



GYRO INTEGRATING INERTIAL REFERENCE T/A, DEVICE 6D8

TRAINING CATEGORY:

BASIC SCIENCE (2) (Physics-Nuclear)

ORIGINATING AGENCY:

NAVTRASYSSEN

SECURITY CLASSIFICATION:

Device 6D8 is unclassified.

INTENDED USE:

- (1) To identify all parts of the IRIG.
- (2) To locate spin, torque, and precession axes.
- (3) To illustrate function of parts.
- (4) To demonstrate application of gyroscope as integrating unit.

FUNCTIONAL DESCRIPTION:

The Training Aid, Inertial Reference Integrating Gyro, Device 6D8, is a model of the Inertial Reference Integrating Gyro (IRIG), which is a component part of Training Aid, Guided Missile Demonstrator, Inertial Guidance, Device X3G51.

The model of the IRIG is a double-scale cutaway unit with movable color-coded parts. The device can be used to identify parts and to demonstrate how the gyroscope is utilized to perform an integrating function.

Device 6D8 enables the instructor to demonstrate manually what the IRIG contributes to the function of a stable reference platform in an inertial guidance system.

The device is mounted on a gimbal, and depicts the spinning element viscous fluid, torquer, pickoff, and direction of the input and output axis and other pertinent and important characteristics of a typical inertial guidance gyroscope.

DIRECTORY OF NAVAL TRAINING DEVICES

PHYSICAL INFORMATION:
ADJUSTMENT AND OPERATION:

All parts of the IRIG important to its function can be moved by hand. The parts are color-coded as follows:

Red	(1) Output Pickoff (sensor) (2) Torque Motor (3) Housing
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Red-Blue Balanced Gyro Rotor

Blue	Viscous Fluid
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White	Adjustable Blocks
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Silver	Shafts
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EQUIPMENT REQUIRED:

QTY	NAME/NOMENCLATURE
1	Training Aid Inertial Reference Integrating Gyro, Device 6D8

REFERENCE PUBLICATIONS:

1. NAVEXOS P-2324: Guide for Training Aid, Inertial Reference Integrating Gyro, Device 6D8.
2. NAVEXOS P-2085: Instructor's Guide for Training Aid, Ballistic Missile Demonstrator, Inertial Guidance.
3. Device X3G51: Ballistic Missile Demonstrator, Inertial Guidance (Training Aid).
4. Device 6D7: Pendulous Integrating Gyro Accelerometer (Training Aid Model).

CONTRACT IDENTIFICATION:

Naval Training System Center, Orlando, FL

LOCAL STOCK NUMBER:

6910-LL-C00-3580