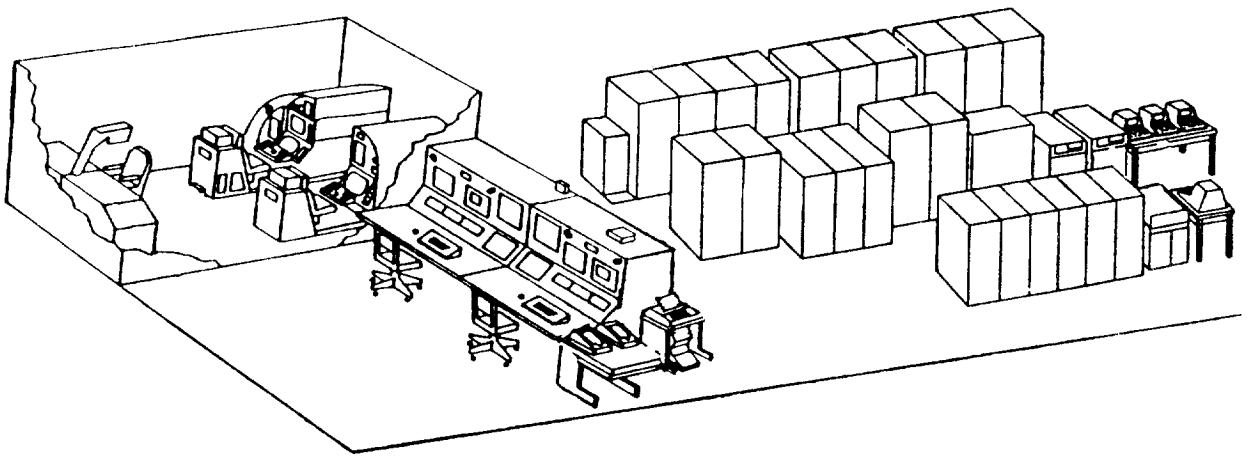

S-3B POSITION TRAINER COMPLEX MODULE, DEVICE 14B49A

TRAINING CATEGORY:

AIR (ASW)

ORIGINATING AGENCY:

DCNO/AIR

SECURITY CLASSIFICATION:

Device14B49A is classified Secret.

PURPOSE OF DEVICE:

To provide realistic training in the use of S-3B acoustic and nonacoustic systems.

INTENDED USE:

To train tactical ASW crews to use S-3B aircraft systems and equipment. Tactics team exercises require the Copilot/TACCO (COTAC), Tactical Coordinator (TACCO), and Sensor operator (SENSO) trainees to operate as a team to complete a common training exercise. The device may also be used to train these crew members independently in the Part Task (PT) mode, in each of three (3) positions: Pseudo-COTAC, TACCO, and SENSO.

FUNCTIONAL DESCRIPTION:

The Position Trainer Complex Module (PTCM No. 3) generates targets; transient, crumpling, shipping, biologic, and sonobuoy sounds; and passive jammer outputs. Signal generation channels stimulate UYS-1 PICS and the aural channels. Antenna washover and RF degradation effects are simulated. Frequency-independent propagation loss and three-path multipath effects are simulated for all targets. Pseudo-COTAC PT exercises provide training on Acoustic Sensor, Navigation, and Communications systems. TACCO PT exercises provide training on Navigation, Communications, Search Stores, Kill Stores, and Tactical Display systems. Simulated acoustic and nonacoustic contact and fix data are automatically provided by TACCO simulation software to provide vector and fix data for the GPDC operational and tactical programs and displays. The SENSO PT exercises provide training on the Acoustic Sensor systems.

DIRECTORY OF NAVAL TRAINING DEVICES

PHYSICAL INFORMATION:

Unit	Length (In.)	Depth (In.)	Height (In.)	Weight (Lb.)
1	96	32	82	1200
2	64	32	82	1020
3	74	36	90	1506
4	96	32	82	1550
7	18.3	32.5	59.5	382
10	136	32	71	2475
14	64	32	82	1032
15	128	32	82	2067
16	72	37	72	1260
22	41.5	19.5	87.3	1300
24-26	(Included in Unit 32 area.)			
28	72	64	68	1385
29	72	64	68	1385
30	16	26	12	135
31	27	23	44	180
32	194	96	96	3317
66	21	24	12	30
67	21	24	12	30

Power	(U)nit 1	NAV/COMM	U 2
Avionics	U 3	Acoustic MDAS	U 4
GPDC	U 7	Tactics Computer	U 10
Nonacoustic	U 14	I/O,Manchest/Std	U 15
ESM	U 16	Frequency Conv	U 22
TACCO Sta	U 24	SENSO Sta	U 25
Pseud Co Sta	U 26	Instr Cns1 1	U 28
Instr Cns1 2	U 29	Hard Copy Unit	U 30
DECWriter	U 31	Tactic. Trainees	U 32
Off-Line CRT	U 66	Micro CRT	U 67

EQUIPMENT REQUIRED (NOT SUPPLIED):

Security Cabinet to store classified material.

POWER REQUIREMENTS:

	Hz	VAC	
Input	60 ±5%	120/208 ±10%	3-ph, 4-wire
(Max Peak Power:	55.47 kVA,	154 A/ph)	
Input	60 ±5%	277/480 ±10%	3-ph, 4-wire
Input	400 ±5%	115/200 ±10%	3-ph, 4-wire
(Max Peak Power:	16.80 kVA,	60 A/ph)	
(Max Start Power:	Within limits above)		

INSTALLATION REQUIREMENTS:

Floor Loading: 45,126 lb; 225 lb/sq ft.

Distr. Loading: 1000 lb/sq. in./pt ft.

Temperature: 65 to 72 Degrees F

Humidity: 50% to 60% Noncondensing

Air Conditioning Required:
25.93 Tons, Training Room

Acoustical Environment:
Trainer 65 dB (A)
Computer 75 dB (A)

PUBLICATIONS FURNISHED:

1. Operation and Maintenance Instructions NTSC P-6251 (U)
2. Planned Maintenance System, NTSC P-6252 (U)
3. Commercial Computer Documentation Set NTSC P-6253 (U)

PERSONNEL:

Maintenance Men: Three (3) ET or Equiv (E)
Instructors: One (1) AW1 or (E) & 1 to 3 NFO
Operators: Instructor-Operated
Trainees: One (1) COTAC, One (1) TACCO, One (1) SENSO

CONTRACT IDENTIFICATION:

Manufactured by Link Tactical Simulation Division of CAE-Link Corp., Silver Spring, MD, under NAVAIRSYSCOM Contract No. N00019-87-C-0148.

LOCAL STOCK NUMBER:

6940-LL-C00-6904

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