

CITY OF NORFOLK

Answers to United States Coast Guard District Five Fire Fighting Presentation Questions

Incident Precursors

- a. Has your agency trained to respond to and extinguish a fire onboard a commercial vessel, such as a passenger vessel [or] a cargo vessel? If YES, please describe.
 - Yes, two classes annually for shipboard firefighting
 1. Virginia Department of Fire Program (about 10 people sponsored to attend each year)
 2. Marine Incident Response Team School (about 10 people sponsored to attend each year)
 - The Fire Recruit Academy training curriculum contains shipboard firefighting
- b. Had your agency received training to establish a chain-of-command and coordinate personnel and equipment with other federal, state and local agencies to respond to and extinguish a fire? If YES, please describe.
 - Yes
 - All members are required to complete ICS 100, 200, 700, 800
 - Command level officers and above also complete ICS 300 and 400

Incident Precursors

- c. Had your agency participated in joint training exercises involving multiple federal, state and local agencies? If YES, please describe.
 - Yes
 - MARMAC Shipboard Firefighting Drills, including Chapter 12 Drills
 - Port of Virginia Maritime Incident Response Team Firefighting School
 - Hampton Roads Metropolitan Medical Response System
 - Tidewater Regional Technical Rescue Team
 - Tidewater Regional Hazardous Materials Team
 - DHS FEMA Virginia Task Force 2 Urban Search and Rescue (USAR) Team
 - Did anyone attend the MIRT Command Cadre training? The following is a list of NFR's MIRT Command School attendees:
 - 2020
 - Roger Burris
 - Wade Lewis
 - Damon Langley
 - William Sigafoos
 - William Tull
 - Stanford Mosley
 - 2021
 - John Loushe
 - John Weaver
 - George Van Houten
 - 2022
 - John Weaver
 - Drew Savage

Incident Precursors

- d. Had your fire department participated in a joint training exercise sponsored by the US Coast Guard?
 - i. If YES, did the exercise involve a fire onboard a passenger vessel or the evacuation of a passenger vessel?
 - ii. If YES, did the exercise clarify who would be in charge of the response or how it would be managed and coordinated?
- Yes.
 - 1. At least two fire drills on the Spirit of Norfolk over the past 10 years. In addition to Coast Guard sponsored training, we also participate in vessel training with the Navy.
 - 2. The responsible party would be the Unified Command, which would be established and maintained by NIMS principles.
- e. Was the NIIMS Incident Command System utilized by responding fire departments and federal, state and local agencies during the Spirit of Norfolk firefighting response?
 - The National Interagency Incident Management System (NIIMS) was phased out years ago. However, the National Incident Management System (NIMS) was utilized.

Incident Precursors

- f. Is there a contingency plan for the Hampton Roads area that addresses marine fire response? If YES, what agency or entity promulgated that contingency plan?
 - The POV MIRT works with the Coast Guard to develop response and contingency plans for POV. The Mutual Aid Agreement between the Navy and the City of Norfolk would also serve as a contingency plan for marine fire responses.
- g. What role if any does the contingency plan assign to your agency for a marine fire response?
 - The answer depends on:
 - where the fire is (e.g. is it in a Norfolk jurisdiction shipyard)
 - If it is a life safety issue or a structural fire
 - This is why there is a Unified Command.

Incident Precursors

- h. Does your agency participate in the contingency plan on a voluntary basis or is your participation mandated by regulation or policy? If mandated, what is the relevant regulation?
 - The City's participation is based on a combination of voluntary participation and regulation or policy as set forth by any federal funding that the City receives includes a requirement that NFR be NIMS compliant.
- i. Did your fire agency provide personnel/apparatus in accordance with the contingency plan?
 - Yes. Pursuant to the Mutual Aid Agreement between Program Director, Regional Public Safety, Navy Region Mid-Atlantic and the City of Norfolk, the City responded to a request for fire fighting assistance at the Naval Base and provided apparatus and personnel assistance as requested.

