The Defense Nuclear Weapons School (DNWS) is located on Kirtland Air Force Base, in Albuquerque, New Mexico. In existence since 1947, this Defense Threat Reduction Agency (DTRA) school is a unique entity that provides training to the Department of Defense (DoD), and other federal, state, and local agencies on: Nuclear and Radiological Weapons; Nuclear Accident/Incident Command, Control and Response; Explosive Ordnance Disposal (EOD) Threat Awareness/Assessment; Weapons of Mass Destruction (WMD); and Chemical, Biological, Radiological and Nuclear (CBRN) modeling.

Mission:
The Defense Nuclear Weapons School provides nuclear weapons core competencies and radiological/nuclear WMD training and education to DoD, interagency organizations, and international partners, to ensure a strong nuclear deterrent, prepare an effective accident/incident response force, and enable countering of WMD-cbRN threats.

Training Objectives:
The school’s training objectives are to create, develop, and implement professional training through both traditional methods and innovative training technologies. DNWS training helps to ensure that our nation maintains a safe, reliable, and credible nuclear deterrent, nuclear accident and incident response, radiological force protection and CWMD hazard recognition for the warfighter and responder.

Courses:
The DNWS delivers instructor-led courses in-residence and via Mobile Training Teams (MTTs), and offers several distance learning courses online. While most courses are taught in-residence at the DNWS, an expanding array of courses are offered via distance learning or MTT. Additionally, the DNWS provides experts who teach modules within courses taught by other military and federal entities such as the Department of State and the Federal Bureau of Investigation.

FY 2023 Comments:
The past year has been one of turmoil within the world. The Russian invasion of the Ukraine has upset the geopolitical balance of Europe, and the world. Their threats of nuclear retaliation puts new emphasis on the training and education that DNWS offers. In fact, Russia is modernizing its nuclear forces, replacing Soviet-era systems with new missiles, submarines and aircraft while developing new types of delivery systems, to include hypersonic missiles.

China, another nuclear power, has been expanding its own nuclear capabilities. They are accelerating their development of strategic nuclear warheads in an effort to amass 700 by 2027 and 1,000 by 2030, in addition to the recent revelations about the construction of at least 250 new missile silos.

Couple the actions of Russia and China with the increased missile testing that the Democratic People’s Republic of Korea (DPRK), a budding nuclear state, has been doing, and the continued nuclear weapons material development in Iran, and we see that the services of DNWS are in demand now more than ever. In fact, we have seen an uptick in requests for our courses from Combatant Commands, CBRNE Response Enterprise (CRE) forces, and our international partners.

In the face of these threats the U.S. hasn’t been idle. The 2022 new National Defense Strategy (NDS) and Nuclear Posture Review (NPR) showcase the integrated way that the U.S. is approaching strategic reviews. The Defense priorities are showcased there, and the nuclear triad portions (Sentinel missiles to replace the Minuteman, Columbia class submarine to replace the Ohio class, and the Long Range Standoff Weapon to replace the ALCM) should provide reassurances to our nation, and the world, that the U.S. takes the concept of Integrated Deterrence seriously. The Defense Nuclear Weapons School stands ready to support these modernization efforts through our education.

Christopher M. Whelan, COL, U.S. Army Commandant, Defense Nuclear Weapons School

Non-Attribution Policy: The Defense Nuclear Weapons School offers its assurances that presentations and discussions will be held in strict confidence. Without the expressed permission of the speaker, nothing will be attributed directly or indirectly in the presence of anyone who was not authorized to hear or view the presentation. Unclassified information gained during lectures, briefings, presentations, and discussions may be used freely. However, neither the speaker nor any element of the Defense Nuclear Weapons School may be identified as the originator of the information without consent.
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DNWS Registrar Office
Email: dtra.kirtland.ne.mbx.dnws-registrar@mail.mil
Phone: 505-846-5666 / DSN: 246-5666
Fax: 505-846-9168 / DSN: 246-9168
JPAS SMO Code: GQDD614
ATTN: DNWS Registrar, SSgt Ryan Edmonds

Website support
https://dnws.dtra.mil
(must connect via a .mil or .gov domain)
Email: dtra.kirtland.ne.list.dtra-dnws-it-support@mail.mil

Albuquerque Billeting Numbers
Kirtland AFB, Albuquerque, NM
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http://af.dodlodging.net/properties/Kirtland-AFB

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DTRA CBRNE Decision Support Analysis
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Email: dtra.belvoir.J9.mbx.reachback-training@mail.mil
Phone: 571-303-2171  Fax: 571-303-2182

DTRA CBRNE M&S Training Center:
6361 Walker Lane, Suite C120
Alexandria, VA 22310
POC: COR Reachback Training CW4
Leonardo Cargill and CBRNE Training

Kirtland AFB Apps:

How to Register for Classes
How to Register for Classes

DNWS Registration and Course Administration Information
General information about DNWS is available on the DNWS web site https://dnws.dtra.mil. The site is available to DoD and other Federal and state agencies, accessible only from .mil or .gov domains.

Course Registration Process
Please read all sections of the course registration process, paying particular attention to security requirements, prerequisites, quota limitations, and requirements for non DoD personnel. DNWS has simplified and automated the course registration process. New students will complete a two-step process to register for DNWS courses. Step 1 requires students to request access to the DNWS Learning Content Management System (ICMS). After receiving access to the ICMS, prospective students will complete Step 2 to register for courses. Returning students need only log in to the ICMS and complete Step 2.

Step 1 (New/Prospective Students)
Prospective students should click the link provided (https://dnws.dtra.mil), select the “Register” tab, complete the “Register for Access to the Portal” form, and click “Submit Credentials for Access.” All fields are required to provide contact information for the students. Upon completion and email will be sent to the provided email address with login and password.

Step 2 (Registered and Returning Students)
Students who have received a DNWS ICMS User ID and password may register for courses. Click on the link provided (https://dnws.dtra.mil), enter User ID and password in the spaces provided, and click “Login.” A “Recover Login ID/Password” button is located at the bottom of this window if password is forgotten. For all other login issues please call or email DNWS Registrar office. DoD students can tie their CAC/PIV certificates to their account for ease of access. This is recommended as it makes accessing the DNWS internal network computers much easier. Once logged in, students may review transcripts, update profile information, browse the DNWS catalog and certification programs, register for courses or review existing course registrations, and take DNWS distance learning courses.

Registration for Non-DoD Students
Inbound students whose security clearances cannot be validated in the Defense Information System for Security (DISS) must provide validation of their security clearance prior to being registered for classified courses. Clearances can be passed to DTTRA via a Visit Authorization Letter (VAL) that includes the students Name, Grade/Rank, Social Security Number, Birth Date, Birth City, Birth State, Birth Country, Citizenship, Visit Dates, Clearance Level, Date Clearance Granted, Clearance Granted By (issuing agency), Type Investigation, Date Investigation Completed, Investigation Conducted By (Investigating Agency), Meeting POC (Use DNWS Registrar or Course Manager), Security Manager Name & Phone #. Once complete the letter should be sent via fax to DTTRA Access/Visitor Control at (703) 767-8577.

Registration for DOE Students
DOE personnel may work with their badging office and elect to complete a DOE form 5631.20 in lieu of the VAL. For all of our classified courses the minimum DOE security clearance requirement is a “Q.” The completed DOE form 5631.20 must validate a Q clearance, list the course to be attended, and request access to Secret/Restricted Data/Critical Nuclear Weapon Design Information. The form must also be signed by a security official or badging office and can be faxed to DTTRA Access/Visitor Control at (703) 767-8577.

Organization/Service Branch Quotas
The following DNWS courses are subject to organization/service branch quotas: ADT-1, ADT-2, JNEODC & NETOPS. Classes may show open seats on the website however, existing quota agreements may preclude general registration. Any student who exceeds the existing service quota will be placed on a wait-list until 30 days prior to the course start date. Once the 30 day mark is reached, wait-listed students will be registered in the order in which they were wait listed. USAF & USMC personnel attempting to register for these courses be advised: The DNWS works with 2d Air Force and Training & Education Command (TECOM) to fill seats in these courses. Inbound students from those existing training pipelines are granted priority for registrations. Any USAF or USMC student who is set to be unit funded, will be wait-listed and will only be registered if seats are not filled by throughput from 2d AF or TECOM or if seats promised to the other sources remain available past the 30 day mark.

Classified Course Security Clearance Requirements
All prospective students should reference the security requirements of their desired training listed on the course information page accessible from the “Training Courses” page. Before attempting to register, students should ensure they meet the minimum requirements. Any student who does not meet the minimum requirements will be withdrawn and notified of disenrollment. The DNWS will not read inbound students into specific areas such as “Restricted Data” or “Critical Nuclear Weapon Design Information” (some exceptions apply for courses such as TNOC).

Email: dtra.kirtland.ne.mbx.dnws-registrar@mail.mil
Fax: Comm: (505) 846-9168 DSN: 246-9168

U.S. Mail: Defense Nuclear Weapons School
Attn. Registrar’s Office
1680 Texas St. SE
Kirtland AFB, NM 87117-5669

JNEODC Special Requirements
Personal registering for the Joint Nuclear Explosive Ordnance Disposal Course (JNEODC) are required to submit a visit request to Sandia National Labs through DISS using the SMO Code 14213 and fill out the Sandia Badge Request Form. Completed forms can be faxed to 505-844-3377 emailed to ml_trl@sandia.gov.

Enrollment Confirmation
The DNWS ICMS will automatically generate and send enrollment confirmation to prospective students by email upon completion of the DNWS course registration process and verification of security clearance information (as appropriate). To ensure receipt of confirmation and other course information, students must provide an unclassified government e-mail address when they register for access to the ICMS.

