

ROSS Quarterly Call

30 September 2024



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 **CRCPD**

Agenda

- Welcome from FEMA Office of Emerging Threats (OET) Branch Chief and ROSS Program Manager – Jonathan Gill, PhD
- Welcome from CRCPD ROSS Program Manager – Bill Irwin, ScD, CHP, FEMA Type 1 ROSS
 - Welcome to new ROSS candidates from Utah, Ohio, Kentucky, Nebraska, and Massachusetts initial training classes
 - ROSS Working Group Annual Meeting Report
 - Recognition of new Type 1 ROSS – Jim Hardeman of Georgia and Paul Schmidt of Wisconsin
- ROSS at Cobalt Magnet 25 and in support of CDC – Jon and Bill
- ROSS exercise support at Silent Thunder – Alex Dawson and Nancy Stanley
- Open dialog with you – all participants
- September 2024 Competency Maintenance Problem Set
- Closing Remarks – Jon Gill



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FEMA Office of Emerging Threats

Welcome and Opening Remarks

Jon Gill, PhD

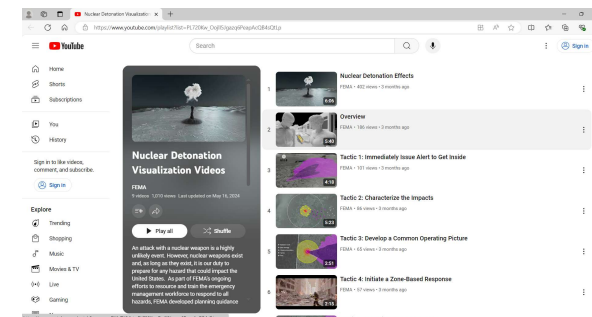
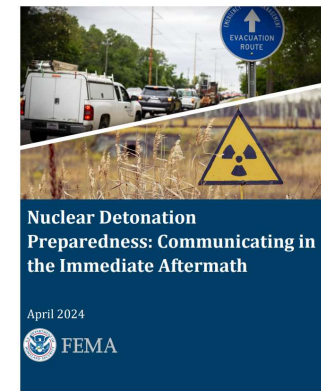


Source: GAO. | www.gao.gov

<https://www.gao.gov/products/gao-19-164> accessed 2/23/23.

FEMA OET Updates

- 10th Anniversary of ROSS NREP and CRCPD meetings, upcoming HPS/IRPA meeting
- PER-388 courses this quarter
- Annual ROSS WG meeting
- [Communicating in the Aftermath of a Nuclear Detonation, 2nd Ed.](#)
- [Nuclear Detonation Response Guidance Planning for the First 72 Hours Visualization](#)



Welcome from CRCPD Homeland Security/Emergency Response Committee 4 (HS/ER-4)

Bill Irwin, ScD, CHP, FEMA Type 1 ROSS, CRCPD ROSS Program Manager



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Questions? william.Irwin@vermont.gov

Welcome to New Initial ROSS Training Course Graduates!

- Ninety-nine new people took the initial step to become a ROSS.
 - PER-388 is the initial step that 475 people have taken since 2016.
 - Documenting training and experience in the in the ROSS Position Task Book (PTB) is where the fuller ROSS development occurs.
- We are grateful to the folks in Ohio, Nebraska, Kentucky and Massachusetts who planned and prepared for the four newest classes!
- We are excited that CTOS is teaching two more classes this year and working on the 2025 calendar now.:
 - Kansas 8 November 2024 Atlanta 28 October 2024
 - Austin, Texas 16 June 2025 Plans for a 2025 class in Wisconsin



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475 people trained as ROSS to date*



*Map does not include accurate distribution of the last five classes into states and regions.

37 States with ROSS

CT-5, MA-16, VT-2, RI-2, NJ-9, NY-39, DC-4, MD-10, PA-7, VA-11, WV-5, DE-1, FL-6, GA-14, KY-16, SC-3, TN-6, MS-1, IL-2, OH-33, MI-17, WI-1, MN-3, IN-14, LA-5, TX-34, IA-8, KS-2, MO-2, NE-21, SD-2, UT-28, AZ-9, CA-79, NV-3, ID-1, OR-16



