



FEMA

NATIONAL QUALIFICATION SYSTEM (NQS)

POSITION TASK BOOK
FOR THE POSITION OF

RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

Version: February 2019

Check the appropriate position type:

Type 1

Type 2

Type 3

POSITION TASK BOOK TASK CODES

For each of the tasks listed in the Position Task Book (PTB), there are one or more codes describing the circumstances in which the trainee can perform tasks related to the position. If a task has multiple codes listed, it means the evaluator can assess the trainee on any of those circumstances as opposed to evaluating the trainee on all of the listed codes.

Code C: Task performed in training or classroom setting, including seminars and workshops.

Code E: Task performed on a full-scale exercise with equipment deployment under the Incident Command System (ICS).

Code F: Task performed on a functional exercise managed under ICS.

Code I: Task performed on an incident or event managed under ICS. Examples of incidents and events that may employ ICS include but are not limited to an oil spill, search and rescue, hazardous material response, fire, and emergency or non-emergency (planned or unplanned) events.

Code J: Task performed as part of day-to-day job duties.

Code T: Task performed during a tabletop exercise.

Code R: Task performed very rarely and used only if applicable to the event.

RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST (ROSS)

1. Competency: Assume position responsibilities

Description: Successfully assume the role of Radiological Operations Support Specialist and initiate position activities at the appropriate time according to the following behaviors.

1a. Behavior: Ensure readiness for assignment

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
1. Demonstrate a basic ability to interpret IMAAC/NARAC/FRMAC data products: <ul style="list-style-type: none"> • Interpret and brief at least two data products to an audience 	C, E, F, I, J, T		
2. Demonstrate ability to share information with responders and decision makers using HSIN, WebEOC, spreadsheets and other common software: <ul style="list-style-type: none"> • Demonstrate a working knowledge of HSIN, WebEOC and spreadsheets and other common software 	C, E, F, I, J, T		
3. Demonstrate understanding that maps, atmospheric plume modeling, briefing products, and technical reports can come from several sources: <ul style="list-style-type: none"> • Explain functions of IMAAC and types of information and products provided • Explain functions of NARAC and types of information and products provided • Explain functions of FRMAC and types of information and products provided 	C, E, F, I, J, T		
4. Explain the value to responders and decision makers of the standard IMAAC/NARAC/FRMAC products: <ul style="list-style-type: none"> • Describe standard products delivered from IMAAC/NARAC/FRMAC for various incidents • Identify standard assumptions, layout, features, information and legends for the data products • Recognize common questions that the IMAAC/NARAC/FRMAC products are intended to answer 	C, E, F, I, J, T		
5. Demonstrate working knowledge of the basic functionality and differences between advanced modeling tools: <ul style="list-style-type: none"> • Demonstrate working knowledge of HPAC, VSP, TurboFRMAC, HotSpot, and RESRAD suite 	C, E, F, I, J, T		
6. Explain the differences between technical guidance vs. making recommendations: <ul style="list-style-type: none"> • Describe how recommendations are alternatives derived from technical guidance 	C, E, F, I, J, T		

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
7. Know authorities and system in your state responsible for radiological and nuclear emergency response: <ul style="list-style-type: none"> Identify the agency responsible for public and worker protection during radiological and nuclear emergencies in your state Establish a mutual awareness with the radiation control program director and agency responsible for public and worker protection during rad/nuc incidents 	C, E, F, I, J, T		
8. Secure access to CM Web Account: <ul style="list-style-type: none"> Demonstrate ability to log into and navigate CM Web 	C, E, F, I, J, T		
9. Demonstrate familiarity using RadResponder: <ul style="list-style-type: none"> Secure a RadResponder login Demonstrate RadResponder account management functions: updating password and username, editing contact information, and recover password functionality Demonstrate ability to navigate to an Event and understanding of basic functionality: downloading data, navigating the map, etc. 	C, E, F, I, J, T		
10. (TYPE 2 ONLY) Demonstrate the ability to interpret the full set of FRMAC data products for one of the three scenarios (NPP, RDD or NucDet): <ul style="list-style-type: none"> Provide after action report from exercise detailing demonstration of task 	C, E, F, I, J, T		

