1. TRAINING STANDARDS. Successful nuclear weapon accident or incident management relies on the maintenance of a high level of training and proficiency, as well as frequent exercising of response capabilities by all personnel involved in the operation. Comprehensive and standardized training, as well as regular exercise participation will ensure personnel operate with a common understanding and foundation. The following paragraphs outline the full spectrum of training required for all DoD personnel assigned to an RTF or assigned to a team responsible for responding to a nuclear weapon accident or incident; these personnel are hereafter referred to as “DoD components” operating under this Manual.

2. MANDATORY FEMA INDEPENDENT STUDY (IS) WEB-BASED TRAINING COURSES (FOUND ON THE FEMA WEBSITE). The FEMA website has multiple courses that will benefit all those having nuclear weapon accident or incident responsibilities. The following FEMA Independent Study courses are MANDATORY for all DoD components operating under this Manual.

   a. IS 100. Introduction to the Incident Command System.
   b. IS 200. ICS for Single Resources and Initial Actions Incidents.
   d. IS 800.B. National Response Framework, an Introduction.

3. SUGGESTED (OPTIONAL) FEMA IS COURSES. The FEMA website has many courses tailored to specific aspects of emergency response operations. Nuclear weapon accident and incident response organizations are encouraged to review the course offerings and select courses they feel will be particularly suited to their specific roles; nuclear weapon accident and incident response organizations should pay particular attention to IS 3, Radiological Emergency Management and IS 301, Radiological Emergency Response.

4. THE DEFENSE THREAT REDUCTION AGENCY COURSES. DTRA is the DoD executive agent for nuclear weapons general interest training. DTRA is currently expanding its training efforts with the development of the Defense Threat Reduction University (DTRU). This new organization provides a one-stop single entry point for Agency Combating WMD (CbtWMD) training and education efforts, providing appropriate linkages to, and partnerships with, other Federal, State, local and tribal response organizations. The DTRU, a capabilities-based entity, offers a full-range of courseware in support of all mission areas associated with CbtWMD. The DTRU is a knowledge-based organization working toward appropriate virtual capabilities and linkages to the Joint National Training Capability (JNTC), non-DoD training and education, and academe. Executive Agency for training is expanding first into the Radiological and High-Yield Explosive arenas and DTRA will continue to strengthen its partnership with the Department of Homeland Security for Chemical, Biological, Radiological, Nuclear, or High-Yield Explosive Response Training. The planned end state is a consortium of Federal, State,
local, and international education, training, and research organizations. Current DTRA training and exercise offerings are listed in the following subparagraphs; mandatory courses are identified.

a. **Defense Nuclear Weapons School (DNWS) Nuclear Weapons Incident Command and Control Courses.** The DNWS conducts training specifically designed for DoD and federal personnel to address the mechanics and procedures associated with DoD response to WMD incidents. Completion of appropriate course work listed in the following subparagraphs is essential to DoD consequence management and coordination of nuclear accident or incident response.

1. **Nuclear and Radiological Incident Management (NRIM) Course (MANDATORY).** A four-day resident course covering Federal, State, and local nuclear accident response roles and responsibilities, lessons learned, and key response issues. Media training and skill application exercises are included. This course (or the mobile version, Commander and Staff Radiological Accident Response (CASRAR)) is mandatory for RTF personnel.

2. **Commander and Staff Nuclear Accident Response (CASNAR) Workshop or Seminar (MANDATORY).** A one-day workshop or two-day seminar is a supervisory-level mobile training course that mirrors the NRIM content. The CASNAR can be tailored to the needs of a specific audience and is mandatory for RTF personnel (unless they have attended NRIM).

3. **Joint Nuclear Explosives Ordnance Disposal Course (JNEODC) (OPTIONAL).** A five-day resident course in nuclear operations with a focus on hazards and weapons stockpile safety features and safeguards. This course is specifically designed for EOD personnel. This course is optional for personnel responsible for conducting on-scene operations.

4. **Hazard Prediction and Assessment Capability (HPAC) Course Levels 1, 2, and 3 (OPTIONAL).** These four-day resident courses train consequence modelers in the use of HPAC computer modeling software. These courses are optional for personnel responsible for conducting on-scene operations.

5. **Consequence Assessment Tool Set (CATS) Course Levels 1 and 2 (OPTIONAL).** Three-day courses on methods to model damage and casualties from CBRN and meteorological sources. Students learn how to apply the CATS software and to integrate geographical information system (GIS) material into hazard accident models. This course is optional for personnel responsible for conducting on-scene operations.

6. **Joint DoD-DOE/NNSA Nuclear Surety Executive Course (JNSEC) (OPTIONAL).** This is an executive-level program offering an overview of safety, security, and control aspects of the U.S. nuclear weapons program. JNSEC is a 1-day program conducted in the Washington DC area, and a second iteration is a 1 ½ –day version offered at the DNWS to accommodate the Weapons Display Area tour. This course is optional for personnel responsible for conducting on-scene operations.

