NAVAIR
Radiological
Affairs Support
Program (RASP) AND
NAVAL AIRCRAFT
RADIOACTIVE
MATERIALS PERMIT
REQUIREMENTS
MANUAL

This manual is to be used in addition to the NAVSEA S0420-AA-RAD-010 (RAD-010) and NAVAIRINST 5104.2.

#### **FOREWORD**

This manual is issued to prescribe responsibilities and guidance for the Naval Air Systems Command (NAVAIR) Radiological Affairs Support Program (RASP). NAVAIRINST 5104.2 and this manual are the official NAVAIR policy for RASP.

The following instructions are cancelled:

NAVAIRINST 5104.1 CH-1A NAVAIRINST 5100.8B

Local supplements to amplify this manual may be issued. A local supplement shall not contradict or repeat information contained in this manual or NAVSEA S0420-AA-RAD-010 (RAD-010).

Forward recommended changes to this manual to:

Radiological Affairs Support Program ATTN: Radiation Safety Officer, 7.10.1 Infrastructure Business Operations 22145 Arnold Circle Bldg. 404 Suite 101 Patuxent River, MD 20670-1541

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Copies of this manual may be obtained via the MyNAVAIR/Web/site, located under Instructions and Notices at: https://mynavair.navair.navair.navy.mil/portal/server.pt

Assistant Commander for Corporate Operations and Total Force

NAVAIR M-5104.2 September 2015

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#### REFERENCES

- (a) NAVSEA S0420-AA-RAD-010 (RAD-010)
- (b) COMNAVAIRFORINST 4790.2
- (c) NAVAIR 01-1A-16-1, Nondestructive Inspection Methods, Basic Theory
- (d) Title 10, Code of Federal Regulations, Part 19, 20, and 30
- (e) MCO 5104.3B, Marine Corps Radiation Safety Program
- (f) Title 49, Code of Federal Regulations
- (g) DoD 4500.9-R, Defense Transportation Regulation, Part II, Chapter 204
- (i) NAVSUP PUB 505, Preparing Hazardous Material for Military Air Shipments
- (j) NAVMED P-5055, Radiation Health Protection Manual
- (k) Federal Acquisition Regulation, Part 23.6
- (l) DoD 4715.6-R, Low Level Radioactive Waste Disposal Program
- (m) NAVAIRINST 5104.2

## CHAPTER 1 OBJECTIVE AND BACKGROUND

#### 1. Purpose

- a. This manual implements policy and procedures set forth in NAVAIRINST 5104.2 for the Naval Air Systems Command (NAVAIR) Radiological Affairs Support Program (RASP) per references (a) through (m). This manual and references (a) and (m) provide policy, procedures, and responsibilities on radiological controls for industrial applications of radioactive materials and sources of ionizing radiation and requirements for weapons systems procured by Naval Aviation Enterprise (NAE), which contain Nuclear Regulatory Commission (NRC), licensed radioactive by-product materials.
- b. This manual applies to all Naval Air Systems Command (NAVAIR), which includes NAVAIR Headquarters (NAVAIRHQ), Competencies, the Program Executive Officers (PEOs), Program Managers, AIR (PMAs), subordinate commands, and field activities who:
- (1) Develop and/or procure weapons systems or equipment that contain NRC licensed radioactive sources, by-product materials, or ionizing radiation producing equipment. Those sources include both NRC and Navy Radioactive Material Permit (NRMP) permitted material) licensed radioactive material, naturally-occurring and accelerator-produced radioactive material, radioactive commodities, radioactive waste, and machine sources (e.g., cabinet X-ray systems, industrial X-ray machines, particle accelerators, flash X-ray, pulsed X-ray, laboratory analytical devices such as X-ray diffraction, electron microscopes, X-ray florescence; and other equipment capable of producing ionizing radiation).
- (2) This manual also covers all Navy and Marine Corps organizations involved with the requisitioning, possession, handling, use, storage, inventory, and disposal of items which are covered under NAVAIRHQ NRMPs process.