1b. Behavior: Successfully assume the role of Radiological Operations Support Specialist and initiate position activities

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
11. Report to your assigned site and supervisor and obtain briefing on role to begin position activities as a ROSS: <ul style="list-style-type: none"> Provide sign in sheet from incidents or exercises 	C, E, F, I, J, T		

1c. Behavior: (TYPE 2 ONLY) Ensure availability, qualifications, and capabilities of resources to complete assignment

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
12. Demonstrate ability to assess qualifications of ROSS strike team members and deploy according to their varying capabilities: <ul style="list-style-type: none"> Provide after action report from exercise detailing demonstration of task 	C, E, F, I, J, T		

1d. Behavior: (TYPE 2 ONLY) Establish effective relationships with relevant personnel

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
13. Identify how the Advisory Team for Environment, Food and Health can provide recommendations to support response: <ul style="list-style-type: none"> • Explain to an audience how Advisory Team interacts with jurisdictions to provide recommendations • Explain to an audience how the ROSS interacts with the Advisory Team 	C, E, F, I, J, T		

2. Competency: Communicate effectively

Description: Use suitable communication techniques to share relevant information with appropriate personnel on a timely basis to accomplish objectives in a potentially rapidly changing environment.

2a. Behavior: Ensure the exchange of relevant information during briefings and debriefings

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
14. Demonstrate ability to identify opportunities for ROSS engagement to share information important to responders, incident managers, agencies and stakeholders throughout an incident: <ul style="list-style-type: none"> • Identify the right meetings/mechanisms to relay important information to responders, incident managers, agencies, and stakeholders • Demonstrate ability to communicate effectively with workers in the field as well as with senior leadership 	C, E, F, I, J, T		

2b. Behavior: Communicate incident priorities and operations

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
15. Evaluate the radiological characteristics of the scenario and relate the risks to the responders and the public: <ul style="list-style-type: none"> • Provide radiological perspectives for development of the Incident Action Plan • Provide radiological perspectives for incident briefing • Provide content for PIO messages • (TYPE 2 ONLY) Demonstrate capacity to appropriately engage with decision-makers for all emergency support functions and incident command roles • (TYPE 1 ONLY) Demonstrate capacity to appropriately engage with decision-makers in the highest levels of government 	C, E, F, I, J, T		

2c. Behavior: Effectively gather, produce, apply, distribute, and communicate information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
16. Provide Just-in-Time training for responders operating in a radiological environment: <ul style="list-style-type: none"> • Prepare training for responders to include risk communication and perspectives to put the radiological risk in perspective with overall hazards • Deliver training to a group of responders preparing to deploy for a radiological incident 	C, E, F, I, J, T		

<p>17. Demonstrate ability to convey technical information to a non-technical audience:</p> <ul style="list-style-type: none"> Given a topic related to the consequences of a radiological or nuclear incident, describe it in terms understandable by a 6th grader 	<p>C, E, F, I, J, T</p>		
<p>18. Demonstrate effective public interaction skills:</p> <ul style="list-style-type: none"> Display good eye contact Display effective and concise language Display proper body language Display self-awareness to recognize effectiveness of message delivery Display situational awareness and ability to adapt message to audience 	<p>C, E, F, I, J, T</p>		

