U.S. Department of Transportation
United States Coast Guard

Commandant
United States Coast Guard

2100 Second Street, S.W.
Washington, DC 20593-0001
(202)

COMDTINST M8071.1
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COMMANDANT INSTRUCTION M8071.1

Subj: Coast Guard Radiac Program Management

1. PURPOSE. To establish policies and procedures for management of Navy-owned radiac equipment being used within the Coast Guard.

2. DISCUSSION. The Naval Electronics Systems Command Headquarters (NAVELEX) supports the Coast Guard's radiac program, except for Coast Guard-owned Port Security Mark III survey instruments that are supported by Commandant (G-WPE) through USCG Supply Center Brooklyn. NAVELEX approves radiac allowances for the Coast Guard and provides guidance for procuring, issuing and maintaining all Navy-owned radiac equipment in coordination with Commandant (G-OMR). This Manual consolidates all NAVELEX instructions that apply to the Coast Guard.

3. ACTION.

   a. Commandant (G-OMR) shall coordinate the Coast Guard radiac program with NAVELEX including radiac allowances for cutters (WAGB, WHEC, WMEC, WLB, WLM, WLV, WPB, WSES and WTGB) and shore units.

   b. District Commanders shall coordinate the radiac program for all vessels and shore units within their district and insure compliance with this Manual.

   c. Commanding Officers and Officers-in-Charge shall insure responsible personnel become familiar with and comply with this Manual.

/s/ T. H. RUTLEDGE
Acting Chief, Office of Operations

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CHAPTER 1. RADIAC SUPPLY PROCEDURES

A. Cutters.

1. These instructions apply to the cutter classes listed in the NAVELEX Coordinated Ships Allowance List (COSAL) (Commandant distribution only): WAGB, WHEC, WLB, WLM, WLV, WMEC, WPB, WSES, WTGB. Cutter classes not listed are included with shore facilities for radiac purposes.

   a. Allowance. Radiac allowances for Coast Guard cutters are developed jointly by Commandant (G-OMR) and NAVELEX and are published in the Cutter Allowance Lists (SICPINST M4441 Series) as Group 9670 and on CALMS cutters as AEL 2-996700399.

   b. Requisitioning. NAVELEX controls all radiac equipment, except for DT-60/PD's which are under SPCC Mechanicsburg cognizance (1H). NAVELEX cognizant equipment (2Z) will be furnished automatically based upon deficiency reports submitted by Commandant (G-OMR). See Chapter 9 for requisitioning DT-60's.

   c. Inventory/Deficiency Reports.

      (1) EICAM/MEASURE. All radiac equipment shall be accounted for using EICAM (Electronics Installation Change And Maintenance System) and MEASURE (Metrology Automated System for Uniform Recall and Reporting). Commandant (G-TES) promulgates EICAM instructions and the Navy issues MEASURE instructions in the MEASURE User's Manual (OPNAV 43P6). Each unit holding radiac equipment is a separate MEASURE customer and will use one of the following codes to identify the appropriate application:

Sub-Custodian Code	End User Application
CG TRNG	Training
DP CG	Disaster Preparedness
CG LE PS	Law Enforcement/ Port Security

      All radiac holders shall use these reporting systems.

      (2) Active Cutters. Do not submit inventory or deficiency reports. Commandant (G-OMR) and Districts will determine deficiencies by comparing vessel allowances and radiac inventory records compiled from EICAM and MEASURE. Check and verify the annual Electronics Installation Record (EIR) against the cutter's current allowance list for

1.A.1. c. (2) (cont'd) correctness. Turn in excess items following the instructions in paragraph 1-D-1. Submit proper EICAM/MEASURE reports.

(3) New Construction Cutters. Commandant (G-OMR) will request radiacs from NAVELEX and requisition DT-60's from SPCC, Mechanicsburg to fill allowances. Equipment will be ordered far enough in advance to allow for shipment three months before the scheduled completion date. Any shortages in NAVELEX controlled equipment will be filled automatically as equipment becomes available.

d. Allowance Changes. Changes to unit allowance lists for new items or increased quantities will be met in the same manner as for new construction cutters.

