

NO ILLUSTRATION AVAILABLE

FFG-7 PROPELLER CONTROLLABLE REVERSIBLE PITCH MODEL, DEVICE 19E35

TRAINING CATEGORY:

PROPULSION ENGINEERING (Equipment Maintenance)

ORIGINATING AGENCY:

CNET

SECURITY CLASSIFICATION:

Device 19E35 is unclassified.

INTENDED USE:

The device will be a one-fourth (1/4) scale, three (3) dimensional, hand operable mockup of the controllable, reversible pitch ship screw propeller assembly. The mockup will be sectionalized and will include the hub, one (1) complete blade, portions of the remaining two (2) blades, part of the propeller shaft, indications of all the mechanical components, hydraulic components and hydraulic pressure.

Manual controls will be provided for demonstrating the principles of operation. Propeller

pitch will be controllable through a hand operated control, from zero (0) to thirty (30) degrees forward and from zero (0) to fifteen (15) degrees reverse.

Operation of a crosshead will rotate the flanges of the three (3) propeller blade assemblies equally. Two (2) of the propeller blade assemblies will be represented by flanges and truncated propeller blades, the third propeller blade will be complete and removable. After removal of the blade, the air nipple, blade port cover, bearing ring, crankpin ring, and other parts may be removed.

The hub assembly will be sectionalized to reveal the various pistons, bearings and seals. A removable plastic cover will protect the sectionalized areas and can readily be snapped on or off.

Color codes and nomenclature plates will be used to facilitate identification of parts. Maintenance inspection and servicing adjustment and replacement points or sections will be indicated. The various colors used will show contrast and be distinguishable from a distance.

DIRECTORY OF NAVAL TRAINING DEVICES

Controls for activating, deactivating and demonstrating pertinent functions of and/or features of the device, will be appropriately labeled and coded. The controls will be located for easy control by instructor personnel and from a position which will not obscure the demonstration from the trainees.

PHYSICAL INFORMATION:

The device will be constructed of light weight, durable material to allow inter-class movement. It will be designed and constructed to be clearly visible in a standard 20' x 30', 600 square ft. classroom, and to move through a standard 36" x 78" door.

ENVIRONMENTAL CHARACTERISTICS:

The device shall be able to withstand classroom use and shall not be adversely affected in any manner during storage and transportation when under ambient temperatures ranging from -5° to 125° F and relative humidity ranging up to 95%.

INSTALLATION AREA:

The device will be mounted on a swivel casted support stand to provide mobility.

PUBLICATIONS FURNISHED:

An instructor guide for operation and maintenance and a device summary sheet will be provided with the device.

PERSONNEL:

Instructor - One (1)
Trainees - Classroom

CONTRACT IDENTIFICATION:

Manufactured by Bird-Johnson Co., Walpole, MA under NAVTRASYSCEN Contract No. N61339-80-C-0028.

LOCAL STOCK NUMBER:

6910-LL-C00-4996