2d. Behavior: Oversee production and distribution of information per established guidelines and ensure recipient understands information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
<p>19. Identify how to request map products and how to receive and distribute them:</p> <ul style="list-style-type: none"> Describe working knowledge of how to record and relay a request for and receipt of a standard or custom IMAAC, NARAC, or FRMAC product (TYPE 2 ONLY) Record and relay a request for and receipt of a standard or custom IMAAC, NARAC, or FRMAC product 	<p>C, E, F, I, J, T</p>		
<p>20. Demonstrate understanding of the Environmental Protection Agency (EPA) Protective Action Guidance (PAGs) and Protective Action Recommendations (PARs) in context with overall levels of risk to workers and public for various incident types:</p> <ul style="list-style-type: none"> Recognize where protective actions may not correspond to the Protective Action Guide levels recommended in Protective Action Guidance manual or map Recognize important considerations for Protective Action Guidance based recommendations, including inputs, assumptions and limitations 	<p>C, E, F, I, J, T</p>		
<p>21. Demonstrate ability to effectively relate risk to public:</p> <ul style="list-style-type: none"> Identify resources available to assist in developing radiation risk/incident messages Demonstrate ability to convey technical information in a non-technical and concise manner appropriate for the public Demonstrate ability to coordinate with appropriate representatives in a jurisdiction to draft and distribute messages (PIO, radiation control, IC) 	<p>C, E, F, I, J, T</p>		
<p>22. Given a unique response or recovery concept, define a custom data product supporting the delivery of information about that concept:</p>	<p>C, E, F, I, J, T</p>		

<ul style="list-style-type: none"> • Identify types of information that can be added to a data product or map (agricultural, special populations, local datasets, etc.) • Describe the information that this specialized product is communicating in a meaningful way that is useful to the responders/decision makers • Respond to difficult questions or requests that would result in non-standard interpretation and use of products • Demonstrate ability to advise on how to order a more specific or detailed data product to address incident questions or priorities • Demonstrate ability to recognize when a technical specialist is required to brief on a custom data product 			
<p>23. (TYPE 2 ONLY) Interpret the AMS products and the scientific understanding behind them:</p> <ul style="list-style-type: none"> • Describe how the AMS can provide measurements of actual radioactivity over a wide area early in a response • Describe how the DOE Watch Office may be contacted to request AMS 	<p>C, E, F, I, J, T</p>		

3. Competency: Ensure completion of assigned actions to meet identified objectives

Description: Identify, analyze, and apply relevant situational information and evaluate actions to complete assignments safely and meet identified objectives. Complete actions within established timeframe.

3a. Behavior: Execute assigned tasks, assess progress, and make necessary adjustments

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
24. Explain the purpose of CM Web and resources available within the system: <ul style="list-style-type: none"> Find and manage data products provided in CM Web Events from IMAAC/NARAC/FRMAC Find and review the Job Aids (10-point monitoring, mission planning, ICS and EOC) Find the Rapid Hazard Assessment Tool and run an IND model 	C, E, F, I, J, T		
25. Explain the purpose and functions of RASCAL and URI-RASCAL: <ul style="list-style-type: none"> Describe incidents and scenarios where RASCAL models are most useful Explain basic functions of RASCAL and output information provided from system 	C, E, F, I, J, T		
26. Explain the purpose and functions of RESRAD-RDD: <ul style="list-style-type: none"> Describe the features of RESRAD-RDD that would benefit an RDD incident response Explain who would run the RESRAD software and how information would be shared 	C, E, F, I, J, T		
27. Provide interpretation and guidance for confounding instrument readings/results: <ul style="list-style-type: none"> Demonstrate ability to apply data quality objectives to ensure reliable data Demonstrate ability to recognize when data requires additional validation Demonstrate ability to identify possible reasons for conflicting data in an incident 	C, E, F, I, J, T		
28. (TYPE 2 ONLY) Use TurboFRMAC to complete ingestion pathway analytical tasks: <ul style="list-style-type: none"> Perform at least one ingestion pathway analytical task using TurboFRMAC Coordinate with assessment scientists to complete at least one ingestion pathway analytical task using TurboFRMAC 	C, E, F, I, J, T		
29. (TYPE 2 ONLY) Use RadResponder mobile app and/or website to support response: <ul style="list-style-type: none"> Demonstrate proficient use of RadResponder during an incident or exercise Provide after action report from exercise detailing demonstration of task 	C, E, F, I, J, T		

