

DEPARTMENT OF THE ARMY
FORT CAMPBELL INSTALLATION
2700 Indiana Avenue
Fort Campbell, Kentucky 42223-5654
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Safety
RADIATION PROTECTION PROGRAM

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1. Purpose

- a. To keep radiation exposures As Low As Reasonably Achievable (ALARA).
- b. To establish policies, responsibilities, and procedures necessary to minimize the exposure of personnel to sources of ionizing and non-ionizing radiation sources. A non-ionizing radiation source is any RF (Radio-Frequency) device, high intensity light, laser system [including Multiple Integrated Laser Engagement System (MILES)], or microwave transmitter within Fort Campbell other than those used for nuclear weapons or medical purposes.
- c. To provide guidance on the accumulation, safe handling, storage, and disposition of all radioactive waste material subject to reporting and disposal.

2. Applicability

This regulation applies to any activity or person on Fort Campbell who possesses or wishes to bring ionizing or non-ionizing radiation sources onto the installation.

3. General

- a. The Army inventory includes a large number of ionizing and non-ionizing radiation sources. Proper

This regulation supersedes CAM Regulation 385-1, dated 23 January 2012

precautions must be taken with all sources of ionizing and non-ionizing radiation; however, most of the ionizing sources contain very small amounts of radioactive material and have only a limited potential for causing injury. Non-ionizing radiation sources contain no radioactive material but proper precautions must still be taken to prevent exposure. TB 43-0116 lists Army inventory items containing ionizing radiation. Technical manuals for these items specify the precautions which must be taken in storing, operating, and disposing of these items. Appropriate technical manuals must be followed when using a non-ionizing radiation source.

b. The Army inventory also includes a limited number of ionizing radiation sources that are designated "Individually Controlled Radiation Sources." These items contain larger amounts of radioactive material, have a greater potential for injury, and require special precautions. Table 1 lists the Individually Controlled Sources.

4. References

Related references are listed in appendix A.

5. Responsibilities

a. The Garrison Commander will:

(1) Appoint in writing a qualified individual to be the Installation Radiation Safety Officer (IRSO) and an alternate IRSO (AIRSO).

(2) Establish an Installation Radiation Safety Committee (IRSC).

(3) Issue Army Radiation Permits (ARPs) and Army Radiation Authorizations (ARAs) as necessary.

(4) Prepare and maintain historical records of location of use or storage of radioactive material on the installation and the responsible activity for that use or storage.

(5) Maintain documentation listing locations categorized as "RF controlled" and "RF uncontrolled" environments as defined by DODI 6055.11.

(6) Maintain an inventory of radiation sources as higher headquarters directs and in accordance with requirements of NRC License conditions or local procedures.

(7) Established written policy and procedures to ensure compliance with radiation safety requirements in applicable regulations and technical publications governing the use of radioactive commodities.

(8) Ensure that Installation Safety Office (ISO), specifically the IRSO, operates and oversees the Installation Radiation Safety Program (IRSP) which includes USAG Campbell and all tenant units assigned to Fort Campbell. The IRSP includes both ionizing and non-ionizing commodities and equipment.

b. Commanders/Directors will:

(1) Determine whether their unit has any ionizing, non-ionizing, individually controlled radiation sources, and/or Nuclear Regulatory Commission (NRC) licensed radiation sources. Ensure they are handled, stored, and maintained in accordance with appropriate TMs and the NRC license.

(2) Notify the Div RSO and IRSO immediately of any incident or accident involving radioactive material commodities to include the loss, theft and destruction of any radioactive material or item.

(3) Ensure all personnel comply with chapter 19 (Laser Operations) of CAM Reg 385-5 (Sustainable Range Program, Safety, and Integrated Training Area Management) when conducting laser operations.

(4) Designate in writing a Radiation Safety Officer (RSO) and an Alternate RSO whose primary duties are to manage the radiation protection program. The RSO will be trained, equipped, and supported with staff commensurate with the extent of his/her responsibilities. Major Unit Command RSOs (Senior Mission - 101st Airborne Division (AASLT) and Major Unit Command Military Tenants - 5th Group and 160th SOAR) should attend the 120 hour Radiological Safety Course. Unit RSOs (Senior Mission Command and Military Tenants) and Civilian Activity RSOs will attend the CECOM 3-day Radiological Safety Course or equivalent Local 1 day course.

(5) Establish a Thermo-luminescence Dosimetry (TLD) service and appoint a TLD custodian in accordance with DA PAM 385-24. This requirement is only for units that have individually controlled radioactive sources.

(6) Establish a Radiation SOP for all operations involving radiation material commodities and to include Non-Ionizing Radioactive Sources (Radio-Frequency (RF) and Optical Hazards (LASERs)).

(7) Provide one copy of all Brigade and Battalion level RSO appointment orders to the IRSO.

(8) Notify the IRSO before turn-in/transfer of individually controlled items.

(9) Ensure that an annual self inspection of the unit (or civilian activity) radiation safety program is conducted. This will be conducted internally by the Battalion or Brigade Chemical Officer, Division RSO, or by the IRSO. Utilize the 101st Airborne Division (AASLT), Command Inspection Program (CIP) Radiation Protection Checklist or equivalent checklist provided by the IRSO. Military tenants will use their MACOM Radiation Protection Checklist or the Fort Campbell Installation checklist, whichever is more restrictive.

(10) Notify the DRSO and IRSO immediately of any suspected or actual exposure to radioactive material, RF or LASERS.