#### 2. Background

a. Reference (a) details the Department of the Navy (DON) RASP and the DON Master Materials License, issued by the NRC, to control the receipt, acquisition, possession, use, and transfer of NRC licensed radioactive materials. It also outlines the establishment of the Navy Radiation Safety Committee (NRSC) to implement the NRMP system. The NRMP system provides NRSC guidance in granting permits for Navy and Marine Corps commands to acquire, receive, possess, use, store, transfer, or dispose of NRC licensed radioactive materials. NAVAIR is permitted by the NRSC to be the permit holder for NRC licensed radioactive material integrated into Naval Aviation Weapons systems.

- b. Through the issuance of a Master Materials License, the NRC has delegated to DON the regulatory authority for administrative control of radioactive material. Reference (a) describes the NRSC and tasks the Commander, Naval Sea Systems Command (NAVSEA) to issue instructions and guidance to regulate the use of radioactive material within the Navy and Marine Corps. Reference (a) also tasks the NAVSEA Detachment Radiological Affairs Support Officer (RASO) (NAVSEADET RASO) to perform inspections to assess compliance, and prepare reports on noncompliance to the NRSC.
- c. Accordingly, NAVAIR applied for and received permits which authorize the use and storage of radioactive material aboard Navy and Marine Corps aircraft, shore facilities, and Navy ships for those systems listed in reference (m). The permits are required to control acquisition, receipt, possession, use, storage, disposal, loss of the radioactive material, and meet requirements set by the NRC and Federal Law. It must be noted by all users of these materials that the basis for NRMP compliance and the Navy's authorization to utilize the items lie with complete inventory accounting.

## CHAPTER 2 RESPONSIBILITIES

#### 1. NAVAIRHQ, Echelon III, and IVs Shall:

- a. Ensure compliance with the provisions of this instruction, references (a) through (m), and other pertinent directives and federal regulations, including reference (k), related to the use of radioactive materials and radiation producing equipment;
  - b. Comply with the terms and conditions of their applicable NRMP; and,
- c. Assign, in writing, a qualified radiation safety officer (RSO) and assistant radiation safety officer (ARSO) with direct access to Commander, NAVAIR on matters dealing with radiation safety.

#### 2. PEOs and PMAs Shall:

- a. Comply with the provisions of this instruction and other pertinent directives and federal regulations, including reference (k), related to the use of radioactive materials; and,
- b. Be cognizant of the special concerns that accompany the use of radioactive materials and request advice and/or assistance from the RSO when incorporating radioactive materials into a weapons system.
- 3. <u>Commanders, Commanding Officers, and Officers-in-Charge of NAVAIR Commands and Activities Shall:</u>
- a. Ensure local RASP policy, instructions, and procedures per reference (a) are established when required and are properly endorsed. Follow all conditions set forth in the applicable NRMP:
- b. Designate, in writing, a RSO and ARSO to manage the activity's Radiation Safety Program. The RSO will have direct reporting authority to the commander, commanding officer, or officer-in-charge and will have the authority to shut down radiation operations in the event of unsafe conditions. The RSO and ARSO must be graduates of the appropriate radiation safety officer course conducted by NAVSEA DET RASO and maintain qualifications per reference (a);
- c. Follow the radiation safety policy and guidelines of reference (a) and all requirements for labeling radioactive material and applicable radiological permit and license requirements. In addition, activities that conduct industrial X-ray radiography on aircraft or aircraft components will follow the additional radiation protection provisions of reference (c);

