



## Agenda

- Introductions
- New Guidance Content for ROSS
- ROSS Program Updates
- Cobalt Magnet Panel Discussion
- June Competency Maintenance Problem
- Open Discussion: New Paradigm
- Closing Remarks





### New from the NCRP

NCRP STATEMENT No. 14

INSTRUMENT RESPONSE VERIFICATION AND CALIBRATION FOR USE IN RADIATION EMERGENCIES

Issued June 22, 2022



National Council on Radiation Protection and Measurements

ROSS worked on both of these new documents from the National Council on Radiation Protection and Measurements.

Available for free in PDF.

NCRP STATEMENT No. 15

RESPIRATORY PROTECTION
RECOMMENDATIONS FOR WORKERS
AND VOLUNTEERS RESPONDING TO
A NUCLEAR INCIDENT OUTSIDE THE
AFFECTED AREA

Issued August 22, 2022



National Council on Radiation Protection and Measurements





### **Growth of the ROSS Cadre**

- Welcome to new ROSS
  - □ 31 trained in Albany August 8 11.
  - 21 trained in Orange, New Jersey August 22 25.
  - □ 12 trained in Indiana September 13 16.
- ROSS-trained people now number 228. The roster was just over 100 a year ago.
- No new courses over fiscal year 23 schedule yet. Planning for multiple PER-388 and multiple IND VEST and RDD VEST though.
- Partners are working to bring the ROSS course to the HPS Mid-Year in Corvallis, Oregon February 6 – 10.



### A recent assessment of the ROSS was made for DHS NUSTL

- Overall good foundation, not yet mature.
  - Must recruit more ROSS in all states.
  - Must assist more with PTB completion.
  - Must socialize more with emergency management.
- Could use 350 or more active, advancing ROSS
  - More in higher population, higher risk states and territories.
  - Each state should have one Type 1 or Type 2 ROSS.
  - Best that recruits have no emergency role in their day job.
- States should have larger role, with ROSS Steering Committee oversight and CRCPD Working Group training and standards coordination.



## ROSS growth will require more state support

- Of 228 people trained since September 2016, about 100 are active.
  - They participate in Quarterly Calls, exercises and PTB task completion.
  - Ten of these people participate in cadre management (initial and continuing training, exercise development and coordination, records management, programmatic planning and sustainment, etc.).
- As the active cadre grows by a factor of three or four, we will need more support in cadre management.
- These 30-40 people will come from the CRCPD and be state ROSS Task Force Leaders (TFLs) and State ROSS Coordinators (SRCs).







2016, 2017 & 2018

Sep 22 Class

Aug 22 Class 1

Region I - 9
Jeffrey Semancik – CT
Michael E, Firsick-CT
Darin Strickland - CT
Douglas Campbell - CT
Jennifer O'Riorden – MA
Mark Walsh – MA Allma
Steven Marsh – MA
William Irwin-VT

Region II - 57 Keith Miano-NJ James Griffin - NY Jeffrey Quinn- NY William Lenczuk - NY Kevin Robinson - NY Mike Cantwell - NY John Criscuoli – NY Anthony Perrone - NY Timothy Rice - NY Jason Wendell – NY Bart Cohen - NY Cynthia Costello - NY Alexander Damiani - NY Christine Dobert - NY Michael Dreibelis - NY Eli Gill - NY Jonathan Green - NY David Karikas - NY Nathaniel Kishbaugh - NY Mark Maiello – NY Ashley McDermott - NY Andrew McCumber - NY Caroline Nguyen - NY David O'Hehir – NY Dennis Quinn - NY Dan Samson - NY Kayla Sossin - NY Narvaez Stimson - NY Janise Stoliarova - NY Marc Sullivan - NY Mai Tran - NY Conor Vandemark - NY Heidi Voelk - NY Richard Watts - NY Kevin Krause – NY Jose Antony - NY Paul Armani – NY John Bevilacqua – NY

Rachel Bratek - NY

Stephanie Bukowinski - NY

### 228 Trained ROSS by FEMA Regions

Dab Quiglev – NJ Evan Bowdler – NJ Glenn Jannaco – N. Paul Kim, -NJ Victor You − NJ Juan Gualipa – NJ Nancy Stanley – NJ (areń Flanigan – NJ Pakorn Patimetha – N. Dan Whartnaby – NJ Paul Fevola – NJ Eddie Reves – NY Art Mogiĺ – NY Eddie Ryan – NY (evin Chambers – N) Mark Becker – NY hea Shelton - N\

