

**BY ORDER OF THE COMMANDER  
934TH AIRLIFT WING**

**934 AIRLIFT WING INSTRUCTION  
48-103**



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**Aerospace Medicine**

**RADIO FREQUENCY RADIATION  
SAFETY PROGRAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This publication implements Air Force Policy Directive (AFPD) 48-1, *Aerospace Medical Program* and Air Force Instruction (AFI) 48-109, *Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health Program* and AFI 48-139 *Laser and Optical Radiation Protection Program*. It provides guidance and procedures for operating fixed and mobile radiation emitters. It applies to all personnel assigned permanently or temporarily to the 934 Airlift Wing (AW). This publication may be supplemented at any level, but all supplements must be routed to the Office of Primary Responsibility (OPR) listed above for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the OPR listed above using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate chain of command. Requests for waivers must be submitted to the OPR listed above for consideration and approval. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

## ***SUMMARY OF CHANGES***

This document has been revised and must be completely reviewed. Changes include emitter locations and procedures, the Office of Primary Responsibility, added Office of Corollary Responsibility.

### **1. Responsibilities.**

1.1. All supervisors of personnel accessing the flight line area will ensure those personnel are informed of this instruction.

1.2. Maintenance personnel using the systems addressed in this instruction are responsible for ensuring safety procedures outlined in **paragraph 3** are followed.

1.3. Maintenance personnel will review the Radiation Frequency (RF) Awareness lesson plan annually.

1.3.1. Supervisors will utilize ARCNet to track RF Awareness training.

1.4. Non-Maintenance personnel with access to the flight line area will be familiar with this instruction.

1.4.1. Documentation for these individuals will utilize their unit's procedures.

### **2. Location Mobile Emitters of Radiation Frequency Radiation:**

2.1. Aircraft parking spots 1 – 9A and hangar areas when aircraft radios, radar or Large Aircraft Infrared Countermeasures (LAIRCM) are operating as applicable.

### **3. Procedures:**

3.1. Radiation warning signs are not required during the operation of any aircraft communication, navigation or radar system.

3.2. Warning signs will be used on the flight line when the LAIRCM system is operated by maintenance technicians.

3.3. Aircraft Ultra/Very High Frequency (UHF/VHF) radios: Keep personnel clear of antennas when transmitting.

3.4. Aircraft Real-Time Information in the Cockpit (RTIC) and Situational Awareness Data Link (SADL) radios: Keep personnel clear of antennas when transmitting.

3.5. Aircraft Tactical Air Navigation (TACAN) system: Keep personnel a minimum of 30 inches from antennas when transmitting.

3.6. Aircraft High Frequency (HF) radio System: Keep personnel clear from top of the aircraft when transmitting.

3.7. Aircraft Radar Warning System: Keep personnel a minimum of 6 feet from front (radiating side) of PLM-4 test simulator during receiver testing.

3.8. Aircraft Low Power Color Radar: Avoid prolonged personnel exposure in front of the nose radome when transmitting.

3.9. Aircraft LAIRCM: LAIRCM maintenance technicians control entry into laser hazard area during maintenance operations.

3.9.1. Do not view any laser source with collecting optics (e.g. binoculars). Eye injury may occur.

3.10. Fuel or liquid oxygen servicing:

3.10.1. Aircraft fuel servicing Technical Order (TO) 1C-130H-2-12JG-10-1, 12-11-01 provides aircraft UHF/VHF radio operation guidance.

3.10.1.1. HF, LAIRCM, and Radar shall not be operated.

3.10.2. Aircraft liquid oxygen servicing Technical Order (TO) 1C-130H-2-12JG-10-2, 12-14-01 prohibits any radio, radar, or LAIRCM system operation.

**4. Overexposure:**

4.1. Any suspected or alleged overexposure will be promptly reported to the following:

4.1.1. Maintenance Operations Control Center at 713-1328/1330/1352; Radio Call Sign: MOC.

4.1.2. Bio-Environmental Engineering (934 MSG/SGPB) at 713-1608/1611.

4.1.3. Immediate Supervisor.

CHRISTOPHER T. LAY, Colonel, USAF  
Commander, 934th Airlift Wing

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 21-101 *AFRC Supplement, Aircraft and Equipment Maintenance Management*, 16 January 2020

AFI 48-109, *Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health Program*, 1 August 2014

AFI 48-139, *Laser and Optical Radiation Protection Program*, 30 September 2014

AFI 33-322, *Records Management and Governance of Records*, 22 March 2020

AFPD 48-1, *Aerospace & Operational Medicine Enterprise*, 6 June 2019

TO 1C-130H-2-12JG-10-1, *Ground Handling Fuel System Servicing and Concurrent Servicing*, 3 December 1990

TO 1C-130H-2-12JG-10-2, *Ground Handling Aircraft Servicing*, 1 January 2019

***Adopted Forms***

AF Form 847, *Recommendation for Change of Publication*

***Abbreviations and Acronyms***

**AF**—Air Force

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Directive

**AFRIMS**—Air Force Records Information Management System

**AW**—Airlift Wing

**ARCNet**—Air Reserve Component Network

**AWI**—Air Wing Instruction

**HF**—High Frequency

**LAIRCM**—Large Aircraft Infrared Countermeasures

**MXG/CC**—Maintenance Group Commander

**OPR**—Office of Primary Responsibility

**RDS**—Records Disposition Schedule

**RF**—Radiation Frequency

**RTITC**—Real-Time in the Cockpit

**SADL**—Situational Awareness Data Link

**TACAN**—Tactical Air Navigation

**TO**—Technical Order

**UHF**—Ultra High Frequency

**VHF**—Very High Frequency