Secondary Screener/Radiation Isotope Identifier Device (SS/RIID) Course

Min/Max Enrollment: 16–18

Hours: 14 hours (2 days)

CEUs: 1.4

Format: Mobile

DHS Course #: PER-245

Prerequisites: PER-243

PER-245 Performance

Course Description

The Secondary Screener/Radiation Isotope Identifier Device (SS/RIID) Course enables law enforcement, fire service, and other response disciplines, assigned to radiation detection secondary screener duties employing a RIID to detect radiation, verify radiation alarms, localize the source of radiation, identify radioactive material, and assess the threat status of detected material. The officer will be trained to employ the RIID to detect radiation in or on people, vehicles, packages, and/or facilities. Additionally, the officer will be trained to obtain technical assessment and adjudication assistance from federal, state, and/or local reachback organizations. A variety of small quantity sealed radioactive sources are used in SS/RIID participant activities and practical exercises. These sources are intended to simulate the types of radioactive material that the secondary screener may encounter in the public domain.

Course Objectives

Upon completing this course, participants will be able to:

- IDENTIFY the core elements of the primary and secondary screener activities, in accordance with the guidelines provided in the SS/RIID Participant Guide.
- IDENTIFY the properties of radiation and radiological/nuclear (rad/nuc) materials related to the detection of rad/nuc weapons of mass destruction (WMDs) and expected legitimate radioactive materials.
- DEFINE the terms improvised nuclear device (IND), radiological dispersal device (RDD), and radiation exposure device (RED).
- DEFINE primary screening, and LIST primary screener activities and tasks.
- DEFINE secondary screening, and LIST secondary screener activities and tasks.
- LIST two countermeasures adversaries may use, and two suspicious behaviors adversaries may display during primary and secondary screening operations.
- STATE the purpose of a hand-held RIID, LIST advantages of a hand-held RIID compared to a Personal Radiation Detector (PRD), and IDENTIFY limitations of a hand-held RIID.
- LIST one advantage and one disadvantage for detecting lethal RDD/RED materials and nuclear materials , and LIST two reasons why smaller amounts of rad/nuc materials can be a threat.
- CONFIGURE the issued RIID kit components to charge a RIID battery.
- DESCRIBE the RIID display, LED, audio, and vibrator indications, and DESCRIBE action levels for:
  - Gamma radiation detection
  - Gamma radiation safety
  - Gamma radiation danger
  - Neutron radiation detection
  - Neutron radiation safety
- Using a RIID kit and the Field Operations Guide (FOG), IDENTIFY the RIID operational characteristics and components, and PERFORM a RIID pre-operations check, in accordance with the SS/RIID FOG procedural steps.
- DESCRIBE the RIID operation and, using the RIID and FOG, PERFORM the Alarm Response Guide steps to detect, verify, locate, measure, identify, and assess radiological sources, in accordance with the procedures listed in the SS/RIID FOG.
- Using the RIID and FOG, EMPLOY the RIID to detect, verify, locate, measure, identify, and assess radiological materials on people, IAW the procedures listed in the SS/RIID FOG.
- PERFORM a radiological survey on a person and/or their carried items.
- ASSESS an unknown radiation alarm on people by comparing the RIID results with the interview responses and medical information.
- ASSESS an unknown radiation alarm on people by comparing RIID results with the Common Innocent Radiation Sources and Isotopes of Major Concern Table (CIRS Table).
- PERFORM a radiological survey on a package or container.

Performing a secondary level screening on a vehicle

- ASSESS an unknown radiation alarm in packages and containers by comparing the RIID results with the shipping documentation and package labels and markings.
- ASSESS an unknown radiation alarm in packages/containers by comparing RIID results with the Common Innocent Radiation Sources (CIRS) and Isotopes of Major Concern Table (CIRS Table).
- Using the RIID and FOG, EMPLOY the RIID to detect, verify, locate, measure, identify, and assess radiological materials in packages, in accordance with the procedures listed in the SS/RIID FOG.
- Using the RIID and FOG, EMPLOY the RIID to detect, verify, locate, measure, identify, and assess radiological materials in vehicles and facilities, in accordance with the procedures listed in the SS/RIID FOG.
- DEFINE the circumstances when further investigation of a vehicle or facility is required.
- PERFORM a radiological survey/sweep of a vehicle or facility.
- ASSESS an unknown radiation alarm by comparing the secondary screener's radiation readings and isotope identification results with the Common Innocent Radiation Sources and Isotopes of Major Concern Table (CIRS Table).
- Using the RIID, RIID data files, email-capable computer with RIID software, and simulated radiation alarm scenario information, DESCRIBE the capabilities of the applicable regional, state, local, and U.S. Department of Homeland Security Joint Analysis Center (JAC) reachback resources, and USE the JAC to identify an unknown source and help adjudicate the simulated alarm.
- RECOGNIZE when a request for technical reachback support is necessary.
- STATE the key steps necessary to complete the technical reachback process.
- TRANSFER the spectrum data from the RIID to the computer, and SEND the spectrum data and other key incident information to the technical reachback specialists for further assessment.

Target Audience/Discipline

Law Enforcement, Fire Service, Hazardous Materials (HazMat), Response personnel assigned duties employing a RIID.