Region III -37 Ken Yale - DC Adel M Baryoun- DC Anne Fenley- DC Holly Arrigoni- DC Jack Spencer- DC Jeffrey Chapman- DC Jennifer Beveridge-DC Kaatrin Abbott-DC Katharine McLellan-DC Kaylie Hammersborg-DC Kenneth Harrison Sr-DC Laurent Ricks-DC Matthew Martenas-DC Larry Brookerd - DC Brad Dekorte - DC Scott Hallett - DC Timothy Pflieger - DC Gregory Voss – DC Kenneth Wierman - DC Michael Howe-DC Steve Chase-DC Paula M. Hughes-MD Carl Holland-MD Lou Brandon - MD Houston Carlson- MD Steven Hand-MD Tom O'Brien-MD Darius Allman - PA Benjamin Hershowitz – PA Michael Erdman - PA

Stephan Brown - PA

Brian E. Iverson- VA

Jason Dunavant- VA

David Paschal- VA Melany McGillvray-VA Matthew Gould – MD Martin Felion - PA

Region IV - 27 Mike Geier – FL John Craft - FL Kimberly Gambone – F Adela Salame-Alfie – GA Andrea Pepper - GA Christina Tabor - GA Darrell Neal - GA Gary Spichiger - GA Harl'O Fisher – GA James Hardeman - GA John Dixon - GA Lauren Finklea - GA L. Samuel Keith-GA Nazia Zakir - GA Paul Charp - GA Robert Burns – GA Steve Grimm - GA Matthew McKinley - KY James Coffin – SC John Kuppinger – SC Michael Spradlin – SC Derrick Stanley - SC Andrew Holcomb - TN Norman Miller - TN Patrick McCloskey - TN Marcia Tutt - FL

Region V - 26 John N Edwards-IL Kay Foster-IL Todd Trygier – IL Chris Salz – OH David Stuenkel -OH Matthew McFee - OH Peter Hill-OH Kimberlee Kearfott - MI Nadir Chaudry - MI Greg Gothard - MI David Skutt - MI T.J. Wentworth - MI Paul Schmidt – WI David LeClear - WI Nicole Traphan - WI Robert Brown - IN Sarah Chaney – IN

Jason Doerflein – IN
Courtney Eckstein – IN
Fernando Flores Carlos – IN
Jeffrey Larmore – IN
John Ly – IN
Justin Mast – IN
Kaci Studer – IN\
Brenda Tubbs – IN
Kristol Ward - IN

Region VI - 38 lussell Clark-LA amie Dismukes-LA James Pate-LA Jessica Walker–LA Ken Gavlik – TX Adrien LeBlanc- TX Mathew Miller-TX Bart Thom-TX Billy Chambers-TX Bobby R. Baker - TX Charles Cavnor-TX Danette Fennesy-TX Earlon Shirley- TX Heather Bill-TX John C. White-TX Laura Warren-TX Marina Pulley TX Robert Graves-TX Roland Benke - TX David McCarty-TX Steve Cima – TX Robert Fisher - TX Stephanie Lopez – TX Nicole Roman – TX Nicholas Studer - TX Trae Windham - TX Brdley Trefz – TX Rafael Alvarez – TX Jason Callahan – TX Timothy Davis – TX Bradley Gibson - TX Dustin Henderson - TX Casev Jones - TX Chris Moore – TX John Nickles – TX Tristan Jeremy – TX Meagan Robinson - TX Will Flanagan - TX

Region VII - 7 Angela Leek – IA Mark Kaintz-MO
Jeremy Wilson – MO
Jim Rogers – NE
Kelly Gillette – IA
Scott Wendt IA
Amanda Hughes - IA