Incident Precursors

- j. How or what process is used to determine the designation of Incident Commander?
 - First, determine who has jurisdictional authority. They provide the Incident Commander.
 - If the City has jurisdictional authority, the Incident Commander is the first arriving officer unless and until command is transferred.
- k. What is the practical difference as it relates to roles and responsibilities between the Incident Commander and Fire Chiefs who respond to the scene?
 - The Incident Commander is in command of the scene
 - Fire Chiefs offer support and fill roles as designated, including roles in Unified Command

Incident Precursors

- I. Are there any written plan or agreements that specifies who the Incident Commander should be for a fire on a civilian vessel alongside a Navy pier? If YES, please describe this plan or agreement.
 - Yes, the Mutual Aid Agreement between Program Director, Regional Public Safety, Navy Region Mid-Atlantic, and the City of Norfolk (dated May 11, 2009) mandates that the senior officer of the party requesting assistance shall assume authority of the scene unless there is an agreement between the parties to change that presumption. Accordingly, a fire on a civilian vessel alongside a Navy pier would be the jurisdiction of Navy Regional Fire and, if Navy Regional Fire requests assistance from the City of Norfolk, the incident commander would accordingly be a Navy Regional Fire representative.
- At the time the SPIRIT OF NORFOLK was made fast to Navy Pier 4, who was the actual Incident Commander?
 - Navy Regional Fire Battalion Chief Baum

Incident Precursors

- m. Please describe the purpose and intent of a Hampton Roads area Mutual Aid request or Call Out? Who initiates the Mutual Aid or Call Out and how does the coordination/assignment of fire-fighting resources work in this context?
 - Purpose/Intent: For when the incident type overwhelms resources currently available and assistance is requested from area jurisdictions.
 - It is initiated by the jurisdiction with authority
 - Generally for the City, the highest-ranking officer on scene decides if a call out/request is made
 - The coordination/assignment of resources are provided as requested in accordance with NIMS

Incident Response

In regards to the SPIRIT OF NORFOLK approach to the Pier and initial fire-fighting efforts at the Pier -

- a. Describe who, if anyone, provided your agency specific information about the unique characteristics, design, and layout of the SPIRIT OF NORFOLK and what assistance did they provide.
 - The Spirit of Norfolk captain advised that the fire was in the engine room as well as the respective locations of the fire plan aboard the ship and the escape hatch to the engine room.
- b. What were the immediate concerns and anticipated challenges for fighting this type of fire?
 - The initial immediate concern is always life safety (100 people on board)
 - Then how to get access to the ship, whether there was fuel on board, and if the fire was in a confined space
- c. Were the shore-side fire-fighters able to communicate with the water-borne fire-fighting efforts who were providing assistance? If YES, how effective were these communications?
 - Yes. Unified Command had direct communication with fire agency boats and indirect communication with civilian boats in the fire-fighting efforts.

Incident Response

In regards to the SPIRIT OF NORFOLK approach to the Pier and initial fire-fighting efforts at the Pier -

- d. Was an incident command established prior to the docking of the SPIRIT OF NORFOLK at the USN pier?
 - Yes.
- e. If known, who and which agency was the Incident Commander? How was this person/agency determined? How was this person/agency determined?
 - It was Navy Regional Fire jurisdiction so Navy Regional Fire assigned the Incident Commander in accordance with NIMS practices. Navy Regional Fire Battalion Chief Baum was selected by Navy Regional Fire as Incident Commander.
- What time was the Unified Command in place and active, estimated time is acceptable?
 - Approximately 12:45 pm.

Incident Response

In regards to the SPIRIT OF NORFOLK approach to the Pier and initial fire-fighting efforts at the Pier -

- f. Please describe the condition of the vessel and how extensive the fire was onboard?
 - The exterior of the vessel appeared undamaged
 - Smoke venting from vents on port and starboard sides
 - Spirit of Norfolk Captain said fire was contained in the engine room
- g. How were firefighting personnel assigned? Who made the decision to assign these personnel? Who made the decision to assign these personnel?
 - In general, personnel were requested by Incident Commander, Chief Baum. He specifically requested that the recon team consist of two Navy Regional Fire firefighters and two Norfolk firefighters. Navy Regional Fire assigned its two firefighters and Norfolk FR assigned its two firefighters.