7. **Weapons of Mass Destruction Command, Control, and Coordination (WMDC3) Course (OPTIONAL).** This is a 4-day course designed for DoD and Federal agency personnel covering the procedures and mechanics involved in DoD support of WMD/CBRNE disaster response operations. The course focuses on command-level plans and constructs used when providing consequence management support to domestic CBRNE emergencies. The course
provides training on the DoD CBRNE disaster response structure and concludes with an
interactive computer-based exercise. This course is optional for personnel responsible for
conducting on-scene operations.

(8) Weapons of Mass Destruction Staff Support Seminar (WMDS3) (OPTIONAL). This
is a 1-day course designed to instruct Combatant Commanders and their planning staff on the
procedures and mechanics involved in DoD support to Federal WMD/CBRNE emergency
response operations and methods to incorporate those processes into their relevant
OPLANS/CONPLANS/FUNCPLANS. The course focuses on the DoD CBRNE disaster
response structure, how the structure associates with the U.S. government domestic and foreign
consequence management response processes, and the mechanics and units used to provide DoD
support. This course is optional for personnel responsible for conducting on-scene operations.

(9) Joint EOD Improvised Radiological Dispersal Device (RDD) and Recognition Course
(JEIRRC) (OPTIONAL). This five-day course, designed as a follow-course to JNEODC, focuses
on RDD and IDD federal assets, capabilities, and radiography interpretation. The course includes
discussion of WMD incident notification structure, passive interrogation, and device information
triage procedures. This class is offered for EOD personnel only.

b. DNWS Incident Response Courses.

(1) The Defense Threat Reduction Agency RTF Commander’s Course
(MANDATORY). This course is available in two different forms – a full-scale two-day course
and a one-day course; the differences are outlined in paragraphs 4.b.(1)(a). and 4.b.(1)(b). Both
are designed to train RTF Commanders and their staffs on nuclear weapon accident management.
One of these courses is required for RTF Commanders within 120 days of their assumption of
command and when more than 50% of their staff has rotated since the last course. The table top
nuclear weapon accident exercise (TTX) conducted during both courses meets the requirement
listed in section 5. Operational level Federal, State, local, and tribal responders and supporting
agencies are encouraged to attend and participate in these courses. One of the versions of this
course is mandatory for personnel responsible for conducting on-scene operations.

(a) 2-Day Staff Course with TTX. This course is designed to train RTF staff
members on nuclear weapon accident response and management. It delves more deeply into roles
and responsibilities than the one-day course. While designed primarily for staff members,
attendance and active involvement by the RTF Commander is encouraged. The TTX scenario
conducted during this course meets the TTX requirements listed in section 5.

(b) 1-Day Commander/Staff Course with TTX. This course is an abbreviated
version of the 2-day course and is designed to prepare RTF Commanders to execute nuclear
weapon accident management activities. Although designed for commanders, RTF staff
members are required to attend as well since their interaction with the RTF commander is vital to
nuclear weapon accident management operations. The TTX scenario conducted during this
course meets the TTX requirements listed in section 5.

(2) Civil Support Team Radiological Training Course (CST-RTC) (OPTIONAL). This is
a 3- to 5-day training event covering the response elements to a radiological accident. Training is
tailored to the mission requirements of National Guard Civil Support Teams. Modules can
include: effects of radiation, plans and capabilities, detection equipment, surveying, and
command and control. This course is optional for personnel responsible for conducting on-scene operations.

(3) Joint Planners Course (JPC) for Combating WMD (OPTIONAL). This is a 5-day course that provides the student with a firm understanding of how to perform planning functions related to CbtWMD activities, threats, and accidents. The course is geared toward the Joint Staff, Combatant and Component Commands, Combat Support Agencies, and Service HQs. The course covers weapons elimination operations, force protection, U.S. nuclear operations, foreign and domestic consequence management, nonproliferation, counter-proliferation, and the Joint Planning and Execution System (JOPES), as they apply to WMD planners. This course is optional for personnel responsible for conducting on-scene operations.

(4) DTRA RTF Commander and Staff Refresher Course. This course is designed to serve as a refresher course for RTF Commanders and their staffs. Modeled after the DTRA Commander’s Course (see paragraph 4.b.(1)), the course re-examines the basic tenets of nuclear weapon accident management operations. The course is one day in length, but can be conducted in conjunction with the yearly Command Post Exercise (CPX) or TTX (see paragraph 5.) or preparation for the required FSE (see paragraph 5.). If combined with a CPX or TTX, the course will be two-days in duration. Operational level Federal, State, local, and tribal responders are encouraged to attend and participate in this course. This course is OPTIONAL as preparation for the CPX or TTX, but MANDATORY for completion no more than 180-days prior to the FSE.

(5) Nuclear Emergency Team Operations (NETOPS) Course (OPTIONAL). A ten-day resident course providing hands-on, high-fidelity training for members of a nuclear emergency response team. Course content includes medical effects, response plans, detection equipment operation, contamination control, radiation surveys, and C2. Several high-fidelity exercises on the DNWS accident training sites are included. This course is optional for personnel responsible for conducting on-scene operations.