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
30. (TYPE 2 ONLY) Demonstrate use of RASCAL to support response: <ul style="list-style-type: none"> • Demonstrate proficient use of RASCAL or URI-RASCAL to support at least one exercise or incident • Provide after action report from exercise detailing demonstration of task 	C, E, F, I, J, T		
31. (TYPE 1 ONLY) Manage assessment scientists engaging in multiple TurboFRMAC analyses: <ul style="list-style-type: none"> • Demonstrate ability to lead assessment scientists in use of TurboFRMAC to answer ingestion pathway exposure and dose questions • Demonstrate ability to appropriately apply information provided from TurboFRMAC ingestion pathway analysis to incident 	C, E, F, I, J, T		
32. (TYPE 1 ONLY) Manage others in the use of RadResponder for aspects of radiological response for situational awareness: <ul style="list-style-type: none"> • Demonstrate ability to direct others in implementation or use of procedures to ensure appropriate data for a common radiological operating picture and situational awareness using RadResponder • Demonstrate proficiency in using the full functionality of the RadResponder website, including mapping features, to direct others to generate and display a variety of data and overlays to support situational awareness 	C, E, F, I, J, T		
33. (TYPE 1 ONLY) Manage others in the use of RASCAL or URI-RASCAL for rad/nuc emergency consequence management: <ul style="list-style-type: none"> • For the purposes of a wide range of decision making, demonstrate the ability to guide assessment scientists in use of RASCAL to generate appropriate models for the incident/exercise • For the purposes of a wide range of decision making, demonstrate ability to appropriately apply information provided from RASCAL analysis to incident 	C, E, F, I, J, T		
34. (TYPE 1 ONLY) Manage others in the use of RESRAD-RDD for rad/nuc emergency consequence management: <ul style="list-style-type: none"> • For the purposes of a wide range of decision making, demonstrate ability to lead assessment scientists in use of RESRAD-RDD to answer questions • For the purposes of a wide range of decision making, demonstrate ability to appropriately apply information provided from RESRAD-RDD analysis to incident 	C, E, F, I, J, T		

3b. Behavior: (TYPE 2 ONLY) Make appropriate decisions based on analysis of gathered information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
35. Integrate local and state capabilities with Federal/State/Local assets to meet incident objectives: <ul style="list-style-type: none"> • Coordinate with state/local jurisdictions in at least one exercise/incident to maintain a common radiological operating picture and situational awareness • Coordinate with Federal assets supporting state/local response in at least one exercise/incident to maintain a common radiological operating picture and situational awareness 	C, E, F, I, J, T		
36. Match multiple capabilities of Federal/State/Local emergency response/recovery assets to incident objectives: <ul style="list-style-type: none"> • Explain to an audience the main non-radiation asset available from the Federal government to support incident response • Explain to an audience the main radiation SME asset available from the Federal government to support incident response 	C, E, F, I, J, T		

3c. Behavior: Gather, analyze, and validate information and make recommendations for setting priorities

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
37. For a large or unique threat incident, scale and adjust guidelines for PPE, dose, population monitoring, and zone definitions and controls to balance resources with responder risk and response benefit: <ul style="list-style-type: none"> • Demonstrate ability to use ROSS Toolkit to provide recommendations for adjustments to guidance/thresholds when resources are scarce • Demonstrate ability to identify unique considerations important for large scale/severe radiological incidents • Demonstrate ability to provide information and references to guide establishment or adjustment of dose recommendations or PPE requirements 	C, E, F, I, J, T		
38. Demonstrate ability to help IC adjust responder dose guidelines for rescue operations involving large doses and vulnerable populations <ul style="list-style-type: none"> • Demonstrate ability to clearly and concisely communicate implications of setting worker dose for lifesaving missions too low • Identify appropriate alarm set points/dose alerts for life saving missions • (TYPE 2 ONLY) Describe the reasons higher dose thresholds are considered appropriate by 	C, E, F, I, J, T		