B. Shore Units.

1. These instructions apply to those cutters not listed in paragraph 1-A-1 and all shore units.

a. Use Categories. Two categories of radiac equipment are used by Coast Guard shore units, Disaster Preparedness (DP) and Operational Use (OU):

(1) Disaster Preparedness (DP). Radiacs used before, during, or after hostile action, or for peacetime radiological incidents to reduce the possibility of damage, minimize its effects, and initiate recovery.

(2) Operational Use (OU). Equipment used for any purpose other than DP. Coast Guard OU radiacs are employed as follows:

(a) Port Security. Selected MSO's have an operational requirement for the AN/PDR-27 radiac in addition to Coast Guard-owned MK III survey instruments furnished by Commandant (G- WPE). An operational allowance of two AN/PDR- 27's has been established with NAVELEX for units listed in Chapter 7.

(b) Training. Radiacs needed to support school curriculums or used by Training Detachments in their day-to-day training.

b. Allowances. See Chapter 6.

c. Procurement Procedures. Allowance requests are submitted to NAVELEX by letter as indicated in Figure 1. These letters allow the Radiac Field Manager (RFM) and NAVELEX to have complete records for administration of inventory and maintenance. The following steps are required to

1.B.1. c. (cont'd) establish or modify a radiac allowance:

(1) Requesting Unit.

(a) Initiate letter based upon establishment or change in mission, functions, curriculum, etc. (see Figure 1).

(b) Forward letter plus five copies to NAVELEX via (1) District Commander (Headquarters units submit via District Commander of district in which located); (2) RFM (see Chapter 3); (3) Commandant (G-ODO).

(2) District Commander.

(a) Recommended approval or disapproval.

(b) Forward.

(c) File one copy.

(3) Radiac Field Manager.

(a) Provide technical review.

(b) Forward.

(c) File two copies.

(4) Commandant (G-OMR).

(a) Coordinate request with responsible program manager at Headquarters.

(b) Approve or disapprove request. Forward to NAVELEX.

(c) File one copy.

(5) NAVELEX.

(a) Act on the request, making comment on correction of deficiencies and return approved request to the unit. This forms the allowance authorization.

(b) Provide equipment under priorities developed with Commandant (G-OMR). Requisitions are not required for this equipment but there is a three year lead time required to obtain it.

1.B.1. c. (6) Requesting Unit.

(a) Upon receipt of new allowance, requisition DT-60/PD's as per instructions in paragraph 9-D-b.

(b) Provide District Commander with a copy of the allowance authorization.

(c) Upon receipt of equipment, provide the RFM a list of equipment by model and serial number (except DT-60/PD's and quartz fiber dosimeters which are reported by nomenclature and quantity) so they may be included in the inventory file and maintenance schedule. Include the allowance name.

(d) Submit proper EICAM/MEASURE reports.

C. Coast Guard-Owned MK III Survey Instruments. All Coast Guard owned MK III survey instruments are under direct control of Commandant (G-WPE) and are not part of the NAVELEX radiac program. Commandant (G-WPE) will maintain accountability and issue instructions for this equipment in accordance with the Operating Instructions for GCF-SCB-MK III Survey Instrument CG-273-140.

D. Disposition Instructions.

1. Excess Equipment. Return all excess Navy-furnished radiacs above authorized allowance to nearest activity:

a. Commanding Officer
U.S. Naval Supply Center
Oakland, CA 94625
Mark For: EXCESS TO (unit), FMF: STOCK UNDER 2Z ASSETS

b. Commanding Officer
U.S. Naval Supply Center
Norfolk, VA 23511
Mark For: EXCESS TO (unit), FMF: STOCK UNDER 2Z ASSETS

2. Unserviceable Equipment. Return inoperative or suspected malfunctioning radiac equipment to the Radiac Repair Facility (RRF) without regard to routine maintenance schedules. Defective equipment will be either repaired or replaced (replacement is subject to equipment availability). If beyond economical repair, the RFM will direct survey action to be taken. The Coast Guard unit will survey the item using procedures in paragraph 1-D-4.

3. Obsolete Equipment. Equipment declared unsuitable for its original military purposes is obsolete. This equipment will not be used to fill radiac allowances. See Chapter 5 for shipboard equipment status. Obsolete equipment for shore

1.D.3. (cont'd) units will be deleted by allowance modifications or other correspondence. Survey obsolete equipment under instructions in paragraph 1-D-4.

