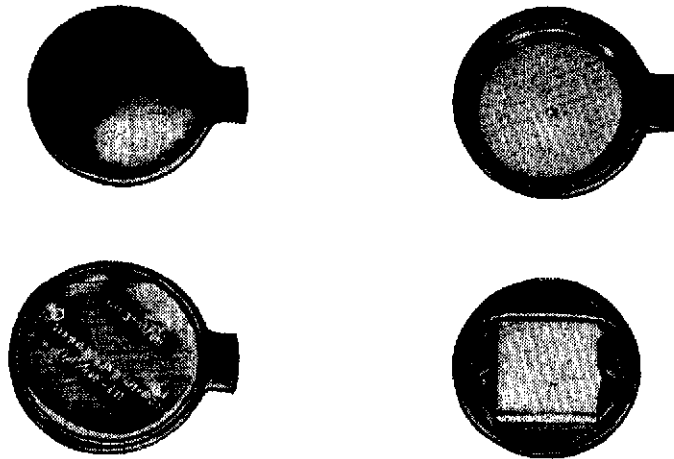


RADIAC DETECTOR DT-60 / P D



FUNCTIONAL DESCRIPTION:

Radiac Detector DT-60/PD is a non-self-indicating personnel dosimeter which is worn about the neck like a pendant. The sensitive element is radiophotoluminescent glass which emits luminescent light under near ultra-violet irradiation after prior exposure to X or gamma radiation. The intensity of this luminescent light is detected and indicated as a roentgen dose by the Radiac Computer-Indicator CP-95 ()/PD.

Radiac Detector DT-60/PD is an integrating device, therefore the readings shown by the CP-95 ()/PD indicate the total amount of radiation to which the detector has been exposed up to the time of the reading. These readings do not indicate the radiation level at any one time.

The detector should not be opened by the wearer. A special tool is provided for use by authorized personnel to open the case for testing and reading.

RELATIONSHIP TO OTHER EQUIPMENT:

Requires an associated Radiac Computer-Indicator CP-95/PD series.

ELECTRICAL AND MECHANICAL CHARACTERISTICS:

Sensitivity: .08 Mev to 1.5 Mev (X and Gamma radiation of energies).

Indication: 0 to 600 roentgens (Detects and integrates the accumulated dose of radiation).

Accuracy: $\pm 20\%$ from .08 Mev to 1.5 Mev Minimum detectable dose: 10 roentgens.

MANUFACTURER'S OR CONTRACTOR'S DATA:

Corning Glass Works, Corning, N. Y. NObsr 57054 (dated 15 Nov 1951) NObsr 57460 (dated 5 June 1952) NObsr 63442 (dated 29 May 1953) NObsr 64235 (dated 18 June 1954) Approximate cost \$.55.

Polaroid Corporation, Cambridge, Mass. NObsr 52704 (dated 30 June 1951) approximate cost \$3.00.

Bausch & Lomb Optical Co., Rochester, N. Y. NObsr 63289 (dated 5 March 1953) approximate cost \$1.00.

Peneberthy Instrument Co., Seattle, Wash. NObsr 63166 (dated 30 December 1952) approximate cost \$1.00.

MAINTENANCE AND CARE:

Since this type radiac-detector is composed entirely of a single glass unit and case, no corrective maintenance can be performed. These dosimeters should be given a calibration check periodically in accordance with sampling methods issued to maintenance activities.

These equipments contain a glass element and must be accorded the maximum care in handling, and when found defective should be replaced by the maintenance activity.

Cleaning and decontamination is easily performed by washing the entire assembly with soap and water.

REFERENCE LITERATURE:

NAVSHIPS 92146 — CP-95/PD INSTR. BOOK

EQUIPMENT SUPPLIED

QUANTITY PER EQUIPMENT	NAME AND NOMENCLATURE	STOCK NUMBER	DIMENSIONS	WEIGHT
1	RADIAC DETECTOR DT-60/PD	F16-D-19884-1031 (NAVY) 8WAA-126000 (AIR FORCE)	1½" DIA. x ½" T.	1 OZ.

TYPE CLASSIFICATION:	UNCLASSIFIED
DESIGN COGNIZANCE:	NAVY, BUSHIPS
PROCUREMENT COGNIZANCE:	NAVY, BUSHIPS
PROCUREMENT INFORMATION:	MIL-R-16153 SHIPS U. S. NAVY
F.I.I.N.	
STOCK NO.	F16-D-19884-1031 (NAVY) 8WAA-126000 (AIR FORCE)