The DNWS (https://dnws.dtra.mil/), will apprise students of changes in class dates, times, and/or location. If a student has not received enrollment confirmation by one week prior to the class start date, he or she should call the DNWS Registrar’s Office main line, (505) 846-5666 or DSN 246-5666, Monday-Friday, 0800–1530, Mountain Time or contact them by email, dtra.kirtland.ne.mbx.dnws-registrar@mail.mil.

Security Check-In/Badging
All personnel entering the DNWS are required to show valid identification at the security desk and receive appropriate badging. As previously noted, specific courses may require a security clearance and some require special access. Each DNWS course has specific security requirements detailed in its catalog course description. Inbound DoD students are not required to submit a visit request through DISS (exception: JNEODC).

Electronic Equipment
Telephone lines with DSN access, are available for students to make and receive telephone calls while in the facility. Internet access at the DNWS is available for students on a limited basis. Security procedures prohibit bringing personal electronic devices (such as but not limited to cellular telephones, pagers, personal digital assistants, cameras, thumb drives, laptop computers, fitbits or like devices) into the school.

Specific instructions for other DTTRA or hosted courses will be provided in the course invitation message.

Please email the registrar if the website is not available for more than 7 days.
NUCLEAR WEAPONS ORIENTATION, AND POLICY

• Advanced Weapons Operators Course (AWOC)
• Joint DOD-DOE Nuclear Surety Executive Course (JNSEC)
• Nuclear Policy Course (NUCPOL)
• Nuclear Weapons Orientation Course (NWOC)

The Nuclear Weapons Branch (NWB) teaches courses focused on nuclear weapon topics such as nuclear weapon design, nuclear weapon effects, and nuclear weapons policies, both foreign and domestic. Nuclear deterrence is a common theme in the Branch’s curriculum. The Branch’s mission is to increase the nuclear literacy of the DoD Warfighter, DoD support, interagency organizations, and additional mission partners. NEB uses various education and training techniques, including the nation’s most complete collection of nuclear weapons and nuclear weapons artifacts in the Nuclear Weapons Instructional Museum (NWIM).

Advanced Weapons Operators Course (AWOC)

Course ID/Number: DNWS NW 112, USN S-140-0002
Course Prerequisites: NWOC or equivalent knowledge and/or experience
Classification: SECRET, Security Requirements: Restricted Data-Critical Nuclear Weapons Design Information (CNWDI), Uniform: As directed by the individual service for military & business casual for civilians., Format: In residence, MTT: N/A, Course Length: 3 days

AWOC is a 3-day course designed to educate the next generation of operators in nuclear deterrence and the capabilities of the U.S. Nuclear Enterprise. The course covers the components of the Nuclear Enterprise, the evolution of nuclear policy, and basic nuclear weapons design and effects. A Nuclear Weapons Instructional Museum (NWIM) tour at the S/RD-CNWDI level is also included.

POC: TSgt William Atkins, 505-853-2157, william.w.atkins3.mil@mail.mil
NUCLEAR WEAPONS ORIENTATION AND POLICY

Joint DOD-DOE Nuclear Surety Executive Course (JNSEC)

Course ID/Number: DNWS NW 201 & 201M, USAF JBOZD32E1DOODA, USN S-140-0003
Course Prerequisites: N/A
Classification: SECRET, Security Requirements: Restricted Data-CNWDI,
Uniform: As directed by the individual service for military & business casual for civilians.,
Format: In residence, MTT: 1-day format only, NCR, Course Length: 1-day and 2-day formats available.

JNSEC is an executive-level program offering an overview of safety, security, and C3 aspects of the U.S. nuclear weapons program. JNSEC is offered in two formats: a 2-day program conducted in the National Capitol Region (NCR), and a 2-day program conducted at the DNWS. A Nuclear Weapons Instructional Museum (NWIM) tour at the S//RD-CNWDI level is included.

POC: Maj Matthew Eldridge, 505-846-5666, matthew.g.mil@mail.mil

Nuclear Policy Course (NUCPOL)

Course ID/Number: DNWS NW 401, USN S-140-0005
Course Prerequisites: N/A
Classification: SECRET, Security Requirements: Restricted Data-CNWDI,
Uniform: As directed by the individual service for military & business casual for civilians.,
Format: In residence, MTT: N/A, Course Length: 5 days

NUCPOL is a 5-day course that provides an overview of U.S. nuclear weapons policy development including issues and challenges facing politicians today. It specifically covers the evolution of U.S. nuclear weapons policy, nuclear deterrence theory, applications of nuclear weapons within the instruments of national policy, factors influencing policy, foreign nation nuclear weapons drivers, and proliferation concerns. A policy-focused tour of the Nuclear Weapons Instructional Museum (NWIM) at the S//RD-CNWDI level is included.

POC: Maj Daaron Spears, 505-846-5442, daaron.l.spears.mil@mail.mil

Nuclear Weapons Orientation Course (NWOC)

Course ID/Number: DNWS NW 110 & NW 110M, USAF ROO1, USAF-JBOZD21A100DA, USMC-FO4EGP1, USN S-140-0001
Course Prerequisites: N/A
Classification: SECRET, Security Requirements: Restricted Data-CNWDI,
Uniform: As directed by the individual service for military & business casual for civilians.,
Format: In residence, MTT: Upon request, Course Length: 4.5 days

NWOC is a 4.5-day course that provides an overview of the history and development of nuclear weapons, management of the U.S. nuclear stockpile, and the issues and challenges facing the program. NWOC focuses on four functional areas: nuclear weapons fundamentals, nuclear weapons effects, nuclear weapons stockpile, and foreign nuclear weapons capabilities and proliferation. A Nuclear Weapons Instructional Museum (NWIM) tour at the S//RD level is included.

POC: TSgt William Atkins, 505-853-2157, william.w.atkins3.mil@mail.mil

NUCLEAR WEAPONS INCIDENTS, ACCIDENTS AND RESPONSE TRAINING

- Nuclear Emergency Team Operations (NETOPS)
- Nuclear Weapons Incident Response Training, Domestic Basic (NWIRT-DB)
- Nuclear Weapons Incident Response Training, Domestic Executive (NWIRT-DE)
- Nuclear Weapons Incident Response Training, Overseas Basic (NWIRT-OB)
- Nuclear Weapons Incident Response Training, Overseas Executive (NWIRT-OE)

The Nuclear Response Branch (NRB) educates personnel in radiological response techniques and concepts. These concepts include but are not limited to radiation detection equipment theory and use, interpretation of information and data, and the command and control of nuclear or radiological incidents and accidents. The Branch’s mission is to increase the nuclear response knowledge of the DoD Warfighter, DoD support, interagency organizations, and additional mission partners.

Nuclear Enterprise Division (NED) uses various education and training techniques, including the DOD’s only “live” radiological training sites.
### Nuclear Emergency Team Operations (NETOPS)

**Course ID/Number:** DNWS NR 101, USMC F045781, USN S-140-0009, USA DNWS-R038, USAF J5OZD32E3G000DA, NM DPS NM210499  
**Prerequisites:** N/A  
**Classification:** UNCLASSIFIED  
**Security Requirements:** None, Uniform: Service Utility Uniform for military & casual for civilians, Format: In residence, MTT: N/A  
**Course Length:** 10 days  
**Uniform:** Service Utility  
**Format:** In residence  
**MTT:** Upon request, Course Length: 10 days  
**Security Requirements:** None, Uniform: Service Utility Uniform for military & casual for civilians  
**Course Prerequisites:** N/A  
**Classification:** UNCLASSIFIED  
**Security Requirements:** None, Uniform: Service Utility Uniform for military & casual for civilians, Format: In residence, MTT: N/A  
**Course Length:** 10 days  

NETOPS is a 10-day hands-on course which provides nuclear weapons accident response operations training to joint service responders. The course provides instruction on basic nuclear physics, biological effects of radiation, response processes and capabilities, radiation detection equipment, contamination control stations, surveys, and command and control. The course culminates with three field training exercises during which students don complete sets of anti-contamination clothing, use RADIAC equipment, and perform realistic nuclear emergency team functions at DNWS live radioactive training sites.  

Military personnel from all branches and Federal employees occupying EOD, CBRN defense specialties and career fields, or other emergency response force positions are welcome to attend.  

POC: TSgt Jacob E Brewer, jacob.e.brewer8.mil@mail.mil

### Nuclear Weapons Incident Response Training (NWIRT) Series

The Nuclear Weapons Incident Response Training (NWIRT) series is tailored to four specific audiences and operating environments: domestic basic, domestic executive, overseas basic and overseas executive. The course reviews the following topics: the roles and responsibilities of the DoD during a nuclear weapon incident as mandated by national policy; response by other Federal departments or agencies, and legal and public affairs issues specific to a U.S. nuclear weapon incident. Each topic is module is presented by a subject matter expert in an academic format. This course is taught by a combined instructor team, including representatives from the FBI, DHS, and DOE. Details and course numbers for each variant are included below.

**Course Dates are not listed due to the uncertain operating environment at the time of publication. Please check the DNWS website (https://dnws.dtra.mil) for the most recent information, or contact the registrar or course manager for specific requests.**

### Nuclear Weapons Incident Response Training, Domestic Basic (NWIRT-DB) Course

**Course ID/Number:** DNWS NR 210-DB, USMC F0480Z1, USN S-140-0010, USAF J5OZD13B402DA, USA DNWS-R003  
**Prerequisites:** N/A  
**Classification:** UNCLASSIFIED (5/FRD level upon specific request), Security Requirements: None, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Upon request, Course Length: 3 days  
**Uniform:** As directed by the individual service for military & business casual  
**Format:** In residence  
**MTT:** Upon request, Course Length: 3 days  
**Security Requirements:** FRD//NATO  
**Course Prerequisites:** N/A  
**Classification:** SECRET  
**Security Requirements:** FRD//NATO, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Upon request, Course Length: 2 days  
**Uniform:** As directed by the individual service for military & business casual  
**Format:** In residence  
**MTT:** Upon request  
**Course Length:** 2 days  
**Security Requirements:** None, Uniform: Business Casual  
**Course Prerequisites:** N/A  
**Classification:** SECRET  
**Security Requirements:** FRD//NATO, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Upon request, Course Length: 1 day  
**Uniform:** As directed by the individual service for military & business casual  
**MTT:** Upon request, Course Length: 1 day  

NWIRT-DB is a 3-day course designed for Initial Response Force (IRF) and Response Task Force (RTF) Commanders and staff, addressing issues specific to a domestic nuclear weapon incident.  