Incident Response

In regards to the SPIRIT OF NORFOLK approach to the Pier and initial fire-fighting efforts at the Pier -

- h. Were personnel from the different responding fire departments working as blended teams or separate teams?
 - Everyone was working collaboratively under the Unified Command at the direction of Chief Baum to accomplish the mission. Specifically, the recon team and the fire attack team consisted of a blended unit of two Navy Regional Fire and two Norfolk firefighters at the request of Incident Commander Chief Baum.
- i. Who was assigning or directing the firefighters?
 - Everyone was working collaboratively under the direction of the Unified Command. For specific personnel, Navy Regional Fire would communicate information from the Unified Command to its personnel and Norfolk FR would communicate information from the Unified Command to its personnel.

Incident Response

Mid-Afternoon Effort-

- a. What was the status of the fire when the reconnaissance team accessed the vessel?
 - Fire was contained in the engine room.
- i. Did the reconnaissance team accomplish its assigned objectives?
 - The recon team was tasked with 1) locate and confirm location of fire; 2) retrieve the vessel plans; and; 3) find the access hatch to the engine room. The objectives were mostly accomplished.
- ii. What if any objectives assigned to the reconnaissance team were not accomplished?
 - The team failed to locate the emergency access hatch to the engine room.
- iii. What was the status of the fire at the time the reconnaissance team exited the vessel?
 - The fire was contained to the engine room.
- iv. After the reconnaissance team accessed the vessel, did the plan for extinguishing the fire on the vessel change?
 - No
- v. What modifications to the fire-fighting plan were made because of the reconnaissance team's accessing the vessel?
 - None
- Per Norfolk's fire report, it stated that the RECON Team "Once the door was opened to the engine room, rollover, pre flashover conditions were noted." Can you explain this situation and possibly explain why the engine room door was opened and how this led to any change in tactics when the suppression team later entered the vessel and opened the engine room door a second time?
 - When the recon team could not locate the engine room emergency hatch, it proceeded to the engine room to assess the situation. After opening the engine room door and surveying the extent of the fire, the recon team closed the door and disembarked from the vessel. The recon team's opening of the engine room door did not change the tactics when the suppression team later entered the vessel.

Incident Response

Mid-Afternoon Effort-

- b. Who decided when firefighters were to board the SPIRIT OF NORFOLK?
 - Unified Command
- c. Where was the smoke or fire located on the vessel when firefighters boarded?
 - The location of the fire was in the engine room.
 - Smoke was noticeable from exterior engine room vents.
- d. Who determined the objectives of the initial firefighters that boarded the SPIRIT OF NORFOLK?
 - Unified Command

Incident Response

Mid-Afternoon Effort-

- e. How many personnel were part of the team? Who determined that the fire in the engine room had to be actively extinguished?
 - The recon team had four personnel: two Navy Regional Fire, two Norfolk
 - The fire attack team had four personnel: two Navy Regional Fire, two Norfolk
 - The Rapid Intervention Team had four personnel
 - Back up safety crew with water hose line: four personnel
 - Unified Command determined that the fire in the engine room had to be actively extinguished
- f. Was the fire expanding into other compartments within the vessel?
 - At the time the recon and fire attack teams boarded the vessel, the fire was in the engine room.
- g. Was the temperature of the fire determined?
 - Yes
 - i. If so, how was the temperature determined? Thermal image
 - ii. Was the temperature of the fire increasing or decreasing? Hull stayed consistent about 100 degrees, while the vent points were about 120-130 degrees
- Can you provide the hose sizes and throughput capacity for each hose in the plan?
 - 1 ¾ " attack lines with a maximum flow capacity of 180 Gallons per Minute (GPM). The exact size and number of supply lines is unknown, as water supply was being drafted from the river adjacent to the Navy pier.

Incident Response

Mid-Afternoon Effort-

- h. Was the location of the fire within the engine room or was it assumed that the entire space was involved in the fire?
 - Isolated to the engine room
- i. Was it ever discussed by the Incident Command or Fire Chiefs to cover all air access vents to prevent oxygen from entering and cool the exterior of the vessel in order to extinguish the fire? If YES: why was this proposal not pursued?
 - No
- j. Did any of the responding agencies feel pressure to extinguish the fire as quickly as possible in order to move the vessel off of the USN pier? If YES, please describe how you became aware of this desire to move the ship from the pier sooner rather than later.
 - No