recommending bodies (such as NCRP, IAEA, EPA, etc.) and when these could be applied			
39. Demonstrate understanding of decision-making process for incident response: <ul style="list-style-type: none"> Describe positions and agencies typically involved in decision-making for radiological incidents Explain how non-technical factors (geographical, social, etc.) can inform protective action decisions (TYPE 2 ONLY) Explain to an audience how non-technical factors (geographical, social, etc.) can inform protective action decisions (TYPE 1 ONLY) Provide science-based guidance with specificity required in complex and potentially dangerous situations to agencies typically involved in decision-making for radiological incidents 	C, E, F, I, J, T		
40. (TYPE 2 ONLY) Explain capabilities of the primary radiological DOD/NG (CST, CERFP, AFRAT, etc.) assets: <ul style="list-style-type: none"> For decision-makers, describe the best application of the DOD/NG assets and when they should be requested or activated Explain to an audience the DOD/NG assets important to radiological incident response, their mission, capabilities, footprint and expected response times 	C, E, F, I, J, T		
41. (TYPE 2 ONLY) Explain capabilities of the primary radiological DOE assets: <ul style="list-style-type: none"> For decision-makers, describe the best application of the DOE assets and when they should be requested or activated Explain to an audience the DOE assets important to radiological incident response (RAP, AMS, FRMAC, NARAC, etc.), their mission, capabilities, footprint and expected response times 	C, E, F, I, J, T		
42. (TYPE 1 ONLY) Integrate local and state capabilities with DOE assets to meet incident objectives: <ul style="list-style-type: none"> Coordinate with state/local jurisdictions to assist in request for DOE assets in three or more major full-scale exercises or real-life incidents Communicate directly with multiple DOE assets in three or more major full-scale exercises or real-life incidents to request and receive information and products important for incident response 	C, E, F, I, J, T		

3d. Behavior: Gather, update, and apply situational information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
43. Support the collection and upload/entry of actionable, verified data on RadResponder or other data collection systems: <ul style="list-style-type: none"> Demonstrate knowledge of equipment details required to allow data to be used for further analysis and product development 	C, E, F, I, J, T		

<ul style="list-style-type: none"> Enter data using the RadResponder mobile app and directly into the website Assess data entered into RadResponder for validity per jurisdictional procedures and designate the assessment of the data point appropriately 			
<p>44. Demonstrate the ability to distinguish relevant information from other non-mission essential information:</p> <ul style="list-style-type: none"> Describe the reasons and methods for sorting through large amounts of radiological data and information to identify those that are relevant to specific questions or priorities 	C, E, F, I, J, T		
<p>45. (TYPE 2 ONLY) Demonstrate ability to recognize release and modeling resources most appropriate for the scenario:</p> <ul style="list-style-type: none"> Identify differences between several modeling products to include: HotSpot, RASCAL, and IMAAC/NARAC/FRMAC and explain why one might be better applied in certain situations 	C, E, F, I, J, T		
<p>46. (TYPE 1 ONLY) Demonstrate ability to coordinate with appropriate release and modeling resources to meet incident objectives:</p> <ul style="list-style-type: none"> Demonstrate direct coordination with IMAAC, NARAC, or other release/modeling resources during three or more major full-scale exercises or real-life incidents Demonstrate proficiency in describing the typical methods for and assumption applied in atmospheric/environmental release and transport modeling for three or more major full-scale exercises or real-life incidents 	C, E, F, I, J, T		

4. Competency: ROSS Position Functions

Description: Perform functions specific to this position.

