

**BY ORDER OF THE COMMANDER
EGLIN AIR FORCE BASE**



AIR FORCE INSTRUCTION 48-148

**EGLIN AIR FORCE BASE
Supplement**

**27 AUGUST 2025
Aerospace Medicine**

IONIZING RADIATION PROTECTION

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.e-Publishing.af.mil

RELEASABILITY: There are no releasability restrictions on this publication

OPR: 96 OMRS/SGXB

Certified by: 96 MDG/CC
(Colonel Bradley Brough)

Supersedes: AFI48-148_EGLIN
AFBSUP, 20 September 2018

Pages: 8

AFMAN 48-148, 20 July 2020, is supplemented as follows:

This supplement implements and extends the guidance in AFMAN 48-148, *Ionizing Radiation Protection*, and also incorporates AFMAN 40-201 and DAFMAN 48-125. **Note:** See AFMAN 48-148. It provides instructions and establishes policies and procedures for managing the Eglin Air Force Base (AFB) Ionizing Radiation Protection Program. This instruction applies to all units assigned and attached to Eglin AFB including AFRC, ANG, tenants, and contracted units. It provides guidance, procedures, precautionary measures, and responsibilities for the control of RAM and radiation-producing devices. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System.

SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed.

1.1.1. **(Added)** This supplement provides specific policy, instruction and guidance for the protection of Eglin AFB installation personnel from sources of ionizing radiation. It requires control of RAM and radiation-producing devices (i.e., diagnostic x-ray machines) to safeguard the health of military and civilian populations, while permitting maximum benefits from their use. The effectiveness of these programs depends on consistent and conscientious safety efforts of the material/device users.

1.3.1. **(Added)** The requirements of this supplement are intended to protect Airmen, civilians, and contractors living or working on the Eglin AFB installation as well as members of the general public present on the installation.

1.4.4.5. **(Added)** Limit exposure to ionizing radiation at Eglin AFB to levels that are ALARA.

1.5.2.4. **(Added)** Interventions will be performed under the guidance, permission, and supervision of the Installation Radiation Safety Officer (IRSO).

2.10.4.1.1. **(Added)** The IRSO will have the authority to suspend installation operations involving RAM that pose a significant health risk to personnel, are in clear violation of regulations or requirements, or can negatively impact United States Air Force (USAF) operations, material, or real estate.

2.10.4.3.3. **(Added)** At Eglin AFB, the installation radiation safety supplement is published as this supplement and also satisfies paragraph 2.9.12.5. of AFMAN 40-201.

2.10.4.4.1.1. **(Added)** The MDG ARSO will annually conduct an audit of their Permit, IAW AF/Inspector General (IG) or NRC guidance and brief the Permit CC (96 MDG/CC) on results, with the IRSO in attendance. Additionally, the ARSO will provide a copy of the audit report to the IRSO and RIC, within 30 days of the briefing.

2.10.4.5.1. **(Added)** At Eglin AFB, the installation radiation safety supplement is published as this supplement and also satisfies paragraph 2.9.12.5. of AFMAN 40-201.

2.10.4.8.1 **(Added)** IAW AFMAN 40-201, paragraph 2.9.3., the IRSO will have access to all areas containing RAM governed by AFMAN 40-201.

2.10.4.9.1. **(Added)** This authority may be delegated to the ARSO for applicable programs in the MTF.

2.10.4.13 **(Added)** Act as central POC for all requests to use RAM or install radiation-producing devices, including those by contractors.

2.10.4.14. **(Added)** Report to the Radioisotope Committee (RIC) those portions of the incident that pertain to the AF involvement in the event of contractor loss or release of RAM, and/or suspected overexposures to ionizing radiation from RAM.

2.10.4.15 **(Added)** Maintain applicable inventories of RAM and radiation-producing devices, using the RAM Management Information System database.

2.10.4.16. **(Added)** Serve as the POC for all RAM shipments into and out of the installation. Coordinates requests for radioactive waste disposal to the Air Force Radioactive Recycling and Disposal (AFRRD) Office (88 ABW/CEV) at Wright-Patterson AFB, OH or the United States Army (USA) Morris Consolidation Facility (MCF), at Rock Island Arsenal, IL as appropriate.