POC: MSgt Robert Stevenson II, robert.r.stevenson6.mil@mail.mil

### Nuclear Weapons Incident Response Training, Domestic Executive (NWIRT-DE) Course

**Course ID/Number:** DNWS NR 210-DE, USMC F0480Z1, USN S-140-0010, USA DNWS-R003, USAF J5OZD13B402DA  
**Prerequisites:** N/A  
**Classification:** UNCLASSIFIED, Security Requirements: None, Uniform: Service Utility Uniform for military & casual for civilians, Format: In residence, MTT: N/A  
**Course Length:** 1 day  
**Security Requirements:** None, Uniform: Service Utility Uniform for military & casual for civilians  
**Course Prerequisites:** N/A  
**Classification:** UNCLASSIFIED  
**Security Requirements:** None, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Upon request, Course Length: 1 day  
**Uniform:** As directed by the individual service for military & business casual  
**Format:** In residence  
**MTT:** Upon request, Course Length: 1 day  
**Security Requirements:** None, Uniform: Business Casual  
**Course Prerequisites:** N/A  
**Classification:** SECRET  
**Security Requirements:** FRD//NATO, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Upon request, Course Length: 1 day  
**Uniform:** As directed by the individual service for military & business casual  
**Format:** In residence  
**MTT:** Upon request, Course Length: 1 day  

NWIRT-DE is a 1-day executive-level course designed for IRT, IRF, and RTF senior leaders, GCC and MAJCOM staff members, addressing issues specific to a domestic nuclear weapon incident.  

POC: MSgt Robert Stevenson II, robert.r.stevenson6.mil@mail.mil

### Nuclear Weapons Incident Response Training, Overseas Basic (NWIRT-OB) Course

**Course ID/Number:** DNWS NR 210-OB, USMC F0480Z1, USN S-140-0010, USA DNWS-R003, USAF J5OZD13B402DA  
**Prerequisites:** N/A  
**Classification:** UNCLASSIFIED, Security Requirements: None, Uniform: Service Utility Uniform for military & casual for civilians, Format: In residence, MTT: N/A  
**Course Length:** 1 day  
**Security Requirements:** None, Uniform: Service Utility Uniform for military & casual for civilians  
**Course Prerequisites:** N/A  
**Classification:** UNCLASSIFIED  
**Security Requirements:** None, Uniform: Service Utility Uniform for military & casual for civilians, Format: In residence, MTT: Upon request, Course Length: 1 day  
**Uniform:** Service Utility Uniform for military & casual  
**Format:** In residence  
**MTT:** Upon request, Course Length: 1 day  

NWIRT-OB is a U.S. Only, classified 2-day course designed for IRF and RTF Commanders and staff, addressing issues specific to a nuclear weapon incident overseas. The course is presented via MTT, and specifically in the EUCOM AOR twice per fiscal year.  

POC: MSgt Robert Stevenson II, robert.r.stevenson6.mil@mail.mil

### Nuclear Weapons Incident Response Training, Overseas Executive (NWIRT-OE) Course

**Course ID/Number:** DNWS NR 210-OE, USMC F0480Z1, USN S-140-0010, USA DNWS-R003, USAF J5OZD13B402DA  
**Prerequisites:** N/A  
**Classification:** SECRET, Security Requirements: FRD//NATO, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Upon request, Course Length: 1 day  
**Uniform:** As directed by the individual service for military & business casual  
**Format:** In residence  
**MTT:** Upon request, Course Length: 1 day  
**Security Requirements:** None, Uniform: Service Utility Uniform for military & casual for civilians  
**Course Prerequisites:** N/A  
**Classification:** SECRET  
**Security Requirements:** FRD//NATO, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Upon request, Course Length: 1 day  
**Uniform:** As directed by the individual service for military & business casual  
**Format:** In residence  
**MTT:** Upon request, Course Length: 1 day  

NWIRT-OE is a U.S. Only, classified 1-day course for IRT, IRF and RTF senior leaders, GCC and MAJCOM staff, addressing issues specific to a nuclear weapon incident overseas. The course is presented via MTT, and specifically in the EUCOM AOR once per fiscal year.  

POC: MSgt Robert Stevenson II, robert.r.stevenson6.mil@mail.mil
• Basic Intermediate Radiological Nuclear Training (B/IRNT)
• Applied Radiological Response Techniques Level 2 (ARRT-2)

The Health Physics (HP) Branch offers courses with a focus on CWMD radiological and nuclear training at the tactical and operational levels. The HP Branch’s mission is to enable individuals and units to operate in a nuclear and radiological environment. This is accomplished through education and training on multi-service tactics, techniques, and procedures (TTPs), conducting hands-on training with current and emerging detector technologies, and sharing best practices.

B/IRNT is a tailorable, 2-5 day course offered in-residence or by mobile training team. This course is designed for units to train on collective tasks relating to radiological and nuclear operations. The core modules are required and conducted over the first two days. The elective modules are optional and, depending on unit selection, are delivered over days 3-5. The minimum class size is 15, maximum class size is 40, and instructor to student ratio goal is 1:6.

Core Modules for the B/IRNT:
• Radiological Fundamentals Review
• Managing Radiological Exposure
• Detector Theory
• Detector Laboratory
• Personal Protective Equipment and Radiological Materials of Concern
• Nuclear Materials of Concern
• Radiological Hazard Isolation and Exploitation

Elective Modules Available:
Radiological Fundamentals Review
• Detector Specific Overviews
• Radiological Search Techniques
• Gamma Spectroscopy
• Radiological Terrorism
• Nuclear Terrorism
• EMP & HEMP Overview
• Nuclear Battlefield
• Aircraft and Vehicle Decontamination
• SNM Hazards
• Reactor Overview
• Radiological Accidents
• Case Study: Operation TOMODACHI
• Nuclear Fuel Cycle
• Case Study: Tuwaitha Site Exploitation
• Radiological Accidents
• Radiological Hazard Isolation and Exploitation

Additional or advanced modules developed upon request.

POC: CPT Branden Passons, 505-853-3708, branden.s.passons.mil@mail.mil
ARRT-2 is a 5-day course designed to apply the theories learned in ARRT-1, with the focus on applied radiological problem solving methods. Approximately 20% of the course is conducted in detector laboratories while the remaining course time is dedicated to hands-on radiological experiences and the interpretation of survey data. There is minimal PowerPoint presentation in this course (only one which is conducted on the first day to review ARRT-1 material). The minimum class size is 7, maximum class size is 15, and the instructor to student ratio goal is 1:3.

POC: SSG William I. Moak, 505-846-6596, william.i.moak.mil@mail.mil
Advanced Diagnostic Training 1 (ADT-1)

Course ID/Number: DNWS-NR-130, USA DNWS ED 300, USAF-E J5A0D385S1 0A1A, USAF-O J5A0D32E3G 0A1A, USMC F04PXX1, S-431-8288, DPS NM220151

Course Prerequisites: N/A

Classification: UNCLASSIFIED, Security Requirements: CUI, Uniform: Service Utility uniform and casual for civilians. Students should bring M-53 masks or service equivalent, if able. Portions of the class are administered outdoors. Appropriate inclement weather and sun protective clothing is recommended, Format: In residence, MTT: Upon request, Course Length: 5 days

ADT-1 is a 5-day course of instruction for CWMD first responders (not just EOD) that focuses on WMD threat awareness, interagency policy, national response architecture, nuclear science, radiation detector theory, and crisis communications. The target audiences are those who current work as, or may support, designated US Government CWMD authorities. This course meets interagency standards for national crisis response, and is recognized by both the FBI and NNSA Stabilization (STAB) programs.

POC: TSgt Joshua R. Hill, 505-853-1504, joshua.r.hill4.mil@mail.mil

Advanced Diagnostic Training 2 (ADT-2)

Course ID/Number: DNWS ED 301, USA DNWS-NR-201, USAF-E J5A0D385S1 0A2A, USAF-O J5A0D32E3G 0A2A, USMC F04PXX1

Course Prerequisites: Attendance at DNWS ADT-1 or ARRT-1 required.

Classification: SECRET, Security Requirements: Restricted Data-CNWDI, Uniform: Service Utility Uniform. Students should bring M-53 masks or service equivalent, if able. Portions of the class are administered outdoors. Appropriate inclement weather and sun protective clothing is recommended, Format: In residence, MTT: Upon request, Course Length: 5 days

ADT-2 is a 5-day course for EOD Technicians that focuses on WMD “Threat Assessment” to apply design concepts to differentiate between material of concern and an Item of Primary Concern, TTPs and communication methods. This course meets interagency standards for national crisis response, and is recognized by both the FBI and NNSA Stabilization (STAB) programs. ADT-2 is intended for EOD technicians with 1+ years of experience. Participants are expected to perform as team members or team leaders during rad/nuke scenarios.

POC: PO1 Ross Bringgold, ross.a.bringgold.mil@mail.mil

Joint Nuclear Explosive Ordnance Disposal Course (JNEODC)

Course ID/Number: DNWS ED 250, USA DNWS-R006, USAF J5AZ03E871 00DA, USN S-140-0011, USMC F04L2Y1

Course Prerequisites: N/A

Classification: SECRET, Security Requirements: Restricted Data-CNWDI, Uniform: Service Utility Uniform. Students should bring M-53 masks or service equivalent, if able. Portions of the class are administered outdoors. Appropriate inclement weather and sun protective clothing is recommended, Format: In residence, MTT: N/A, Course Length: 5 days

JNEODC is a 5-day course that provides detailed sustainment training for EOD technicians when responding to Nuclear Weapons Accidents or Incidents (NWAI) as part of the Initial Response Force (IRF). The program focuses on nuclear weapons hazards, stockpile safety features and safeguards, weapons development, and response protocols. Portions of this course are taught by SMEs at the Sandia National Laboratory.