Region VIII -2 Dustin Willitt- SD Susan T. Masih –SD

Region IX - 23 Andrea Prado-AZ Andrew Castro-AZ Craig Artrip- AZ David Burtch-AZ Jennifer Hobbs- AZ Mark Spina-AZ Nathan Elizalde-AZ Toby Morales - AZ Richard Turner-AZ Sonia Carpena-AZ Travis Rand-AZ Valerie L. Meyers-AZ William Smith-AZ Greg Funderburk - CA Gail Carter- CA Matthew Portteus-CA Tanya Ridgle – CA Brandon Holmes - CA Juan Garcia – CA Dave Pasquale - NV Corey Creveling - NV John Follette - NV Sam Oberlies - NV

Region X -2 Gregory Hall – ID Toni Bamford – OR

## **ROSS TFL and SRC approach and guidance**

- Assign ROSS to:
  - State ROSS TFLs and SRCs where they exist, and
  - $\square$  National (α, β, γ) ROSS TFLs where neither exist.
- Process to coordinate ROSS exercise deployments.
- Processes to maintain competency through quarterly calls and annual training at conferences.
- Procedure for Qualification Review Board.
- ROSS web presence (CRCPD web page, LinkedIn, HSIN, CBRNResponder)
- Records management at national and local level.





				i	
No.	State	ROSS	Radiation Control Program Director	State ROSS Coordinator/TFL	State ROSS Coordinator Email
1	Alabama	0	David Turberville	Kevin Hicks	kevin.hicks@adph.state.al.us
2	Arkansas	0	Bernard Beville	Bernard Beville	bernard.bevill@arkansas.gov
3	California	6	Gonzalo Perez	Rajiv Mishra	rajiv.mishra@cdph.ca.gov;
				Juan Garcia	juan.garcia@cdph.ca.gov;
4	Connecticut	4	Jeff Semancik	Jeff Semancik	Jeffrey.Semancik@ct.gov
5	Florida	5	Cindy Becker	John Williamson	john.williamson@flhealth.gov
6	lowa	4	Angela Leek	Angela Leek	angela.leek@idph.iowa.gov
7	Kansas	0	Kim Steves	Jason Meinholdt	jason.meinholdt@ks.gov
8	Kentucky	1	Matt McKinley	Matt McKinley	mattheww.mckinley@ky.gov
9	Maryland	7	Eva Nair	Marci Catlett	marci.catlett@maryland.gov
10	Michigan	5	T.R. Wentworth	David Skutt	skuttd@michigan.gov
11	Minnesota	0	Mary Navara	Sherrie Flaherty	sherrie.flaherty@state.mn.us
12	Missouri	2	John Langston	Keith Henke	keith.hanke@health.mo.gov
13	Nevada	4	John Follette	John Follette	ifollette@health.nv.gov
14	New Hampshire	0	Augustinus Ong	Brennen Brunner	Brennen.brunner@dhhs.nh.gov
15	New Jersey	12	Paul Orlando	Patrick Mulligan	patrick.mulligan@dep.nj.gov
16	New York	45	Alex Damiani	Cynthia Costello	cynthia.costello@health.ny.gov
17	North Carolina	0	David Crowley	Terri Richards	terri.richards@ncdps.gov
18	Ohio	4	Gene Philips	William Lohner	william.lohner@odh.ohio.gov
19	Oregon	1	David Howe	Hillary Haskins	hillary.k.haskins@dhsoha.state.or.us
20	Pennsylvania	6	David Allard	David Allard	djallard@pa.gov
21	South Carolina	4	Susan Jenkins	Crispulo Isminger	ismincl@dhec.sc.gov
22	Tennessee	3	Debra Shults	Andrew Holcomb	andrew.holcomb@tn.gov
23	Texas	34	Lisa Bruedigan	Chris Moore	chris.moore@dshs.texas.gov
24	Vermont	2	William Irwin	William Irwin	william.irwin@vermont.gov
25	Virginia	4	Lea Perlas	Brian Iverson	brian.iverson@vdem.virginia.gov
26	West Virginia	0	Tera Patton	Jason Lively	jason.k.lively@wv.gov
27	Wisconsin	3	Paul Schmidt	Charles Adams	charles.adams@dhs.wisconsin.gov

There are 10 states with ROSS TFLs and 17 with RSCs. There are 24 states and territories without ROSS, 10 with ROSS, but no ROSS TFL or RSC.