4. Survey Procedures. Conduct surveys following the Coast Guard Comptroller Manual (COMDTINST M4400.13), Volume III, Part IX, Chapter 4. Additional information:

a. Write in the block titled "Survey Action and Recommendations:"

(1) For unserviceable equipment: Survey authority is the letter from the RFM directing survey action.

(2) For obsolete equipment: Cutters on the NAVELEX COSAL cite NAVELEX COSAL as survey authority. Shore units and cutters not on the COSAL cite allowance modification letter as survey authority.

(3) Include the following statement: "By copy hereof, NAVELEX is requested to furnish suitable replacement when available."

b. Submit survey to the District Commander (or) for approval.

c. Upon receipt of approved survey, transfer the equipment to the nearest RRF.

d. Forward a copy of the completed survey, including final disposition action taken to:

Commander (Code 8153)
Naval Electronics Sytem Command
Washington DC 20360

Shore units and cutters not on the COSAL submit completed survey to the RFM.

e. Upon receipt of completed survey, NAVELEX will provide replacement under existing priorities. Additional requisitions or letter requests are not necessary.

5. Caution. Check to insure removable radioactive check sources are included and accounted for upon turn-in.

6. Inventory Records. Update the unit radiac inventory record whenever equipment is disposed of (excess, turn-in, survey). Submit proper EICAM/MEASURE reports. Units not on the COSAL send a letter report or copy to their District Commander (or).

1.E. Accountability.

1. The Nuclear Regulatory Commission requires strict accountability for all licensed sources of radioactive material. Maintain custody records for all radiac equipment locally for proper accountability and control. Account for removable radioactive check sources separately. Account for all items of Navy-owned radiac equipment through the EICAM/MEASURE reporting systems (removable check sources do not have to be listed separately). The resulting EIR will be used by the District Commander to report shortages to NAVELEX.

From: Commanding Officer, U.S. Coast Guard (Unit name)
To: Commander, Naval Electronics Systems Command (Code 8153)
Via: (1) Commander, _____ Coast Guard District (or)
(2) Radiac Field Manager (see Chapter 3)
(3) Commandant, U.S. Coast Guard (G-OMR)

Subj: Request for Establishment/Modification (as applicable) of Shore Radiac Equipment Allowance

Ref: (a) COMDTINST M8071
(b) (Other directive, i.e. last allowance action letter)

1. Request our radiac allowance as outlined in enclosure (1) be established/modified, as per reference(s) ____. UIC #_____.

2. This radiac equipment will be used (explain how equipment will be used).

3. (Justification - provide complete information such as actual increases/decreases in workload, new missions assigned, requirements for higher/lower intensity or dose measurement with specific parameters, reason for certain parameters by type of radioactivity being measured or detected, material or agent producing the radioactivity, number of students assigned, extent and duration of training, etc.).

4. (If requested equipment is under NAVELEX cognizance, give a realistic deadline delivery date for the equipment. Explain any specific undesirable consequences which may result if the date is not met. "To perform our assigned mission/function" is not sufficient explanation.)

5. (Provide information on predicted changes in requirements.)

Signature

Encl: (1) Shore Radiac Equipment Allowance and Inventory for Operational Use

Figure 1

Enclosure (1) to CO, CG (Unit name) ltr (file) of (date)
1.

Shore Radiac Equipment
Allowance and Inventory for Operational Use
UIC # _____

Equipment Category/ Function	Equipment Nomenclature	Requested Allowance	Current Allowance
(If military model, state category; if commercial describe required parameters)	List if only one specific model will fulfill the requirements described in para. 3 of request		
Example:			
Hi-R Gamma Measuring	An/PDR-43 ( )	0	2
Lo-R Gamma Meas. and Beta Detecting	AN/PDR-27 ( )	0	2
Alpha Survey	An/PDR-56 ( ) 0	2	0
Hi-R Dosimeters	10	20	10

Figure 1-a

CHAPTER 2. END-USER RESPONSIBILITIES FOR RADIAC EQUIPMENT

A. Purpose. To establish responsibilities for maintenance, calibration and custody of Navy-owned radiac equipment.

B. Discussion.

1. Calibration of radiac equipment often requires using potentially hazardous radioactive sources. Radiac Repair Facilities (RRF's) are especially equipped to do maintenance and calibration. They are located at shore activities listed in Chapter 3 and on all tenders for nuclear powered ships.