(11) Establish a local radiation safety program that will ensure compliance with all Federal, DOD, ARs and local directives.

(12) Ensure that all radioactive material commodities under their control are properly stored, maintained, used, and accounted for.

(13) Ensure that storage areas for radioactive materials are properly secured, and that storage areas are properly marked and posted IAW with this Cam Reg.

(14) Ensure radioactive material commodities are physically inventoried monthly with date and signatures.

(15) Ensure that all operators of radioactive material commodities are trained IAW the appropriate Technical Manual.

(16) Ensure that training records are maintained for a minimum of 3 years.

(17) Ensure that Chemical Detection Equipment (CDE) information regarding a change of status (annual reconciliation by serial number including cell or drift tube module number, transfer of equipment, lost or suspected lost equipment, inventory gain, ownership change, etc) into the Property Book Unit Set Equipment (PBUSE) system.

c. Commanders, U.S. Army Medical Department Activity/Dental Activity will:

(1) Provide a qualified officer to serve as the RSO and a qualified NCO to serve as the Alternate RSO for ionizing and non-ionizing sources used for medical purposes.

(2) Provide results of the U.S. Army Ionizing and Non-ionizing Radiation surveys to the IRSO when requested.

(3) Develop and maintain a separate SOP for ionizing and non-ionizing sources used for medical purposes and provide a copy to the IRSO.

(4) Ensure medical surveillance as follows:

(a) Personnel potentially exposed to ionizing radiation in their occupational environment will receive medical examinations as required by DA PAM 385-24/DLAR 1000.28.

(b) Personnel potentially exposed to non-ionizing radiation will receive medical examinations as required by AR 40-5, TB Med 524, and USAEHA TG No. 153.

d. The Director, Logistics Readiness Command (LRC) will:

(1) Appoint in writing Activity Radiation Safety Officers (ARSO) to manage the radiation protection program for ISD and IMD Weapons. The ARSOs will be trained and equipped to accomplish this mission.

(2) Obtain the IRSO's guidance and approval for all shipments of radioactive materials.

(3) Notify the IRSO upon receipt of a shipment containing radioactive material. Immediate notification is required when the shipment contains an individually controlled item or a radioactive labeled package

(4) Ensure that vehicles, military or commercial; unloading individually controlled radioactive materials at Fort Campbell are not released until monitored by the IRSO or the ARSO.

(5) Establish a consolidation point to hold radioactive waste items until receipt of disposition instructions for disposal from Headquarters, United States Army, Joint Munitions Command (JMC).

(6) Establish procedures and security to preclude the unauthorized removal or salvage of radioactive material from storage.

e. The Director, Installation Safety Office will provide the IRSO and alternate to provide ionizing and non-ionizing radiation safety support for Fort Campbell.

f. The Corps of Engineers (COE) will ensure commercial contractors under COE jurisdiction comply with the regulations governing the use, transport, and storage of radiation producing devices or materials. Contractors must have a DA Radiation Permit or Department of the Army Radiation Authorization (DARA) prior to bringing RMCs onto Fort Campbell. Permit applications will be forwarded to the IRSO and approved by the Garrison Commander.

g. The IRSO will:

(1) Assist the 101st Airborne Division RSO (DRSO), all major unit command tenant radiation safety officers (TRSO) and civilian activity radiation safety officers (ARSO) at all levels in implementing and managing the Fort Campbell radiation protection program.

(2) Provide guidance on proper working conditions and operating procedures for ionizing and non-ionizing radiation devices.

(3) Inspect and monitor the radioactive materials storage CONEX at the Logistics Readiness Command, Supply and Services Division, as required.

(4) Establish guidelines for procurement, control, safe handling, inspection, storage, disposition, emergency situations, and transportation of all radiation sources on Fort Campbell.

(5) Review and maintain records of proposed uses of ionizing and non-ionizing radiation sources, SOPs, and license applications.

(6) Investigate all ionizing and non-ionizing incidents and accidents. Make recommendations and report findings to appropriate agencies.

(7) Review all requests for transfer of radioactive material and requests to bring radioactive items greater than one micro curie onto Fort Campbell.

(8) Assist the DRSO, all TRSOs, and civilian ARSOs at all levels to ensure exposures to personnel are kept ALARA.

(9) In case of deployments, assist in providing required training to Unit RSOs. This training will provide the Unit RSOs the requirements that are needed to be appointed as a Unit RSO. This training is referred to as the "Fort Campbell Unit Radiation Safety Officer Course". Particulars of this course may be found in ATTRS under CAM-URSO.

(10) Will investigate accidents or incidents involving lost, stolen, broken or damaged radioactive material commodities or malfunctioned safety devices of radioactive commodities.

(11) Will be the Installation Point of Contact for all external evaluations and external visits.

h. The 101st ABN DIV (AASLT) Division Chemical Officer will:

(1) Appoint in writing a Division Radiation Safety Officer (DRSO) and alternate (ADRSO) to provide radiation safety support for Division assets that have completed the 120 hour Radiological Safety Course. Duties include, but are not limited to, conducting radiation training, assist in disposal of unwanted radioactive materials, contamination surveys, transport, inventory, shipping, storage procedures, and wipe testing of ionizing and non-ionizing radiation sources.

(2) Maintain two calibrated Radiac sets.

(3) Maintain membrane filters and vials to conduct wipe tests of equipment suspected of being contaminated and Divisional unit work areas (surveys).

(4) Assist all subordinate units as required and requested.

