



THROTTLEMAN WATCHSTATION TRAINER, DEVICE 19A8

TRAINING CATEGORY:

PROPULSION OPERATOR TRAINER

ORIGINATING AGENCY:

NAVSEA

SECURITY CLASSIFICATION:

Device 19A8 is unclassified.

INTENDED USE:

The Throttleman Watchstation Trainer serves to provide the Machinist Mate (MM) a means to practice hands-on operations, develop confidence and demonstrate skills in performing safe and correct operating procedures.

PURPOSE OF DEVICE:

Device 19A8 provides a realistic replica of the Throttleman Watchstation as an environment for training personnel for duty on the FF1052 and similar class ships. The total trainer system

includes the replica Watchstation as the Trainee Station, a digital computer system to operate the station, an Instructor Station, and an Audio Communication System.

Device 19A8 is a full sized replica of the Watchstation found in the current FF1052 class vessels.

FUNCTIONAL DESCRIPTION:

Provides an accurate representation of the operational FF1052 environment. A digital computer simulates the operation of the Throttleman Watchstation. Inputs from the Throttleman Trainee and Instructor Stations is processed by mathematical model of the steam plant. The simulated outputs of this model are sent to facsimile gauges, indicators, and alarms on the Watchstation Console and the Motor Control Panel.

Additionally, a high resolution monitor and software graphics routine is used to simulate propellor shaft rotation.

DIRECTORY OF NAVAL TRAINING DEVICES

The inputs to the trainer VME computer are electrical signals generated by the simulated Throttleman controls. Outputs from the VME computer system go to electrically controlled simulated pressure gauges, indicators, and alarms.

PHYSICAL INFORMATION:

Number of Pieces: Two (2) Major
Six (6) Minor

Instructor Console:

	Sizes	Weight
Desk	60" x 30" x 29"	200 lbs.
Chair	36" x 36" x 36"	50 lbs.
Term.	19" x 13" x 14"	23 lbs.
Card Cage	7" x 15" x 15"	35 lbs.
Prntr	21" x 15" x 6"	13 lbs.

Watchstation Console:

114" x 42" x 76" 2,050 lbs.

Motor Control Panel:

48" x 10" x 24" 50 lbs.

POWER REQUIREMENTS:

120 VAC, Nominal, Single-Phase 47.8 to 63 Hz., 100 AMPS, 12 KVA

PUBLICATIONS FURNISHED:

Operations and Maintenance Instructions
Technical Manual Device 19A8, NTSC P-5891
with supplements (U)

PERSONNEL:

Instructor: Grades E6 - E8

Operator: Instructor Operated

Trainees: Class of up to Ten (10)

Maintenance: One (1) Technician

CONTRACT IDENTIFICATION:

Manufactured by Integral Technologies, Inc,
Hunt Valley, MD under NAVTRASYS-CEN Con-
tract No. N61339-87-C-0141.

LOCAL STOCK NUMBER:

6930-LL-C00-6372