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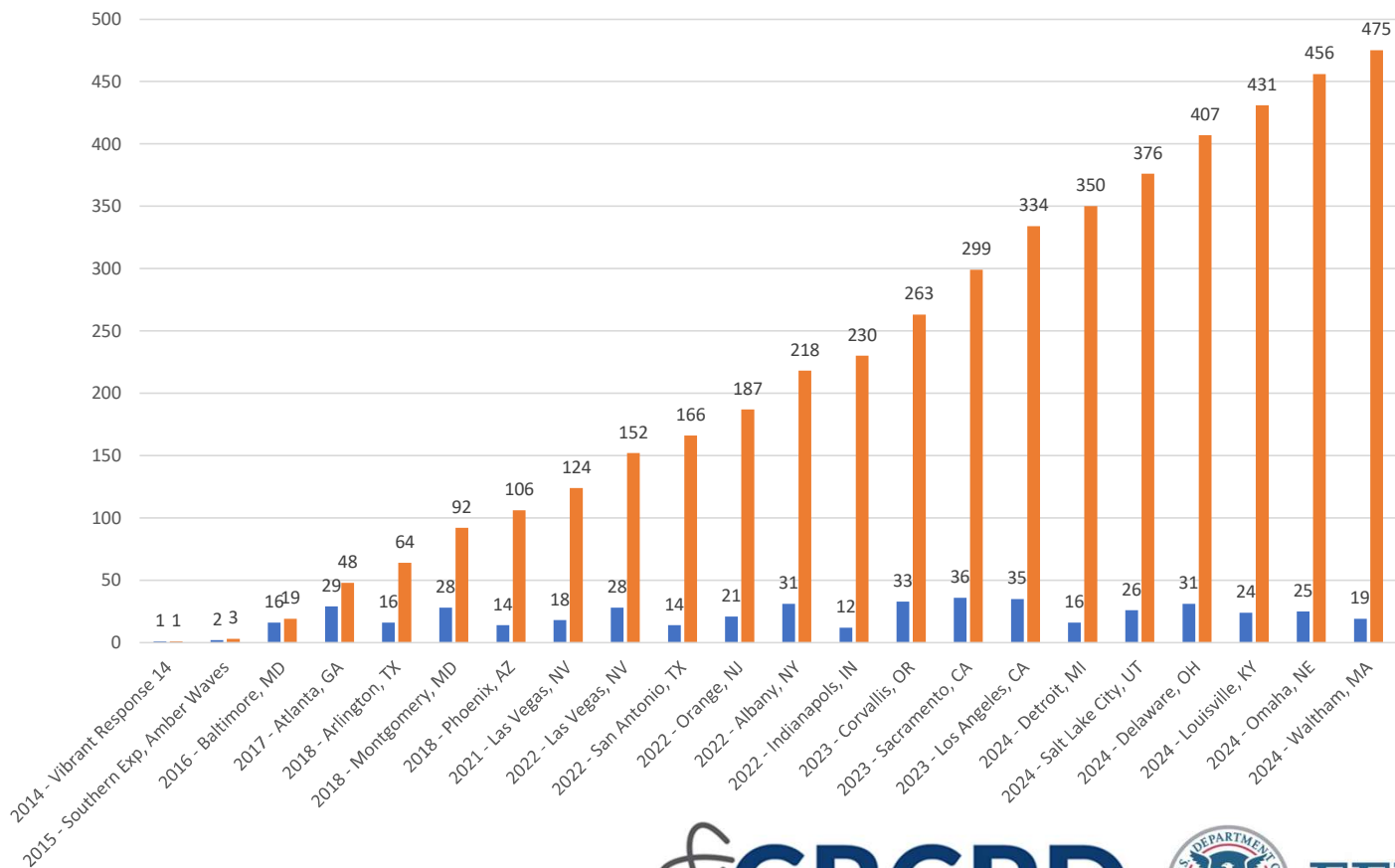


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The ROSS trajectory so far

ROSS Trained 2014-2024



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The Next Steps

- A reminder to send your certificates for ROSS Type 4 Training to FEMA-ROSS@fema.dhs.gov: IS-100, IS-200, IS-700, IS-800, IS-836 or equivalents and PER-388.
- You will then be invited as a Type 4 ROSS to join MissionEdge and get assigned your Type 3 PTB to work on so you can work independently as a ROSS.
- We are doing our best to provide opportunities where you can advance in type:
 - The ND and RDD Virtual Evaluation Scenario Tool (VEST), tabletop and full-scale exercises, and quarterly ROSS problem sets.
 - Historical recognition to document competencies demonstrated in the past.



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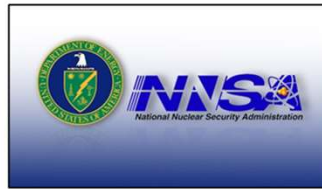


