

# FRMAC Semi-Annual Teleconference July 2022

*Radiological Assistance Program*

*Consequence Management Highlights*



# Radiological Assistance Program

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- **2022 Program Updates**
  - **National Guard Training**
    - Road RAPTER; Rad Basics refresher through advanced search and consequence management.
    - State and local agencies can coordinate with their Civil Support team.
  - **Ukraine**
    - Remote monitoring of open-source sensor data
    - Technical support to Operations



Nuclear power plants in Ukraine



# Region 1

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- **Massachusetts** (Preventative Search as part of JHAT)
  - Boston Pops 4<sup>th</sup> of July |
  - Boston Marathon October 2021 and April 2022
- **New York**
  - New York City (Preventative Search as part of JHAT)
    - United Nations General Assembly
    - Thanksgiving Day Parade
    - Christmas Tree Lighting
    - New years Eve
  - Operation Shield July and August of 2022
    - Joint law enforcement operation which conducts physical and technical surveillance at all marinas in Eastern Suffolk county, Long Island.
    - (Preventative Search as part of JHAT)
- **New Jersey**
  - Enriched Uranium Source recovery (NJ) SEP 2021
  - Joint operation with FBI
  - No criminal intent; Self reported by a retired Scientist who was doing some house keeping and wanted to properly dispose of the source.



# Region 3

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## Alabama

- **World Games, SEAR 1, Birmingham, AL (4-18, July)** PRND team led by RAP 3 included personnel from RAP 2, OPX, NSP Home Team, Alabama Office of Radiation Control, DHS Countering Weapons of Mass Destruction (CWMD) Office, Florida Highway Patrol

## South Carolina

- **Heritage Golf Tournament, SEAR 5, Hilton Head Island, SC (13-17 April)** PRND team consisting of Beaufort County Sheriff's Office, RAP 3, and 43<sup>rd</sup> CST (SC).

## Georgia

- **Masters Golf Tournament, SEAR 3, Augusta, GA (4-10 April)** PRND team consisting of RAP 3 and 4<sup>th</sup> CST (GA)

## North Carolina

- **Brunswick Nuclear Power Plant Ingestion Pathway Exercise, Wilmington, NC (26-27 July).** A 5-person team will assist with field monitoring activities during the Plume Phase on Day 1, and the Federal Team Leader and Team Captain will support the Ingestion Pathway TTX on Day 2.



# Region 4

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## New Mexico

- Supported a response with local law enforcement to characterize radioactive materials at a private residence in the mountains outside of Albuquerque NM

## Texas

- Participated in the CM22 exercise in Austin TX partnering with the State of Texas and local personnel in support of the FRMAC. Scenario included the detonation of a radiological dispersion device in an urban environment.
- Comanche Peak NPP Plume Pathway exercises (one currently postponed due to active wildfires in the vicinity)

## Oklahoma

- Provided Preventative Radiological/Nuclear Detection (PRND) support to Federal and Local law enforcement at the Oklahoma City Memorial Marathon

## Wyoming

- **WY WIPP TTX Series (3-9 April, 2022)** This TTX series took place over a one-week period in the three major metropolitan cities, Cheyenne, Laramie, and Rock Springs, WY, through which WIPP shipments travel. State, County, and local responders worked through their respective response actions and worked with other response entities who may also be involved in an accident involving a WIPP shipment.

## Utah

- **UT JTTF Meeting (2-3 May, 2022)** The Salt Lake City FBI and the State of Utah invited DOE RAP 6 to participate in the semi-annual meeting to discuss upcoming events, potential threats, and other activities for partnering agencies to be aware of. The rad/nuc search mission is evolving and engagements between PHS (RAP) and its Federal and State (CST) partners is becoming increasingly more important to future successes within the whole of government response matrix. This meeting brings together those regional agencies and the scope of work enforces the need to combine elements for operational success.

## Montana

- **Silent Thunder TTX, Montana State University (8-9 June, 2022)** Montana State University, FBI, and NNSA hosted a tabletop exercise on weapons of mass destruction (WMD) terrorism at Montana State University. The TTX focused on a terrorist-created WMD/radiological incident affecting both MSU and the greater Bozeman, MT, community. This is part of the Silent Thunder Exercise Series designed to foster collaboration among representatives from local, state, and federal agencies with a shared stake in ensuring a positive outcome.

# Region 7

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- **Sentinel Response 2022 (2022.04.29-30)**
  - A Full-Scale, Multi-Task Force, Mobilization Exercise
  - RAP 7 developed and proctored a building clearing exercise within a radiological environment simulating dose rates from 100s of microR/h to 100s of R/h.
- **BART/ MUNI/ SFFD/CST Radiological Dispersal Device (RDD) Exercise (2022.06.12)**
  - A Full-Scale, Multi-Task Force, Mobilization Exercise
  - RAP 7 provided radioactive material to generate a field of several milliR/h emulating a right of boom RDD environment on a subway platform.
- **Lessons learned:**
  - Local first responders well understood the ALARA concepts as they relate to lifesaving activities.
  - First responders were surprised to see and discuss shielding effects of the structures (concrete).
  - Drill artifacts should be reduced to prevent first responder reliance on assets and capabilities which will NOT be immediately available.

# Region 7

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## Sentinel Response Simulated Radiological Environment

location	distance [meter-ish]	unshielded [R/h]	1TVL [R/h]	2TVL [mR/h]	3TVL [mR/h]	4TVL [μR/h]	5TVL [μR/h]	6TVL [μR/h]
R-01	1	640.000	64.000					
R-02	2	160.000	16.000		160.0			
R-03	4	640.000	64.000					
R-04	6	17.778	1.778					
R-05	8	10.000	1.000	100.0				
R-06	10	6.400	0.640	64.0				
R-07	12	4.444	0.444	44.4	4.4			
R-08	14	3.265	0.327	32.7	3.3			
R-09	16	2.500	0.250	25.0	2.5			
R-10	18	1.975	0.198	19.8	2.0	198		
R-11	20	1.600	0.160	16.0	1.6	160		
R-12	22	1.322	0.132	13.2	1.3	132	13	
R-13	24	1.111	0.111	11.1	1.1	111	11	
R-14	26	0.947	0.095	9.5	0.9	95	9	
R-15	28	0.816	0.082	8.2	0.8	82	8	1
R-16	30	0.711	0.071		0.7	71	7	1
R-17	32	0.625	0.063			63	6	1
R-18	34	0.554	0.055			55	6	1
R-19	36	0.494	0.049			49		0
R-20	38	0.443	0.044			44		0
R-21	40	0.400	0.040			40		0
R-22	42	0.363	0.036			36		0
R-23	44	0.331	0.033					0
R-24	46	0.302	0.030					0
R-25	48	0.278	0.028					0
R-26	50	0.256	0.026					0
R-27	52	0.237	0.024					0
R-28	54	0.219	0.022					0
R-29	56	0.204	0.020					0
R-30	58	0.190	0.019					0
R-31	60	0.178	0.018					
R-32	62	0.166	0.017	1.7	0.166			
R-33	64	0.156	0.016	1.6	0.156			
R-34	66	0.147	0.015	1.5	0.147			



## BART Exercise with Civil Support Team





# Planning | Exercises and Operations

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- 2023 looks like it will be a busy year
- Please reach out to your local RAP region early