

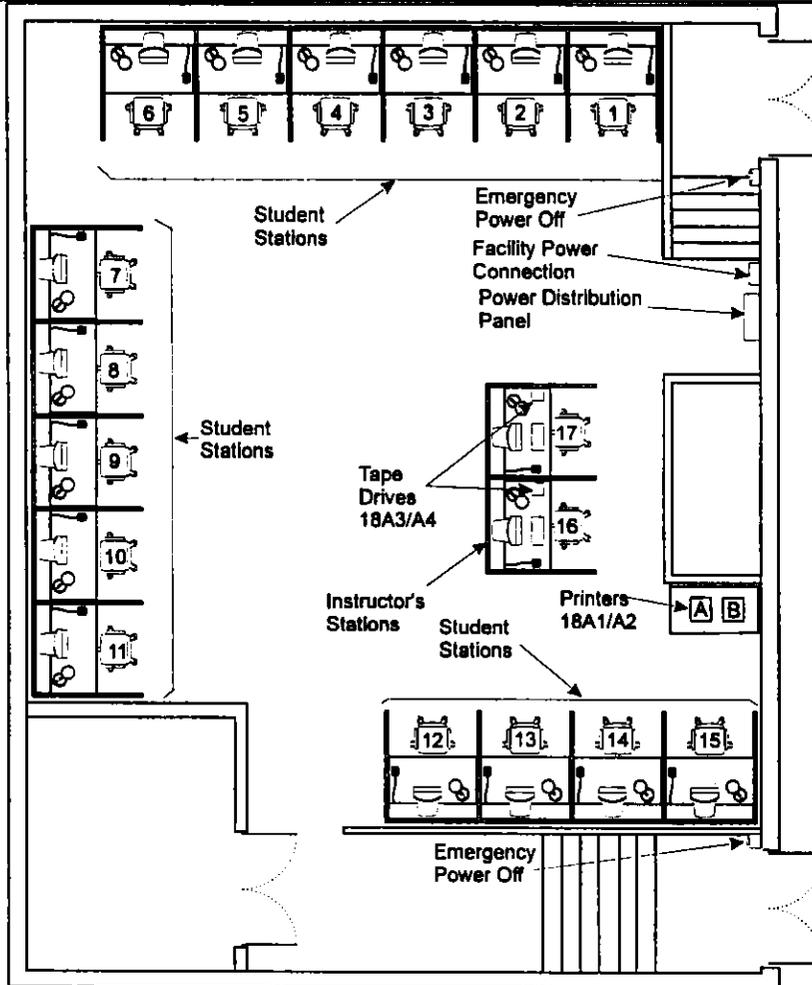
**SUMMARY OF
FORWARD OBSERVER TRAINING SYSTEM, (FOTS)**

JANUARY 1998

Device 16C82

NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION

ORLANDO, FLORIDA



TRAINING CATEGORY:

COMBINED OPERATIONS (AMPHIBIOUS)

ORIGINATING AGENCY:

CNO/AIR

SECURITY CLASSIFICATION OF DEVICE:

Device 16C82 is unclassified

PURPOSE OF DEVICE:

The FOTS provides initial and sustaining training for USN/Marine Corps Forward Observers in the skills necessary to provide accurate Naval Gunfire (NGF) and artillery calls for fire.

INTENDED USE:

The FOTS is used in a classroom environment to provide initial and sustaining training for USN/Marine Corps Forward Observers. Forward Observers are trained in: the correct procedures for: target identification and location, calling for, and adjusting fire, and reporting the results of the call for fire in a simulated battlefield environment displayed on the Student Station monitors.