### Other developmental needs

- Greater awareness among state emergency management and homeland security agencies.
  - This is critical to incorporating ROSS into planning, training, exercises and grants.
  - They can help get non-government ROSS candidates into CTOS state and local government training.
- More targeted recruitment of people to ROSS training.
  - Recognizing the resources expended to hold each course, we must get the right people in (HPs, rad/nuc emergency management) and more of them.
  - We need more people from outside government emergency response since many already have assigned roles (academia, industry, retirement).
- More Type 1 & 2 ROSS support of CTOS initial and continuing training (PER-388, IND VEST & RDD VEST).



## **Future training opportunities**

- Continue to have numerous tabletop exercises, some virtual but most in person.
- Continue to seek full-scale exercise from the nuclear power plant community.
- LN-100 and LN-200 training.
- New England Radiological Health Conference at Brookhaven the week of November 14, 2022.
- Continuing education at NREP, CRCPD and HPS in 2023.
- IND and RDD Virtual Evaluation Scenario Tool (VEST) in FY 2023.





### **June 2022 Competency Maintenance Problem Set**

#### Assignment

- 1. Watch the 57-minute LLNL Responder Training Video at https://responder.llnl.gov/training called Responding to Nuclear Terrorism.
- 2. Assume a nuclear detonation has occurred in your state and you are responding to your assigned incident command post or emergency operations center. Further assume that it is in the first hour or so of activation and what exactly has occurred remains unclear.
- 3. Using the ROSS Planning Process Job Aid from the ROSS Toolkit in CBRN Responder, identify the meetings at which a ROSS may provide a report useful to the incident management team.
- 4. If you are working on Type 3, brief the incident command post near the front lines to the Hot Zone on the first three indicators in Task 15. If you are working on Type 2 or Type 1, brief the Objectives Meeting on all five indicators in Task 15. If you are working on Type 1 assume your briefing is for the Governor and his/her cabinet."



### June 2022 Competency Maintenance Tasks for Evaluation

- 14. Demonstrate ability to identify opportunities to share information important to responders, incident managers, agencies and stakeholders during an incident:
  - a) Identify the right meetings/mechanisms to relay important information to responders, incident managers, agencies and stakeholders.
  - b) Demonstrate ability to communicate effectively with workers in the field and with senior leadership.
- 15. Evaluate the radiological characteristics of the scenario and relate the risks to responders and the public:
  - a) Provide radiological perspectives to inform the Incident Action Plan (IAP)
  - b) Provide radiological perspectives for incident briefings
  - c) Provide content for Public Information Officer (PIO) messages



## June 2022 Competency Maintenance Problem Set Solution

- Please see the solution offered by Mike Geier of Florida.
- It was sent as a separate attachment to today's meeting invite.
- As you can imagine, Mike has a conflict today.
- Providing a review of Mike's problem set solution is his current ROSS Task Force Leader, Matt McKinley of Kentucky.





## **Cobalt Magnet 22 Panel Discussion**

- Cobalt Magnet scope.
- Texas Radiation Program.
- How to include ROSS in the Texas Emergency Response Team (RERT).
- Assigned ROSS representing Texas Dept of State Health Services.
  - Roland Benke FRMAC Liaison
  - Danette Fennesy County/Liaison then moved to FEMA Incident Management Team at FEMA Joint Field Office
  - John White Regional Medical Operations Center to support Medical and Hospital response
- Additional trained ROSS that work for DSHS were assigned specific roles to use their skill set.



### **Cobalt Magnet 22 Panel Discussion**

- Allow each ROSS to discuss:
  - Experience of participation
  - Education value of participating in a federal/state/local exercise
  - Open discussion of expectations and effectiveness



### **Lessons Learned**

- Specific Training needed for ROSS on State Response.
  - Texas WebEOC, resource request process
  - Texas RERT