2. NAVELEX funds RRF maintenance service at no cost to the end-user. NAVELEX does not fund maintenance service by tenders.

3. The no-cost service provided by RRF's applies only to equipment on NAVELEX-approved allowance lists and then only for normal processing authorized in paragraphs 2-C-1-(c) and (d). Other maintenance or calibration assistance will be done on a reimbursable basis when RRF work schedules permit.

C. Responsibilities.

1. Coast Guard End-Users.

a. Do not attempt to repair radiac equipment.

b. Perform a monthly equipment check on all radiac equipment, except for DT-60/PD's (see Chapter 9). Perform this check following instructions in the Operator Section of the equipment's technical manual. Dead batteries may be replaced at the unit.

c. Temporarily transfer radiac equipment to the RRF as specified in paragraph 2-E. Cutters adhere to the intervals as closely as operating schedules permit. Shore activities adhere to the schedules set by their RFM's. Do not allow over 50 percent of any equipment category to be removed for calibration unless the allowance for that item is one.

d. Return inoperative or suspected malfunctioning equipment to the RRF without regard to the routine maintenance schedule. The RFM will direct survey if the item is beyond economical repair. Follow instructions in Chapter 1.

e. Remove batteries before any permanent transfer of radiac equipment. Do not remove batteries before temporary transfer of equipment for calibration.

f. Store radiac equipment in a clean, cool, dry area with controlled access. Provide heating where temperatures may drop below freezing. Use the equipment and

1.C. f. (cont'd) operational check sources only as described in the equipment's technical manual. Be careful to avoid damaging the equipment or losing/removing radiation markings.

g. Any command seeking maintenance service from other than its cognizant RFM must present an inventory of equipment to be serviced and reference the allowance authorization.

h. Do not transfer radiac equipment among end-users without prior authority from the RFM for shore units or Commandant (G-OMR) for cutters.

i. If a radiac set or operational check source is damaged and could conceivably result in the release of radioactive material, restrict the immediate and likely contaminated area and contact the nearest industrial hygienist, radiological safety officer or other safety superintendent to supervise removal. Submit report specified in paragraph 2-F-2.

2. Navy Radiac Facilities.

a. Radiac Repair Facilities.

(1) Maintain and calibrate radiac equipment following instructions issued by NAVELEX.

(2) Assist the RFM in developing maintenance schedules for shore units.

b. Radiac Field Managers. Assist all cutters and shore units, following NAVELEX instructions.

D. Training. Use the equipment supplied to fill nuclear warfare (ship) and DP (shore) allowances to train the personnel who will be required to use the equipment. Some training can be given by assigning these persons the duty of making required monthly maintenance checks.

E. Routine Maintenance Schedule Intervals.

1. Unless specified otherwise by NAVELEX, intervals for temporary transfer of radiacs to RRF's for routine maintenance and calibration shall be as listed in the Metrology Requirements List (METRL), reference (j) and following the MEASURE Program schedule as shown on individual equipment METER cards.

2. Some radiacs (both commercial and military) may not yet be listed in the METRL. Intervals for those equipments will be six months.

1.F. Reports.

1. Loss of Radiac Set and/or Operational Check Sources. Report any loss of a radiac set or operational check source from a radiac set in writing to NAVELEX (Code 8153) via Commandant (G-OMR) when the loss is discovered. This report (RCS-OMR- 2129) shall:

   a. Describe the circumstances surrounding the loss.

      (1) When the missing items were last accounted for.

      (2) The most probable cause for loss.

      (3) Whether a thorough search and research has been conducted.

   b. Describe the action to prevent future losses.

   c. Indicate if a replacement is required.

2. Breakage of Operational Check Source. If an operational check source containing radioactive material breaks, submit a standard accident report. Forward a copy of the accident report (RCS OMR 2128) to Commandant (G-OMR), NAVELEX (Code 8153) and the cognizant RFM.

3. Leak Testing of Sealed Sources. Several radiac instruments contain sealed sources of radioactive material. These are licensed to the Coast Guard by the Nuclear Regulatory Commission for distribution within the service. NRC requires these sources to be tested for leakage or contamination every six months. This test is performed automatically when the radiacs are turned in for routine maintenance and calibration. The RRF will report the test results to the end-user when the equipment is returned. Keep this report with the instrument for future reference. Do not submit to Commandant (G-OMR).