Incident Response

Mid-Afternoon Effort-

- k. Who developed the plan to extinguish the engine room fire utilizing a foam applicator through the engine room hatch located on the starboard side of the main deck?
 - Unified Command
- i. Were vessel plans provided which showed the location of the escape hatch and main deck engine room hatch?
 - Yes, the recon team retrieved the vessel plans and provided them to Incident Command.
- ii. Who provided the information as to where the hatch to the engine room was located so a foam applicator could be placed into the space?
 - The Spirit of Norfolk Captain

Incident Response

Mid-Afternoon Effort-

- I. In planning for the foam dispersal, did anyone discuss ramifications of opening the engine room watertight door in terms of:
 - Breaking the fire boundary
 - Risk to firefighters
 - Spreading the entrained firewater throughout the vessel.
 - Potential for rescue
 - Fire Backdraft
- Not to the City's current knowledge

Incident Response

Mid-Afternoon Effort-

- m. Did the planning include a risk assessment to personnel and the vessel based on an engine room escape hatch versus opening the watertight door to the engine room?
 - Yes. Unified Command determined that using the engine room escape hatch would be the most effective and safest method of extinguishing the fire.
- n. The initial plan was described in testimony as boarding the SPIRIT OF NORFOLK from a horizontal apparatus ladder and then descending to the main deck and entering the structure on the [aft] starboard side and putting foam into the engine room via deck escape hatch with a cellar nozzle. Confirm if that was the plan for the Recon team and then the foam attack line.
 - This was the plan for the second entry, not the recon team. But to be clear, it was not a cellar nozzle. It was a foam induction nozzle, and it was always the plan to use foam.
 - i. If that initial plan changed, who and why was that plan changed?
 - The fire attack team was tasked with placing the foam line in the engine room escape hatch, securing the line in place, and then withdrawing from the vessel. Having failed to locate the engine room escape hatch, the fire attack team attempted to place the foam line in the engine room via the engine room door before securing the line in place and withdrawing from the vessel.

Incident Response

Mid-Afternoon Effort-

- o. Who did you identify as the Coast Guard senior on-scene decision maker prior to the mid-afternoon fire team boarding of the vessel?
 - Then-Deputy Commander Jennifer Stockwell (now Captain of the Port)
- i. If there were discussions with that Coast Guard individual, what were the substance of those discussions?
 - Then-Deputy Commander Stockwell was part of Unified Command and therefore part of all the Unified Command discussions once she arrived
- ii. Was this individual apart of the Incident Command?
 - Yes

Incident Response

Mid-Afternoon Effort-

- p. Who did you identify as the MIRT liaison on-scene to assist during the fire-fighting response?
 - Bill Burkett of the Virginia Port Authority
- i. What were the substance of discussions with that individual?
 - Burkett was available as needed for consultation but was not part of the Unified Command
- ii. Was this individual apart of the Incident Command?
 - No

Incident Response

Mid-Afternoon Effort-

- q. Did any of the fire-fighters who went onboard the vessel possess ship-board firefighting experience or training?
 - Unknown as to Navy Regional Fire
 - Yes, Firefighter Jackson from the City had training

Incident Response

Mid-Afternoon Effort-

- r. Who, if anyone, briefed this plan to the Incident Commander and other senior members of other responding agencies?
 - These were ongoing discussions so there was not a formal brief. The Incident Commander and other senior members were the ones developing the plan and making decisions.
- s. What agency firefighters were represented on the second team that made entry to the vessel?
 - Navy Regional Fire and Norfolk Fire Rescue. The Navy captain (Captain Parker) on the recon team was not included as part of the fire attack team. It is the understanding of NFR that Captain Parker was not included as part of the fire attack team because he was suffering from heat exhaustion.
- Were the recon team and the attack team made up of the same personnel?
 - Three of the four members were the same. Captain Parker was not a member of the attack team.

