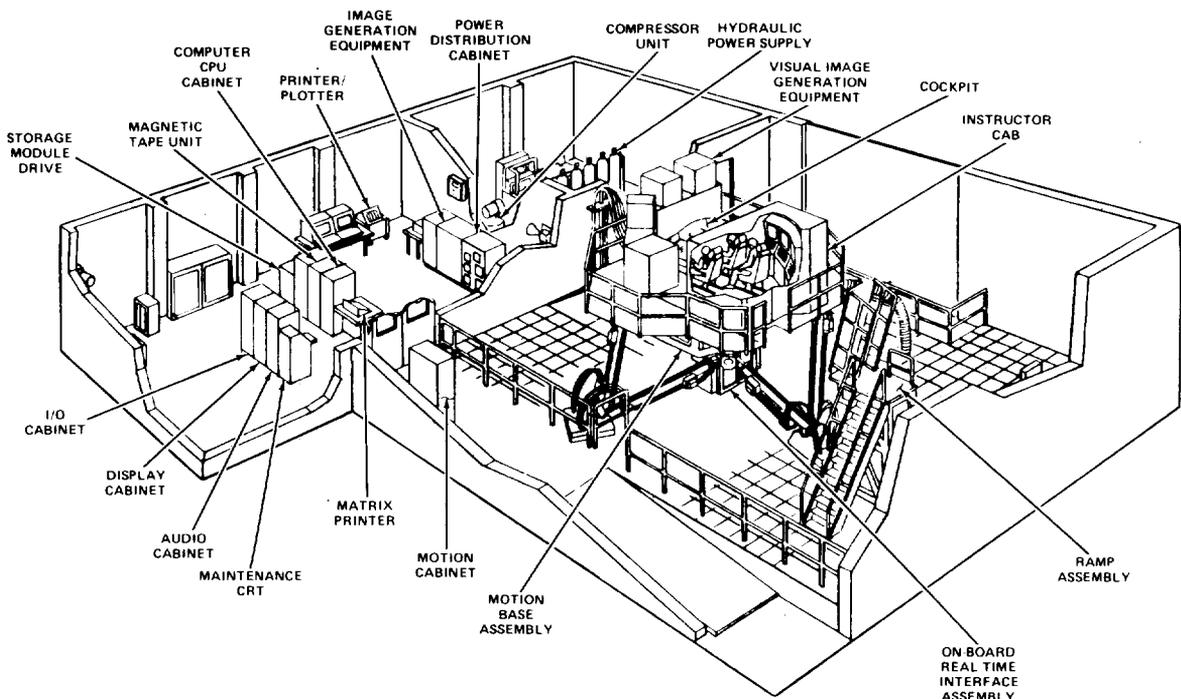


## DIRECTORY OF NAVAL TRAINING DEVICES



### E-2C AIRCRAFT OPERATIONAL FLIGHT TRAINER, DEVICE 2F110

#### TRAINING CATEGORY:

AVIATION (Operational Flight/Weapon System)

#### ORIGINATING AGENCY:

DCNO/AIR

#### SECURITY CLASSIFICATION:

Device 2F110 is unclassified.

#### PURPOSE:

To provide realistic training and practice in pilot and copilot operation of the E-2C aircraft.

#### INTENDED USE:

The E-2C OFT Device 2F110 provides a realistic training environment for the pilot and copilot in the areas of flight, navigation and communications peculiar to the E-2C aircraft. The Device 2F110 promotes initial qualification, transition, requalification proficiency and tactical flight training under instrument flight conditions. The operational flight training objectives

include cockpit familiarization and an in-depth understanding of the E-2C flight characteristics, normal procedures and emergency procedures. The 2F110 also provides a medium for practicing emergency situations that are considered unsafe for the aircraft. All this is achieved at a cost significantly lower than training on the actual aircraft.

#### FUNCTIONAL DESCRIPTION:

Device 2F110 is a fully simulated replica of the E-2C cockpit. It is a completely operational flight trainer that incorporates a 6 degrees-of-freedom motion system, a 4 window dusk/night visual system, and an audio system.

The device consists of three (3) major equipment areas. The trainer area includes the cockpit, instructor station and visual system on the motion base. The computer area contains the computer and peripheral equipment and the power distribution, display, and audio cabinets. The hydraulic area contains the hydraulic power supply and plumbing and an air compressor.

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The instructor controls the cockpit parameters from the on-board instructor station and continuously monitors trainee performance on three (3) CRT displays. The instructor-selected parameters include visual scenes, environmental conditions, navigational/radio facilities, and more than 300 aircraft malfunctions. Trainee scoring and evaluation is accomplished by automatic monitoring and scoring of 83 parameters. A printer/plotter generates hard copy critique data. Dynamic and instant replay are available as training aides.

### PHYSICAL INFORMATION:

#### Dimensions

Trainer Area: 30' high x 40' deep x 40' wide

Computer Area: 13' high x 20' deep x 40' wide

Hydraulics Area: 13' high x 20' deep x 20' wide

#### Weight

Trainer Equipment: 15,440 lbs

Computer Equipment: 7,470 lbs

Hydraulic Equipment: 9,260 lbs

**Total System: 32,170 lbs**

### POWER REQUIREMENTS:

120/208 Volts, 60 Hz, 3-Phase, 4-wire, Y-connected

Maximum Instantaneous Load: 482 KVA

Maximum Running Load: 108 KVA

Power Factor: 0.853

Maximum Instantaneous Current Load

(Sequential Start): 1,200 amperes per phase

Maximum Running Current Load: 300 amperes  
per phase

### PUBLICATIONS FURNISHED:

1. Maintenance Handbook, E-2C OFT Device 2F110. NAVTRADEV P-4296 Vol 1 thru IX and Supplements (U)
2. Maintenance Requirement Cards, E-2C OFT Device 2F110 NAVTRADEV P-4297 (U)

3. Visual System Documentation Set, Novoview Model SP1 NAVTRADEV P-4293 (U)
4. Instructor Utilization Handbook, E-2C OFT Device 2F110 NAVTRADEV P-4312 (U)
5. Parts Catalog, E-2C OFT, Device 2F110 NAVTRADEV P-4412 (U)
6. Hardware Maintenance/THOTS Manuals, E-2C OFT, Device 2F110 NAVTRADEV P-4499 (U)
7. Trainer Test Procedures and Results Report (TTPRR), E-2C OFT, Device 2F110 NAVTRADEV P-4692 (U)
8. Trainer Math Model Report, E-2C OFT Device 2F110 NAVTRADEV P-6037 (U)
9. Trainer Programming Report, E-2C OFT Device 2F110 NAVTRADEV P-6038 (U)
10. Commercial Computer Documentation Set. Harris H800-2CP and Peripherals NAVTRADEV P-6152 (U)

### PERSONNEL:

Instructor: One (1) Officer Pilot, qualified as E-2 instructor pilot

Operator/Maintenance: Staffed under Contractor Operations and Maintenance (COMS) contract.

Trainees: Two (2) per training session, Pilot and Copilot

### CONTRACT IDENTIFICATION:

Manufactured by Grumman Aerospace Corp. under NAVAIR Contract NAVTRASYSSEN Contract No. N00019-75-C-0404.

### LOCAL STOCK NUMBER:

6930-LL-C00-4635