CHAPTER 3. LOCATION OF RADIAC FIELD MANAGERS, SHORE RADIAC REPAIR FACILITIES, AND THEIR AREAS OF RESPONSIBILITY

RADIAC FIELD MANAGER	RADIAC REPAIR FACILITY	AREA OF RESPONSIBILITY
Commanding Officer Naval Electronics Systems Engineering Center, Portsmouth (Code 335) PO Box 55 Portsmouth VA 23705 804-444-1591	1. Portsmouth Naval Shipyard NH (POJ)	1. ME, VT, NPTU West Milton, NY, MA (No. of Boston), NH, and NPTU Windsor CT
	2. Naval Submarine Support Facility, New London, CT (NLJ)	2. CT, RI, and MA (So. of of Boston), Boston
	3. Naval Station Rota, Spain (ROJ)	3. Europe, North Africa
	4. Philadelphia Naval Shipyard (PHJ)	4. NY, NJ, PA, OH, IN, MI,
	5. Norfolk Naval Shipyard (NOJ)	5. So. VA, NC, KY, Bermuda, Iceland, Newfoundland
Commanding Officer Naval Electronics Systems Security Engineering Center Naval Security Station (Code 450) 3801 Nebraska Ave., NW Washington, DC 20390 202-433-2614	1. Washington Navy Yard (WAJ)	1. DL, MD, No. VA, DC, WV

RADIAC FIELD MANAGER	RADIAC REPAIR FACILITY	AREA OF RESPONSIBILITY
Commanding Officer Naval Electronics Systems Engineering Center Charleston (Code 503) 4600 Marriott Drive North Charleston, SC 29406 803-554-2045	1. Naval Station Mayport FL (MAJ)	1. AL, MS, MO, OK, GA, MN, WI, KS, AR, LA, TX, TN, FL, IA, IL, SC (less Charleston), PR, Caribbean, Panama Canal
	2. Charleston Naval Shipyard (CHJ)	2. Charleston area only
Commanding Officer Naval Electronic Systems Engineering Center, San Diego (Code 3334) PO Box 80337 San Diego, CA 92138 714-235-2520	1. NAVELEXSYSENGCEN San Diego (SDJ)	1. So. CA (less Long Beach Naval Shipyard)AZ, NM
	2. Long Beach Naval Shipyard CA (LBJ)	1. LB Naval Shipyard area only
Commanding Officer Naval Electronic Systems Engineering Center, Vallejo (Code 352) Vallejo, CA 94592 707-554-5747	1. Mare Island Naval Shipyard Vallejo CA (MIJ)	1. No. CA, NV, CO, UT
	2. Puget Sound Naval Shipyard Bremerton WA (PSJ)	2. AK, ID, WA, OR, MT, WY, ND, SD, NB

LOCATION OF RADIAC FIELD MANAGERS, SHORES RADIAC REPAIR FACILITIES, AND THEIR AREAS OF RESPONSIBILITY (cont'd)

RADIAC FIELD MANAGER	RADIAC REPAIR FACILITY	AREA OF RESPONSIBILITY
Commanding Officer Naval Electronics Engineering Activity, Pacific (Code 330) Box 130 Pearl Harbor, HI 96860 808-474-6209	1. Pearl Harbor Naval Shipyard HI (PEJ)	1. HI, Australia, NZ, Antarctica
	2. Naval Shore Electronics Engineering Activity Yokosuka JA (YOJ)	2. Japan, Okinawa, Korea, Taiwan
	3. Naval Ship Repair Facility, Guam (GUJ)	3. Marianas
	4. Naval Ship Repair Facility, Subic Bay (SBJ)	4. Philippines, SE Asia, Diego Garcia

LOCATION OF RADIAC FIELD MANAGERS, SHORES RADIAC REPAIR FACILITIES, AND THEIR AREAS OF RESPONSIBILITY (cont'd)

CHAPTER 4. RADIAC REPAIR FACILITY MAINTENANCE PRIORITIES

These priorities apply to all radiac maintenance work:

PRIORITY	APPLICATION
1	Nuclear Power
2	Radiological Safety
3	Medical
4	Radiography
5	Nuclear Weapons Handling and Storage
6	Explosive Ordnance Disposal Teams
7	Coast Guard Port Security
8	Mobile Construction Battalion Disaster Preparedness allowance items
9	Nuclear Accident Teams in Disaster Preparedness organization
10	Nuclear Warfare (Ship) allowance items
11	Disaster Preparedness (Shore) allowance items
12	Stock purification
13	Reimbursable work for non-Navy activities (see note 2)

NOTES:

1. Priority 7 is for MSO's; cutters are included in priority 10; and shore units are included in priority 11.

2. Priority 13 work will be covered by a written agreement, clearly stating this priority. NAVELEX encourages cross- servicing agreements to the extent that the added work does not reflect adversely on the RRF's primary mission. RFM's will determine the amount of this type work which will be done. When priority 10-12 is restricted by a shortage of NAVELEX funds, priority 13 may be given precedence.

3. Training allowance items shall be given the same priority as the application for which the training is intended. If stock purification is required to fill a higher need, the amount of work required to meet that need shall be given the appropriate priority.

4. These priorities apply equally to work done for units on a reimbursable basis and to NAVELEX funded work. Work will be performed on the most equitable basis possible within a given priority, considering factors like cutter sailing dates and end-user's work schedules.

5. In emergency situations RRF's are authorized to exchange radiac equipment on a one-for-one basis.

6. NW equipment maintenance for cutters deploying overseas will be considered as priority 5.

7. Deferment of work due to a shortage NAVELEX funds will be limited to priorities 10 thru 12. RMF will perform work in priorities 10-13 to the extent funds and labor allow. When NW/DP radiacs cannot be processed, it will be held until processing can be done (if delays would be minor) or returned to the end-user without processing. All radiac equipment must be tested for surface contamination but can be returned without recalibration. All items returned without full processing will be tagged with information on work done, citing this manual as authorization for deferment of the work not done.

CHAPTER 5. OPERATIONAL STATUS OF PORTABLE RADIAC EQUIPMENT (SHIPBOARD ONLY)

Definitions:

STANDARD: Most advanced and satisfactory equipment, preferred for procurement.

SUBST STD: Substitute Standard. Approved for service use, but without satisfactory military characteristics as STANDARD equipment. May be procured to supplement the supply of STANDARD equipment.

LMTD STD: Limited Standard. Approved for service use, but without satisfactory military characteristics as STANDARD or SUBST STD, but are useable substitutes. Complete major units will not be procured, but parts may be procured if necessary and economical to maintain complete major unit in serviceable condition throughout reasonable life expectancy.

OBSLSNT: Obsolescent. No longer has satisfactory military characteristics but must be continued in service pending availability of improved replacements. Do not procure units or parts for maintenance. However, spare parts common to other equipment in the supply establishment may be used for maintenance.

OBSOLETE: Unsuitable for original military purpose. Expedite disposal of stocks in all cases.

ITEM:	Dosimeter Charger	Reader Casualty Dosimeter	Shipboard Radiac Set Fixed
STANDARD:	PP-4276/PD, A	CP-95/PD	AN/PDR-65
SUBST STD:			
LMTD STD:		CP-95A/PD	
OBSLSNT:			
OBSOLETE:	PP-311/PD 354B, C, D, E	CP-95B/PD	AN/SDR-1, 2

ITEM:	Dosimeter Indicating 0-200 mr	Survey Meter Beta/Gamma Low Range	Survey Meter Alpha
STANDARD:	IM-9E/PD F, G, H	AN/PDR-27J Q, R, S	AN/PDR-56B C, D, E, G
SUBST STD:			AN/PDR-56A
LMTD STD:		AN/PDR-27P	AN/PDR-56
OBSLSNT:			
OBSOLETE:	IM-9/PD, A B, C, D, IM-50/PD	AN/PDR-27, A C,CY, D, E, F G, H, L	AN/PDR-10, A, B, C, D