**ROSS ANNUAL
WORKING GROUP
MEETING
SEP 10-12, 2024**



Overview

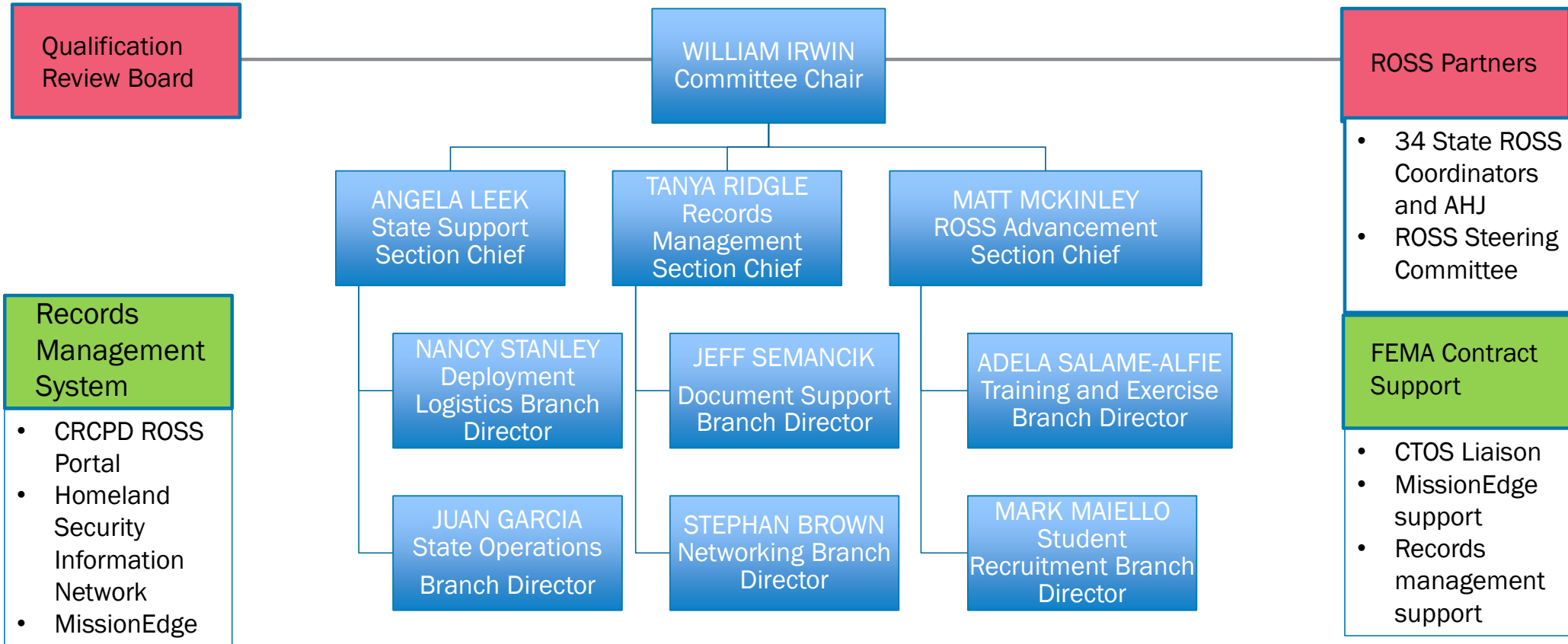
- Two-and-a-half day meeting at FEMA headquarters in Washington, DC.
 - FEMA OET ROSS Program staff Jon Gill, Sara Baltozer, Gerald Gifford and Caitlin Young.
 - The ROSS Steering Committee Jon Gill (FEMA), Eliot Calhoun (DHS), Jeff Chapman (DOE), Bill Irwin (CRCPD).
 - CRCPD Homeland Security/Emergency Response Committee-4 leadership (next page).
- The meeting was both in person and virtual.
- FEMA OET provided invitational travel funding for CRCPD HS/ER-4 folks.



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CRCPD HS/ER-4 Organization Chart



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The first ROSS Working Group Annual Meeting since COVID

- After four years of development (2014-2018) we reached a cadre of 100 trained ROSS, and initial training ceased for three years.
- With no initial classroom training, we focused on exercises sending nearly half the trained ROSS to dozens of tabletop and full-scale exercises.
- In addition, we built the ROSS Position Qualification and ROSS Position Task Book within the FEMA National Qualification System.
- We also designed, built and piloted the first Virtual Evaluation Scenario Tool to help ROSS complete tasks related to the nuclear detonation scenario.

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Resource Typing Definition for Response
Situational Assessment

RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

RESOURCE CATEGORY	Radiological and Nuclear Response				
RESOURCE KIND	Personnel				
OVERALL FUNCTION	<p>The Radiological Operations Support Specialist (ROSS):</p> <ol style="list-style-type: none"> Provides subject-matter expertise and guidance on questions about radiation, the environment, hazard modeling, data and risk management, public protective actions and other scientific and technical issues to incident response leaders at any level. Gathers, organizes, synthesizes, documents and distributes incident and resource information to improve situational awareness at all levels of incident management. Is able to clearly explain the implications of modeling, measurement and analysis methods, as well as the health risks and hazards that exist during a radiological or nuclear incident. May function as a ROSS Strike Team Leader when serving as a Type 1 or Type 2 ROSS as part of a ROSS Strike Team. 				
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> This position can be ordered as a single resource. Resource specifies any additional qualifications necessary based on incident complexity and needs. Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment. <p>Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.</p>				
COMPONENT	TYPE 1	TYPE 2	TYPE 3	TYPE 4	NOTES
DESCRIPTION	<p>Same as Type 2, PLUS:</p> <ol style="list-style-type: none"> Has the capacity to work at the Incident Command Post (ICP) and Emergency Operations Center (EOC) levels and to advise Authority Having Jurisdiction (AHJ) and elected officials. Helps the AHJ integrate federal radiological response assets and capabilities from across the government as necessary. Coordinates radiological activities and technical data management with 	<p>Same as Type 3, PLUS:</p> <ol style="list-style-type: none"> Creates exposure estimates for a variety of internal and external exposure scenarios. Understands key state and federal radiological response assets, capabilities, and reporting structures, and integrates them into an effective response. Communicates complex radiological issues to large groups and senior managers, and supports public message development. 	<p>Same as Type 4, PLUS:</p> <ol style="list-style-type: none"> Works as a technical specialist and advises response personnel and AHJ on issues pertaining to radiological and nuclear incident response. Provides radiological incident assessment and resource information through: <ol style="list-style-type: none"> Interpreting and communicating model and measurement results and data products. Proficient use of the CDR/Responder mobile app and website to collect and share data. Has knowledge of data radiation control programs and other radiological emergency preparedness assets, as 	<p>The National Incident Management System (NIMS) Type 2 ROSS: Has completed initial ROSS training and can work as a technical specialist under the supervision of a Type 3 or higher ROSS.</p>	<p>When serving as part of a ROSS Strike Team, a field Type 1 or Type 2 ROSS may also function as a team leader.</p>