*Deadline for registration is 21 days prior to the class convene date.*

POC: MSgt Anthony F Pousen, 505-846-8689, anthony.f.pousen.mil@mail.mil
The Emerging Requirement Branch (ERB) is an integral part of the DTRA’s mission to support the Nuclear Enterprise & CWMD community by reviewing CWMD/CBRNE emerging requirements, then providing corresponding solutions to support the efforts of our warfighters, the USG, allies, and partners as the nation competes with global competitors. The ERB has access, internal and external to DNWS, for instructors and Subject Matter Experts (SMEs) who can customize tailor curricula to:

- Initiate new instruction, modules and courses.
- Integrate/modify ongoing education, training, and information exchange material for curricula/activities (conferences, seminars, workshops, information sharing).
- Assist development of reference materials, handbooks, multiservice/joint publications, and other relevant documents.

ERB focuses on supporting the DTRA Priorities for:

- CWMD/EMERGING THREATS MISSION EXCELLENCE by using SME to ensure an actionable, forward-thinking CWMD/emerging threats agenda for instruction & curricula.
- ALIGN RESOURCES TO STRATEGY by ensuring tasks and resources are aligned to requirements, needs and gaps.
- DRIVE THE INSTRUCTIONAL AGENDA WITH A SENSE OF URGENCY by finding, coordinating, and producing solutions that provide timely, effective actions for CWMD education & training.

ERB topic areas for tailored instruction, seminars, information exchange venues, electives, and training iterations include, but are not limited to:

- WMD/CBRNE, Radiological, & Nuclear Terrorism
- Radiological & Nuclear (SNM Focus) Materials of Concern
- EMP/HEMP Comparison for Responders
- Nuclear Reactors & Nuclear Reactor Accidents
- Radiological & Nuclear Cargo Hazards
- Survival on a Nuclear Battlefield
- Radiological & Nuclear Decontamination
- Nuclear Weapons Design and Design Evolution
- Operation TOMODACHI Lessons Learned
- Tuwaitha - Iraq Survey Group Case Study
- Minot to Barksdale Overview and Lessons Learned
- Legacy and Current U.S. Nuclear Weapons Stockpile

CRNOS is a 4-day seminar (education and training hands-on) conducted at the TOP SECRET//SCI/RD-CNWDI classification. The target audience is Theater Special Operations Command (TSOC), Geographic Combatant Commands (GCCs), and operational staff personnel participating in CWMD efforts. The seminar is conducted twice a year. An additional iteration can be conducted as required.

Please contact the ERB team for further information or request support; call (505) 846-6254 / (505) 846-1193 / (505) 853-0195 / (505) 853-4509.

Branch Manager: Mr. Chris Pink, Lead Instructors: Mr. Randy Stover, Maj Kuhn, Mr. Tom Cotton
DEVELOPING COURSES

• Whole of Government (WOG)
• Weapon Recovery EOD Course (WREC)

Whole of Government (WOG)

The Whole of Government (WOG) course is an online training program that provides knowledge and skills in the field of the United States Nuclear Weapons Enterprise. Specific attention will be directed to the concepts of nuclear deterrence, nuclear policy, and the history of the U.S. nuclear weapons program. This program will prepare professionals to attend courses that DNWS offers addressing the nuclear weapons enterprise. When complete, WOG will be a mandatory prerequisite for the below courses:

Nuclear Policy Course (NUCPOL)
Course ID/Number: DNWS NW 401, USN S-140-0005

Nuclear Weapons Orientation Course (NWOC)
Course ID/Number: DNWS NW 110 & NW 110M, USA-ROO1, USAF-JBOZD21A100DA, USMC-FO4EGP1, USN S-140-0001

Joint DOD-DOE Nuclear Surety Executive Course (JNSEC)
Course ID/Number: DNWS NW 112, USN S-140-0002

Weapon Recovery EOD Course (WREC)

The Weapon Recovery EOD Course (WREC) is a 2.5-day (20 hour) course intended for custodial/ Direct Support Unit (DSU) EOD personnel to familiarize responders with weapon recovery planning. This planning introduction includes policy overview, the personnel and equipment deployed by DoD, DOE, and DOJ, and interagency Standard Operating Procedures (SOPs) in response to a Nuclear Weapon Incident (NWI).

Course Dates: Upon request

If you have any interest in the Whole of Government (WOG) course or the Weapon Recovery EOD Course (WREC), please contact the registrar office.
Here is an example of a current Emerging Requirements Branch (ERB) tailored course:

• CWMD Radiological/Nuclear Operational Seminar (CRNOS) - This seminar provides Operational Staff level awareness of the Radiological and Nuclear Operational environment as it relates to CWMD efforts. The 4-day seminar addresses the following topics and evolutions:
  - An overview of radiological and nuclear materials, categorization and equipment.
  - An overview of RED, RDD and IND threats.
  - Operational considerations concerning the medical effects of ionizing radiation.
  - U.S. CWMD policies and capabilities as they apply to radiological and nuclear threats.
  - CWMD/IND focused classified tour of the Nuclear Weapons Instructional Museum (NWIM).
  - Visits and discussions with Rad/Nuc event response stakeholders.
  - Hands on exposure to radiological sources and the spectrum of DOD radiological detectors.
DISTANCE LEARNING TRAINING

• Applied Radiological Response Techniques – Level 1 (ARRT-1) Modules
• Basic Science Skills (BSS) Modules
• Joint Nuclear Weapons Publications System (JNWPS)
• Nuclear Safety Studies and Review (NSSR)
• Nuclear Weapons Surety (NWS)
• Personnel Reliability Assurance Program (PRAP)

The school currently offers online training content on two platforms, on the DNWS Learning Content Management System (LCMS) and on the Joint Knowledge Online (JKO) Learning Management System (LMS).

Using DNWS LCMS: Navigate to https://dnws.dtra.mil. Login using your CAC. Click on the “Training Courses” link on the DNWS Home Page. Available courses will display in the list.

Using JKO LMS: Navigate to https://jko.jten.mil/. Login using your CAC. Click on the “Training Courses” link on the JKO Home Page. Available courses will display in the list.

Note: The user must create/register for a student account on either of the above sites.

Applied Radiological Response Techniques – Level 1 (ARRT-1) Modules

DNWS Course Number: DNWS NR 200 DL, USA DNWS-R027, DPS NM 200339, DTRA-0020
JKO Course Number: DNWS-AD01-AD08
Course Prerequisites: Basic Scientific Skills Modules and Nuclear Weapons Surety (NWS)
Classification: UNCLASSIFIED, Security Requirements: None, Course Length: 16 hours, self-paced

ARRT-1 is an awareness-level course that provides instruction on basic radiological response techniques. This course is based on a series of modules that cover the following: Basic Radiation Science, Characteristics of Radiation, Radiation Units of Measure, Gas Filled Detectors, Solid State Detectors, Radiation Exposure Control, Radiological Contamination Control, and Radiological Survey Planning.

POC: SSG William I. Moak, 505-846-6596, william.i.moak.mil@mail.mil

Basic Science Skills (BSS) Modules

Basic Science Skills comprises five stand-alone modules that can be completed in sequence or individually, as the student or in-residence course manager sees fit. This online series is considered a prerequisite/refresher in the fundamentals of the basic sciences as they relate to the Nuclear Enterprise.

POC: CPT Branden Passons, branden.s.passons.mil@mail.mil
**Joint Nuclear Weapons Publications System (JNWPS)**

DNWS Course Number: DNWS NS 105 DL  
JKO Course Number: DNWS ID-01  
Course Prerequisites: N/A  
Classification: UNCLASSIFIED  
Security Requirements: None  
Course Length: 4 hours, self-paced

JNWPS is an awareness level course that provides an introduction of basic concepts and principles related to the Joint Nuclear Weapons Publication System (JNWPS) for professionals supporting the nuclear weapons enterprise. The course goal is to provide clear understanding of the JNWPS and why it exists.

**Nuclear Safety Studies and Review (NSSR)**

DNWS Course Number: DNWS SA 103 DL  
JKO Course Number: DNWS SD-01  
Course Prerequisites: DNWS NI 101- DL (PRAP), DNWS NI 104 DL (NWS)  
Classification: UNCLASSIFIED  
Security Requirements: None  
Course Length: 4 hours; self-paced

NSSR is an awareness level course that provides an introduction of basic concepts and principles related to nuclear safety studies and reviews for professionals supporting the nuclear weapons enterprise. The course goal is to facilitate a clear understanding of what nuclear safety studies and reviews are and why they are conducted.

**Nuclear Weapons Surety (NWS)**

DNWS Course Number: DNWS NI 104 DL  
JKO Course Number: DNWS ND01  
Course Prerequisites: N/A  
Classification: UNCLASSIFIED  
Security Requirements: None  
Course Length: 8 hours

NWS is an awareness level course that provides an introduction of basic concepts and principles related to nuclear surety for professionals supporting the nuclear weapons enterprise. The course goal is to facilitate a clear understanding of what nuclear surety is and how nuclear surety is achieved.

