After Action Report

Command Post Exercise
December 3–5, 2007

National Response Team/Autoridad Del Canal De Panamá
Promulgated October 2008
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Executive Summary

On December 3-5, 2007, the National Response Team (NRT) and the Autoridad del Canal de Panamá (Panama Canal Authority) (ACP) held their third Command Post Exercise (CPX) in the newly constructed ACP Emergency Operations Center (EOC) in Panama City, Panama. The aim of the exercise was to provide an opportunity to test and review the Memorandum of Agreement (MOA) signed between ACP and NRT in 2002, as well as to assess the NRT’s and ACP’s ability to coordinate a well executed oil spill response in the Panama Canal (hereinafter referred to as “the Canal”).

The CPX involved a three-step process of pre-exercise training, exercise conduct, and post-exercise evaluation. The evaluation began immediately after the conclusion of the exercise in the form of a hotwash and was intended to examine the success of several key objectives, including implementing the ACP Contingency Plan to facilitate the transfer of command; identifying available assets and subsequently determining processing costs for Clean Caribbean and Americas (CCA) and NRT resources; and evaluating response methods to mitigate the effects of the spill.

In the months leading up to the CPX, several training sessions on facets of the Incident Command System (ICS) were provided, while a workshop just prior to the exercise offered additional instruction and guidance on emergency response processes, the Planning “P,” and setting up an initial ICS Situation Unit. The CPX (which included a scenario resulting in 15,000 barrels of oil being released, and the potential for the entire contents of the barge to spill near environmentally and economically sensitive areas) provided an opportunity for ACP personnel to employ their training through the objectives set by the exercise design team.

Furthermore, the CPX provided a venue for ACP to demonstrate its ability to strategically react and respond to a major (Tier III) oil spill, exercise their personnel using ICS principles, and review response operations and technologies, while also presenting an occasion to practice and review the ACP Contingency Plan.

Stemming from the hotwash, several areas for improvement were identified to facilitate future joint ACP/NRT responses. They include maintaining and enhancing ICS training for ACP personnel; further reviewing and developing procedures between the NRT and the ACP; and improving the organization of ACP equipment and personnel documentation.

Additionally, several recommendations and opportunities for improvement were identified during the exercise, and are detailed in the Exercise Evaluation section of this report. The suggested improvement actions offered in this report are recommendations. In some cases, the ACP or NRT may determine that particular tasks and activities are outside of their scope and capability at the present time or in the future. Similarly, alternative solutions may be identified that are more effective and efficient.
Exercise Overview

Dates and Location
An initial narrative was used as the starting point of the CPX, which was held from December 3 to 5, 2007, in Panama City, Republic of Panama. The exercise focused on strategic decision making during an incident that was determined significant enough to move from the Marine Traffic Control Center to the Emergency Operations Center (EOC) in Corozal West, Building 741. The hotwash, held on Wednesday, December 5, 2007, was also held at the ACP EOC in Corozal West, Building 741.

Participating Organizations
Multiple offices within ACP and multiple NRT member agencies, as well as a representative from the U.S. Embassy to Panama, participated in the exercise. Exercise participants are listed in Appendix B.

ACP Offices
- National Public Affairs (CC)
- Environmental Management Division (EAC)
- Protection and Emergency Response Division (OPP)
- Office of General Counsel (AJ)
- Transit Operations Division (OPT)
- Maritime Training Unit (RHSM)
- Procurement, Storehouse and Inventory Division (FAAE)
- Geographical Information Systems Unit (FAII-GIS)

NRT Member Agencies
- U.S. Coast Guard (USCG)
  - Headquarters, Office of Incident Management and Response (CG-533)
  - Headquarters, Office of Exercise Policy (CG-535)
  - Gulf Strike Team (GST)
- U.S. Environmental Protection Agency (EPA)
  - Headquarters, Office of Emergency Management (OEM)
  - Environmental Response Team (ERT)
- U.S. Department of Commerce (DOC)
  - National Oceanic and Atmospheric Administration (NOAA)

U.S. Embassy to Panama
- Counselor for Economic Affairs

As the federal point of contact for reporting oil and chemical spills in the United States, the National Response Center (NRC) remotely participated in the exercise, receiving incident notification from ACP representatives.
**Concept and Design**

On April 1, 2002, the ACP and the United States Department of State, EPA, and USCG signed an MOA regarding assistance in certain environmental pollution incidents in the Canal. A key facet of this agreement directs the signatory parties to conduct an annual functional exercise to “ensure continuity of communications, planning, and operations.”