(6) Nuclear Emergency Team Orientation (NETOR) Course (OPTIONAL). A five-day mobile training course tailored to the needs of the requesting organization. Content and audience mirrors the RETOPS, but without the high-fidelity field exercises available in the resident course. This course is optional for personnel responsible for conducting on-scene operations.

5. MEDICAL EDUCATION. Clinical military personnel must be well versed in radiation casualty management. The following courses provide the appropriate level of post-graduate medical, nursing and health physics education for RTF and special team medical professionals.

a. Medical Effects of Ionizing Radiation (MEIR). MANDATORY for RTF and military Special Team physicians, physician assistants, nurses, health physicists and health physics technicians. OPTIONAL for medical planners, CBRN specialists, medics, corpsmen, and other military medical personnel. The MEIR course is a five day course taught by subject matter experts from the Armed Forces Radiobiology Research Institute (AFRRI). The course focuses on radiation injury signs/symptoms, treatment, patient decontamination, nuclear weapon effects on humans, radiobiology, bioassay and health physics.

b. REAC/TS Radiation Emergency Medicine. MANDATORY for RAMT and MRAT physicians, PAs and nurses. OPTIONAL for other military medical personnel. This 3 1/2-day
course is intended for physicians, nurses, and physicians' assistants who may be called upon to provide emergency medical service in the event of a radiation emergency.

c. **REAC/TS Advanced Radiation Medicine.** MANDATORY for RAMT and MRAT physicians, PAs and nurses. OPTIONAL for other military medical personnel. This 4 1/2-day course, designed primarily for physicians, PAs and nurses presents an advanced level of information on the diagnosis and treatment of a wide range of ionizing radiation injuries and illnesses.

d. **REAC/TS Health Physics in Radiation Emergencies.** MANDATORY for RAMT and MRAT physicists. OPTIONAL for other military medical personnel. This 4 1/2-day course is designed primarily for health physicists, medical physicists, radiation safety officers, and others who have radiation dose assessment and/or radiological control responsibilities.

6. **ADDITIONAL COURSES.**

   a. **National Guard JTF State Commanders Course.** This O-6 to O-8 level course is presented by USNORTHCOM and provides extensive JTF leadership training for RTF Commanders and their staffs in the areas of capability assessment, the NRF and NIMS organizational structures, and practical exercises that utilize each day’s lecture materials.

7. **EXERCISES.**

In addition to the training requirements listed in paragraphs 2. through 4., each RTF will participate in one exercise per year. The annual exercise will be part of a triennial rotation, where one year the RTF will participate in a TTX, then a CPX the second year, followed by a Full Scale Exercise (FSE) the third year (e.g., FY 1 – TTX; FY 2 – CPX; FY 3 – FSE; FY 4 – TTX; etc.).

   a. **High Demand/Low Density Assets.** Several DoD components participating in nuclear weapon accident response frequently perform like-duties during non-nuclear weapon accident exercises or real world events. With the approval of the Combatant Commands (NORTHCOM, EUCOM, and PACOM), these components may petition the NWAIRS for “credit” for the requirements listed in this Manual based upon participation in other non-nuclear weapon incident exercises or real world events.

   b. In addition to these exercise requirements, Combatant Commands and the Services may require additional exercises. The After Action Reports for these exercises will be forwarded to the NWAIRS and the executive agent of this Manual to facilitate the required reviews outlined in section 5 of DoD 3150.08-M.

   c. **National Exercise Program.** Nuclear weapon accident or incident exercises are a part of the National Exercise Program; further, the NSPD-28 Committee of Principles has mandated the execution of one national-level nuclear weapon accident exercise each year as part of the DoD five-year nuclear weapon accident, incident, and other nuclear radiological incident exercise program (NUWAIX). This exercise will involve one RTF to ensure each of the five RTFs participate in one national level exercise once every five years. This national-level exercise will fulfill the requirements for a FSE set forth in paragraph 7.
8. READINESS.

RTFs and other DoD components tasked by this DoD 3150.08-M will be considered mission ready for training once they have met the requirements outlined in this page. Additionally, each Combatant Command may require the Services to undergo additional training and report readiness. These standards will be relayed by the Combatant Commands and the Services to the RTFs, as well as to the NWAIRS, for inclusion in future editions of DoD 3150.08-M.

   a. Readiness Reporting. Readiness status of RTFs will be reported to the appropriate Combatant Commands IAW standard reporting protocols using the DOTMLPF construct.

9. CONFERENCES. In addition to the training and exercise requirements listed in this chapter, RTF Commanders, SEOs, and potential Senior Officials (SOs) should meet on a regular basis to discuss current events and issues related to nuclear weapon accident response, lessons learned from Combatant Command exercises, and any other topics to aid in effective, efficient, and cohesive nuclear weapon accident response.

   a. DTRA 1-day SO, SEO, and RTF Conference. This conference is to be completed at least annually. The primary focus of the conference is to provide one mechanism for achieving nuclear weapon incident response and management standards, facilitate interagency communications, and ensure a cohesive, effective, and efficient nuclear weapon accident response with NORTHCOM, PACOM, EUCOM, DOE and other key Military and Federal agencies.