Eligibility

It is the responsibility of the jurisdiction to select course participants.

Certificate

A certificate will be issued upon successful completion of the course, granting 1.4 continuing education units (CEUs) through the University of Nevada, Las Vegas (UNLV). A letter verifying CEUs can be provided upon request by contacting CTOS at ctosnnsa@nv.doe.gov.

Cost

All training and course materials are provided at no cost to eligible participants. Funding provided by the Federal Emergency Management Agency/ National Preparedness Directorate (FEMA/NPD) and the U.S. Department of Homeland Security.

Location

Regional, state, or local training facilities

Radioactive Sources

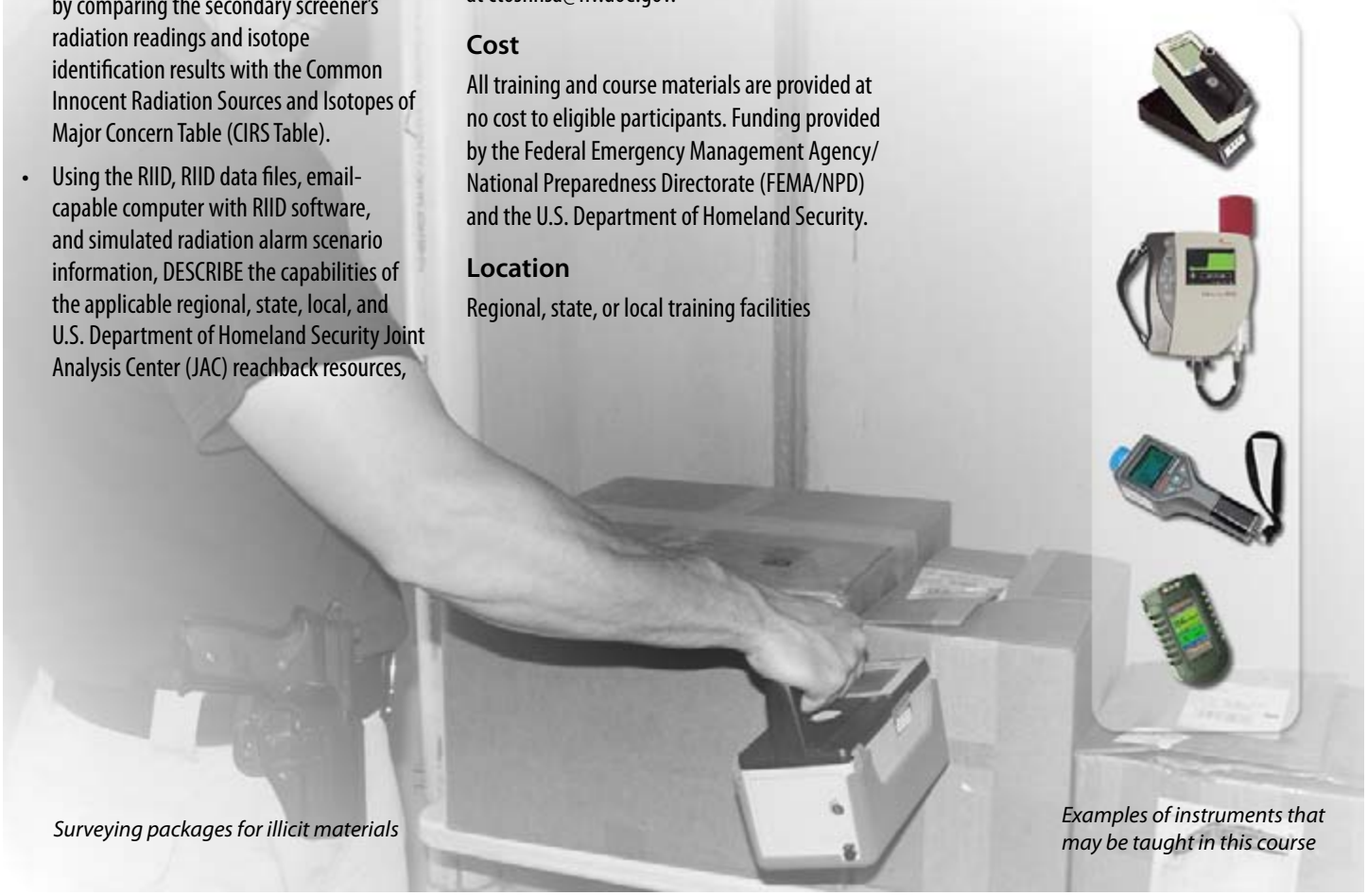
This is a "live agent" course using radioactive materials. It is designed and monitored so participants receive only minor radiation doses (lower than a chest X-ray or typical round-trip airline flight across the U.S.).

Compliance

This course complies with ANSI N42.37-2006, "American National Standard for Training Requirements for Homeland Security Purposes Using Radiation Detector Instrumentation for Interdiction and Prevention."

Enrollment Information

In order to attend a training class delivered by one of the FEMA/NPD training partners, a request must be submitted to the designated U.S. Department of Homeland Security training point of contact. For a Training Coordinator in your area, please call 877.963.2867 or email ctosmttreg@nv.doe.gov.



Surveying packages for illicit materials

Examples of instruments that may be taught in this course