March 2023
FEMA-100-2017-017
RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST
1 OF 7

FEMA
NATIONAL QUALIFICATION SYSTEM (NQS)
POSITION TASK BOOK
FOR THE POSITION OF
RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST
Version: October 2019

Check the appropriate position type:
 Type 1 Type 2 Type 3

POSITION TASK BOOK ASSIGNED TO:

TRAINEE'S NAME: _____
 DUTY STATION: _____
 PHONE NUMBER: _____
 E-MAIL: _____

POSITION TASK BOOK INITIATED BY:

OFFICIAL'S NAME: _____
 TITLE: _____
 DUTY STATION: _____
 PHONE NUMBER: _____
 E-MAIL: _____

POSITION TASK BOOK WAS INITIATED:

LOCATION: _____
 DATE: _____

Version: October 2019



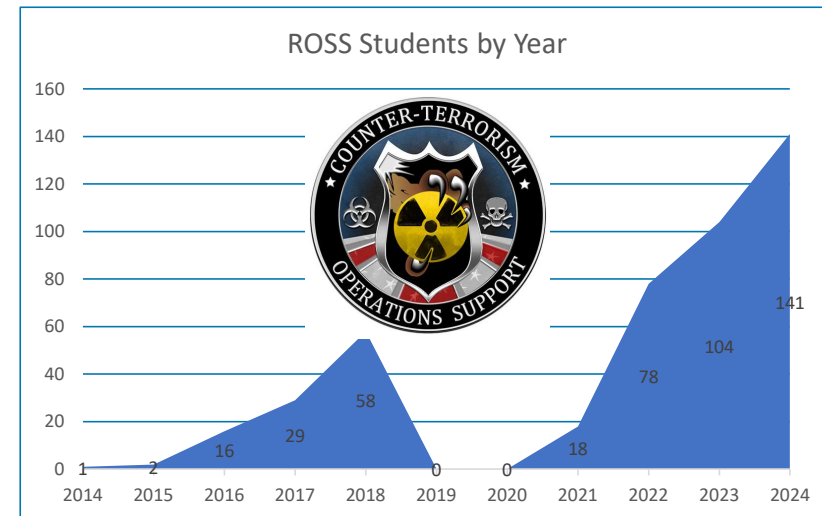
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Federal Emergency

The ROSS post-COVID expansion

- Post COVID, federal travel funding for ROSS exercise support was no longer available.
- The solution to getting ROSS to exercises all over the country was getting ROSS all over the country.
- This reinforced recommendations of the RAND Report out of the Homeland Security Operational Analysis Center to turn the ROSS over to the states.
- To help get ROSS in every state, FEMA's National Training and Education Division asked Counterterrorism Operations Support (CTOS) to accelerate their initial ROSS training offerings.



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Where the ROSS is now

- We do not want to be like the new business that has success and opens branches in a few places where they too become successful, but with eyes on being a national chain, the business overexpands and cannot keep all its customers happy.
- Our plan is to ensure currently trained ROSS remain engaged, improve their competencies, get tasks signed-off and advance by type.
 - Use initial ROSS training to keep ROSS growth equal to ROSS attrition.
 - Seek a transition to more ROSS continuing education in the form of the Virtual Evaluation Scenario Tool.
 - Continuous ROSS work as planners, controllers and players in tabletop and full-scale exercises.
 - Develop or identify other ROSS training to further our competencies and advancement by Type.
 - Provide support to the thirty-four states that have State ROSS Coordinators.



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Areas of deliberation and planning

- Standard Operating Procedures
- Support Needs for State ROSS Coordinators
- EMAC/Deployment
- Monthly Standing Meeting of Working Group
- ROSS Training Development
- Records Management
- Cobalt Magnet 2025