(5) Will provide to the IRSO a consolidated annual inventory (BDE Level) NLT 15 October, Serial numbers will be required with the inventory. This includes ionizing and non-ionizing producing equipment and material.

(6) Provide required training to Unit RSOs, this training will provide the Unit RSOs the requirements that are needed to be appointed as a Unit RSO. This training is referred to as the "Fort Campbell Unit Radiation Safety Officer Course"; particulars of this course may be found in ATTRS under CAM-URSO.

(7) Responsible for scheduling, class materials and conducting the CAM-URSO course. DRSO will coordinate directly with the IRSO when unable to conduct scheduled training.

i. The Installation Radiation Safety Committee (IRSC) will:

(1) Act as an advisory body to the Garrison Commander to gather and disseminate information, recommend procedures and controls to maintain radiation exposures as low as reasonably achievable (ALARA), and promote Nuclear Regulatory Commission (NRC) license compliance.

(2) Membership includes the Garrison Commander as chair (or designee who is a senior member of the Garrison Commander's staff), the IRSO, 101st Airborne Division RSO, major unit command tenant radiation safety officers (TRSO) and civilian activity radiation safety officers (ARSO).

(3) The IRSC will meet annually and/or at the call of the chair.

j. Unit Radiation Safety Officers (URSO) will:

(1) Receive classroom training from the Division Radiation Safety Officer (DRSO) or Alternate Division Radiation Safety Officer (ADRSO) or the IRSO if the DRSO/ADRSO is unable to provide training.

(2) The URSO is responsible for managing and supervising of the ionizing radiation protection requirements specified in DA PAM 385-24 as well as the non-ionizing radiation protection program specified in AR 40-5, DA PAM 385-24, and DODI 6055.11.

(3) Develop and maintain a unit standing operating procedure (SOP) for storage, inventory, training, disposal, tracking, transportation, contamination surveys if required, leak testing if required, and responding to broken or damaged radioactive devices.

(4) Will maintain the Radiation Safety Program records as required per AR 25-400-2.

(5) Train all operators of radioactive material commodities IAW with the appropriate TMs, to include:

(a) To recognize signs and symbols.

(b) Safe handling procedures.

(c) Emergency procedures.

(d) Biological hazards associated with the particular isotope that the individual will be using.

(6) Ensure all radiation emitting devices are used only by qualified operators.

(7) Manage the inventory of radioactive commodities by submitting an annual radioactive material commodities inventory to the Division RSO, NLT 15 October of every year and by utilizing FC Form 4052. All military and civilian tenants will submit the annual radioactive material commodities inventory to the Installation RSO, NLT 15 October of every year utilizing FC Form 4052. Refer to TB 43-0116 for a listing of radioactive commodities.

(8) Manage the inventory of the Non-Ionizing Equipment Inventory by submitting an annual Non-Ionizing Equipment Inventory to the Division RSO, NLT 15 October of every year and by utilizing FC Form 4052. All military and civilian tenants will submit the annual Non-Ionizing Equipment Inventory to the IRSO, NLT 15 October of every year utilizing FC Form 4052. The Non-Ionizing equipment will subdivide into two categories: Radiofrequency (RF) and Optical (LASERs). A partial list of non-ionizing radiation equipment is listed in Table 2 and TB 43-0133 for identification of RF and LASERs radiation producing equipment.

(9) Immediately report the loss, theft, destruction, or damage of any radioactive material to the next higher RSO and IRSO.

(10) Immediately notify the next higher RSO and IRSO of any suspected or known overexposure.

(11) Request instructions from the IRSO for transfer or disposition of radioactive material commodities or radiation sources.

(12) Control radioactive material commodities and radiation sources by serial number. Coordinate with the Serialization Officer to ensure that all applicable transactions are entered into the DOD Radiations Tracking and Testing System (RATTS) database in accordance with AR 710-3 as required. Also see paragraph 7 for UIT and PBUSE requirements.

(13) Ensures all items are secured (locked) in their storage area and container when not in use.

(14) Ensures that the storage area is properly posted and marked in accordance with paragraph 12.

(15) Know emergency procedures as outlined in paragraph 9.

(16) Know the location of all unit radioactive material commodities at all times. Provide the Unit Movement Officer a copy of FC Form 4246 for movement of radioactive material commodities off of Fort Campbell for military training moves or contingency moves.

(17) All radioactive material commodities that are to be shipped off of Fort Campbell for non-tactical purposes will be shipped out of the Installation Supply Division, Packing and Crating Section.

(18) Ensure all radioactive waste items are processed prior to turn-in. Coordinate with the next higher RSO and IRSO.

(19) Units will provide the fire department a list of radioactive material commodities in their unit, minimum required information; [example - Name of Item (CAM), Number of Items (4), Isotope (Ni-63), Activity (10 mCi), Location and Room Number (Bldg #2170, Room 222)].

(20) Establish and maintain a personnel dosimetry program (when required).

(21) Notify the next higher RSO and IRSO of any forthcoming changes to the unit RSO status.

6. Control of ionizing radiation sources

a. No radioactive material or ionizing radiation producing device may be brought onto Fort Campbell unless it meets one of the following criteria:

(1) must be incorporated in a standard issue item which is authorized by MTOE/TDA.

(2) must be covered by a specific license issued by the NRC to an activity on the installation or by a general license issued by the NRC.

(3) must be authorized by a DA authorization for Army-owned quantities exempt from NRC license.