- d. Take action to correct any findings contained in NAVSEADET RASO Compliance Inspection Report or contact the NAVAIR RSO for resolution on matters of disagreement regarding the findings;
- e. Request technical assistance from the Commander, Fleet Readiness Center (COMFRC) or NAVAIR RSO, as appropriate, when the implementations of recommendations are beyond the local activity's capability;
- f. Provide NAVAIR RSO with corrective actions to close RASO Inspection Report findings; all corrective actions for closing action items require approval of NAVSEADET RASO before the finding is formally closed; NAVAIR RSO will report all formally closed items to NAVAIR Inspector General (AIR-00G) for compliance review during command inspections;
- g. Request technical assistance from COMFRC or NAVAIR RSO, as appropriate, on those matters that cannot be resolved by the activity RSO with assistance from NAVSEADET RASO. Coordinate with COMFRC and/or NAVAIR RSO on significant or controversial matters;
- h. Ensure the semi-annual and annual inventories are completed and submitted as required by the NRMP, (normally to the PMA or NAVAIR Commander, Naval Air Forces (CNAF) RSO; and,
- i. Participate with, or respond to actions required by CNAF RSO in response to annual inventories, program reviews, or audits governing radioactive source containing commodities (i.e. Inflight Blade Detection System (IBIS), Electro Optical Tracking System (EOTS), or similar aviation subsystems containing radioactive material), and that are managed under a CNAF radioactive permit.

<u>Note</u>: As of February, 2015, CNAF has assumed overall management of IBIS radiological permit actions, with the exception of IBIS units maintained under NAVAIR's Research, Development, Test and Evaluation (RDT&E) activities.

#### 4. NAVAIR RSO Shall:

- a. Serve as the NAVAIR point of contact for radiological matters concerning NAVAIRHQ NRMPs, and provide radiological safety program assistance to all NAVAIR commands or activities as needed;
- b. Maintain an effective Radiological Controls Program in compliance with the provisions of reference (a) and other pertinent directives and federal regulations;
- c. Implement a radiation protection audit program to ensure compliance with all naval instructions, pertinent directives, and federal regulations;

- d. Maintain copies of inventory for each NAVAIRHQ NRMP indefinitely;
- e. Maintain qualifications per reference (a) and be technically qualified;
- f. Prepare and coordinate new or renewal NRMP applications with NAVAIR Program Offices, to determine acquisition program impacts and special support requirements, and forward applications to NAVSEA DET RASO; and,
- g. Review applicable NAVAIRHQ RASP Inspection Reports and findings; identify each finding with a matching corrective action; prepare and forward the corrective action plan to RASO; track and assure completion of inspection corrective actions.
- 5. <u>AIR-00G</u> and the Infrastructure Safety and Business Operations Department (AIR-7.10.1) Shall:
- a. Include in each activity's inspector general or occupational safety program evaluation, a review of recent RASP inspection noncompliance items and corrective actions with severity levels I, II, or III; and,
- b. Provide the NAVAIR RSO a copy of that portion of each activity's inspection report that identifies items of continued RASP noncompliance.

#### 6. Activity RSOs Shall:

- a. Have direct reporting authority to the commander, commanding officer, or officer-incharge;
- b. Develop, implement, and maintain an effective RASP that complies with Navy and Marine Corps directives and federal regulations, and the conditions of any NRMP issued to the command or activity;
  - c. Have authority to shut down radiation operations in the event of unsafe conditions;
  - d. Provide technical assistance within their activity and to subordinate activities;
  - e. Coordinate resolution of site deficiencies with NAVSEA DET RASO; and,
- f. Provide program management information to NAVSEA DET RASO and NAVAIR RSO as requested.

#### 7. Activity RSO Supervisor Shall:

- a. Have a basic understanding of the RASP; and,
- b. Perform oversight of the RSO to ensure they execute their duties.
- 8. <u>Program Directors, Designated Program Managers, Program Coordinators, Directorate</u> Directors, and Office and Division Directors Shall:
- a. Be cognizant of the special concerns that accompany the use of radioactive materials and machine sources of ionizing radiation per this instruction; and,
- b. Request advice and/or assistance from the NAVAIR RSO as soon as it becomes apparent that radioactive material or other sources of ionizing radiation need to be incorporated into systems, subsystems, equipment, or devices to support NAVAIR's mission.