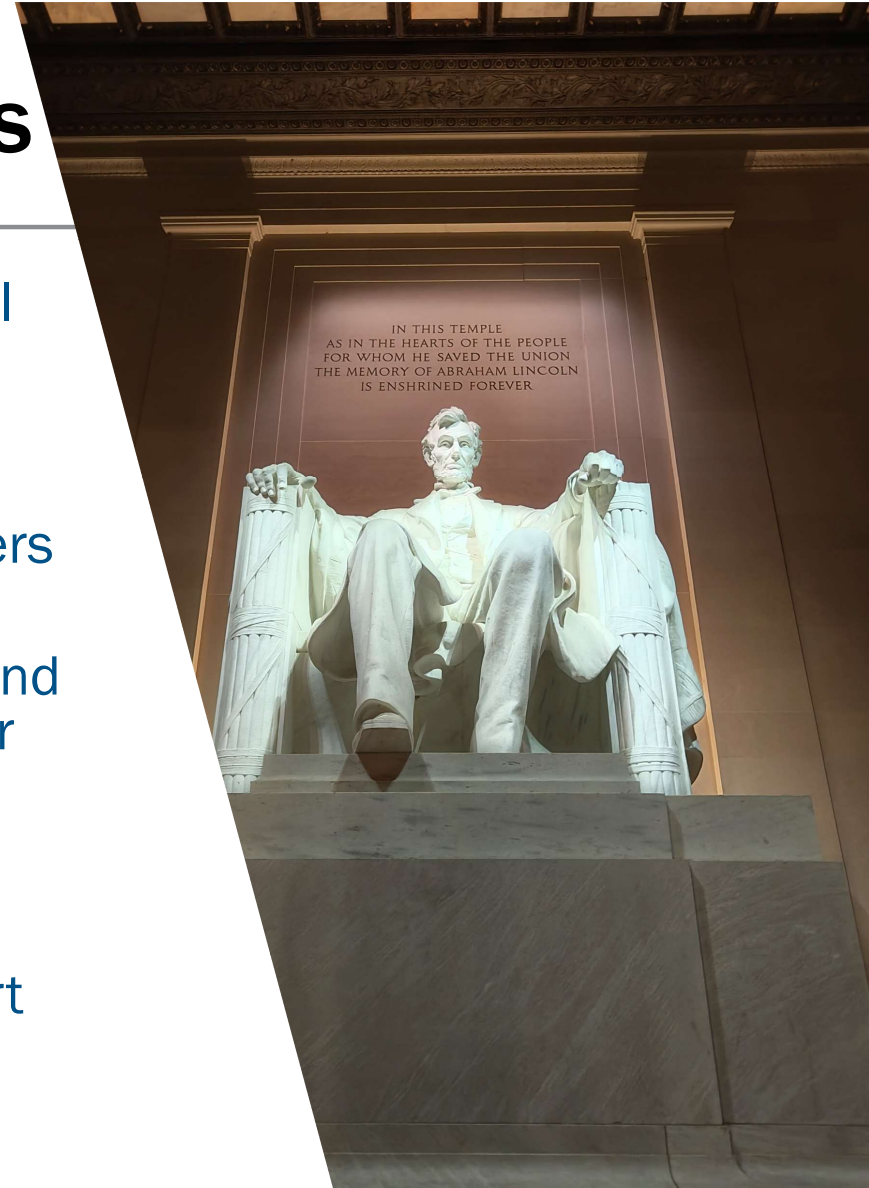


Publish standard operating procedures to the CRCPD ROSS Portal

- State ROSS Coordinator guidance on advancement by Type via historical recognition and witnessed task evaluation
- ROSS Orientation describing progression using MissionEdge to become credentialed radiological/nuclear emergency subject matter experts
- Use of MissionEdge by ROSS and State ROSS Coordinators for workflow management
- Qualification Review Board functions
- Deployment for exercises and via EMAC for real-world incidents
- Rules of conduct for ROSS

State ROSS Coordinator needs

- Periodic engagement with the ROSS national program, the Authority Having Jurisdiction (AHJ) and the State ROSS Coordinators
- Help with developing Regional ROSS Task Forces and Regional ROSS Task Force Leaders in large states
- Sharing opportunities for ROSS to practice and demonstrate tasks for evaluation within their state
- Incentivize inclusion of ROSS in plans, organizations, planning, and training
- Minimize the burdens for this voluntary effort





Readiness through EMAC deployment tools

- Subgroup has started to develop ROSS-specific templates from the National Emergency Management Association for use by States
- Develop Mission Ready Packages (MRPs) and Resource Support Agreements (RSAs) in each state
- Train State ROSS Coordinators, ROSS and AHJ in deployment methods
- Engage state emergency management EMAC officials so they can help in ROSS activation using the ROSS MRP and RSA



MONTHLY STANDING MEETING

- Quality Review Board to review equivalencies for courses in Position Task Books
- Progress candidates through advancement by Type to credentialing by Certifying Official (AHJ)
- Publish events to a training calendar
- Recruit ROSS for Virtual Evaluation Scenario Tool (VEST) training
- Recruit students for Initial ROSS training
- Records management in MissionEdge, Homeland Security Information Network, CRCPD ROSS Portal

Training

- ROSS Orientation
- State ROSS Coordinator and Authority Having Jurisdiction (AHJ) Training
- MissionEdge Training
- HSIN Training
- NREP ROSS activity/training
- RESRAD, TurboFRMAC and other technical courses specifically for ROSS
- Deep dives into RDD, NPP and ND scenarios
- Upcoming training: PER-388 and VEST





COBALT MAGNET 2025

- Discussed planners interest in ROSS, FEMA's goals, CRCPD's support and the CDC's invitation for ROSS.
- Start with identifying ROSS to deploy.
- Secure travel funding.
- We will discuss the specifics shortly.
- We hope to duplicate ROSS participation for all national level exercises in the future.