**Personnel Reliability Assurance Program (PRAP)**

DNWS Course Number: DNWS NI 101 DL, JCS-201210  
JKO Course Number: JKO DNWS WD01  
Course Prerequisites: N/A  
Classification: UNCLASSIFIED  
Security Requirements: None  
Course Length: 3 hours, self-paced

PRAP is an awareness level course that provides an introduction of basic DOD PRAP fundamentals and concepts for personnel who are assigned duties involving nuclear weapons or nuclear command and control systems. The course addresses PRAP concepts, roles, responsibilities, and processes in support of nuclear surety and further explains these concepts in relationship to real-world scenarios.
DTRA-RD & HOSTED COURSES

- Defense Integration and Management of Nuclear Data Services (DIAMONDS)
- Functional Area 52 Qualification Course (FA-52 QC Phase 1)*
- Joint Countering Weapons of Mass Destruction Planning Course (JCPC)
- Mission Assurance Assessment Course (MAAC)
- Nuclear Weapons Technical Inspections Course (NWTIC)
- Theater Nuclear Operations Course (TNOC)

CBRNE Modeling Simulation Courses
- Geospatial Analysis for Consequence Assessment – Level 1 (GACA-1)
- Geospatial Analysis for Consequence Assessment – Level 2 (GACA-2)
- High Altitude Nuclear Effects (HANE)
- Hazard Prediction and Assessment Capability Level 1 (HPAC-1)
- Hazard Prediction and Assessment Capability Level 2 – Chemical, Biological, Radiological (HPAC-2-CBR)
- Hazard Prediction and Assessment Capability Executive Course (HPAC-Exec)
- Hazard Prediction and Assessment Capability – Nuclear (HPAC-N)
- Integrated Munitions Effects Assessment Level 1 (IMEA-1)
- Integrated Munitions Effects Assessment Level-2 - Conventional (IMEA-2-C)
- Integrated Munitions Effects Assessment - Nuclear (IMEA-N)
- Medical Effects of Ionizing Radiation (MEIR)
- NCBRE (Nuclear, Chemical, Biological, Radiological, and high-yield Explosive) Analysis Toolset - Consequence Assessment (NATS-CA)
- NCBRE (Nuclear, Chemical, Biological, Radiological, and high-yield Explosive) Analysis Toolset –Consequence Assessment – Nuclear (NATS-CA-N)
- Vulnerability Assessment and Protection Option Level 1 (VAPO-1)
- Vulnerability Assessment and Protection Option Level 2 (VAPO-2)

* - denotes restricted course

DIAMONDS Training is a 3-day course that provides hands-on familiarization training with the national nuclear stockpile’s sole accountability database for prospective and current users. Content of this course outlines current practices for generation, process, and submission of nuclear accountability transactions in the DIAMONDS system, as well as, the incorporation of DoD nuclear weapons accountability policies and procedures. Students should already be familiar with nuclear accountability transactions outside of DIAMONDS.

This Course is sponsored by the DTRA/J10NL. For more information please contact Diana Kuhn, (703) 767-4315, diana.l.kuhn.civ@mail.mil

The Functional Area 52 Qualification Course (FA-52 QC Phase 2) is hosted annually at DNWS by the U.S. Army Nuclear and CWMD Agency (USANCA). The training is for U.S. Army FA-52 officers and serves as the Nuclear and CWMD Officers Functional Area Phase 2 qualifying course. Other students accepted by exception. Topics include; an overview of the physics of nuclear weapons, weapon characteristics, weapon engineering, weapon surety, weapon subsystem/component technology, scope of the US nuclear weapons program, stockpile stewardship, and the nuclear fuel cycle. In addition, students will conduct critical site visits to DOE laboratories and receive information briefings from subject matter experts.

For more information please contact Mr. Bill Coffin, (703) 545-9817, william.j.coffin.civ@army.mil or usarmy.belvoir.dcs-g-3-5-7.mbx.usanca-proponency-division@mail.mil

* - denotes restricted course
**Joint Countering Weapons of Mass Destruction Planning Course (JCPC)**

*Course ID/Number:* DNWS P 300  
*Course Prerequisites:* N/A  
*Classification:* SECRET  
*Security Requirements:* None  
*Course Length:* 5 days

JCPC is a 5-day course that introduces students to U.S. Government and DoD policy, strategy, doctrine, and planning related to CWMD; teaches students to recognize CWMD equities in a strategic and operational context, and demonstrates how to incorporate them into the Joint Planning Process (JPP). The first half of the course focuses on the three strategic end states (prevent (pathway defeat), protect (WMD defeat), and respond (minimize WMD effects)) and the six CWMD Activities with their supporting tasks identified in the DOD Strategy for Countering WMD and joint doctrine. The second half of the course takes students through select areas of the JPP and merges CWMD and JPP concepts through a series of facilitator-led, small-group planning exercises.

This Course is sponsored by DTRA Intelligence and Plans Directorate. For more information please contact Mr. Victor Carter, (571) 616-6342, victor.t.carter3.civ@mail.mil.

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**Mission Assurance Assessment Course (MAAC)**

*Course ID/Number:* DNWS P 331, G55000APCIL  
*Course Prerequisites:* JKO Course J3OP-US1401, Mission Assurance  
*Classification:* SECRET  
*Security Requirements:* None  
*Course Length:* 5 days

MAAC is a 5-day course that provides training on the DoD Mission Assurance Assessment (MAA) Program, which is an integrated approach to assessing risk to mission. Students are provided the methodologies and tools to conduct MAAs of assets identified as critical to mission accomplishment. Students will also assess the mission assurance related programs and activities as they apply to the asset(s) using the DoD MAA Benchmarks. The course includes facilitated discussions, case studies, mock interviews, classroom exercises, field group exercises, and subject matter expert breakout sessions.

This course is sponsored by the Joint Staff, Deputy Directorate for Nuclear, Homeland Defense, and Current Operations (DD NHDCO), and conducted by DTRA.

For more information please email the DTRA MAA Help Mailbox: dtra.belvoir.ne.mbx.ne-maa-help@mail.mil or dtra.belvoir.ne.mbx.ne-maa-help@mail.smil.mil.

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**Nuclear Weapons Technical Inspections Course (NWTIC)**

*Course ID/Number:* DNWS P 120  
*Course Prerequisites:* DNWS DL Course NW104DL: Nuclear Weapon Surety (NWS)  
*Classification:* SECRET, Security Requirements: Restricted Data-CNWDI, Uniform: As directed by the individual service for military & business casual for civilians, Format: In residence, MTT: Yes, specified dates and upon request, *Course Length:* 4 days

NWTIC is a 4-day course that provides instruction on common inspection methodology to better baseline and educate Service Inspectors for the Nuclear Enterprise. The course will use lectures, facilitated group discussions, and inspection scenarios to ensure strict and consistent application of nuclear weapon technical inspection guidance.

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**Theater Nuclear Operations Course (TNOC)**

*Course ID/Number:* DNWS P 305, USN S-140-0004, USA DNWS RO13, USAF-J50ZD138404DA, DNWS MTT DNWS P 305 M  
*Course Prerequisites:* NCP-52 or NWOC  
*Classification:* SECRET  
*Security Requirements:* Restricted Data-CNWDI  
*Course Length:* 5 days

TNOC is a 5-day course that provides training for planners, support staff, targeting staff, and staff nuclear planners for nuclear joint operations and targeting. The course provides instruction on theater integration of US nuclear capabilities into conventional operations, US nuclear policy, joint nuclear doctrine, nuclear effects modeling, consequences of execution, and targeting concepts. A Nuclear Weapons Instructional Museum (NWIM) tour at the S/RD-CNWDI level is also included.

For more information please contact CW3 David McMorris, (571) 515-9965, david.j.mcmorris.mil@mail.mil or usarmy.belvoir.hqda-dcs-g-3-5-7.mbx.usanca-proponency-division@mail.mil.
**Geospatial Analysis for Consequence Assessment – Level 1 (GACA-1)**

Course ID/Number: DNWS P 170, USA GACA-1  
Course Prerequisites: N/A  
Classification: UNCLASSIFIED  
Security Requirements: None  
Course Length: 4 days

GACA–1 is a 4-day course that provides students with tools to analyze CBRNE and natural hazards using Geospatial Information Systems (GIS) in conjunction with DTRA hazard modeling software. Students will work to produce comprehensive decision support products that communicate the operational impact of CBRNE and natural hazards to a Commander or Common Operational Picture (COP).

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil for FIRST Basic, FIRST Nuclear and ICWater).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

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**Geospatial Analysis for Consequence Assessment – Level 2 (GACA-2)**

Course ID/Number: DNWS P 171, USA GACA-2  
Course Prerequisites: DNWS P 170, USA GACA-1  
Classification: UNCLASSIFIED  
Security Requirements: None  
Course Length: 4 days

GACA–2 is a 4-day course that builds on the work in GACA–1 to apply modeling and analysis techniques to DTRA and third-party software to improve response time and streamline the modeling/analysis process of a CBRNE incident. Students will develop methods to communicate CBRNE response products across multiple software platforms.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil for FIRST Basic, FIRST Nuclear and ICWater).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

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**High Altitude Nuclear Effects (HANE)**

Course ID/Number: DNWS CM-270  
Course Prerequisites: N/A  
Classification: SECRET  
Security Requirements: Restricted Data-CNWDI  
Course Length: 4 days

HANE is a modular, 4-day course that provides students with the basic concepts involving high altitude nuclear detonations, prompt and persistent nuclear environments, EMP, and their effects on military systems and infrastructure. The course includes basic understanding of the physics of high altitude nuclear explosions, survivability of space-based, airborne and ground based systems, and effects on radar and radio wave communications. Training includes software demonstrations, hands-on familiarization and practices using both command line and graphical user interfaces. Emphasis is placed on mission level and system performance impacts.