#### **CHAPTER 3**

#### AUDITS, SURVEILLANCES, AND ANNUAL PROGRAM REVIEWS (APRs)

- 1. <u>Audits, Surveillances and Annual Program Reviews (APRs)</u>. RASP audits, surveillances, and APRs improve safety, reduce RASP violations, and prevent mishaps.
- a. RSOs shall complete semi-annual audits per reference (a) and the applicable NRMP for their operation. NAVAIR Activity RSOs shall use the NAVAIR 5104/1 (5/2015), Semi-Annual Radiation Safety Program Audit form as the official audit checklist. Subordinate commands and field activities are granted permission to create a local form if necessary to complete their semi-annual audits. Audits shall be documented and maintained per reference (a).
- b. Supervisors responsible for operations subject to RASP controls shall conduct and document a surveillance of operations at least quarterly, per reference (a). Activity RSOs shall review the findings of supervisor surveillances.
- c. Activity RSOs shall conduct and document surveillances of RASP operations no less than quarterly.
- d. Activity RSOs whose commands conduct open facility x-ray radiography shall also conduct a surveillance of open facility operations every three months. Operations shall not be conducted solely to meet this requirement.
- e. NAVAIR and Activity RSOs will conduct an APR annually, conformant with reference (a), section 2.10.
  - f. Consult reference (a) for record keeping requirements.

## CHAPTER 4 RADIOLOGICAL DEFICIENCY REPORT (RDR) PROGRAM

#### 1. NAVAIR Radiological Deficiency Report (RDR) Program

- a. RDRs or a Command equivalent program approved by NAVSEA DET RASO provide a means to identify and correct RASP deficiencies and abnormal conditions; document and track the completion of RASP improvements; and allow for correction of hazards at the lowest level before they cause a mishap or develop into violations. RDRs should be used profusely within a RASP program by all employees, PEOs, PMAs, commanders, and RSOs to:
- (1) Document all deficiencies, hazards, conditions, and improvement items associated with the command's or activity RASP;
- (2) Ensure supervisors take appropriate actions to correct deficiencies and abnormal conditions; and,
- (3) RSOs and ARSOs categorize and review each RASP deficiency as part of the semiannual (or annual) audit, and identify trends as needed for correction.
- b. The level of effort for the RDR program within NAVAIR activities should correspond to the complexity and scope of the RASP at the command or field activity. NAVAIR Commands and Activities shall document the RDR process using NAVAIR 5104/2 (5/2015), RDR Deficiency Form and 5104/3 (5/2015), RDR Log. Subordinate commands and field activities are granted permission to create a local form if necessary. Logs shall be documented and maintained per reference (a).

Note: RDR events categorized as "Incidents" are reportable events per reference (a).

## CHAPTER 5 OPERATING AND EMERGENCY PROCEDURES

- 1. <u>Operating and emergency procedures</u>. Operating and emergency procedures for each RASP radiation source have been developed and can be found within:
  - a. References (b) and (c);
  - b. Appropriate NAMP aircraft maintenance manual;
- c. Appropriate Naval Air Training and Operating Procedures Standardization manuals (NATOPS);
  - d. The corresponding NRMP;
- e. Standard Operating Procedures (SOP). Activities shall develop a SOP for ionizing radiation producing equipment at their command or activity that meet requirements contained in reference (a); and,
- f. General and specific guidance concerning operating and emergency procedures may be found in reference (a).