We need more volunteers!

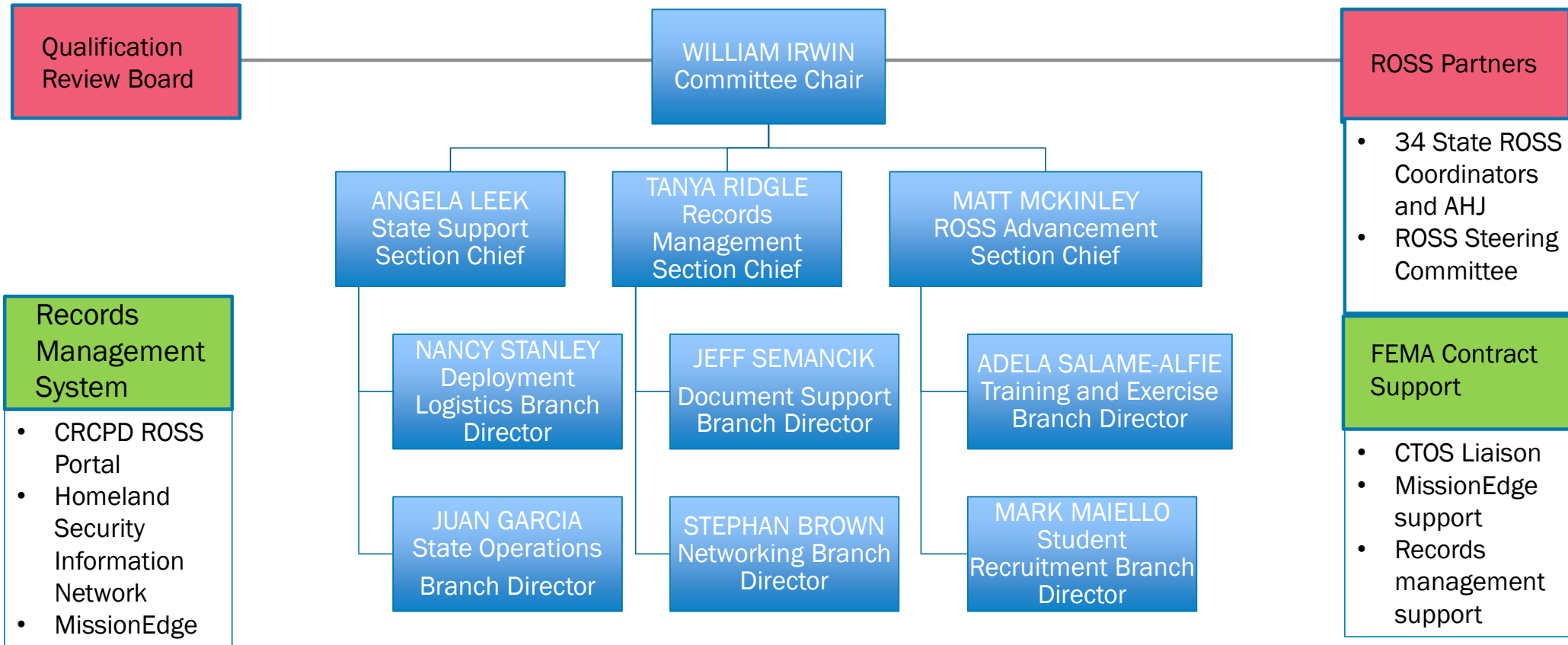
- We have an organization to accomplish our plan's needs.
- We need more ROSS volunteers to support the execution of this plan.
- We identified about forty assignments for the working group with deadlines over the next eighteen months.
- We could use a dozen or more people to help the ROSS.
- Contact me at william.Irwin@vermont.gov to volunteer for CRCPD Committee HS/ER-4 which manages the ROSS for the States.



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CRCPD HS/ER-4 Organization Chart



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Two New Type 1 ROSS



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Jim Hardeman, Georgia
Paul Schmidt, Wisconsin

Jim and Paul Certified Using Historical Recognition*

Both used the PTB's instructions and forms, worked with Type 1 ROSS for task sign-offs, and used the CRCPD HS/ER-4 Qualification Review Board before certification by their Authority Having Jurisdiction.

*Historical recognition and other aspects of resource typing are described in FEMA's NIMS Guideline for the NQS found at: https://www.fema.gov/sites/default/files/2020-05/fema_nims_nqs_guideline_0.pdf.

HOW TO COMPLETE THE EVALUATION RECORD FORM

Each Evaluation Record Form (see next page) covers one evaluation period. Evaluation periods may involve incidents, classroom simulations, or daily duties, depending on what the PTB recommends. The AHJ determines the number of evaluations required for position qualification and certification. If evaluators need additional evaluation periods, they can copy pages from a blank PTB and attach them to the PTB in question.