(4) must be included on a DA radiation permit granted for non-Army agencies in accordance with DA PAM 385-24.

b. Ionizing radiation producing sources will be stored, used, and maintained in accordance with appropriate TMs and/or NRC license.

c. Standard issue items containing radioactive material must be removed from service immediately when found to be broken or unserviceable and turned in accordance with paragraph 9.

d. Unwanted serviceable items will be reported as excess and turned in through the appropriate supply channels to the LRC, ISD. These items will be stored in the ISD radioactive material storage until returned to depot.

7. Unique Item Tracking Radiation Tracking System (UITRATS) procedures

a. Unit Property Book Officers will enter chemical detection equipment (CDE) information regarding a change of status (annual reconciliation by serial number including cell or drift tube module number, transfer of equipment, lost

or suspected lost equipment, inventory gain, ownership change, etc.) into the Property Book Unit Set Equipment (PBUSE).

b. Units performing leak tests (DS/TMDE activities) on CDE will report the results to the Fort Campbell Installation Serialization Officer. The Installation Serialization Officer will input the results into the Unique Item Tracking Radiation Tracking System (UITRATS).

8. Control of non-ionizing radiation hazards

Commanders of activities responsible for the operation or testing of non-ionizing generating equipment will take the necessary measures to ensure the following:

- a. Personnel working in the vicinity of such equipment are informed of potential health hazards.
- b. SOPs pertaining to operational limitations placed on the equipment and control of the radiation field to minimize personnel exposures are published and enforced.
- c. Periodic operational checks are conducted on all radiation safety devices such as alarms, lights, and interlocks installed on or near radiating sources prior to operation. Defective safety devices will be repaired or replaced before continuing operation.
- d. When interlocks and other control or warning devices are bypassed or overridden, operational logs must indicate the purpose and duration.
- e. Safety procedures prescribed in TB Med 523 or TB Med 524, as applicable, are followed.
- f. All non-ionizing radiation areas are properly marked and have proper warning signs and safety switches.
- g. Class 3b or 4 lasers will only be used on a laser approved range. Incorporate TM control measures into risk management planning. Report non-ionizing overexposure accidents to the IRSO.
- h. Class 3b or 4 lasers will not be used force on force unless operated in a training mode which reduces output to a Class 3a or lower. Class 3a control measures will be enforced per the TM. Commanders will ensure that operators follow all warnings, cautions, notes, and control measures specified in the applicable operator manuals.

9. Control/disposal of radioactive material

- a. When material has been determined or suspected to be broken, the following procedures must take place:
 - (1) The item must be double-bagged (plastic). Clear plastic bags are preferred to allow inspection of the device.
 - (2) The bag must be labeled with:
 - (a) "Broken Radioactive Device."
 - (b) Noun Nomenclature or NSN or common name.
- b. Additional information will be required:
 - (a) Name of individual who bagged the item and date of bagging.
 - (b) Name of individual who discovered the item was broken and the date of suspected breakage.
 - (3) Segregate and safeguard the material (secured outside storage area).
 - (4) Immediately notify the Brigade RSO and IRSO upon finding a broken or suspected broken radioactive item.
- c. Submit non-individually controlled items through the appropriate supply channels to the LRC, ISD for turn in.
- d. For individually controlled items, submit the following information to the IRSO:
 - (1) NSN of the item.
 - (2) Number on hand.
 - (3) Nomenclature of item.
 - (4) Other distinguishing information.
 - (5) Radioactive isotope.
 - (6) Activity.
 - (7) Whether or not the device is leaking or suspected to be leaking.
 - (8) Serial number.
 - (9) Actual or estimated age of the item.
- d. Wipe, package, and monitor the items in accordance with applicable TMs or NRC licenses.
- e. Dispose of unwanted radioactive material as follows:
 - (1) Contact the appropriate Brigade RSO to dispose of unwanted radioactive material. The Brigade RSO will then contact the IRSO for disposal. The IRSO will remove the material from the owning unit. The owning unit will ensure correct supply transactions, forms and PBUSE input is initiated. The IRSO will ensure correct disposition procedures are followed, owning units are responsible for shipping costs for radioactive items that are being shipped off the installation for serviceable turn-in or repair.

(2) The IRSO will secure the material in the Fort Campbell Low Level Radioactive Waste (LLRW) storage containers. The IRSO and Alternate are the only personnel authorized to place unwanted radioactive material into the storage containers. The storage containers will be posted and in a fenced secure and controlled area. Tritium items will be stored in a separate container from other radioisotopes. Storage container inventories will be up to date and maintained by the IRSO. The IRSO will periodically contact the US Army Field Support Command (AFSC) for radioactive waste disposal.

10. Transportation of radioactive materials

a. Standard issue items containing radioactive materials (except individually controlled items) may be moved anywhere on or off the installation consistent with the owning activity's mission. The item must be serviceable and used under proper supervision for its intended purpose as specified in the appropriate technical publication.

b. A Radioactive Materials Movement Form (RMMF), FC Form 4246 (Appendix C), will be completed for transport of ionizing radioactive material commodities off of Fort Campbell whether by vehicle, commercial shipment, or military contingency shipment. A RMMF will accompany the equipment for commercial shipments; one copy will be maintained with the owning unit and on file for inspection purposes for 3 years. For military contingency shipments, one copy of the RMMF will be attached to the container contents list, a copy given to the unit movement officer, and a copy filed with the owning unit. Items will not be packed or containerized with food products, explosives, HAZMAT, or photographic film.

c. Off-post transportation of individually controlled items by military vehicle for mission essential purposes may be authorized if:

(1) Name and rank of person responsible for the equipment with knowledge of the radioactive material contained in the item is forwarded to the Brigade RSO, IRSO, and Unit Movement Officer.