## CHAPTER 6 RADIOLOGICAL POSTING AND LABELING

- 1. <u>Radiological Posting and Labeling</u>. Reference (d) requires all activities and persons, who receive, possess, use, or transfer materials covered by a NRMP to prominently post certain documents, ensuring clear visibility. The documents, notices, and forms posted pursuant to this section shall appear in a sufficient number of places to permit individuals who receive, possess, use, or transfer material covered by a NRMP to observe them on the way to or from any particular location to which the document applies. The documents shall be conspicuous and replaced if defaced and/or altered, reference (m) provides a list of required postings.
- a. NRC Form 3, "Notice to Employees", can be downloaded at: <a href="http://www.nrc.gov/reading-rm/doc-collections/forms/#NRC">http://www.nrc.gov/reading-rm/doc-collections/forms/#NRC</a>
- b. A copy of any notice of violation involving radiological working conditions, proposed imposition of civil penalty, any order by the NRC, and any response to the violation.
- c. The following shall either be posted in the same location or if posting of a document specified below is not practicable, the activity may post a notice that describes the document and states where it may be examined:
  - (1) Parts 19, 20, and 21 of reference (d);
- (2) Current applicable NRMP held by NAVAIR, the permit conditions, any amendments, and this instruction; and,
- (3) The operating procedures applicable to licensed activities as set forth in the appropriate maintenance manuals.

## CHAPTER 7 NAVAL AIRCRAFT RADIOLOGICAL PERMIT REQUIREMENTS

- 1. <u>Naval Aircraft Radiological Permit Requirements</u>. The following items are required for the proper management of NAVAIRHQ NRMPs listed in chapter 8, table 1.
  - a. Asset Management
- (1) All end users and stocking activities having licensed items on hand will comply with pertinent procedures and instructions for each item permitted to NAVAIR.
- (2) Naval Inventory Control Point Philadelphia (NAVICP-PHILA) is responsible for properly coding all items in chapter 8, table 1 as radioactive. The NAVICP-PHILA shall ensure that the items are issued restricted, maintain inventories, and control records.
- (3) No new purchases of specifically licensed radioactive items or changes in inventory management of the radioactive items listed in chapter 8, table 1 may be made by NAVICP-PHILA without the approval of the NAVAIR RSO.
- b. Repair. Items held under NAVAIR permits are not repairable by Navy and Marine Corps personnel. Unserviceable items, not damaged or broken, shall not be opened and shall be either turned in to supply for shipment back to manufacturer or disposed of per reference (l).
- c. <u>Use</u>. Users and maintenance personnel should refer to the Illustrated Parts Bulletins and maintenance instruction concerning installation and use of the items listed in chapter 8, table 1. Unbroken or undamaged items installed on aircraft or in the supply system should present no radiological hazard to personnel during normal handling, servicing, or use.
- d. <u>Damaged or Defective Items</u>. Damaged or broken items are hazardous and must be handled accordingly. Only personnel wearing rubber gloves shall handle broken parts. The parts shall be placed in double sealed containers pending disposal. Items damaged or broken due to aircraft accidents shall be recovered where practicable and disposed of per this instruction, reference (a), and the applicable NRMP for the material.
- e. <u>Transfer</u>. Items may not be transferred from Navy or Marine Corps custody except to persons or firms licensed by the NRC or Licensed Agreement State to receive them. The Defense Logistics Agency is authorized by a NRC license to store these items for the Navy and Marine Corps. However, if items are to be transferred to another service, that service must possess a valid permit or license for that item. Local inventory control authority must authorize all transfers and possess written certification, which complies with reference (d), Part 30.41 (c) and (d), prior to authorizing a transfer. This information shall be retained on file locally until the

NRSC terminates the NRMP. Interservice and interdepartmental agreements concerning naval aircraft shall comply with this instruction.