In 2003, 2004, and 2007, three notification exercises were held between NRT agencies and the ACP. The first full functional exercise, Balboa Reach Impact Exercise, was held in Panama City, Republic of Panama, in March 2005. In March 2006, the NRT and ACP held a second exercise to further strengthen coordination between the NRT and ACP.

Subsequently, in April 2007, NRT and ACP representatives began planning for a third command post exercise. The scenario, objectives, and foundation for the CPX were conceived and developed during conference calls and finalized with three face-to-face meetings (June, August, and October) between the parties. The exercise was structured with the intent of continuing to strengthen the relationship between the ACP and NRT, which was enhanced during the previous exercises.

The first day of the exercise comprised a workshop to review key concepts of ICS. Subsequently, a scenario unfolded that would necessitate assistance outside of ACP by invoking their agreement with CCA (such that CCA equipment was hypothetically requested and subsequently deployed) and requesting assistance from the United States NRT and NRC to provide resources and technical support, as outlined in the 2002 MOA. The ACP developed the scenario for the incident to be significant enough for the command post to shift from the Marine Traffic Control Center to the ACP EOC in Corozal.

The second and third day of the CPX focused on completing two full planning cycles (ICS 201s) and effectively transitioning from one shift to the next. At the end of the third day a hotwash was held to discuss successes and areas for potential improvement.

**Purpose and Scope**

The purpose of the CPX was to strengthen coordination between the NRT and ACP. The Panama Canal Area Contingency Plan dictates that the ACP use ICS, and the U.S. Homeland Security Presidential Directive-5 (HSPD-5) requires the use of the National Incident Management System (NIMS) in field response operations. National Response Framework (NRF) requires the NRT to use ICS. Therefore, NRT-ACP coordination is most successful when the two organizations follow the ICS system.

The exercise facilitated training and preparation for a Tier III incident in which NRT resources and technical assistance would be brought into the Canal Area. Such training and pre-incident coordination will assist the emergency planning and preparedness needs of the Canal, its customers and stakeholders, and the NRT.

The exercise was also designed to evaluate the ability of the NRT to successfully activate, deploy, and integrate a Technical Assistance Team (TAT) into the ACP.
response system. It was important to discuss and exercise activation of the ACP-NRT MOA, and thus, NRC notification. Contacting the NRC early enough during the response enables the NRT to provide effective support, and the ACP to make efficient use of NRT resources for a major response.

The CPX did not involve deployment of NRT resources; however, ACP conducted several equipment deployment drills in the Canal during play that were not in direct response to any decisions made at the EOC. NRT personnel did, however, participate in the exercise in-country, with deployment of NRT TAT personnel and staging of resource mobilization coordinated via the primary notification conference call with ACP. Completion of a full planning cycle was facilitated during exercise play and participants practiced developing an Incident Action Plan (IAP).

Further, the CPX was held concurrently with CCA’s mobilization exercise (MOBEX), allowing both exercises to serve as an example of how Latin American nations can engage in oil spill contingency planning and training/implementation of ICS.
Exercise Objectives

The core and specific objectives were developed and agreed upon by the NRT-ACP design team and key ACP authorities.

Core Objective
Exercise the ability to think strategically, beyond a tactical reaction, using an overwhelming scenario and planning a response that can minimize Canal Traffic blockage and environmental impacts.

Specific Objectives
Objective #1: Demonstrate the ability to implement the ACP Contingency Plan to where it can be used to facilitate the transfer of command with specific strategic plans for the next operational period while developing tactical plans for the current operational period. (Use the 201 form.)

Objective #2: Demonstrate the ability to populate a functional Situation Unit.

Objective #3: Demonstrate the ability to assemble a Tier III spill response organization identified in the ACP Contingency Plan associated with CCA.