Complete these items AT THE START of the evaluation period:

Evaluation Record Number: Label each evaluation record with a number to identify the incident(s), exercise(s), or event(s) during which the trainee completed the PTB tasks. The evaluator should also write this number in the PTB column labeled "Evaluation Record #" for each task performed satisfactorily. This number enables reviewers of the completed PTB to ascertain the evaluators' qualifications before signing off on the PTB.

Evaluator's name; Incident/office title and agency: List the name of the evaluator, his/her incident position or office title, and the evaluator's home agency.

Evaluator's home unit address and phone: List evaluator's home unit address and phone number.

Name and location of incident or simulation/exercise: Identify the name (if applicable) and location where the trainee performed the tasks.

Incident kind: Enter the kind of incident (such as hazmat, law enforcement, wildland fire, structural fire, search and rescue, flood, or tornado).

Complete these items AT THE END of the evaluation period:

Number and kind of resources: Enter the number of resources assigned to the incident, and their kind (such as team, personnel, and equipment) pertinent to the trainee's PTB.

Evaluation period: Enter inclusive dates of trainee evaluation. This time span may cover several small, similar incidents.

Position type: Enter position type (such as Type 3, Type 2, Type 1, or Single Type).

Recommendation: Check the appropriate line and make comments below regarding the trainee's future development needs.

Additional recommendations/comments: Provide additional recommendations and comments about trainee, as necessary.

Date: List the current date.

Evaluator's initials: Initial here to authenticate your recommendations and to allow for comparison with initials in the PTB.

Evaluator's relevant qualification: List your certification relevant to the trainee position you supervised.

EVALUATION RECORD FORM

TRAINEE NAME:
TRAINEE POSITION:
Evaluation Record Number:
Evaluator's name:
Incident/office title and agency:
Evaluator's home unit address and phone:
Name and location of incident or simulation/exercise:
Incident kind:
Number and kind of resources:
Evaluation period:
Position type:
Recommendation: The above named trainee performed the initialed and dated tasks under my supervision. I recommend the following for this trainee's further development: <input type="checkbox"/> The trainee has successfully performed all required tasks for the position. The AHJ should consider the individual for certification. <input type="checkbox"/> The trainee could not complete certain tasks or needs additional guidance. See comments below. <input type="checkbox"/> Not all tasks were evaluated on this assignment. An additional assignment is needed to complete the evaluation. <input type="checkbox"/> The trainee is severely deficient in the performance of tasks and needs further training prior to additional assignment(s) as a trainee for this position.
Additional recommendations/comments:
Date:
Evaluator's initials:
Evaluator's relevant qualification:

EVALUATOR VERIFICATION

(Do not complete this form unless you are recommending the trainee for all-hazards certification.)

FINAL EVALUATOR VERIFICATION

I verify that _____
has successfully completed all tasks as a trainee and should therefore be considered for certification in this position. I also verify that all tasks are documented with appropriate initials.

FINAL EVALUATOR'S SIGNATURE:

DATE:

FINAL EVALUATOR'S PRINTED NAME:

TITLE:

DUTY STATION:

PHONE NUMBER:

E-MAIL:

DOCUMENTATION OF AGENCY CERTIFICATION

DOCUMENTATION OF AGENCY CERTIFICATION

I certify that _____
has successfully met all of the criteria set out in the National Incident Management System (NIMS) Job Title/Position Qualifications document for the position and will hereby receive certification of his/her qualification.

OFFICIAL'S SIGNATURE:

DATE:

OFFICIAL'S NAME:

TITLE:

DUTY STATION:

PHONE NUMBER:

E-MAIL:



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ROSS in Exercises

Impacts

- What is the capacity of the local healthcare system to provide medical care during this incident?
- What is the process to identify individuals who were exposed or contaminated? (And what is the difference?)
 - Mass decontamination capabilities
 - Individual patient decontamination procedures
- What is your plan for the "worried well" presenting at healthcare facilities?
- How would the population of possibly contaminated patients be accounted for?



Out-briefs from Silent Thunder – Alex Dawson (MI) and Nancy Stanley (NJ)

- We want to thank every ROSS who has volunteered to work at an exercise.
- Most of our exercises since COVID have been tabletop exercises, including Silent Thunder, Isotope Crossroads and CURRIE from the DOE Office of Radiological Security.
- While not as demanding and likely to lead to multiple task sign-offs, these tabletops are a great way to meet interesting people, learn more about various government agencies, healthcare facilities, law enforcement, firefighters, emergency medical service providers, university staff and non-government organizations.
- They are also good for practicing a critical skills for ROSS – public speaking, efficiently explaining what a ROSS does, answering questions from attendees and providing thoughtful guidance.
- We hope more of you volunteer for these and provide out-briefs like Alex and Nancy.