FUNCTIONAL DESCRIPTION:

The FOTS is installed in a classroom facility. It is comprised of: 17 identical stations (15 - Student Stations and 2 - Instructor Stations), 2 - Laser Jet printers, 2 - 4-mm cartridge tape drives, and associated station furniture (desks, chairs, desk lamps, and

partitions). The Student and Instructor Stations are interconnected via a 10 Base 2 Ethernet, and are identical in both hardware and software configuration. Any of the 17 stations can be configured as an instructor station. Each Instructor/Student station is comprised of COTS equipment consisting of a Deskside Computer, a 21-inch color monitor, and a mouse. Communications between Instructor and Student are provided, via the Ethernet, by a microphone and headset at each location. The FOTS instructors: create, modify and maintain stored training scenarios, initiate, monitor and control the execution of training scenarios at the student stations, and record, evaluate, and print out student call for fire performance. Student training is accomplished at the Student Stations through the interaction between the students and instructor selected training scenarios. The scenarios provide the students with simulated battlefield scenes, targets, and gun battery assets. The color monitor at the Student Station displays a visual data base consisting of the battlefield terrain, stationary and moving targets, and the effects of trainee directed artillery fire. During a scenario, students locate and designate targets within the visual scene using the mouse, and issue call for fire messages via the station microphone and a speech recognition system to simulated supporting gun batteries, either on- or off-shore. Individual student call for fire performance may be monitored at the Instructor Station during a mission and is automatically scored and transferred to the instructor station for monitoring and evaluation purposes at the end of the training scenario. Student and Instructor personnel are protected from any electrical shock by ground fault interruptors that are connected to the ac power for each station. Emergency Power Disconnect switches are located at each entrance to the classroom. Activation of either one of these switches will remove power from all FOTS equipment.

PHYSICAL INFORMATION:

The FOTS is permanently installed. The device physical requirements and dimensions are as follows.

- Minimum Classroom Size Requirements : Height 8 ft. x 40 ft. wide x 51 ft. in. long.
- Instructor / Student Station footprint :- 5 ft. high x 5 ft. wide x 6 ft. long.
- Deskside Computer: - Height 25.8 in x 7.9 in. wide x 20.0 in. deep. Weight 60.0 pounds.
- Color Monitor: - Height 19.9 in. x 19.2 in. wide x 20.4 in. deep. Weight 65 pounds.
- Mouse: - Height 1.0. in x 2.0 in. wide x 4.0 in. deep. Weight 0.5 pounds.
- Laser Printer: - Height 11.7 in. x 16.4 in. wide x 15.9 in. deep. Weight 37 pounds.

- Tape Drive: - Height 2.75 in. x 9.75 in. wide x 10.5 in. deep. Weight 5.0 pounds.

EQUIPMENT REQUIRED (NOT SUPPLIED) :
Facility ac power distribution system

POWER REQUIREMENTS:

FOTS Device (17 Stations, 2 Printers, 2 Tape Drives):
115V ac, 60 Hz, single phase, 10.52 KVA.

- Computer: 115V ac, 60 Hz, 460W, single phase.
- 21-Inch Color Monitor: 115v ac, 60 Hz, 160W, single phase.
- Laser Printer: 115V ac, 60 Hz, 300W, single phase.
- Tape Drive: 115V ac, 60 Hz, 23W, single phase.
- Student Desk Lamp: 115v ac, 60 Hz, 20W, single phase.

INSTALLATION REQUIREMENTS:

All device units are cooled using room ambient air. Device total cooling requirements are 39,351 Btu/hr. Individual unit cooling requirements are as follows:

- Computer: 1570 Btu/hr.
- 21-Inch Color Monitor: 546 Btu/hr.
- Laser Printer: 1024 Btu/hr
- Tape Drive: 79 Btu/hr.

PUBLICATIONS FURNISHED:

- Forward Observer Training System, Device 16C2, System Interface Manual, , NAWCTSD P -7305. (U)
- Various COTS Vendor Manuals, NAWCTSD P-7306-X, (U)
- Training System Utilization Handbook, Forward Observer Training System, Device 16C82, NAWCTSD P- 7307 , (U)

PERSONNEL

Instructor (s) - 1 or 2, (Fire Support Man, MOS 0861).
Operator (s) - None.
Trainees - Up to 15.
Trainee Observers - None.
Maintenance Personnel - 1.

CONTRACT IDENTIFICATION

Manufactured by:
Future Technologies Inc.
Enzian Systems Division
3251 Progress Drive, Suite B
Orlando, FL 32826
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