- f. <u>Shipment</u>. Items may not be shipped unless they are packaged, marked, and transported following references (f) through (g), as applicable. To preclude violating international shipping regulations, items containing radioactive materials being shipped overseas, or to forward-deployed commands, shall be sent via military transport.
- g. <u>Storage</u>. Reference (d) requires that licensed materials be secure from unauthorized removal or access. Access to radioactive material shall be restricted to authorized personnel only, and the material shall be stored in a secured location. Licensed material not in a secured area shall be under constant surveillance by authorized personnel. Copies of the items listed in chapter 8, table 1 shall also be conspicuously posted in the vicinity of any areas containing licensed radioactive material.
- h. <u>Disposal</u>. Disposal actions shall follow the Low Level Radioactive Waste Program contained in reference (l) and procedures established by and available from the NAVSEA DET RASO. The NAVAIR RSO must be notified of disposal actions involving items governed by this instruction.
- i. <u>Losses</u>. The NAVAIR RSO shall be notified by naval message of the loss of any items. The report must include the following: a description of circumstances surrounding the loss (Include reporting activity, unit identification code, date, location, aircraft type, aircraft identification, part number, serial number, and events leading up to the loss), potential exposure of the general public, actions taken to recover the material, disposition or probable disposition of the material, and measures that will be adopted to ensure against future loss. Items not recovered from accident scenes due to unpractical situation shall be reported as lost.
- j. <u>Inventory</u>. Each NAVAIRHQ NRMP will have its own requirements on inventory frequency (semi-annual or annual) and information that shall be recorded. Semi-annual and/or annual inventories shall be submitted to the appropriate PMA and NAVAIR RSO for record keeping and reconciliation. Accordingly, all activities that hold the following materials are required to report their inventory:
  - (1) Tritium or Krypton-85, Isolites on KC-130 Aircraft (Annually on 15 September).
- (2) Americium 241, found within laser target designator/ranger series within the AN/AAS-38 NITEHAWK, Common United States (U.S) Navy Name Targeting Forward Looking Infrared (TFLIR) on F/A-18 Aircraft; AN/AAQ-25 Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN) on F-14, S-3 and research aircraft including P-3s; AN/AAQ-30, Targeting Sight Sensor (TSS) on research aircraft; AN/AAQ-28, LITENING pod; Electro Optical Targeting Sensor (EOTS), on the F-35 Joint Strike Fighter; and the AN/AAQ-33

SNIPER/ATP/PANTERA on F-35,F-18,F-16 aircraft, (Semi-Annual 15 September and 15 March).

- (3) Strontium-90 (Sr90), IBIS on H-53 Aircraft (Semi-Annual, 15 November and 15 May). Inventories shall include date, radioactive material, nomenclature (e.g., Forward Looking Infrared Radar (FLIR) Isolite, IBIS), unique identifier (IBIS, Isolites and TFLIR report serial number for source, TSS report part number for turret), location and total number. CNAF is now responsible for the full inventory of the Sr90 used in the H-53 aircraft.
  - (4) Inventories shall be reported to NAVAIR, Patuxent River MD Attn:
    - (a) Tactical Airlift Program (PMA207) for KC-130 Isolites.
    - (b) F/A-18 and EA-18G Program (PMA265) for F/A-18 TFLIR.
    - (b) Maritime Patrol and Reconnaissance Aircraft (PMA290) for S-3/research LANTIRN.
    - (b) H-53 Heavy Lift Helicopter Program (PMA261) for H-53 IBIS.
    - (b) H-1 Light Attack Helicopters (PMA276) for TSS).
- (5) The appropriate Program Management Office (PMO), via the NAVAIR RSO, will coordinate with the CNAF RSO to assure a complete IBIS inventory is maintained. Provide copy to AIR-7.10.1 and NAVSEADET RASO on all inventory reports.
- k. <u>Personal Safety</u>. Reference (j) shall be complied with in all matters relating to radiation health protection.
- 1. <u>Training</u>. Training shall be conducted locally by the RSO as specified in the individual NRMP for the IBIS and Isolites. This training shall include a description of the source material and its associated hazards.