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ROSS Participation in Cobalt Magnet 25

Jon Gill and Bill Irwin



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Questions? william.Irwin@vermont.gov

Cobalt Magnet 25 ROSS in Michigan

- Many of their skilled personnel are CM25 planners.
- Indiana and Ohio have many of their own ROSS.
- Likely sites for players and controllers include the:
 - Federal Radiological Monitoring Assessment Center (FRMAC)
 - The Master Control Center/Simulation Cell
 - Michigan's
 - Joint Information Center
 - Community Reception Center
 - Emergency Coordination Center
 - Department of Environment, Great Lakes and Energy
 - Department of Agriculture and Rural Development



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Cobalt Magnet 25 in Atlanta

- The CDC is seeking to augment their pool of radiation subject matter experts.
- ROSS there would all be players.
- We would choose one to be a ROSS Task Force Leader.
- You should expect to float from need-to-need within the CDC Emergency Operations Center.
- We are looking for the CDC to fund travel expenses.



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For ROSS interested in deploying

- You must have a MissionEdge account to be considered for the deployment.
- We will send out a message from MissionEdge with the details sought for those wishing to be considered for the CM25 deployment.
- The deployment request will:
 - Ask you to describe your relevant experience and training,
 - Ask for your preferences relative to exercise play or exercise control.
 - Ask about why participating in Cobalt Magnet 25 would be useful for your goals as a ROSS.
- We hope to send out the deployment requests soon because evaluating applicants, assigning applicants to exercise roles, and arranging travel and funding will take significant effort and time.



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ROSS Open Dialog

All ROSS as Facilitated by Bill Irwin



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Questions? william.Irwin@vermont.gov

Questions for you, and to stimulate discussion

1. Has anyone used a ROSS in exercises like those of the NPP Radiological Emergency Preparedness (REP) program? Please describe how and how it went.
2. Has anyone used ROSS in their Preventive Radiological Nuclear Detection (PRND) program, e.g., Secure the Cities (STC) and Urban Area Security Initiative (UASI) activities? Please describe how and how it went.
3. What other ways have you used ROSS in your jurisdiction?
4. Would you be willing to give a ROSS story during the Quarterly Calls?
5. Would a ROSS survey be useful?
6. Would you respond to a ROSS survey?
7. What ideas do you ROSS have?



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September 2024 ROSS Competency Maintenance Problem Set



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September 2024 ROSS Competency Maintenance Problem Set



Radiological Operations Support Specialist Continuing Education Competency Maintenance Program

ROSS Quarterly Problem Set	September 2024
Answers Due By:	No end date
Submit Answers and Supporting Attachments to:	Your State ROSS Task Force Leader or Adela Salame-Alfie – salamealfie8@gmail.com
Questions about problem:	Adela Salame-Alfie – salamealfie8@gmail.com
Task Sign Off Potential <i>Successful completion of this quarterly problem allows you to request signoff</i>	ROSS Position Task Book (PTB) Task Number 21, 37, 48C, 50, 51
Expected Answer Format	Ten short answers to ten questions.



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Problem Set Instructions**Scenario**

You are a Radiological Operations Support Specialist (ROSS) Type 3 supporting the State EOC responding to a nuclear detonation that occurred 6 hours ago. The radiological assessment teams for the state are responding to make initial protective action recommendations/decisions and are assessing initial field surveys reported from first responders around the impacted area. The state has requested the support of the Radiological Assistance Program (RAP) team, and those assets will be arriving on scene soon to provide field support.

The first responders are asking what levels to use to set up the hot zone and they are concerned that setting it up at twice background will unnecessarily define a very large area that would be very hard to manage.

Question 1

Using the tools available in the ROSS toolkit ([ROSS Toolkit](#) | [RadResponder](#)) how would you define a manageable hot zone area based on radiation measurements?

Question 2

What considerations beyond radiation measurements would you use to make your recommendations?

Scenario detail

The state radiation control program is being asked questions regarding beta/gamma contamination screening levels for people that are being sent to Community Reception Centers to get screened.

Question 3

Provide recommendations based on three different scenarios:

- Severely resource constrained conditions (estimated screening wait times in excess of several hours)
- Resource constrained conditions (screening wait times longer than one hour)
- Nominal (able to screen everyone within a reasonable time frame)

Scenario detail

The state radiation control program is being asked questions regarding dose estimation and treatment for survivors arriving at hospitals from near the blast who may have received large doses of radiation.

Question 4

How would you identify areas with the highest radiation levels?

Question 5

Would you request IMAAC products?

Question 6

If so, which IMAAC products would be most useful in the first 12 hours?

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September 2024 ROSS Competency Maintenance Problem Set

Scenario Detail

In addition to the large numbers of survivors, the state is dealing with a significant number of casualties.

Question 7

What resource would best advise medical professionals on the triage and treatment of survivors with significant radiation doses?

Question 8

How soon could they be available to the state? Are there any algorithms that emergency departments can use for quick triage?

Question 9

What resource would be available to advise on fatality management? Does their expertise typically include radiological-specific knowledge?

Question 10

What resource could provide disposal or alternate processing options for milk that is potentially contaminated?



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Closing Remarks

Jon Gill, PhD, FEMA Office of Emerging Threats



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ROSS Program Questions:

Contact FEMA-ROSS@FEMA.DHS.GOV

Jonathan Gill

Jonathan.gill@fema.dhs.gov

ROSS Program Manager
Chief, Risk Management Branch
Office of Emerging Threats