(2) Prior to departure/return and upon arrival at destination, the Unit Movement Officer inspects the equipment for damages and documents the findings. A copy of the inspection results will be forwarded to the IRSO upon return to the installation. IRSO or unit RSO will conduct a vehicle/equipment inspection prior to equipment being moved off the installation.

(3) The vehicle is marked IAW the appropriate regulation.

(4) The unit notifies the IRSO on departure and provides the following information:

(a) Transport personnel have been briefed on procedures in case of an accident.

(b) Date of departures and returns.

(c) Destination.

(d) Purpose of move.

(e) Unit inventory of end items containing radioactive material.

(f) Radioactivity per item.

(g) List of TMs and support equipment to accompany the individually controlled item.

d. Off-post transportation of individually controlled items by commercial vehicle will be coordinated with the IRSO to ensure compliance with all regulatory guidelines.

e. Unsealed or leaking sources (unserviceable) will be moved only by the IRSO.

f. Upon receipt of a package containing a non-individually controlled item, the LRC Transportation Officer will telephonically notify the IRSO, and provide a description of the shipment. The IRSO will determine further actions based on the information received.

g. Upon receipt of a package containing one of the individually controlled items listed in table 1, the ISD Transportation Officer will immediately notify the IRSO. The vehicle (military or commercial) must be held until monitored and released by the IRSO. Monitoring must be accomplished within 3 hours of receipt if during normal duty hours or 18 hours if received after normal duty hours. These packages will be labeled in accordance with appropriate TMs and Title 49 (Transportation-Code of Federal Regulations). Action must be taken to prevent personnel from loitering within 10 feet of the package(s).

h. Radioactive materials may be stored in connection with movement as long as they are not stored in the same warehouse section with explosives, flammable materials, photographic film, or unsealed food products.

i. Radioactive material will only be transported on cargo aircraft, not passenger aircraft.

j. The IRSO will, at the request of ISD, inspect and monitor radioactive items being prepared for turn-in and ensure the proper documents are correctly completed in accordance with Title 49 (Transportation-Code of Federal Regulations).

k. Personnel that transport radioactive material commodities by commercial shipments (Federal Express, United Parcel Service, etc.) will receive and successfully complete the appropriate Radioactive Commodities Identification

Transportation Course or equivalent HAZMAT Transportation Course. Refresher training must be conducted every 2 years.

1. Radioactive material commodities will not be transported by POV.

11. Inspections

- a. The IRSO will inspect and monitor the radioactive materials storage CONEX at LRC Supply and Services Division as required.
- b. The DIV RSO and IRSO will conduct annual inspections of the Brigade radiation safety programs.
- c. Inspections and other surveys will be conducted as needed.

12. Storage

All radioactive material must be stored and posted in accordance with Title 10 (Energy-Code of Federal Regulations) and Army Regulations.

- a. Two Caution Radioactive Material Signs (1st on the door leading into the room where the items are stored, 2nd on the actual container).
- b. NRC Form 3 Notice to Employees, Appendix E, (on the door leading into the room where the items are stored).
- c. Section 206 "Energy Reorganization Act of 1974" (on the door leading into the room where the items are stored).
- d. Notice(s) of violations – if any (on the door leading into the room where the items are stored).
- e. "Radiation Safety Information Notice" must be filled out and posted on the door leading into the room where the items are stored (Appendix D).

13. Safe handling

Ensure all safe handling techniques are in accordance with appropriate TMs and NRC license.

14. Emergency situations

a. When an emergency situation involving radioactive material occurs at Fort Campbell, the following notifications will be made:

- (1) The Brigade RSO and the IRS.
- (2) In case of injury - hospital.
- (3) In case of fire - fire department.
- (4) In case of explosives-EOD. If a terrorist incident is suspected contact G3 DPTM, IPOD (Cam Reg 525-13).
- (5) In all cases when first responders and fire department actions are required, all life saving measures will be performed as outlined in first responders and fire department Standard Operating Guidelines (SOG).

b. The first few minutes after the discovery of a radiological accident can be the most critical if there are injured persons involved. Personnel present must take immediate action to accomplish the following tasks in order:

- (1) If possible cover your (and victim's) nose and mouth with a cloth to reduce inhalation of radioactive dust.
- (2) Administer life-saving first aid.

c. All incidents involving theft, loss, damage, destruction, accident, disassembly, fire, burial, unauthorized transfer of radioactive material or unauthorized use of any of the Tritium fire control devices, M43A1, ICAM/CAM and M22 ACADA must be reported immediately through the GIRSO to:

TACOM-LCMC, Safety Office
ATTN: AMSTA-CSC-Z
6501 E 11 Mile Road
Warren, MI 48397
DSN: 786-0891
AC: (586) 282-0891

15. Permits, licenses, and authorizations

a. DA PAM 385-24 requires all non-Army agencies to possess a DA Radiation Authorization or DA Radiation Permit, to use, possess, or store, ionizing radiation sources on any federal installation. This may be accomplished by following the steps listed below:

- (1) Forward a request to the IRSO utilizing DA Form 3337.
- (2) Forward a copy of the NRC or state license held by the agency to the IRSO.

- (3) Identify the location where the source will be operated and stored.
 - (4) Identify individuals responsible for operations involving the source.
 - (5) Provide the duration of use.
- b. The IRSO will forward the request to the Garrison Commander for approval IAW DA PAM 385-24.