Incident Response

Mid-Afternoon Effort-

- t. Had any members of the second team been trained to fight a vessel engine room fire?
 - Unknown as to Navy Regional Fire
 - Yes, Firefighter Jackson from the City had training that discussed engine room fires

Incident Response

Mid-Afternoon Effort-

- u. What instructions were each member of the second team given?
 - Take foam line onto vessel
 - Leave foam hose line to fill up engine room and suppress the fire

- v. Was the second team briefed on the general arrangement of the vessel, including the location of the engine room hatch and escape scuttle?
 - Yes

Incident Response

Mid-Afternoon Effort-

- w. What was the status of the fire when the second team accessed the vessel?
 - The fire was contained in the engine room.
- x. Did the second team maintain communications with fire department supervisors during their access to the vessel?
 - Yes
- y. Did the second team give status reports or updates on their progress during the course of their access?
 - Yes
- z. Who briefed the firefighter team tasked with boarding the vessel, finding the hatch, opening the hatch and applying foam into the engine room?
 - Chief Milligan briefed the NFR personnel
 - Unknown who briefed Navy Regional Fire personnel

Incident Response

Mid-Afternoon Effort-

- aa. Was the firefighter team made up of personnel from different responding fire departments?
 - Yes, two Norfolk and two Navy Regional Fire.
- bb. Who was in charge of the firefighter team?
 - Captain Corey Wade of Norfolk FR, at the direction of Unified Command. Captain Wade was the senior member of the firefighting team when Navy Captain Parker, who was in charge of the recon team, suffered from heat exhaustion and stated that he could not continue as part of the firefighting team. Captain Wade ultimately acted under the direction of the Incident Commander.
- cc. Were there direct communications with the firefighter team leader while the team was on the vessel?

Yes

 - i. If YES, How did you communicate with the firefighter team leaders?
 - Radio communications
 - ii. Was the communication clear?
 - Radio seemed clear, but surrounding noises could make it difficult to hear. Additionally, there were instances where Incident Command lost radio communications with the firefighting team.

Incident Response

Mid-Afternoon Effort-

- dd. Prior to opening the forward engine room hatch, did the firefighter team report their position?
 - No
- ee. Please describe what occurred following the entry of the firefighter team into the engine room?
 - No one entered the engine room. After a slight turn on the turn wheel, the door swung open. Fluid rushed out. There was a fireball and flash fire. Fluid prevented door from being shut. Before the flash fire, a Navy Regional Fire team member was swept off his feet. As soon as the team could, they called a MAYDAY.
- The initial report from Norfolk FD indicates that the engine room watertight door was opened twice. Once by the recon team and then again, by the second team (where they experienced the flash fire and fluid rush out). Can you explain the discrepancy?
 - There is no discrepancy. The engine room door was opened twice, once by the recon team and again by the firefighting team.
- ff. Was anyone injured?
 - It is the City's understanding that one of the Navy Regional Fire members was injured. It is the understanding of NFR that the injury was minor.
- gg. What did the second team report to their supervisors during and after their entry to the vessel?
 - There was report during entry, and after the entry the City personnel reported on their well-being. Later that night Captain Wade prepared his formal report on the incident.

Incident Response

Mid-Afternoon Effort-

- hh. Did the second team accomplish its assigned objectives?
 - No
- ii. What if any objectives assigned to the second team were not accomplished?
 - Leaving the foam line to fill up and suppress the fire

Incident Response

Post- Vessel Boarding

- a. Who did you identify as the Coast Guard senior on-scene decision maker AFTER the mid-afternoon fire team boarding of the vessel?
 - Then-Deputy Commander Jennifer Stockwell (at the time deputy commander, currently Captain of the Port), until the Captain of the Port arrived (well into the burning time)
- b. If there were discussions with that Coast Guard individual, what were the substance of those discussions?
 - Then-Deputy Commander Stockwell was present for the post-boarding discussions of the Unified Command, including:
 - Norfolk FR Chief Brooks said he would not be sending NFR personnel back on board and that the tugs should stop pouring water onto the vessel.
 - The salvage company would not commit if the vessel was stable enough or could be made stable for re-entry
 - Before Norfolk FR Chief Brooks left the scene, he spoke with Deputy Commander Stockwell. She asked what he thought, and he told her if the vessel could be kept afloat then it should be left to consume itself, but that once the glass goes it would put resources and personnel in jeopardy. The priority was keeping it contained.
- What was reaction from the Navy Fire dept IC regarding NFR not putting Firefighter back on the vessel?
 - The Navy wanted to reenter the vessel a third time and suggested it would do so with or without NFR, until USCG Deputy Commander Stockwell informed the Navy that no further personnel would be allowed aboard the vessel.
- What was the discussion between NFR and the salvage company regarding stability? Would like a little more detail on the conversation if possible.
 - There were no communications between the salvage company and NFR. Communications were between the salvage company and Unified Command regarding the stability of the vessel and whether it was safe to send personnel back aboard the vessel, but the salvage team would not confirm whether the vessel was safe to reenter.