2.10.4.17. **(Added)** Serve as the sole authority for contacting AFMC/SGXB, the USAF RIC, or the NRC regarding reportable events. This authority may be delegated to the PRSO for their applicable programs. Reports to the RIC incidents involving contractor loss or release of RAM, and/or suspected overexposures to ionizing radiation from RAM.

2.10.4.18. **(Added)** Oversee annual permit audit performed by MTF ARSO.

2.10.4.19 **(Added)** Report any incidents to 96th Test Wing Safety Office as required. The individual's injury disclosures to the 96th Test Wing Safety must be tracked IAW DODM 6025.18, *Implementation of the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule* DOD Health Case Programs, 4.4 a. and k., and DHAI 5400.01, Enclosure 2.6.c. Safety personnel shall ensure additional reporting is accomplished IAW current requirements. A flight surgeon and/or aerospace physiologist shall conduct a human factors evaluation of the incident/accident.

2.11.1.1. **(Added)** Send copies of Unit Radiation Safety Officer (URSO) appointment letters to 96th Operational Medical Readiness Squadron (96 OMRS)/Bioenvironmental Engineering (SGXB) and the IRSO.

2.11.7.1 **(Added)** Notifies the IRSO of potential violations of this instruction, of unsafe work practices involving radiation sources, or of accidents or incidents involving radiation.

2.11.9.1. **(Added)** Ensures unit personnel who receive, possess, distribute, use, transfer, or dispose of RAM observe the requirements of this instruction, federal, local, and USAF policies and regulations. Ensures notification to the IRSOs is given prior to the receipt of RAM or radiation-producing devices.

2.11.10.4.1 **(Added)** Coordinate with the IRSO for assistance in developing unit radiation safety training and operating instructions (OI).

2.11.10.8 **(Added)** IAW Nuclear Regulatory Commission (NRC) regulations, AFMAN 40-201 and AFMAN 48-148 for the duration of Eglin AFB's existing RAM Permits, appoints Permit Radiation Safety Officers (PRSO) and/or Radiation Safety Officers (RSO). For the 96th Medical Group (96 MDG) PRSOs will also serve as the functioning URSOs.

2.11.10.9. **(Added)** Through the IRSO and PRSO, advise all applicable staff members on radiological health and safety.

2.11.10.10. **(Added)** Must maintain and update an inventory of all RAM, Generally Licensed Devices (GLD), and radiation-producing devices, respectively, within the organization. The URSO or PRSO must contact the IRSO whenever changes occur (i.e., when a new device is purchased, placed into service, or removed from service). URSOs will ensure that new radiation-producing devices are not placed into service after installation until 96 OMRS/SGXB, Bioenvironmental Engineering (BE) ensures safe use via scatter survey.

2.11.10.11. **(Added)** Will ensure workplaces using GLDs adhere to the provisions of 10 CFR 31.5., and work with the RSO to ensure all GLDs are registered with the RIC.

2.13.3. **(Added)** Contractor use of RAM: The contractor (through the contracting officer) must notify BE and the IRSO at least 30 days prior to the RAM entering the installation.

2.13.4 **(Added)** Contractors (through the contracting officer) will report any loss or theft of RAM from their possession to BE and the IRSO.

2.18.9. **(Added)** Must ensure workers new to the work center, or new to radiation duties, are enrolled in the OSL program prior to engaging in radiation duties (preferably as a step on the in-processing checklist). When workers depart station or are no longer assigned to work involving radiation, workplace supervisors shall inform BE of the member's change in status and removal from the OSL program.

4.1.2.3. **(Added)** Units with RAM on the Eglin AFB RAM inventory and units with radiation producing devices will develop and follow a written radiation training plan meeting the requirements in AFMAN 48-148, paragraphs 4.1.2.1 – 4.1.2.2. This plan will be reviewed by the IRSO to ensure all requirements are met.

4.1.2.4. **(Added)** Radiation procedures and instructions will be reviewed by 96 OMRS/SGXB during regular workplace occupational health assessments (annually if defined as a Category 1 workplace per AFI 48-145, *Occupational and Environmental Health Program*, or every 36 months if defined as a Category 2 workplace per AFI 48-145). Unit RSOs should ensure they are reviewed annually and updated as necessary.

4.3.1.2.1. **(Added)** Eglin AFB IRSO will review all ALARA and workplace specific training plans initially and whenever changes to the training are made.