ITEM:	Survey Meter Gamma High Range (Tactical)	Dosimeter High Dose Indicating	Dosimeter Non-indicating
STANDARD:	AN/PDR-43B C, D, E	IM-143/PD IM-143A/PD	DT-60/PD C, D
SUBST STD:			
LMTD STD:		CDV-742	
OBSLSNT:	AN/PDR-43 43A		
OBSOLETE:	AN/PDR-T1B, AN/PDR-18, A, B, IM-3/PD	IM-94/PD	DT-60/PD

CHAPTER 6. SHORE UNIT EQUIPMENT ALLOWANCE GUIDE

RADIAC	APPLICABLE FOR AREA	APPLICABLE FOR PERSONNEL	MONITORING EQUIPMENT	REQUIREMENTS FOR UNITS
AN/PDR-27	X	X	X	Two sets/500 personnel (2 minimum)
AN/PDR-43	X	X	X	One set/100 personnel (2 minimum)
AN/PDR-56	X	X	X	Two sets/1000 personnel (2 minimum)
CP-95/PD		NA		One unit/500 personnel
DT-60/PD	X	X		1.1 times personnel
IM-143/PD	X	X		0.1 times personnel
PP-4276/PD	NA			One unit/25 IM-143/PD

CHAPTER 7. MSO OPERATIONAL RADIAC ALLOWANCE

Because of present and anticipated shipments of radioactive material, the following MSO'S have an operational radiac allowance of two AN/PDR-27s. Procedure for recommending changes is contained in Chapter 1.

SHORE RADIAC ALLOWANCE: TWO AN/PDR-27's (48) total

CCGD1	MSO	BOSTON MA
	MSO	PORTLAND ME
CCGD5	MSO	WILMINGTON NC
	MSO	BALTIMORE MD
	MSO	HAMPTON ROADS VA
CCGD7	MSO	CHARLESTON SC
	MSO	SAVANNAH GA
	MSO	MIAMI FL
	MSO	TAMPA FL
CCGD8	MSO	MOBILE AL
	MSO	GALVESTON TX
	MSO	CORPUS CHRISTI TX
	MSO	PORT ARTHUR TX
CCGD9	MSO	BUFFALO NY
	MSO	CHICAGO IL
	MSO	CLEVELAND OH
	MSO	TOLEDO OH
	MSO	DULUTH MN
	MSO	MILWAUKEE WI
CCGD11	MSO	LONG BEACH/ LOS ANGELES CA
	MSO	JACKSONVILLE FL
CCGD12	MSO	SAN FRANCISCO CA
CCGD17	MSO	VALDEZ AK
	MSO	ANCHORAGE AK

CHAPTER 8. PROCEDURES GOVERNING THE POSSESSION AND USE OF OPERATIONAL CHECK SOURCES OF RADIOACTIVE MATERIAL IN RADIAC SETS

A. Radioactive Check Sources: the following radiacs which contain radioactive check sources do not require leak tests:

NAME	ISOTOPE AND QUANTITY
AN/PDR-43, 43E	Kr-85, 100 uci
AN/PDR-43B, 43C, 43D	Kr-85, 80 uci
AN/PDR-56	Th-232, 2.8 uci
AN/PDR-56A, 56c, 56D	Th-232, 3.2 uci
AN/PDR-56B	Th-232, 1.2 uci
AN/PDR-56E, 56G	Th-232, .5 uci
CDV-700	U-238, 0.013 uci

B. Procedures:

1. Do not remove or otherwise tamper with the operational check source unless authorized by NAVELEX.

2. Do not remove labels or other markings on radiac sets. Only RRF's are authorized to change the labeling of radiac sets.

3. Report any loss of a radiac set containing an operational check source or of an operational check source from a radiac set in writing to NAVELEX 8153 using the format in Chapter 2. Immediately conduct a search for the lost equipment to insure no person will receive inadvertent internal or external radiation exposure. Report the search results to NAVELEX 8153. Units with MEASURE, submit a delete METER card to document the loss, writing "LOST" in Block 20 "REMARKS".

4. Do not transfer radiac sets with check sources from one activity to another except for periodic calibration or permanent disposal. Each unit possessing these radiac sets ensure they are leak tested every six months. A label is attached to the radiac or an entry is made on the certificate of calibration when a leak test is performed. This informs the end-user that the equipment has been leak tested.

