training Device Inventory Records (U)
 Trainer Test Procedures and Results Report,
 CDRL A00L (U)

PERSONNEL:

Instructor/Operator: One (1)
 Trainees: Fifteen (15) maximum
 Maintenance: One (1)

CONTRACT IDENTIFICATION:

Manufactured by ComPutron, Inc., Norfolk, VA; CAGE; 7Z152; Contract No. N61339-88-C-0092.

LOCAL STOCK NUMBER:

6930-LL-C00-6978