4.3.1.2.2. **(Added)** Eglin AFB IRSO will assist in the development of ALARA and workplace-specific training plans when requested.

4.3.1.3.1. **(Added)** Units providing radiation training to their workers will maintain records of training and attendance for five (5) years.

4.5.2.3.1. **(Added)** Current Investigation Action Levels established at Eglin AFB are listed in **Attachment 2** of this supplement.

4.7.3. **(Added)** Units that require disposal of RAM will contact the Eglin AFB IRSO for instructions. The Eglin AFB IRSO will handle all disposal requests to the Air Force Radioactive Recycling & Disposal (AFRRAD) Office and ensure proper disposition procedures for the particular type of RAM are followed.

5.2.3.1. **(Added)** The Eglin AFB IRSO will assess public exposures generated from activities which use or produce ionizing radiation. These assessments will be done initially when a new process is first introduced on base, and any time that a process involving ionizing radiation is changed in such a way that radiation exposures to the public are expected to differ from the initial assessment. Unit or Permit RSOs will inform the Eglin AFB IRSO if such changes take place; (i.e., an x-ray machine is moved into a different room). 96 OMRS/SGXB will maintain permanent records of these assessments.

MARK A. MASSARO,
Brigadier General, USAF
Commander, 96th Test Wing

Attachment 1 (Added)**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, 22 March 2020

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AFB—Air Force Base

AFI—Air Force Instruction

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFRRD—Air Force Radioactive Recycling and Disposal

BE—Bioenvironmental Engineering

CC—Commander

DOE—Department of Energy

ESOH—Environmental, Safety and Occupational Health

GLD—Generally Licensed Device

IAL—Investigative Action Level

IAW—In Accordance With

IG—Inspector General

INRAD—Intrinsic Radiation

LLD—Lower limit of detection

MCF—Morris Consolidation Facility

NRC—Nuclear Regulatory Commission

OI—Operating Instruction

OPR—Office of Primary Responsibility

OSHA—Occupational Safety and Health Administration

OSL—Optically Stimulated Luminescence Dosimeters

PA—Privacy Act

POC—Point of Contact

PRSO—Permit Radiation Safety Officer

RIC—Radioisotope Committee

SGXB—Bioenvironmental Engineering

SORN—System of Records Notice

URSO—Unit Radiation Safety Officer

USA—United States Army

USAF—United States Air Force

96 OMRS—96th Operational Medical Readiness Squadron

96 MDG—96th Medical Group

Attachment 2 (Added)
ABNORMAL EXPOSURE CRITERIA

Table A2.1. (Added) ALARA Regulatory Levels.

Description	Regulatory Limit	OSL Enrollment
Total effective dose equivalent	5,000 mrem/yr	500 mrem/yr
Shallow dose equivalent	50,000 mrem/yr	5,000 mrem/yr
Dose to an embryo/fetus during the entire pregnancy	500 mrem/gestation	Any radiation worker

Table A2.2. (Added) ALARA Investigational Levels.

Area	Occupational Code	Investigation Level
Radiology	310 & 311	125 mrem/qtr
Urology	312	125 mrem/qtr
Nuclear Medicine	310 & 437	125 mrem/qtr
Cardio-Pulmonary	310 & 318	125 mrem/qtr
All Other Badged Areas	All	50 mrem/qtr
All Pregnant Females	All	10 mrem/mon
Fluoroscopy Procedures	315	375 mrem/qtr

Attachment 3 (Added)**THE IRSO INVESTIGATES LEVELS ABOVE THE INVESTIGATIVE ACTION LEVEL (IAL)**

A3.1. (Added) The IRSO investigates levels above the Investigative Action Level (IAL). The IAL is based on trend analysis for each monitored area. IAW DAFMAN 48-125, paragraph 1.5.1., the IAL should not be lower than the analytical system's lower limit of detection (LLD). USAFSAM/OEA has determined the appropriate LLD for dosimeters issued to Eglin AFB is 0.01 REM. The IRSO and/or 96 MDG ARSO will compare these IALs with ongoing trends at Eglin AFB and adjust the IALs when necessary. Where significant historical data exists, the IRSO may establish a more-stringent investigation level, based off dose histories in these workplaces.