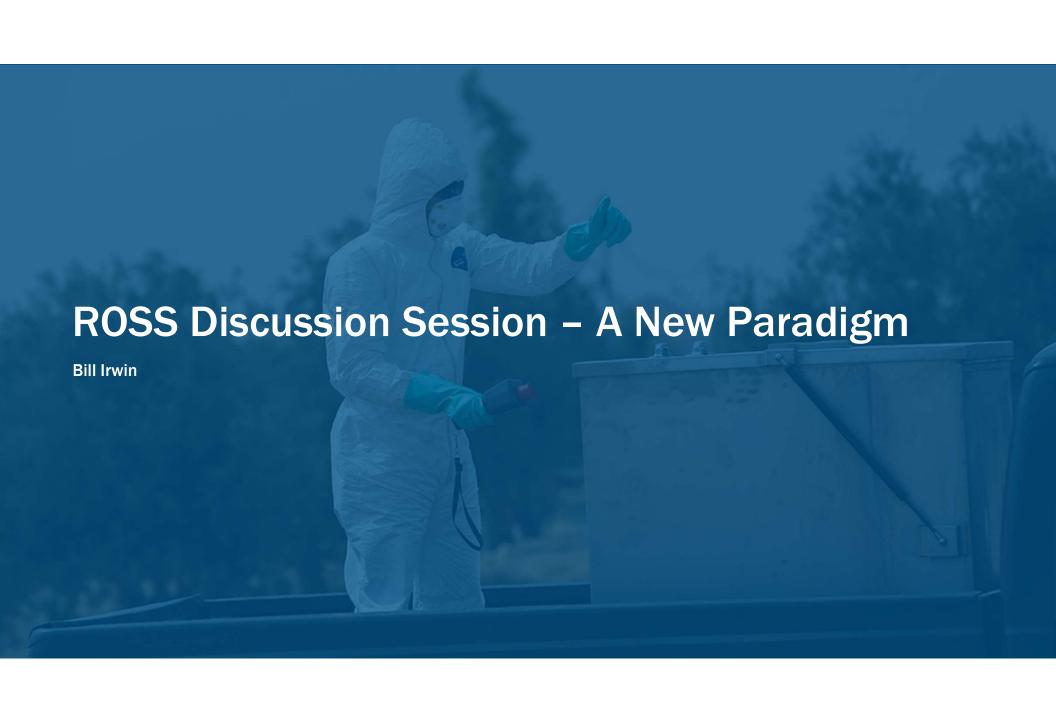
FEMA

- Texas Emergency regional disaster District Council (DDC) and State Operation Center (SOC)
- DSHS State Medical Operations Center
- ROSS training course included significant training that our RERT team lacked.
- ROSS will undergo state specific training 3-4 times a year.
- ROSS will be assigned to every TTX and exercise in Texas. Invited to DSHS training.
- ROSS will be trained and added to the RERT Roster in specific positions. Initial Focus: DDC/City/County LNOS, Community Reception Centers, Medical and Hospital Support.

## **2022 ROSS Support in Texas**

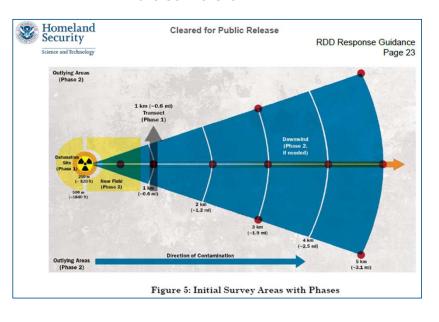
- Cobalt Magnet 2022 Austin
- South Texas Nuclear Power Plant Evaluated Exercise
- Comanche Peak Nuclear Power Plant Dress Rehearsal
- Comanche Peak Nuclear Power Plant Evaluated Exercise
- FBI Currie TTX Houston

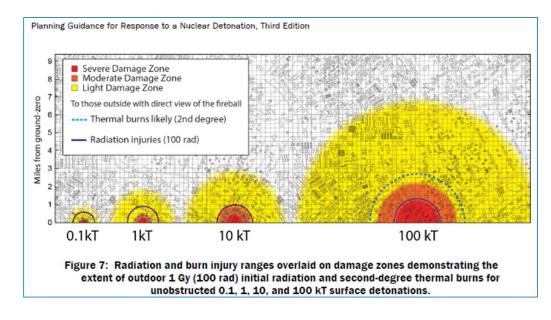




### **Open discussion**

What are the differences between the past paradigm of radiological and nuclear emergency response and recovery that may not work, may waste scarce resources or even be of too high a risk, if implemented in a no-notice, non-fixed facility incident like an RDD or nuclear detonation?









# **Closing Remarks**

- Next call in December 2022
- Lawrence Livermore Responder Training Videos