

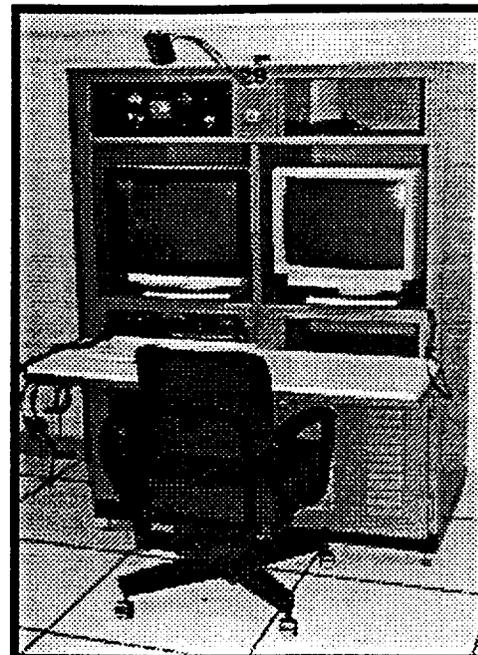
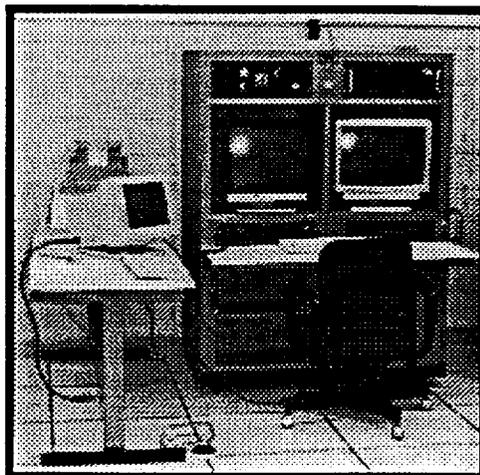
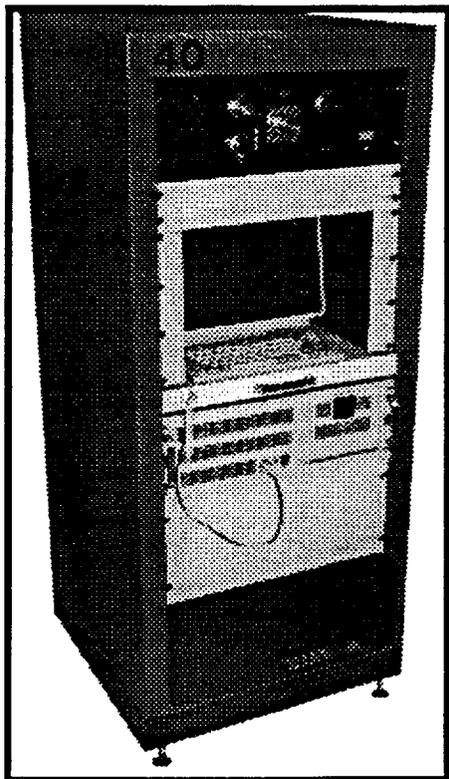
**SUMMARY OF
AVIONICS AND ELECTRICAL SYSTEMS ADVANCED TRNR**

March 1994

Device 11B110

NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION

ORLANDO, FLORIDA



TRAINING CATEGORY:

AVIONICS/ELECTRICAL SYSTEMS
MAINTENANCE

ORIGINATING AGENCY:

DCNO/AIR

SECURITY CLASSIFICATION OF DEVICE:

Device 11B110 is unclassified.

PURPOSE OF DEVICE:

To provide realistic training and practice in organizational and intermediate level maintenance of avionics systems.

INTENDED USE:

In Advanced Avionics Integrated Weapons Systems Maintenance course, Class C1, for classroom training of personnel in advanced technical knowledge and skills associated with organizational and intermediate level avionics maintenance procedures.

FUNCTIONAL DESCRIPTION:

Device 11B110 consists of an Instructor Operator Station (IOS), 18 Student Stations (SS), a Peripheral Controller (PC), and a Power Distribution Unit (PDU). The trainer uses interactive videodisc and computer graphics technology on two 19-inch color monitors to simulate actual test equipment and 24 aircraft systems. A lightpen serves as a test lead for probing aircraft system test points displayed on the right screen; the left screen features test equipment and indications. The trainer simulates systems representative of those in five different aircraft, the A-7, F-4, F-18, H-60, and P-3. In replicating the hardware of each simulated system, dynamic traces, readouts, and meter movements are displayed by using a graphic overlay technique.

The Instructor at the IOS assigns lessons, which are stored at the PC, to students as a class or individually. He can also monitor lessons in progress and play back recorded lessons of individual students. Lessons can also be played back at individual Student Stations by the roving Instructor. There are a total of 690 lessons of which 515 are structured and 175 are freeplay. The device has a freeze feature which will cause the SS displays to remain fixed at the present settings until released by the Instructor. The SS will freeze if one of the following conditions is met: Safety/hazard violation, help is requested, IOS Instructor initiates a freeze, freeplay time limit exceeded, or excessive errors are made in a structured lesson. An internal voice communications system allows the Instructor to communicate with individual trainees, groups of trainees, or all trainees.

The IOS and SS are housed in identical cabinets.

PHYSICAL INFORMATION:

Number of pieces: Three major, one minor (PDU)

Sizes: IOS - 66" high x 28" deep x 48" wide

SS - 66" high x 28" deep x 48" wide

PC - 57" high x 30" deep x 23" wide

PDU - 48" high x 36" deep x 30" wide

Weight: IOS - 535 pounds

SS - 490 pounds

PC - 250 pounds

PDU - 776 pounds

Total system (including cables) 10,581 pounds

EQUIPMENT REQUIRED (BUT NOT SUPPLIED):

NONE

POWER REQUIREMENTS: 480 vac, 3 phase, 60 hertz, 35 kva.

INSTALLATION REQUIREMENTS:

Minimum Installation area: 20' x 40'.

Floor Loading: 250 lbs/square foot.

BTU/hr: 70,237, 5.85 tons.

Temperature and humidity:

Operating 10°C to 27°C, non-operating -20°C to 60°C.

Relative humidity: Up to 80% non-condensing.

PUBLICATIONS FURNISHED:

Operations and Maintenance Manual, NTSC P-6286 (U), Instructor's Utilization Handbook, NTSC P-6289 (U), Planned Maintenance System, NTSC P-6287 (U).

PERSONNEL: Instructors: One stationary Instructor/Operator and one roving Instructor, both of whom are qualified to teach at the C1 school level.

Operator: Instructor operated.

Trainees: Class of up to 18.

Trainee Observers: As required.

Maintenance: Contractor operations and maintenance services. (COMS)

CONTRACT IDENTIFICATION:

Manufactured by Hughes Training, Inc.,
Arlington, Texas under
NAVAIRWARCENTRASYS DIV Contract No.
N61339-88-C-0015.

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