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

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**Hazard Prediction and Assessment Capability Level 1 (HPAC-1)**

Course ID/Number: DNWS P 145, USA DTRA-ALEX-HL1  
Course Prerequisites: N/A  
Classification: UNCLASSIFIED  
Security Requirements: None  
Course Length: 5 days

HPAC–1 is a 5-day course that provides students with a basic level of competency in the modeling of hazardous material releases using the DTRA HPAC software package. Upon completion of the course, students will learn to apply the HPAC model to predict hazard environment areas and potential human effects based on user’s mission requirements.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil
**Hazard Prediction and Assessment Capability Level 2 – Chemical, Biological, Radiological (HPAC-2-CBR)**

**Course ID/Number:** DNWS P 150-C, USA DTRA-ALEX-HL2, DHS CM-150  
**Course Prerequisites:** HPAC-1 and six months of HPAC experience  
**Classification:** UNCLASSIFIED, **Security Requirements:** None,  
**Course Length:** 5 days

HPAC-2-CBR is a 5-day course that provides students with a higher level of proficiency in modeling and analysis of chemical, biological, or radiological (CBR) hazard release using HPAC. Upon completion of the course, students will learn to apply HPAC advanced software features to model the transport and dispersion of CBR materials and their potential human and collateral effects based on mission requirements.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

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**Hazard Prediction and Assessment Capability – Nuclear (HPAC-N)**

**Course ID/Number:** DNWS P 150-N, USA DTRA-ALEX-HL2  
**Course Prerequisites:** N/A  
**Classification:** UNCLASSIFIED, **Security Requirements:** None,  
**Course Length:** 5 days

HPAC-N is a 5-day course that provides students with a higher level of proficiency in modeling and analysis of nuclear hazard release using HPAC. Students will learn to apply the HPAC model to predict hazard environment areas and potential human effects based on user mission requirements.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

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**Integrated Munitions Effects Assessment Level 1 (IMEA-1)**

**Course ID/Number:** DNWS P 105, USA DTRA-ALEX-IL1  
**Course Prerequisites:** N/A  
**Classification:** SECRET, **Security Requirements:** None,  
**Course Length:** 5 days

IMEA-1 is a 5-day course that provides students with an initial level of competency in IMEA. Students will experience the capabilities and limitations of IMEA by creating/obtaining and equipping target models (buildings, bunkers and tunnels), analyzing conventional weapons penetration and damage capabilities, creating attack plans, and analyzing and interpreting results.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

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**Hazard Prediction and Assessment Capability Executive Course (HPAC-Exec)**

**Course ID/Number:** DNWS P 101, USA DTRA-ALEX-HL2  
**Course Prerequisites:** A basic understanding of the HPAC model and Consequence Assessment Modeling is desired but not required  
**Classification:** UNCLASSIFIED, **Security Requirements:** None,  
**Course Length:** 2 days

HPAC-Exec is a 2-day course that provides Leaders/Decision Makers exposure to the Consequence Assessment Modeling methodologies and their capabilities and limitations. Upon completion of the course students will recognize HPAC products to best communicate the hazards associated with their operations, understand the uncertainties related to their HPAC products, and the guidance needed to provide the best modeling and simulation support.

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil
IMEA-2-C is a 5-day course that provides students with advanced skills in the application of IMEA conventional strike capabilities and limitations. Students will be exposed to an in-depth review of each methodology underlying the calculations in IMEA. Methodology lectures are followed by hands-on use of tailored IMEA scenarios.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

IMEA-N is a 5-day course that provides students with basic skills in the application of IMEA nuclear strike capabilities and limitations. Students will achieve proficiency with importing and creating target models, developing attack plans, performing consequence assessment to WMD scenarios, and communicating results.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

The Medical Effects of Ionizing Radiation (MEIR) Course is post-graduate level instruction concerning the biomedical consequences of radiation exposure, how the effects can be minimized, and how to medically manage casualties. The training includes nuclear incidents that can occur on or off the battlefield and that go beyond nuclear weapons events. It covers thoroughly all four of the key subjects: health physics, biological effects of radiation, medical/health effects, and psychological effects.

For more information contact LT Stewart, Aure, (301) 295-1963, aure.stewart@usuhs.mil

IMEA-N is a 5-day course that provides students with basic skills in the application of IMEA nuclear strike capabilities and limitations. Students will be exposed to an in-depth review of each methodology underlying the calculations in IMEA. Methodology lectures are followed by hands-on use of tailored IMEA scenarios, and communicating results.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

NATs-CA is a five-day course in which the student achieves a basic level of competency in the modeling of Chemical, Biological, Radiological, and Nuclear (CBRN) hazard releases. Students use NAT, a Net-centric tool, in a collaborative environment to predict hazard environment areas and potential human effects based on mission requirements.

Account Registration: On CBRNE Decision Support site: https://cbrnedss.dtra.mil

For more information contact CW4 Leonardo Cargill and the training coordinator, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

MTT: Based on availability and coordination with DTRA CBRNE training manager.
VAPO-1 is a 5-day course in which students will receive instruction in the full functionality of VAPO to include its capabilities, limitations, and assumptions. Using VAPO functionality, students will assess and analyze a spectrum of threats against assets and develop mitigating strategies with respect to vulnerability assessment and force protection.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

VAPO-2 is a 4-day course designed to enable users to achieve a higher level of understanding of the software’s physics based blast effects models to enhance the application of VAPO for force protection, anti-terrorism and vulnerability assessment modeling against a wide spectrum of real world threats.

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

NATs-CA-N is a five-day course in which the student achieves an initial level of competency in the modeling of nuclear hazard releases. Students use NATs, a Net-centric tool, in a collaborative environment to predict nuclear hazard environment areas and potential human effects based on mission requirements.

Account Registration: On CBRNE Decision Support site: https://cbrnedss.dtra.mil

For more information contact CW4 Leonardo Cargill and the training coordinator, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

Vulnerability Assessment Protection Options

Level 1 (VAPO-1)

Course ID/Number: DNWS P 135, USA DTRA-ALEX-VL1

Course Prerequisites: N/A

Classification: UNCLASSIFIED

Security Requirements: None

Course Length: 5 days

VAPO-1 is a 5-day course in which students will receive instruction in the full functionality of VAPO to include its capabilities, limitations, and assumptions. Using VAPO functionality, students will assess and analyze a spectrum of threats against assets and develop mitigating strategies with respect to vulnerability assessment and force protection.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

Level 2 (VAPO-2)

Course ID/Number: DNWS P 140, USA DTRA ALEX VL2

Course Prerequisites: VAPO-1

Classification: UNCLASSIFIED

Security Requirements: None

Course Length: 4 days

VAPO-2 is a 4-day course designed to enable users to achieve a higher level of understanding of the software’s physics based blast effects models to enhance the application of VAPO for force protection, anti-terrorism and vulnerability assessment modeling against a wide spectrum of real world threats.

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

DTRA Research & Development Directorate, Reachback Division (RD-OPR) provides 24/7 Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) SME and decision support for planning, operations, and post-event analysis to warfighters and emergency responders. Additionally, Reachback manages and implements the DTRA training contracts in support of Joint, Intergovernmental, Interagency, and Multinational organizations, providing training on DTRA CBRNE decision support analysis software tools. The DTRA CBRNE Decision Support Analysis Capabilities Training Support team provides training on DTRA- and third-party-developed Weapons of Mass Destruction (WMD) models, tools, and capabilities for military and emergency responder operations. Reachback offers the following CBRN Modeling and Simulations courses at DNWS. Classes are normally 4-5 days in length.

- Geospatial Analysis for Consequence Assessment – Level 1 (GACA-1)
- Geospatial Analysis for Consequence Assessment – Level 2 (GACA-2)
- High Altitude Nuclear Effects (HANE)
- Hazard Prediction and Assessment Capability Level 1 (HPAC-1)
- Hazard Prediction and Assessment Capability Level 2 – Chemical, Biological, Radiological (HPAC-2-CBR)
- Hazard Prediction and Assessment Capability Executive Course (HPAC-Exec)
- Hazard Prediction and Assessment Capability – Nuclear (HPAC-N)
- Integrated Munitions Effects Assessment Level 1 (IMEA-1)
- Integrated Munitions Effects Assessment Level-2 – Conventional (IMEA-2-C)
- Integrated Munitions Effects Assessment - Nuclear (IMEA-N)
- Medical Effects of Ionizing Radiation (MEIR)
- NATs-CA-N is a five-day course in which the student achieves an initial level of competency in the modeling of nuclear hazard releases. Students use NATs, a Net-centric tool, in a collaborative environment to predict nuclear hazard environment areas and potential human effects based on mission requirements.

Account Registration: On CBRNE Decision Support site: https://cbrnedss.dtra.mil

For more information contact CW4 Leonardo Cargill and the training coordinator, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

MTT: Based on availability and coordination with DTRA CBRNE training manager.

Vulnerability Assessment Protection Options

Level 1 (VAPO-1)

Course ID/Number: DNWS P 135, USA DTRA-ALEX-VL1

Course Prerequisites: N/A

Classification: UNCLASSIFIED

Security Requirements: None

Course Length: 5 days

VAPO-1 is a 5-day course in which students will receive instruction in the full functionality of VAPO to include its capabilities, limitations, and assumptions. Using VAPO functionality, students will assess and analyze a spectrum of threats against assets and develop mitigating strategies with respect to vulnerability assessment and force protection.

Software Registration is required (CBRNE Decision Support site: https://cbrnedss.dtra.mil).

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil

Level 2 (VAPO-2)

Course ID/Number: DNWS P 140, USA DTRA ALEX VL2

Course Prerequisites: VAPO-1

Classification: UNCLASSIFIED

Security Requirements: None

Course Length: 4 days

VAPO-2 is a 4-day course designed to enable users to achieve a higher level of understanding of the software’s physics based blast effects models to enhance the application of VAPO for force protection, anti-terrorism and vulnerability assessment modeling against a wide spectrum of real world threats.

