



## DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND  
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NAVAIRINST 5104.2  
AIR-7.10.1

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### NAVAIR INSTRUCTION 5104.2

From: Commander, Naval Air Systems Command

Subj: NAVAL AIR SYSTEMS COMMAND RADIOLOGICAL AFFAIRS SUPPORT PROGRAM AND NAVAL AIRCRAFT RADIOACTIVE MATERIALS PERMIT REQUIREMENTS

Ref: (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, Subpart 23.6  
(l) DoD 4715.6-R, Low Level Radioactive Waste Disposal Program

#### 1. Purpose

a. To establish policy and procedures for the Naval Air Systems Command (NAVAIR) Radiological Affairs Support Program (RASP) per references (a) through (l). This instruction and reference (a) provide policy and responsibilities for NAVAIR 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. This is a major revision and should be reviewed in its entirety.

b. To delegate technical authority to Assistant Commander for Corporate Operations and Total Force (AIR-7.0). This authority allows AIR-7.0 to establish responsibilities and

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implementing procedures for the NAVAIR RASP. NAVAIR RASP supporting documents shall utilize the NAVAIR directives coordination process.

2. Cancellation. This instruction cancels NAVAIRINST 5104.1 CH-1A and NAVAIRINST 5100.8B.

### 3. Scope and Applicability

a. This instruction applies to all NAVAIR, which includes NAVAIR Headquarters (NAVAIRHQ), Competencies, the Program Executive Officers (PEOs), Program Managers, AIR (PMAs), subordinate commands, and field activities.

b. This instruction 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 Navy Radioactive Material Permits (NRMPs) process.

### 4. 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

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aboard Navy and Marine Corps aircraft, shore facilities, and Navy ships for specific systems. 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.

## 5. Policy

a. Reference (a) shall be the direct authority for the NAVAIR Radiological Affairs Support Program in conjunction with this instruction and NAVAIR M-5104.2, NAVAIR Radiological Affairs Support Program Manual. NAVAIR M-5104.2 provides responsibilities and procedures established by AIR-7.0, including specifics for the following:

(1) Radiation Protection Elements. "As low as reasonably achievable" (ALARA), radiation protection dose limits, radiation health program, radiation safety training, logs and records, radiological posting and labeling guidance.

(a) Surveys and Inspections.

(b) Incidents and Emergency Planning.

(c) Reports and Notifications.

(2) Naval Aircraft Radiological Permit Requirements. The items required for the proper management of NAVAIRHQ NRMPs.

b. The use of radioactive material in NAVAIR developed systems or procured equipment should be avoided whenever possible. Radioactive material use requires detailed controls and lifecycle management, including extensive disposal requirements that add significantly to management efforts. When radioactive material must be used, all personnel must apply the principles and engineering controls required to keep radioactive exposures ALARA.

6. Responsibilities. Responsibilities are provided in NAVAIR M-5104.2, chapter 2 and can be downloaded at <https://mynavair.navair.navy.mil/portal/server.pt>.

a. AIR-7.0 shall establish responsibilities and procedures for the NAVAIR RASP utilizing the NAVAIR directives coordination

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process. In exercising this authority, AIR-7.0 shall obtain inputs and concurrence from stakeholders prior to initial issuance as well as prior to issuance of substantive change revisions. Non-substantive, administrative change revisions may be issued by AIR-7.0 without formal coordination and inputs from impacted stakeholders.

b. Upon formal issuance of NAVAIR RASP responsibilities and procedures, all NAVAIR shall review and comply as specified.

7. Communication. Each PMA shall ensure that fleet and/or subordinate commands are able to obtain the documents and materials discussed within this instruction and its references and advise them to post. Address policy and implementation issues concerning this instruction to Command Safety and Business Operations (AIR-7.10.1), attention NAVAIR RSO.

8. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per SECNAV Manual 5210.1, Department of the Navy Records Management Manual.

9. Review. This instruction will be reviewed by AIR-7.10.1 annually and recommendations or cancellation will be provided to the Commander.

10. Forms. The following forms will be used in the Radiation Safety Program. Local forms are authorized.

a. NAVAIR 5104/1 (5/2015), Semi-Annual Radiation Safety Program Audit; NAVAIR 5104/2 (5/2015), RDR Deficiency; and NAVAIR 5104/3 (5/2015), RDR Log can be downloaded from Navy Forms Online at:

<https://navalforms.documentservices.dla.mil/web/public/home>

b. NRC 3, Notice to Employees can be downloaded at:  
<http://www.nrc.gov/reading-rm/doc-collections/forms/#NRC>

  
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