16. Proponent

The proponent for this regulation is the Installation Safety Office; ATTN IMCB-SO.

GARY J. VOLESKY
Major General, USA
Commanding

Official:



JEFFREY W. YAEGER
Director, Mission Support Element

DISTRIBUTION:
INTRANET

**Appendix A
References**

DOD Manual 6055.5-M
Occupational Medical Examinations and Surveillance Manual

DODI 6055.11
Protecting Personnel from Electromagnetic Fields

AR 25-400-2
The Army Records Information Management System (ARIMS)

AR 40-5
Preventive Medicine

AR 40-13
Radiological Advisory Medical Teams

AR 55-162
Permits for Oversize, Overweight or Other Special Military Movement on Public Highways in the U.S.

AR 700-48
Management of Equipment Contaminated with Depleted Uranium or Radioactive Commodities

DA PAM 385-24
The Army Radiation Safety Program

DA Pam 385-25
Occupational Dosimetry and Dose Recording for Exposure to Ionizing Radiation

DA Pam 385-40
Army Accident Investigations and Reporting

DA Pam 700-48
Handling Procedures for Equipment Contaminated with Depleted Uranium or Radioactive Commodities

TB 43-0116
Identification of Radioactive Items in the Army

TB Med 523
Control of Hazards to Health from Microwave and Radio- Frequency Radiation and Ultrasound

TB Med 524
Control of Hazards to Health from Laser Radiation

TM 3-261
Handling and Disposal of Unwanted Radioactive Materials

Title 10
Energy-Code of Federal Regulations, Parts 0-199

Title 49
Transportation-Code of Federal Regulations, Parts 100-177

Appendix B Glossary

B-1. Accident

The unexpected occurrence in a sequence of events which produces injury, death, radiation exposure, or property damage.

B-2. Alternate Installation Radiation Safety Officer (AIRSO)

A person appointed by the Garrison Commander to act as a stand in when the IRSO is absent. This person must have graduated from the 120-hour Radiological Safety course.

B-3. Department of the Army Radioactive Material Authorization and Written Permit

DA authorization is required for use of any radioactive material (greater than 1 micro curie except Radium which is 0.1 micro curie) used on any installation if the material is not subject to an NRC license. In addition, DA written approval is required for federal and nonfederal agencies (e.g., civilian contractors) to store and use radiation sources on any Army installation.

B-4. Incident

The unexpected release or loss of control of radioactive materials either sealed or unsealed to the environment.

B-5. Individually Controlled Item

An item which must be controlled to the extent that its integrity and location are known by the licensee or his/her designated agents (control points) from its inception into the supply system until its disposal in an authorized waste disposal facility.

B-6. Installation Radiation Safety Officer (IRSO)

A person appointed by the Garrison Commander to manage the Fort Campbell Radiation Safety Program. The scope includes ionizing and non-ionizing equipment of all military, military tenant, civilian activities, Guard/Reserve units, and civilian contractors operating ionizing and non-ionizing commodities on the installation. This person must have graduated from the 120-hour Radiological Safety course.

B-7. Ionizing Radiation

Electromagnetic or special radiation capable of producing ions, directly or indirectly in its passage through matter. For the purposes of this regulation, alpha and beta particles, gamma rays, X-rays, and neutrons are examples of ionizing radiation.

B-8. Installation Radiation Safety Committee (IRSC)

Membership includes the Garrison Commander as chair (or a designee who is a senior member of the Commander's staff), the IRSO, 101st Division RSO, all major unit command tenant radiation safety officers (TRSO) and civilian activity radiation safety officers (ARSO). The committee acts as an advisory body to the Garrison Commander to gather and disseminate information, recommended procedures and controls to maintain radiation exposure as low as reasonably achievable (ALARA), and promote Nuclear Regulatory Commission license compliance.

B-9. Non-ionizing Radiation

This type of radiation comprises the electromagnetic radiation spectrum from radio frequencies through microwaves to visible and ultra-violet light. It includes two categories: radiofrequency (RF) radiation and optical (LASER).

B-10. Unit Radiation Safety Officer

A person appointed by the unit commander to Assist, Advise, Implement and Manage the Unit Level Radiation Safety Program for both ionizing and non-ionizing radioactive material commodities and radiation emitting sources and to supply effective ways to control these hazards.