For more information contact CW4 Cargill, (703) 677-3352, dtra.belvoir.rd.mbx.reachback-training@mail.mil
NUCLEAR WEAPONS INSTRUCTIONAL MUSEUM & TRAINING SITES

- Nuclear Weapons Instructional Museum
- NWIM Virtual Tour
- DNWS Tour Request Procedures
- DNWS Training Sites

Nuclear Weapons Instructional Museum

DNNS manages and operates the only classified Nuclear Weapons Instructional Museum (NWIM) in DoD. The NWIM is an irreplaceable repository that traces the history and development of the U.S. nuclear weapons stockpile from its inception to the present. The NWIM contains displays of all stockpiled U.S. nuclear weapons and their associated components and delivery systems, as well as related training aids.

In addition to preserving artifacts of unique historic significance, the DNNS NWIM serves as an important teaching aid. Tours are provided in conjunction with some courses conducted at the DNNS and vary in length from two to four hours, depending on the nature of the audience. Touring the NWIM display affords students and visitors a rare opportunity to view exhibits and to discuss stockpile issues with experienced instructors.

The NWIM has two major components:

1. An unclassified area where visitors may view a number of different weapon casings and a display of one-tenth scale foreign missile delivery systems.
2. A classified area displaying detailed nuclear weapon models. Arrangements can be made for groups and visitors to tour the NWIM on Tuesdays, Wednesdays, and Thursdays only; Mondays and Fridays the museum is closed to tours for maintenance and upkeep operations. Tours are available for anyone who meets security clearance requirements, has a need-to-know, and submits the required paperwork in accordance with school policy. A DoD SECRET security clearance with Restricted Data or Critical Nuclear Weapons Design Information access or a Department of Energy “Q” clearance is required to participate in an NWIM tour. To reserve a special tour of the NWIM, a written request must be submitted to and received a minimum of 15 working days before the requested tour date. Download a sample NWIM tour request letter or use the template on the following catalog page. Requests may be emailed to dtra.kirtland.ne.mbx.dnws-nwim@mail.mil or faxed to 505-846-5560.

The NWIM is a member of the American Alliance of Museums.

For all tours of the Nuclear Weapons Instructional Museum (NWIM), please contact the NWIM Scheduler at: (505) 853-2157 or FAX: (505) 846-5560

NWIM Virtual Tour:

The NWIM Virtual Tour provides an immersive digital experience that allows users to access the classified areas of the museum. The tour is designed as a mobile version of the in-person NWIM tour, and likewise traces the history and development of the U.S. nuclear weapons stockpile from its inception to the present. Virtual tour content includes panoramic photos, still photos, instructor videos, information-al text, and detailed displays of all stockpiled U.S. nuclear weapons alongside their associated components and delivery systems. The tour can be presented by a DNNS instructor on a provided DNNS laptop, or self-paced for approved users, upon request. A DoD SECRET security clearance with Restricted Data or Critical Nuclear Weapons Design Information access or a Department of Energy “Q” clearance is required to view the virtual tour.

Requests may be emailed to dtra.kirtland.ne.mbx.dnws-nwim@mail.mil.
DNWS Tour Request Procedures

The following actions are required to request and book a tour of the NWIM:

1. All tour attendees requesting entry into the classified Weapons Display Area (WDA) must possess Restricted Data (RD) and Controlled Nuclear Weapons Design Information (CNWDI) clearances. Please note that these clearances are not automatically included in a Secret or Top Secret clearance and require read-in by the owning organization to these respective programs if the personnel have a need to know. Personnel will not be read into RD and CNWDI by DNWS.

2. Please contact the NWIM Scheduler via email at dtra.kirtland.ne.mbx.dnws-nwim@mail.mil or via telephone at DSN 263-2157 or Commercial (505) 853-2157. Once you have received an acknowledgement and a draft Access Roster from the NWIM Scheduler you may proceed to the next step.

3. All organizations must download and return the NWIM Access Roster ASAP. The clearance information included on the Access Roster will be validated by the NWIM Scheduler, not your local Security Office/Manager. Changes to the roster can be made up to 15 days prior to visit. Deletions may be made at any time. No additions will be accepted within 15 days of the visit. The Access Roster can either be emailed to dtra.kirtland.ne.mbx.dnws-nwim@mail.mil or faxed. If faxed, please send to 505-846-5560.

4. The following items are not permitted in NWIM:
   - Any automobile key fobs with two way data transmission capability
   - Any item with a data port (including pedometers)
   - Smart watches
   - Bluetooth devices
   - Cell phones
   - Food or drinks
   - Backpacks/purses of any kind (storage area available outside the NWIM)
   - Any item with a data port (including pedometers)
   - Any automobile key fobs with two way data transmission capability

You may leave these items in your vehicle or in the case of line items C-F, leave them in unsecured cubbies at the entrance to the facility.

DNWS Training Sites

The most unique aspect to DNWS is our practical training. And, New Mexico’s distinct legacy within the Nuclear Enterprise makes it the premiere locale for practical radiological and nuclear weapons training.

Located on Kirtland AFB, DNWS has access to several special training sites. The use of these sites is incorporated into many of the school’s courses to reinforce the concepts and procedures explained in the classroom. In practical exercises, students are given the opportunity to recognize threats in real-time; don and use PPE; and practice response or search procedures using the actual equipment fielded to their parent organization. DNWS would not be able to provide these unique training experiences without the use of these training sites.

This section highlights two of the DNWS Training Sites on Kirtland AFB.

Operations/Training – 10 (OT-10) Sites

Called OT-10 sites by the Air Force, Training Sites 1 - 4 are the remainder of eight original sites developed by the school in 1961, largely in response to the Palomares nuclear weapons accident in Spain. The Palomares accident challenged responders with large scale radiological monitoring and clean-up operations. Eight fields were chosen and seeded with natural thorium, which is slightly radioactive, to create areas of detectable, elevated radiological background. The four sites still in use have a variety of aircraft or vehicle wreckage that students must navigate while employing detectors. Today, these sites are the only training areas of their type available to the DOD to safely practice working in elevated background.

NETOPS, JNEODC, ARRT-2 and B/IRNT courses feature practical exercises using these training sites.

DNWS Advanced Radiological Training Site (DARTS)

The DARTS is a distinctive underground facility with over 12,000 square feet of enclosed training space. Formerly the Advanced Research EMP Simulator (ARES) facility, DARTS was first used by DNWS as a training site in 2018. Over the past three years, the DNWS team has gradually rehabilitated the facility from a testing platform into an invaluable training site that can replicate a variety of industrial facilities. Coordinat-ed maintenance by the 210th RED HORSE Squadron has also freed up previously unusable underground areas adjacent to the facility that could be expanded into future training space.

ADT-2 and BIRNT courses feature practical exercises using this training site. The site is available for exercises and tailored training as well.
College Credit and Recognition for DNWS Courses

The American Council on Education (ACE) has recommended college credit for nine (9) DNWS courses, designated by the ACE logo in the respective course description. ACE is the major coordinating body for all of the nation’s higher education institutions and provides a unifying voice on key higher education issues. The level of credit (undergraduate or graduate) and the number or recommended credit hours are listed in the adjacent table. DNWS has also partnered with the following colleges and universities to simplify credit transfers: Strayer University, SUNY Empire State College, Colorado Technical University, University of Maryland University College (UMUC), and National American University (NAU) Henley-Putnam School of Strategic Security.

For more than 30 years, colleges and universities have trusted ACE to provide reliable course equivalency information to facilitate their decisions to award academic credit. For more information, visit the website at http://www.acenet.edu/news-room/Pages/The-ACE-CREDIT-College-and-University-Network.aspx. Additionally, DNWS participates in the ACE CREDIT Transcript Service. The Transcript Service offers a lifelong record for students who have successfully completed DNWS courses that have been evaluated and recommended by ACE CREDIT. For more information, visit the ACE CREDIT Transcript Service website at http://www.acenet.edu/higher-education/topics/Pages/Transcript-Services.aspx.

DNWS has also received accreditation/certification from the Joint Staff and New Mexico Department of Public Safety for several courses. Courses with these accreditation/certifications will be designated by the respective logo in the course description. See below for more details.

The Joint Staff (JCS) Certification
There are currently nine (9) DNWS courses that have joint certification. The Joint Staff Directorate for Joint Force Development (J7) certifies certain joint courses offered by DNWS for discretionary points toward Joint Qualified Officer (JQO) designation through the experience path of the Joint Qualification System (JQS). Students in the grades of O-1 through O-6 may self-nominate their experiences and submit course certificates to https://milconnect.dmdc.osd.mil/milconnect/. Select “Viewing Your Joint Officer History” to view your status towards becoming a JQO, and to request award of joint experience points. This input will be reviewed by the proper Joint Officer Matters channels of the respective service branches to obtain JQS credit.

New Mexico Department of Public Safety (NMDPS) Accreditation
The New Mexico Department of Public Safety has accredited five (5) of our courses. These courses meet the requirements for the Continuing Education Program (CEP) for First Responders. Once students complete one or more of these classes, they may download a certification letter from the transcript page. Students must use this letter in conjunction with the certificate to receive credit from the NM DPS Training Center.

<table>
<thead>
<tr>
<th>Course/ACE Number</th>
<th>DNWS Course Name</th>
<th>Colorado Technical University</th>
<th>Empire State University - SUNY</th>
<th>University of Maryland University College</th>
<th>Strayer University</th>
<th>National American University</th>
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Incident Command and Control Certificate (NWIRT). This certificate is particularly valuable for combatant command staff members.

Incident Command and Control Certification Program:
- Level III, USAF SF Nuclear Policy Certification (Level II + JNSEC)
- Level II, USAF SF Nuclear Group/Squadron Certification (Level I + NWTIC)

To become NSCTP certified, you must complete the following collective courses appropriate to your duty position or assigned position.