Objective #4: Demonstrate the ability to form an Information Center to include a Public Information Officer (PIO) for the EOC and a “real time” PIO for public outreach relating to the exercise.

Objective #5: Demonstrate the ability to monitor exercise field operations to ensure compliance with safety standards.

Objective #6: Demonstrate the ability to assemble and deploy the on-water recovery resources identified in the response plans and the allocation of critical resources.

Objective #7: Demonstrate the ability to quickly evaluate the applicability of on-land and on-water in-situ burning for this incident and, if appropriate, develop a plan for use.

Objective #8: Demonstrate the ability to provide administrative management of all personnel involved in the response. This requirement includes the ability to move personnel into or out of the response organization.

Objective #9: Demonstrate the ability to process costs for international resource requests to include CCA, salvage operations, and the NRT.

Objective #10: Demonstrate the ability to establish internal and external communications systems.
Exercise Proceedings

Overview
The three-day exercise was structured to include training sessions and workshops, provided by both ACP and NRT, prior to, during, and after the actual exercise play. Day One of the exercise included a workshop covering the following key topics:

- Emergency process;
- Planning process;
- ICS; and
- Situation Unit initial setup.

The exercise began on Day One following the educational workshop. Facilitated exercise play continued throughout Day Two and addressed access to the Panama Canal Area Contingency Plan, completion of ICS forms, and the overall planning cycle. The CPX was augmented by multiple training sessions provided several months prior by USCG, NOAA, and EPA. These sessions included ICS position-specific training for:

- **Incident Commander (IC)** – The official responsible for all aspects of the response, including developing incident objectives and managing all incident operations. The IC has the following key responsibilities: (1) Establish immediate priorities especially concerning the safety of responders, other emergency workers, bystanders, and people involved in the incident; (2) Stabilize the incident by ensuring life safety and managing resources efficiently and cost effectively; (3) Determine incident objectives and strategy to achieve the objectives; (4) Establish and monitor incident organization; (5) Approve the implementation of the written or oral Incident Action Plan; and (6) Ensure adequate health and safety measures are in place.

- **Scientific Support Coordinator (SSC)** – Scientific and technical advisors in coastal and marine areas of NOAA, who serve as members of the ICS staff. Their capabilities include contingency planning, surface/subsurface trajectory forecasting and hindcasting, resource risk analysis, and liaison to other scientists and technical experts. NOAA’s SSCs often serve as Environmental Unit (EU) leaders in the ICS and could easily integrate into ACP’s Planning Section.

- **Public Information Officer (PIO)** – Responsible for communicating with the public, media, and/or coordinating with other agencies, as necessary, with incident-related information requirements. The PIO is responsible for developing and releasing information about the incident to the news media, incident personnel, and other appropriate agencies and organizations. Depending on the size or complexity of the incident, a lead PIO should be assigned for each incident and may have assistants, as necessary, including supporting PIOs representing other responding agencies or jurisdictions.
2007 Command Post Exercise

Scenario
On December 3, 2007 at 1045, the Marine Traffic Control Center (MTC) receives a notification from the Canal Pilot on board tanker barge N18B stating the barge hit the east bank rocky side and bottom leaving Culebra Cut near buoy 103 before the Chagres crossing. The barge is grounded north of the Gamboa moorings near buoy 92 and has spilled oil heavily from the initial collision point and continues to leak while at the grounding site. The pilot informed the MTC that it could not be taken to the safe beaching area at Gamboa moorings because there was a moored vessel obstructing the entrance and he could not get immediate tug assistance. He fears the possible sinking of the barge into the navigational channel.

At this time, the product is not secured and the vessel is taking on water, presenting a 5-degree list to starboard side. A Canal Port Captain (CPC) is en route to the incident scene. It has been confirmed that no terrorist or security issues exist.

The Traffic Control Center has been instructed to transfer the incident management to the EOC at Corozal West, bldg. 741. The EOC consists of an Incident Commander, Operations Section, Planning Section, Logistics/Finance Section, Public Information Officer, Liaison/Legal Officer, and Safety Officer.