4a. Behavior: Demonstrate Core Position Skills

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
<p>47. Demonstrate ability to research and explain capabilities of the major Federal/State/Local assets as they relate to NPP release, RDD and nuclear detonation:</p> <ul style="list-style-type: none"> Describe the main assets for radiation incidents available in state/local jurisdictions Describe the main radiation SME assets available from the Federal government for radiological incidents Describe the main non-radiation SME assets available from the Federal government to support incident response Identify references where the various assets and resources are described 	C, E, F, I, J, T		

<p>48. Demonstrate an understanding of guidance and reference documents important for NPP, RDD, and NucDet incidents:</p> <ul style="list-style-type: none"> • Describe the key guidance documents related to response to a nuclear detonation • Describe the key guidance documents related to response to a NPP release • Describe the key guidance documents related to response to an RDD 	<p>C, E, F, I, J, T</p>		
<p>49. Differentiate the radiological risks of nuclear power plant releases, a radiological dispersal device, and a nuclear detonation:</p> <ul style="list-style-type: none"> • Identify the most critical radiological effects likely from NPP releases, RDD, and nuc det • Identify objectives of response related to the specific release and pathways to human exposure for NPP releases, RDD, and nuc det • Describe the variations in incident scale between NPP release, RDD, and nuc det 	<p>C, E, F, I, J, T</p>		
<p>50. Recognize the appropriate IMAAC/NARAC/FRMAC data products for NPP releases, RDD, and nuclear detonation:</p> <ul style="list-style-type: none"> • Obtain the different data products from CM Web for NPP release, RDD and nuc det • Describe the unique characteristics of each of the data products available on CM Web for NPP release, RDD and nuc det 	<p>C, E, F, I, J, T</p>		
<p>51. Recognize the varying levels of radiological control in the ROSS toolkit useful in response to NPP release, RDD, and nuclear detonation:</p> <ul style="list-style-type: none"> • Describe the controls related to Perimeters and Zones in the ROSS toolkit useful in response to NPP release, RDD, and nuc det • Describe the controls related to Worker Safety in the ROSS toolkit useful in response to NPP release, RDD, and nuc det • Describe the considerations and criteria related Shelter and Evacuation in the ROSS toolkit useful in response to NPP release, RDD, and nuc det • Describe the considerations and criteria related to Population Monitoring in the ROSS toolkit useful in response to NPP release, RDD, and nuc det • Describe other radiological and nuclear emergency response resources in the ROSS toolkit useful in response to NPP release, RDD, and nuc det 	<p>C, E, F, I, J, T</p>		
<p>52. Describe the appropriate radiological instrumentation and environmental measurement data collection techniques for NPP release:</p> <ul style="list-style-type: none"> • Identify the media samples appropriate to assessing dose pathways for NPP release • Identify the analytical instrumentation for environmental samples obtained following NPP release • Identify quality assurance controls for sampling and laboratory analysis for samples obtained after NPP release 	<p>C, E, F, I, J, T</p>		

<ul style="list-style-type: none"> Identify modifications of routine environmental sampling and analysis procedures that may be necessary following NPP release 			
<p>53. Identify the dose calculations appropriate to NPP releases, RDD, and nuc det:</p> <ul style="list-style-type: none"> Describe the internal dose calculations and consequences important for NPP release, RDD, and nuc det Describe the external dose calculations and consequences important for NPP release, RDD, and nuc det Describe response objectives-oriented recommendations relative to dose consequences to NPP release, RDD, and nuc det Describe quality assurance methods to best correlate dose measurements to the success of incident objectives 	C, E, F, I, J, T		
<p>54. Describe how the environmental monitoring requirements for a NPP release, RDD, and nuclear detonation for chronic exposures in the environment are similar in their characteristics and methodologies:</p> <ul style="list-style-type: none"> Identify the most significant environmental consequences of NPP release Identify the most significant environmental consequences of RDD incident Identify the most significant environmental consequences of nuclear detonation (TYPE 2 ONLY) Describe environmental assessments for human health protection common to NPP release, RDD, and nuc det incidents 	C, E, F, I, J, T		
<p>55. Describe the appropriate radiological instrumentation and environmental measurement data collection techniques for an RDD incident:</p> <ul style="list-style-type: none"> Identify the media samples appropriate to assessing dose pathways for RDD incidents Identify the analytical instrumentation for environmental samples obtained following an RDD incident Identify quality assurance controls for sampling and laboratory analysis for samples obtained after an RDD incident Identify modifications of routine environmental sampling and analysis procedures that may be necessary following an RDD incident 	C, E, F, I, J, T		
<p>56. Describe the appropriate radiological instrumentation and environmental measurement data collection techniques for a nuclear detonation:</p> <ul style="list-style-type: none"> Identify the media samples appropriate to assessing dose pathways for a nuclear detonation Identify the analytical instrumentation for environmental samples obtained following a nuclear detonation Identify quality assurance controls for sampling and laboratory analysis for samples obtained after a nuclear detonation 	C, E, F, I, J, T		

