



### SUBMARINE PASSIVE ACOUSTIC ANALYSIS TRAINER, DEVICE 21H14

**TRAINING CATEGORY:**

UNDERSEA OPERATIONS (SHIP) (Acoustic Analysis)

**ORIGINATING AGENCY:**

NAVSEA

**SECURITY CLASSIFICATION:**

Device 21H14 is SECRET.

**PURPOSE OF DEVICE:**

The purpose of the Device 21H14 is to train sonar operators in basic through advanced passive acoustic analysis and classification skills.

**INTENDED USE:**

The Device 21H14 is intended to be used for classroom training of submarine sonar operators with varying degrees of proficiency in acoustic analysis and classification skills.

**FUNCTIONAL DESCRIPTION:**

Device 21H14, a shorebased installation, provides for simultaneous training of up to ten (10) students. The Trainer, a standalone system, consists of ten (10) student stations and one (1) instructor station. Each pair of student stations shares a common equipment cabinet. All data communications between instructor and student take place over a local area network. Basic network utilization involves transmission of lesson display files and classified data from the instructor station to the student station. The Trainer has the capability of training groups of students using the same lesson or for each student to be assigned a unique lesson. In either case the actions performed by a student are independent of those actions performed by students at other stations.

The primary function of the Instructor Station Computer Program is to provide the instructor with the capability to assign lessons and monitor progress. The instructor station is interfaced to two (2) 205MB removable media disk drives allowing for storage of 200 lessons.

## DIRECTORY OF NAVAL TRAINING DEVICES

The primary function of the Student Station Computer Program (SSCP) is to present Gram display on a high resolution graphic CRT that is synchronized with acoustic audio (aural clues that are representative of various surface and subsurface contacts of interest). The SSPC also defines a set of function keys which the student manipulates in order to select alternate gram band displays and make on screen gram annotations. Completed student classification worksheets will be transmitted to the instructor station.

### PHYSICAL INFORMATION:

#### Instructor Equipment Cabinet

Size: 72.1" x 48" x 36"  
 Weight: 800 lbs.  
 Weight with Equipment: 989 lbs.

#### Printer Cabinet

Size: 29" x 36" x 65.5"  
 Weight: 250 lbs.

#### Student Equipment Cabinet (5)

Size: 72.1" x 24.3" x 36"  
 Weight: 400 lbs.  
 Weight With Equipment: 636 lbs.  
 Weight of 5 Cabinets: 3,180 lbs.

#### Standalone Peripheral Equipment Disk Drive

Size: 41" x 21.3" x 36"  
 Weight: 541 lbs.

#### Hardcopier, Terminal

Size: 70" x 22" x 15.5"  
 Weight: 25 lbs.

#### Printer

Size: 9" x 21.5" x 13.5"  
 Weight: 25 lbs.

#### Hardcopier

Size: 12.2" x 20.5" x 20"  
 Weight: 81 lbs.

#### Instructor Desk

Size: 30" x 60" x 29.25"  
 Weight Approx. 140 lbs.

### POWER REQUIREMENTS:

120 Volt, 4-Wire, 16 Circuits

### PUBLICATIONS FURNISHED:

1. Trainer System Interface Manual for Submarine Passive Acoustic Analysis Trainer - Device 21H14 NTSC P-5700 (U)
2. Instructor Utilization Handbook for Submarine Passive Acoustic Analysis Trainer - Device 21H14 NTSC P-5698 (U)
3. On-The-Job Training Handbook for Submarine Passive Acoustic Analysis Trainer - Device 21H14 NTSC P-5697 (U)
4. Instructor Guide for Submarine Passive Acoustic Analysis Trainer - Device 21H14 NTSC P-5699 (U)

### PERSONNEL:

**Instructor:** One (1) Navy Enlisted Sonar Technician (E5-E7), Submarine and Sonar Supervisor qualified, graduate of Instructor School.

**Operator:** One (1) Navy Enlisted Sonar Technician (E5-E7) Submarine qualified.

**Trainees:** Ten (10)

**Maintenance:** None

### CONTRACT IDENTIFICATION:

Manufactured by Ship Analytics, Inc., North Stonington, CT under NAVTRASYS-SCEN Contract No. N61339-87-C-0053

### LOCAL STOCK NUMBER:

6930-LL-C00-6777