Current winds are from the west at 10 knots and variable. There is no precipitation and clear visibility. No currents are exiting the Chagres River. Madden Dam is not expected to release water.

Facilitated Exercise Play
Day One began with an Incident Briefing and initial Unified Command/Incident Commander Objectives meeting. Players were briefed on the current status of the incident and all actions that had taken place up to the present time.

Following the Incident Brief, the Incident Commander worked with the ICS section chiefs to establish the organizational structure, determine the operational period, and identify objectives. The IC established a 24-hour operational period for the Incident Action Plan.

Priorities for the Operational Period
The following objectives were identified during the Incident Commander Objectives Meeting:

- Contain oil spill;
- Minimize impact to the surrounding environment;
- Resume Canal transits as soon as possible and secure vessel;
- Prepare news release and review release before it is published; and
- Notify all responsible parties.
Following the Command and General Staff meeting, a tactics meeting was held, during which players discussed strategy and tactics, as well as resources that would be ordered from CCA.

After the tactics meeting, a planning meeting was held to refine and review the incident objectives, strategies, and tactics, and to identify resource needs during the next operational period. The Operations Section Chief provided a situation briefing, detailing decisions made during the tactics meeting. Following the tactics meeting, the written IAP was prepared by the ICS section chiefs and officers and then approved and signed off by the Incident Commander.

**Notification Exercise**

The notification exercise was conducted on the afternoon of Day Two of the exercise. To simulate an actual notification, NRT members convened, via conference call, with the ACP personnel to discuss their initial response actions, personnel and resource needs, and resources at risk within the Canal Area. Exercise participants identified the following key actions to be taken by ACP:

- Coordinating with U.S. Navy Supervisor of Salvage (SUPSALV) to discuss stabilizing the barge and identifying technical experts to assist in salvage operations;
- Following up with on-scene CPC to determine if additional over-flight or modeling resources are needed;
- Coordinating funding mechanisms for actions that are within the scope of the NRT-ACP MOA; and
- Drafting and coordinating Incident Specific Agreements (ISAs) with respective NRT Member Agencies.

During the Command and General Staff meeting, the Safety Officer and the Planning, Operations, and Logistics section chiefs each provided a report-out on their objectives, ongoing and future activities, and task assignments. This included such items as requiring use of personal protective equipment (PPE) by all responders, tasking the local police to maintain security around the perimeter of the incident, and integrating the NRT TAT into the Incident Command. Additionally, the NRT agreed that the Executive Director would work with the Department of State in Washington, D.C., and the American Embassy in Panama to facilitate resource flow and country clearance approvals.

**Hotwash**

A hotwash was conducted to identify the exercise successes and recommendations for improvement. The hotwash allowed all participants to share feedback on the positive aspects of the exercise and those aspects where corrective action is needed to enhance response operations.
Exercise Evaluation

Evaluation Process
The exercise was designed to provide participants with an opportunity to assess current capabilities to perform the critical tasks required to respond to a major (Tier III) emergency in the Canal Area. By assessing those capabilities, participants identified strengths, weaknesses, and future training needs.

Evaluators were present at the exercise location to observe and record exercise events, including player actions. Members of the evaluation team, from both NRT and ACP, completed exercise evaluation forms based on specific criteria established for each of the 10 specific objectives. Following completion of the facilitated exercise play, a hotwash was conducted to capture observations and opinions from players and identify issues and gaps in the response. In addition, all participants were provided with exercise evaluation forms to record their observations of the exercise. Post-hotwash, evaluators held a meeting to discuss and collaborate on their personal observations and recommendations. The results of the hotwash discussion and evaluation forms are documented below, focusing on the strengths and areas for improvement resulting from the exercise.

In keeping with the no-fault nature of this exercise, the evaluation in this report examines the plans, procedures, and response systems used. Evaluator observations focus primarily on overall unit actions and the interaction between response units rather than on individual players.

Lessons learned from the exercise will improve coordination between the ACP and NRT, in addition to all parties’ preparedness and planning efforts, and will lead to further discussion and training relevant to recognized capabilities and identification of issues.

Assessment of Exercise Objective Achievement
Assessment on the achievement of each of the exercise objectives was based upon evaluators’ comments and observations provided during the exercise hotwash on December 5, 2007.