5. Do not dispose of or permanently transfer any radiac set unless authorized by either an RFM or NAVELEX.

CHAPTER 9. DT-60/PD DOSIMETERS

A. General.

1. The DT-60/PD Personnel Dosimeter used together with the CP-95/PD Radiac Computer-Indicator, provides information about the dose of gamma radiation received by individuals, so that:

   a. Commanders can determine which personnel may be used in future operations involving radiation hazards.

   b. A permanent record is furnished of total exposure between recorded readings. These records may also be useful in the settling of disability claims involving radiation sickness.

   c. Personnel can be notified of the amount of radiation they have received.

2. The DT-60/PD is permanently assigned to the person it is issued to. Since the maximum reading obtainable from the DT- 60/PD - CP-95/PD system is 600 roentgens (usually fatal if received in one dose) the device should be good for the person's lifetime. Do not turn in for reissue to another person. Personnel should retain their dosimeter when separated from the service. If records are lost, the dosimeter itself records the individual's cumulative dose.

3. The DT-60/PD - CP-95/PD system does not substitute for the personnel dosimetry program required for those who are occupationally exposed to ionizing radiation.

4. The DT-60/PD is used to determine the amount of exposure an individual receives several hours after being exposed. Because these dosimeters can only be read using the computer-indicator CP-95/PD, they cannot be used to control entry to hazardous areas on a tactical basis or for making decisions for operational purposes.

B. Custody. Place DT-60/PD's in appropriate storage in the custody of the Damage Control Assistant (DCA) (shipboard) or the Disaster Preparedness Officer (DPO) (shore units). When issue is directed, the custodian supervises the issue and maintains records. He provides the medical and personnel officers of the command the information they need for health and service records.

C. Storage and Maintenance.

1. Due to the ages of these dosimeters, inherent readings of rather high magnitudes are common, even without exposure to radiation, especially if they have been opened and the glass handled. The DT-60/PD cannot be calibrated against a known source of radiation because they will not return

9.C.1 (cont'd) to a prior reading. They record cumulative exposure. Therefore, to establish a reference point upon which to record the subsequent radiation exposure of an individual, observe and record the reading on each device before issue. Dosimeters reading 75R or less have enough range remaining (525R) to justify keeping the device.

2. Read unissued DT-60/PDs at least once/year with the CP-95/PD, and record the observed readings. These readings should be made between 72 and 82 degrees Fahrenheit for greatest accuracy. If the reference point reading exceeds 75R wash the glass with water. Don't issue the dosimeter if it still exceeds 75R.

3. The following procedures are recommended so the most current reading will be in an individual's health record at the time of issue and to expedite emergency issue:

   a. Secure a tag to each unissued DT-60/PD similar to that depicted below:

DT-60/PD	Issued to
_____	_____
Serial	Name
_____	_____
Reference	Unit
_____	_____
Date Read	Date Issued

   b. Read dosimeters annually and record readings on the tag.

   c. When the dosimeter is issued, advise the individual of the significance of the device and proper care. Remove the tag, fill in the reverse and deliver to the custodian of the individual's medical record for entry on the proper form.

D. <u>Disposal and Requisitioning</u>.

1. DT-60/PDs which read above 75R even after washing should be returned in groups of ten or more to the supporting RRF (do not ship to NAVELEX). The shipping list should include the serial number and reading of each instrument. Forward copies of the list to the cognizant RFM and NAVELEX (Code 8153) so inventory records may be adjusted. Local records, MEASURE and EICAM records must also be updated.

9.D. 2. Requisition replacement DT-60/PDs from SPCC Mechanicsburg, FSN 1H6665009789637 (cost $1.30 each). Use a "D" signal code (column 51), NO fund code (column 52-53) and write "NAVELEXINST 4440.10A of 4 MAR 75" in the remarks block.

E. Issue. Commanding Officers/Officers-In-Charge shall:

1. Issue DT-60/PDs to Coast Guard military personnel when operating conditions demand. When deciding to issue the DT- 60/PD, weigh operational hazards against the expense involved in mass issuing and replacement.

2. Issue DT-60/PD to Coast Guard civilian employees under above conditions if:

a. They are enrolled members of the DP organization; or

b. They are designated to remain at their posts under emergency conditions; or

c. Their work involves proximity to possible radiological contaminating accidents.

F. Dosimeter Data. The DCA and DPO shall record dosimeter readings and provide the information to command and medical department personnel.