Incident Response

Post- Vessel Boarding

- c. Was this individual apart of the Incident Command? Yes
- d. Did this individual attempt to establish a Unified Command?
 - No, because a Unified Command was already in existence
- e. Were there any plans developed to access the vessel a third time to put a blanket of foam into the engine room and galley?
 - It was mentioned but the salvage company would not commit to the stability of the vessel and a formal plan could not be made. The Coast Guard also said that no additional personnel should board the vessel.

Incident Response

Post- Vessel Boarding

- b. Were these plans communicated to other agencies? Yes.
- i. If YES, what were the substance and resolutions of this plan?
 - Because the salvage company would not commit to the stability of the vessel, a formal plan could not be made.
- ii. Was this plan approved or rejected? iii. Who approved or rejected this plan?
 - Rejected by Then-Deputy Commander Stockwell
- iv. Was this plan communicated to the representative from the Spirit of Norfolk or their hired salvage team? Describe these communications.
 - Yes, a meeting was held with Unified Command, the Spirit of Norfolk, and their salvage team. But the salvage team would not confirm if the vessel was stable or how to make it stable if it wasn't.

Post Incident

- a. Challenges Encountered
- i. Please describe in detail any and all challenges encountered during this incident.
 - Accessibility to the vessel
 - No proper means of egress from vessel
 - Vessel did not contain a fire suppression system
 - Escape hatch was difficult to locate and never located on June 7, 2022
 - Navy Regional Fire was Incident Command but appeared to be having internal personnel issues—various NFR personnel witnessed disagreements between senior Navy personnel among Unified Command.
 - There were people in the command post who were not part of Unified Command or supposed to be there—there were miscellaneous Navy personnel present who were onlookers and not assisting in the firefighting efforts.
 - Salvage company would not commit if the vessel was stable for re-entry
 - Foam line took a while to set up
 - Each agency was on a different radio channel so unaware of what the other agency knew unless it was conveyed to the entire Unified Command—the Navy and the NFR have different communication systems. They do not have overlapping radio frequencies.
 - Do the agencies that were on-scene have the ability with their current radio equipment to all be on the same channel/frequency? If so, why were they all on different channels/frequencies? What this ever discussed at the scene?
 - The municipal fire departments responding to the incident were able to communicate on the same channel/frequency, but the Navy did not have access to those channels, and the municipal fire departments did not have access to the Navy's channels. This is based on the difference in equipment between the municipalities and the Navy. The Unified Command identified this issue, and the municipalities would communicate with their respective personnel, while the Navy would speak with their personnel.

Post Incident

- b. Recommendations for Improvement
- i. Do you have any recommendations to improve the efficiency for a firefighting operations such as this one?
 - When bringing a vessel in, try to position the vessel so it is easier to access for the firefighters
 - How could this have been better, was it the large bumper holding the vessel off the dock which caused difficulty in access?
 - The primary entrance point to the vessel is located on the port side amidships. Because the vessel was moored starboard side to the dock, the firefighters could only access the vessel via a ladder placed on the stern, thus making it difficult for firefighters in full gear to access the vessel.
 - Isolate Unified Command
 - Was there interference with the operation of the UC and who was causing this issue?
 - There was no active interference by the Navy bystanders, but their presence in and around the Unified Command caused some confusion regarding who was part of the Unified Command.
 - Mandate fire suppression system on passenger vessels
 - If an entry team is made up of different agency personnel, have a joint briefing and debriefing of the entry team
 - Wouldn't a joint briefing be part of a pre-operation for a mutual aid event made up of different personnel? Can you go more into detail about how the RECON and entry teams were briefed? Were they briefed by their own depts? Were they every briefed together as a single team?
 - They were briefed by their respective operations Chiefs prior to both entries.
- ii. What are the lessons learned that you have determined from this incident?
 - Emergency situations can lead to differences in communication

Post Incident

- c. Please take this opportunity to correct, direct our attention to any other factors, or provide proper context to any areas or questions the CG/NTSB team have posed.