Objective #1: Demonstrate the ability to implement the ACP Contingency Plan to where it can be used to facilitate the transfer of command with specific strategic plans for the next operational period while developing tactical plans for the current operational period. (Use the 201 form.)

Objective achieved? Yes.

Observations:
- The ACP Contingency Plan was implemented.
- The 201 form was completed. Tactics were completed.
Objective #2: Demonstrate the ability to populate a functional Situation Unit.

Objective achieved? Inconclusive.

Observations:
• In retrospect, additional staffing would have aided the Situation Unit.

Objective #3: Demonstrate the ability to assemble a Tier III spill response organization identified in the ACP Contingency Plan associated with CCA.

Objective achieved? Inconclusive.

Observations:
• The scenario consisted of a barge with a spill of larger magnitude than the one considered by the players, and the potential to spill the whole contents.
• Further clarifying how CCA would be incorporated into the exercise would have been beneficial.

Objective #4: Demonstrate the ability to form an Information Center to include a Public Information Officer (PIO) for the EOC and a “real time” PIO for public outreach relating to the exercise.

Objective achieved? Yes.

Observations:
• Having the same individual play the role of the PIO throughout the exercise was a positive aspect. It proved to be a very valuable learning experience.
• There was some conflicting information being provided as to whether the Canal was open or not for vessel traffic.

Objective #5: Demonstrate the ability to monitor exercise field operations to ensure compliance with safety standards.

Objective achieved? Yes.

Observations:
• It proved difficult to evaluate safety methods in the field without an evaluator present.
• The Safety Officer at the EOC kept in close communication with safety officers out in the field. There were two safety officers in the field keeping in contact with the Safety Officer at the EOC.
• A Health and Safety Plan was developed in the EOC; however, the evaluators never saw the plan. It was believed that this was due to misunderstandings between the players and the evaluators.
**Objective #6:** Demonstrate the ability to assemble and deploy the on-water recovery resources identified in the response plans and the allocation of critical resources.

Objective achieved? Yes.

Observations:
- The players did a good job in identifying and prioritizing resources and how they were being used. It was a positive learning experience for the players.

**Objective #7:** Demonstrate the ability to quickly evaluate the applicability of on land and on water in-situ burning for this incident and, if appropriate, develop a plan for use.

Objective achieved? Yes.

Observations:
- There was some indecisiveness as to whether in-situ burning would be appropriate, considering the area in which the spill occurred.
- Players eventually determined that in-situ burning would be appropriate in certain areas and developed a comprehensive action plan for the incident.

**Objective #8:** Demonstrate the ability to provide administrative management of all personnel involved in the response. This requirement includes the ability to move personnel into or out of the response organization.

Objective achieved? Inconclusive.

Observations:
- The task of moving personnel resources to different sections could have been managed better. There was a lack of clarity as to where personnel should have been moved and what resources the various sections required.
- Personnel need to work on staying in their respective ICS roles.

**Objective #9:** Demonstrate the ability to process costs for international resource requests to include CCA, salvage operations, and the NRT.

Objective achieved? Yes.

Observations:
- The cost requests from the Finance Section were very clear. They did a good job in determining expenses of the various entities.
- The exercise provided the first opportunity to test cost procedures under the current MOU.

**Objective #10:** Demonstrate the ability to establish internal and external communications systems.
Objective achieved? No.

Observations:
• This was a difficult objective to meet due to language barriers.

**Exercise Observations and Results**

**Exercise Strengths**
The exercise strengths were recorded based upon exercise participants’ and coaches’ report-outs at the exercise hotwash on December 5, 2007. They have been categorized by the following basic emergency management and response program elements: Resources; Communications; and Command, Control and Coordination.

**Resources**
• Detailed descriptions of the resources that were being requested saved time and increased efficiency for the Logistics Section.

**Communications**
• The exercise pointed out areas for improving communication and the stresses that can occur in real-life situations.
  • Players’ ability to assume new roles and having an established working relationship with other personnel helped facilitate communications within and between each ICS section.
  • The IC’s recognized the need for an EOC communications plan that was in compliance with ICS Form 207. This allowed the IC to know the appropriate section to consult when critical information was needed.