Appendix C
FC Form 4246, Radioactive Material Movement Form

RADIOACTIVE MATERIAL MOVEMENT FORM						
(For use of this form see CAM Regulation 385-1 The proponent of this form is Command Safety)						
TO		FROM			<input type="checkbox"/> SHIPMENT	MOVEMENT NO.
					<input type="checkbox"/> RECEIPT	
COMMODITY DESCRIPTION						
NO OF CONTAINERS	QTY	NSN	NOMENCLATURE	ISOTOPE	ACTIVITY	TOTAL ACTIVITY
MODE OF SHIPMENT		PHYSICAL CHARACTERISTICS		RADIATION SURVEY RESULTS		
<input type="checkbox"/> AIR <input type="checkbox"/> TRUCK <input type="checkbox"/> RAIL <input type="checkbox"/> WATER <input type="checkbox"/> PARCEL POST <input type="checkbox"/> OTHER		<input type="checkbox"/> SPECIAL FORM <input type="checkbox"/> NORMAL FORM <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS		INSTRUMENT DETECTOR USED: _____ SN: _____ CALIBRATION VOID: _____ SURFACE: _____ mrem/hr BACKGROUND: _____ mrem/hr TRANSPORT INDEX: _____		
WIPE TEST RESULTS						
WIPE TAKEN BY: _____		WIPE ANALYZED BY: _____		REMOVABLE _____ dpm (package)		
DATE: _____		DATE: _____		_____ dpm (equipment)		
				LLD: _____ dpm		
BASIC DESCRIPTION						
<input type="checkbox"/> RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - INSTRUMENTS OR ARTICLES, 7 UN 2011 <input type="checkbox"/> RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - LIMITED QUANTITY OF MATERIAL, 7 UN 2010 <input type="checkbox"/> RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - ARTICLES MANUFACTURED FROM NATURAL OR DEPLETED URANIUM OR NATURAL THORIUM, 7 UN 2909 <input type="checkbox"/> RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - EMPTY PACKAGING, 7, UN 2908 <input type="checkbox"/> RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, NON-FISSILE OR FISSILE - EXCEPTED, 7, UN 3332 <input type="checkbox"/> RADIOACTIVE MATERIAL, TYPE A PACKAGE, NON-SPECIAL FORM, NON-FISSILE OR FISSILE-EXCEPTED 7 UN 2915 <input type="checkbox"/> RADIOACTIVE MATERIAL _____						
LABELING		MARKING(S)			SHIPPING PAPERS	
<input type="checkbox"/> WHITE I <input type="checkbox"/> EXEMPT <input type="checkbox"/> YELLOW II <input type="checkbox"/> YELLOW III <input type="checkbox"/> CARGO AIRCRAFT		<input type="checkbox"/> RADIOACTIVE <input type="checkbox"/> OTHER _____ <input type="checkbox"/> RADIOACTIVE LSA <input type="checkbox"/> UN NUMBER _____ <input type="checkbox"/> OTHER _____			<input type="checkbox"/> INCLUDED AND COMPLETE <input type="checkbox"/> EXEMPT	
24 HOUR EMERGENCY RESPONSE NUMBER IS: (270) 798-9793 (Fort Campbell Staff Duty Officer)						
THE DOSE RATE FOR EACH INSTRUMENT OR ARTICLE IS <10 mrem/hr AT 4 INCHES _____ (Initial)						
CERTIFICATION STATEMENT(S) INCLUDED _____ (Initial)						
REMARKS:						
NAME OF RSO _____			SIGNATURE _____		DATE _____	

RADIATION SAFETY INFORMATION

NOTICE

**NO EATING, DRINKING, SMOKING, OR APPLYING OF
COSMETICS IS PERMITTED IN THIS AREA**

Your Points of Contact for RADIOACTIVE MATERIALS used and/or stored in this area by this unit are:

LOCAL RADIATION SAFETY OFFICER (LRSO)

	PHONE:
--	--------

ALTERNATE LOCAL RADIATION SAFETY OFFICER (LRSO)

	PHONE:
--	--------

INSTALLATION RADIATION SAFETY OFFICER (IRSO)

	PHONE:
--	--------

OTHER CONTACTS:

U.S. ARMY, TACOM- RI (Licensee for fire control devices; CAM; M43A1 CADs, and M22 ACADAs	PHONE: DSN: 793-2965/6228 Commercial: (309) 782-2965/6228
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- 1 - The following signs must be posted where radioactive materials are used, stored, or maintained:
 - * "No eating, Drinking, Smoking, or Applying of Cosmetics Is Permitted In This Area"
 - * "Caution - Radioactive Material" (as applicable)
- 2 - The following documents must be posted in an area that is common to the workplace (i.e., break room, safety board, etc)
 - * Most current NRC Form 3, "Notice to Employees"
 - * Section 206, Energy Reorganization Act of 1974
 - * Notice(s) of Violation -- if any
- 3 - The following documents are available for review locally or by contracting LRSO:
 - * Applicable Standing Operating Procedures (SOPs, Technical Manuals (TMs), Technical Bulletins (TBs) and local regulations.
- 4 - The following documents are available for review by contacting your IRSO:
 - * Nuclear Regulatory Commission (NRC) Licenses and Army Radiation Authorization and Permits (ARA)
 - * Title 10, Code of Federal Regulations (CFR) Parts 19, 20, and 21.



UNITED STATES NUCLEAR REGULATORY COMMISSION
Washington, DC 20555-0001

NOTICE TO EMPLOYEES

STANDARDS FOR PROTECTION AGAINST RADIATION (PART 20); NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS; INSPECTIONS (PART 19); EMPLOYEE PROTECTION

NRC FORM 3
(5-2012)

WHAT IS THE NUCLEAR REGULATORY COMMISSION?
The Nuclear Regulatory Commission (NRC) is an independent Federal agency within the Executive Branch of the United States Government. The NRC is responsible for regulating the activities of nuclear power plants, nuclear reactors, and other nuclear facilities to protect public health, safety, and the environment from the hazards of radiation.

WHAT DOES THE NRC DO?
The NRC's primary responsibility is to ensure that nuclear power plants and other nuclear facilities are operated in a safe and sound manner. The NRC also regulates the activities of nuclear power plant workers, nuclear reactor operators, and other nuclear facility employees to protect them from the hazards of radiation.

WHAT RESPONSIBILITY DOES MY EMPLOYER HAVE?
Your employer has a legal responsibility to protect you from the hazards of radiation. This responsibility includes providing you with a safe and sound working environment, providing you with the necessary training and information to protect you from the hazards of radiation, and providing you with the necessary protective equipment to protect you from the hazards of radiation.