<ul style="list-style-type: none"> Identify modifications of routine environmental sampling and analysis procedures that may be necessary following a nuclear detonation 			
<p>57. (TYPE 2 ONLY) Demonstrate the ability to lead a strike team of ROSS engaged in NPP release, RDD, or nuclear detonation response and recovery within the incident management structure:</p> <ul style="list-style-type: none"> Provide after action report from exercise detailing demonstration of task 	C, E, F, I, J, T		
<p>58. (TYPE 2 ONLY) Recognize the critical role of dose related recordkeeping in response to NPP release, RDD, and nuclear detonation incidents:</p> <ul style="list-style-type: none"> Describe the types of dose related records to be obtained and maintained in response to NPP release, RDD and nuc det Identify uses of dose related records to individual, group, and incident management purposes Describe methods to ensure and preserve the quality and integrity of dose related records 	C, E, F, I, J, T		
<p>59. (TYPE 2 ONLY) Recognize the potential health impacts related to a nuclear detonation:</p> <ul style="list-style-type: none"> Describe the physical, environmental, societal, and human effects of a nuclear detonation Explain to an audience the specific sources of radiation exposure in the early and later phases of a nuclear detonation Explain to an audience the complexities of minimizing or mitigating the physical, environmental, societal, and human effects of a nuclear detonation where resources are scarce, and conditions are austere Describe the roles ROSS can play in minimizing or mitigating the physical, environmental, societal, and human effects of a nuclear detonation 	C, E, F, I, J, T		
<p>60. (TYPE 2 ONLY) Recognize the potential health impacts related to a nuclear power plant release:</p> <ul style="list-style-type: none"> Describe the physical, environmental, societal, and human effects of a NPP release Explain to an audience the specific sources of radiation exposure in the early and later phases of a NPP release Describe the roles ROSS can play in minimizing or mitigating the physical, environmental, societal, and human effects of a NPP release 	C, E, F, I, J, T		
<p>61. (TYPE 2 ONLY) Recognize the potential health impacts related to a radiological dispersal device release:</p> <ul style="list-style-type: none"> Describe the physical, environmental, societal, and human effects of an RDD Explain to an audience the specific sources of radiation exposure in the early and later phases of an RDD incident Describe the roles ROSS can play in minimizing or mitigating the physical, environmental, societal, and human effects of an RDD incident 	C, E, F, I, J, T		
<p>62. (TYPE 2 ONLY) Recognize the variety of environmental monitoring methods appropriate for assessing the</p>	C, E, F, I, J, T		

<p>exposure pathways following a NPP release, RDD and nuclear detonation:</p> <ul style="list-style-type: none"> • Describe the sampling priorities and analysis methods for samples obtained following NPP release, RDD and nuc det incidents • Explain to an audience the primary exposure pathway resulting in dose to humans from NPP release, RDD and nuc det incidents 			
<p>63. (TYPE 1 ONLY) Manage multiple ROSS strike teams engaged in different radiological incident management functions for the most geographically widespread and resource intensive response and recovery operations:</p> <ul style="list-style-type: none"> • Provide after action report from participation in exercise or incident 	<p>C, E, F, I, J, T</p>		