- Basic Incident Response (BIR) Certificate (ARRT2)
- Advanced Incident Response Certificate (BIR Certificate + NETOPS)

Nuclear Weapons Certification Programs:
The Nuclear Weapons Certification Programs are designed for personnel with responsibilities in the Nuclear Enterprise, such as nuclear weapons policy, nuclear weapons operations, and nuclear weapons surety. These certifications would be particularly valuable for combatant command staff members, joint staff members, and personnel working in other components of the Nuclear Enterprise such as: nuclear weapons intelligence, nuclear weapons maintenance, nuclear weapons operations, and nuclear weapons security.

- Basic Nuclear Weapons Certificate (NWOC)
- Intermediate Nuclear Weapons Certificate (Basic Nuclear Weapons Certificate + NUCPOL)

Nuclear Matters Certification Program: The Nuclear Matters Certification Program is designed for personnel with responsibilities in nuclear weapons stockpile management and stewardship. The purpose of this certification program is to provide the candidate with familiarization in nuclear weapons and radiological incident/accident response; past and current responsibilities in nuclear weapons stockpile management and stewardship. These certifications would be particularly valuable for combatant command staff members, joint staff members, and personnel working in other components of the Nuclear Enterprise such as: nuclear weapons intelligence, nuclear weapons maintenance, nuclear weapons operations, and nuclear weapons security.

- Intermediate Nuclear Weapons Certificate (Basic Nuclear Weapons Certificate + NUCPOL)
- Basic Nuclear Weapons Certificate (NWOC)

USAF Security Forces (SF) Nuclear Security Certification Training Program (NSCTP): NSCTP is designed for USAF SF personnel with responsibilities dealing with security of nuclear weapons. Level I certification is designed for SF nuclear security flight leadership such as flight chiefs, flight commanders, convoy commanders, flight security Officers, and similar personnel. Level II certification is designed for SF nuclear security group/squadron leadership such as group commanders, squadron commanders, SF operations officers, SF managers, SF operations superintendents, and similar personnel. Level III certification is designed for SF nuclear security policy personnel such as Air Staff, Headquarters Air Force Security Forces Center, MAJCOM, and Numbered Air Force nuclear security staff members and similar nuclear security policy personnel.

To become NSCTP certified, you must complete the following collective courses appropriate to your duty position or assigned position.

- Level I, USAF SF Nuclear Flight Certification (NWOC)
- Level II, USAF SF Nuclear Group/Squadron Certification (Level I + NWTIC)
- Level III, USAF SF Nuclear Policy Certification (Level II + JNSEC)

EOD WMD Certification Program:
The EOD WMD Certification Program is designed to develop the practical skills required for EOD personnel across DoD to respond to a nuclear weapons accident/incident as part of the Initial Response Force (IRF) and perform appropriate Phase 0 requirements based on Federal guidance, to include Presidential Policy Directives (PPD), and DoD regulations. While appropriate for all general support EOD personnel requiring skills to respond to a nuclear weapon accident and nuclear incident, the EOD WMD Certification Training Program supports and integrates into the overall whole-of-government accident/incident response structure. This program is not intended to replace any EOD WMD training otherwise established by the individual services.

- EOD WMD Certificate (ARRT-1 + ADT-1 + ADT-2 + JNEODC)

CBRN Modeling Certification Programs: The CBRN modeling certification programs are designed to recognize and document the completion of a comprehensive training program focused on specific hazard prediction modeling tools. This program is designed to support a wide audience that includes, but is not limited to WMD-CSTs, Consequence Management Advisory Teams (CMAT); Combatant Commands; and DoD, federal, state, and local emergency managers and planners.

- Hazard Prediction and Assessment Capability (HPAC) Certificate (HPAC-1 + HPAC-2)
- Advanced CBRN Modeling Certificate (HPAC certificate + GACA)

Personnel who have completed the criteria for a certification program may apply for certificates through the DNWS Registrar. The entire sequence must be completed within three years of initial registration into the first course of the sequence. Upon proper completion of an application for certification, the individual will receive a DNWS Certificate of Training in the applicable certification program. For further details on these certificate programs, see https://dnws.dtra.mil/.
DNWS FY 2023 COURSE CALENDAR

- DNWS FY 2023 Course Calendar
- DNWS FY 2023 MTT Course Calendar
- DTRA-RD & Hosted Course Calendar
### DNWS FY 2023 Course Calendar

#### NUCLEAR WEAPONS ORIENTATION, POLICY AND SENIOR EXECUTIVE TRAINING

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#### NUCLEAR WEAPONS INCIDENT, ACCIDENT AND RESPONSE TRAINING

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#### CWMD RADIOTHERMAL AND NUCLEAR TRAINING

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#### EXPLOSIVE ORDNANCE DISPOSAL SPECIALTY TRAINING

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### DNWS FY 2023 MTT Course Calendar

#### NUCLEAR WEAPONS ORIENTATION, POLICY AND SENIOR EXECUTIVE TRAINING - MTT

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#### NUCLEAR WEAPONS INCIDENT, ACCIDENT AND RESPONSE TRAINING - MTT

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### DTRA-RD & Hosted Course Calendar

#### Hosted - CBRNE MODELING SIMULATION

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### Location:
- DTRA CBRNE M&S Training Center, Alexandria, VA
- USSTRATCOM, Offutt AFB, NE
- EUCOM/AFRICOM Stuttgart, GE
- USINDOPACOM Honolulu, HI

*Restricted course - registration request must go through the controlling agency
**Please contact registrar for updated dates

(-) denotes class carried over one month to another

Please check the DNWS website (https://dnws.dtra.mil) for the most recent information, or contact the DNWS registrar for specific requests.
Under the Joint Program Manager CBRN Sensors, the Joint Product Leader Radiological and Nuclear Defense (JPdL RND) was established in 2013 partly out of the lessons learned from Operation TOMODACHI with an overarching goal to develop, test and field the Department of Defense’s first joint, interagency and international radiological detector known as the Radiological Detection System which begins fielding in FY 23. Additionally, in FY 22 fielding also begins with the Man Portable Radiological Detection System or MRDS.

### New Equipment - FY24

#### The Fielding of Joint Detector Systems

Radiological & Nuclear Protection - Radiological Detection System (RDS)

**Description:** The Radiological Detection System (RDS) will replace DoD’s legacy Radiation Detection and Computation (RADIAC) survey meters as well as USCG, UK, and Canadian legacy systems. The RDS will provide the Warfighter with the capability to detect alpha, beta, gamma, neutron, and low energy x-rays.

**Legacy System Replacement:** Replaces following systems reaching obsolescence: USA & USMC AN/PDR 77, USA AN/VDR 2, USAF ADM 300, USN & USCG Multi functional RADIAC (MFR) Suite

**Capabilities:** RDS possesses modern capability upgrades over legacy RADIAC systems including open architecture smart probes, Net Ready, GPS interface, and data logging. Provides a common, interoperable equipment with adequate sensitivity and common units of measure.

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<td>Small Area Beta Gamma Probe</td>
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<td>Sensitive Gamma Probe</td>
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<td>Alpha Beta Probe</td>
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### Radiological & Nuclear Protection - Man Portable Radiological Detection System (MRDS)

**Description:** The MRDS provides increased Radiological Nuclear (RN) detection, localization, and presumptive and field confirmatory identification of Special Nuclear Material (SNM) capabilities that are networked to provide a near real time situational awareness at the tactical level. MRDS supports Countering Weapons of Mass Destruction Interdiction and Elimination operations, specifically RN Sensitive Site Assessment (SSA) and Sensitive Site Exploitation (SSE).

**Radiological & Nuclear (RN) Sensors to Detect & ID**

- Bruker Sentry Mark II
- Ortec Detective X-N

**Radio Net for Voice and Data**

- TIALES AN/PRC 148C MMRTR
- Terrell/H considered TV 950 Shadow

**Near-real-time RN Situational Awareness (SA)**

**Legacy System Replacement:**

- TSTIRS JCTD equipment Nuclear Disablement Team
- Various COTS Civil Support Team
- Adds New Capabilities to more Army CBRN Teams

**Capabilities:** Hands Free (HF) and Hand Held (HH) RN sensors. Situational awareness (SA) suite displays sensor data from all sensors at the tactical level, MRDS allows for SNM searching in radio frequency restricted facility.

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**History:**

Lieutenant General Leslie Groves, the director of the Manhattan Project, established the Armed Forces Special Weapons Project (AFSWP) on the U.S. Army’s Sandia Base in 1947. General Groves hand selected 63 West Point graduates to man the AFSWP. These men were known as the Sandia Pioneers. One pioneer with an advanced degree and a background in military training, Colonel John A. Ord, was chosen to establish the Technical Training Group (TTG) to provide integral training in this revolutionary new warfare specialty.

The original core curricula was focused on the complex assembly of the first nuclear weapons. Nuclear weapon response was included as “disaster and salvage” training within these early classes, with nuclear bomb disposal classes added as early as 1948. Nuclear weapons orientation classes were also provided. As nuclear weapons evolved, the services took over more of the hands-on training of their technicians while the school added more radiological defense training.

Today, the DNWS operates DoD’s only radiological training sites. These sites are the-room-seeded fields that DNWS instructors use as an integral part of field training for radiological emergency team members. DNWS conducts a variety of radiological accident exercises at these training sites, as well as other local training areas, providing a realistic environment where students can apply their classroom knowledge. Students receive hands-on instruction and experience in the use of radioactivity monitoring instruments; and the proper donning of personal protective equipment.

In addition, DNWS manages and operates the only DoD classified Nuclear Weapons Instruc tional Museum (NWIM). The NWIM is an irreplaceable repository that traces the history and development of the U.S. nuclear weapons stockpile from its inception to the present and displays examples of all stockpiled U.S. nuclear weapons, associated components and some delivery systems. The school maintains also unclassified displays of radiological detectors and technologies along with some examples from the nuclear materials cycle.
DEFENSE NUCLEAR WEAPONS SCHOOL
Christopher M. Whelan, COL, U.S. Army
Commandant

Release #22-3290

http://www.dtra.mil • https://dnws.dtra.mil