WHAT IS MY RESPONSIBILITY?
You have a responsibility to protect yourself and your fellow workers from the hazards of radiation. This responsibility includes following the safety rules and regulations of your employer, reporting any unsafe conditions to your employer, and using the necessary protective equipment to protect yourself and your fellow workers from the hazards of radiation.

WHAT CAUSES A VIOLATION?
A violation occurs when your employer or you fail to follow the safety rules and regulations of the NRC. This can happen in many ways, such as failing to provide you with the necessary training and information, failing to provide you with the necessary protective equipment, or failing to follow the safety rules and regulations of the NRC.

HOW DO I REPORT VIOLATIONS AND SAFETY CONCERNS?
If you believe that your employer or you have violated the safety rules and regulations of the NRC, you should report this to your employer first. If you believe that your employer is not taking appropriate action to correct the violation, you should report this to the NRC. You can report a violation to the NRC by calling 1-800-695-7403 or by writing to the NRC at the address listed below.

WHAT WILL THE NRC DO?
If the NRC receives a report of a violation, it will investigate the report to determine if a violation has occurred. If a violation is found, the NRC will take appropriate action to correct the violation. This action can include issuing a citation to your employer, requiring your employer to take corrective action, or suspending your employer's license to operate a nuclear power plant.

WHAT CAN THE DEPARTMENT OF LABOR DO?
The Department of Labor (DOL) is responsible for enforcing the Federal Occupational Safety and Health Act (OSHA). OSHA is responsible for protecting workers from the hazards of radiation in the workplace. OSHA can issue citations to your employer if it finds a violation of the OSHA standards, and it can require your employer to take corrective action to correct the violation.

WHAT WILL THE NRC DO?
If the NRC receives a report of a violation, it will investigate the report to determine if a violation has occurred. If a violation is found, the NRC will take appropriate action to correct the violation. This action can include issuing a citation to your employer, requiring your employer to take corrective action, or suspending your employer's license to operate a nuclear power plant.

UNITED STATES NUCLEAR REGULATORY COMMISSION REGIONAL OFFICE LOCATIONS
A representative of the Nuclear Regulatory Commission can be contacted by employees who wish to register complaints or concerns about radiologic working conditions or other matters regarding compliance with Commission rules and regulations at the following addresses and telephone numbers:

REGION	ADDRESS	TELEPHONE
I	U.S. Nuclear Regulatory Commission Region I 7-10 International Business Center Dr. King of Prussia, PA 19381-2111	(610) 432-1194
II	U.S. Nuclear Regulatory Commission Region II 240 Piedmont Center Avenue, NE, Suite 1700 Atlanta, GA 30303-1257	(404) 577-8510
III	U.S. Nuclear Regulatory Commission Region III 240 Piedmont Center Avenue, NE, Suite 1711 Atlanta, GA 30303-1257	(404) 577-8510
IV	U.S. Nuclear Regulatory Commission Region IV 1405 East Line Boulevard Arlington, Texas 76010-4511	(817) 932-9477



1. Call your employer first. If you believe that your employer is not taking appropriate action to correct the violation, you should report this to the NRC.

To report an unsafe working condition or other violation of the NRC's rules and regulations, call the NRC's toll-free hotline at 1-800-695-7403.

OFFICE OF THE INSPECTOR GENERAL
HOTLINE
1-800-233-3487

To report safety concerns or violations of NRC regulations, call the NRC's toll-free hotline at 1-800-695-7403.

NRC SAFETY HOTLINE
1-800-695-7403

Table 1
Individually Controlled Radiation Sources

<u>Description</u>	<u>NSN</u>	<u>References</u>
Radioactive Source Set, M3A1	6665-00-856-8235	TM 3-6665-214-13&P
Radiac Calibrator, AN/UDM-6	6665-00-767-7497	TM 9-6665-203-10
Radiac Calibrator, TS 1230A	6665-00-973-1123	TM 3-6665-202-10
Radiac Calibrator, AN/UDM-2	6665-00-669-0077	TM 11-6665-217-15
Radiac Calibrator, AN/UDM-1A	6665-00-556-8825	TM 11-6665-217-15
Radiac Calibrator, AN/UDM-7B	6665-00-400-5388	TM 11-6665-217-15
Tester, Density and Moisture Nuclear Method, Campbell Pacific Model No. MC-1	6665-01-030-6896	TB 385-103

Table 2
Non-ionizing Radiation Sources

<u>Description</u>	<u>Description</u>	<u>Description</u>	<u>Description</u>
AN/MPQ-49	AN/GRC-106	AN-TPQ-36	AN/TPQ-37
AN/ULQ-19	AN/GLQ-3B	AN/PPS-4A	AN/PPS-5A
AN/VRC-46	AN/VRC-47	AN/GRC-122	AN/GRC-142
AN/VSC-3	AN/VPS-2	AN/VPM-2	AN/ARC-51BX
AN/ARC-114	AN/ARC-116	AN/ARC-131	AN/ARC-134
AN/ARC-164	AN/ALQ-144	AN/APN-194	AN/APX-72
AN/APX-100	AN/GRT-21	AN/GRT-22	AN/FSQ-84
AN/ARC-102	AN/GVS-5	AN/PAQ-4	AN/PAQ-1
AIM-M-110	MINI LRF L	AATS	TADS
G/VLLD	MILES	X-RAY	ARC WELDERS
LASER SYSTEMS			