# CHAPTER 8 LIST OF NAVAIR NAVY RADIOACTIVE MATERIAL PERMITS (NRMP)

NRMP Number	Title and Description
19-00019-T2NP	Litton Systems Model AN/AAS-38 series, Laser Target Designator/Ranger Pod on F/A-18 Aircraft Targeting Forward Looking Infrared (TFLIR)
19-00019-T3NP	Litton Systems Model AN/AAQ-25, Low-Altitude Navigation and Targeting Infrared System for Night ( <u>LANTIRN</u> ) on S-3 and research aircraft including P-3's.
19-00019-T4NP	Isolite and Drogue Lights, United States Radium LAB 562-11A, Isolite containing 25 millicuries of Krypton 85, and Lockheed 42000PD Isolites, containing 500 millicuries of Tritium.
19-00019-T5NP	In-Flight Blade Inspection System, 500 microcuries of Strontium 90 (Sr90), General Nucleonics Inc, P/N: 12210-1 or 12220-1
19-00019-W2NP	Laser Target Designators/Ranger Series found with LANTIRN, Targeting Sight Sensor, TFLIR, SNIPER, Electro Optical Targeting Sensor, LITENING, used within a Research, Development, Test and Evaluation environment within Naval Air Systems Command activities. Generally contain (2) QSA Model AMM or AMM.1001H foil sources of Am241, with up to 12 microcurie each.

Table 1

## CHAPTER 9 RADIATION PROTECTION ELEMENTS

- 1. <u>ALARA</u>. Every member of the Command shall use, to the fullest extent practicable, procedures and engineering controls based upon sound radiation protection principles ensuring occupational doses and doses to members of the public are ALARA.
- 2. <u>Radiation Protection Dose Limits</u>. Radiation exposures and internal intake limits shall be maintained per references (a) and (j).
- 3. <u>Radiation Health Program</u>. Reference (j) specifies the radiation health requirements applicable to Navy and Marine Corps radiation protection programs. Under the current set of NAVAIRHQ NRMPs, enclosure (1), medical examinations and personnel monitoring are not required by the NRMP. NAVAIR members should consult with their local, activity's RSO to determine health program requirements for other radiological activities covered under reference (a).
- 4. <u>Radiation Safety Training</u>. Radiation safety training shall be completed as applicable, per reference (a), section 2.8, for the individuals and/or groups listed in reference (m), chapter 2x.
  - a. Command Management or Leadership;
  - b. RSO and ARSO;
  - c. Radiation Workers;
  - d. Contamination Workers;
  - e. Non-Radiation Workers;
- f. Members of the public and other organizational personnel working in proximity to RASP controlled areas; and,
  - g. Radioactive Material Shipper Training (if applicable).

**Note**: Consult reference (a) section 2.26 for training record keeping requirements.

5. <u>Logs and Records</u>. Utilization Log guidance can be found in reference (a). RASP records will be constructed and maintained per reference (a).

#### 6.. Surveys and Inspections

- a. Radiation protection surveys are conducted to determine radiological conditions before, during, and after work. Surveys within NAVAIR Commands and Activities will conform to procedures outlined in reference (a) and locally developed procedures.
- b. Inspections provide a means of compliance while operating under NRMP conditions. RASP inspections will be conducted by the NAVSEA DET RASO, but command personnel may assist with the process. The inspection process contained in reference (a) will be followed.
- 7. <u>Incidents and Emergency Planning</u>. See reference (m), chapter 9.Radiological incidents can range from acute exposures to unauthorized disposals. Reference (a) provides a complete radiological incident list. NAVAIR Commands and Activities that contain radioactive hazards shall identify conditions and develop local emergency response plans commensurate with the hazards present. These plans will be reviewed and updated annually, and drills conducted as necessary, per reference (a), section 2.23.

#### 8. Reports and Notifications

- a. All NAVAIR Commands and Activities shall upon discovery of any incident identified in reference (a) immediately report its occurrence to NAVSEA DET RASO. Initial reporting shall be done by telephone. Follow up reports shall be in writing within ten days. The report shall include the required information in reference (a). In addition, incidents involving radioactive material permitted under NAVAIRHQ permits shall be reported to the NAVAIR RSO at (301) 757-2133. Voice mail is acceptable. A written report shall also be submitted to the NAVAIR RSO. These reports may be in addition to any other serious incident or mishap reporting that is required by Command authorities.
- b. NAVAIR Command and Activity RSOs will furnish a complete RASP radioactive material inventory to NAVSEA DET RASO annually no later than 31 January of each year for the material possessed by the Command or Activity on 31 December of the previous year, (see reference (a), 2.27.3).