**Command, Control, and Coordination**
• The location and internal structure of the EOC provided easy accessibility of information and the ability to disseminate this information quickly. This allowed players to have a clear understanding of their responsibilities. This also assisted the IC/UC in maintaining situational awareness.
  • The Finance Section was able to process all incoming requests effectively. Additionally, the section was able to respond to several different situations and meet all of the demands that were placed on them.
  • Members of the Incident Management Team demonstrated flexibility and the willingness to work with each other by assisting other ICS sections when needed.
  • Communication mechanisms to the NRT and CCA were helpful, including using calling cards and having scheduled, but flexible, contact times.
Members of the Incident Management Team expressed a positive attitude. They were willing to do the jobs that were asked of them, understanding that they were understaffed.

There was a seamless transition from one operational period to the next.

Clear delineation in the role of Logistics Section helped increase efficiency.

Establishment of objectives helped maintain situational awareness.

**Exercise Areas for Improvement**

The exercise areas for improvement and accompanying recommendations were drafted based upon discussion at the exercise hotwash on December 5, 2007. They have been categorized by the following basic emergency management and response program elements: Resources; Communications; Training; and Command, Control and Coordination.

**Resources**

*Observation #1*

The IT equipment necessary for efficiently processing Finance requests was lacking.

*Recommendations*

Additional resources, such as a computer, copier, and other office equipment, should be readily available for future exercises and incidents. The ACP should consider evaluating office equipment needs that would be required in the event of a large emergency response.

*Potential Action Items*

ACP should consider pre-identifying personnel that would be necessary to maintain a large-scale response.

**Observation #2**

The number of personnel staffing some of the sections could have been increased to allow for more efficient response.

*Recommendations*

Maintaining a defined number of trained personnel in each section would be beneficial in future exercises. For example, establishing a Deputy Finance Chief would have been extremely helpful. Additionally, it is important for the Procurement and Finance sections to be staffed by at least two personnel, which was the case during this exercise.

*Potential Action Items*

ACP should consider pre-identifying personnel that would be necessary to maintain a large-scale response.
Observation #3
The process of planning for resources was not as organized as it should have been. Additional staff in the Planning Section would have helped.

Recommendations
More efficient and specific planning for resources is needed. Equipment and people/expertise should have been accounted for more quickly (e.g., a “diving barge” should have been requested).

Potential Action Items
A future exercise should focus on resource acquisition/ordering process. In addition, players should participate in team and position-specific ICS training prior to the event.

Observation #4
The methodology used to organize equipment and personnel was not as efficient as it could have been.

Recommendations
Improve tools to identify additional resource needs from the NRT and CCA.

Potential Action Items
NRT agencies and CCA may want to consider developing Technical Assistance Documents (TADs) that outline resources available to the ACP.

Observation #5
Written procedures detailing NRT response processes, resources, and capabilities for an incident in the Panama Canal were lacking.

Recommendations
Develop standard operating procedures (SOPs) and checklists to better understand the capabilities of the NRT-ACP relationship.

Potential Action Items
Develop and compile TADs that outline NRT member agencies and CCA capabilities available to the ACP.

Communications
Observation #6
There was a lack of communication between the different ICS sections. There were several instances when conflicting information arose from the various ICS sections.

Recommendations
Representatives from all ICS sections should be present at all meetings to ensure that critical information is being shared across the response structure. Representatives should brief out to their particular sections following the meetings.
Reassessment of the physical organization in the EOC as the incident evolves, e.g., moving the Planning and Operations sections closer together physically, would help increase efficiency in communications and coordination.

Potential Action Items
Provide additional ICS training and evaluate the organization of the EOC floor plan during an upcoming exercise. Meetings should be schedule in accordance with the ICS Planning “P.”

Training
Observation #7
There was uncertainty regarding the use of in-situ burning as a response technique to reduce the amount of oil on the water and minimize the adverse effect of the oil on the environment.

Recommendations
The manner in which in-situ burning is evaluated and conducted needs to be addressed. In future exercise and incidents, players should have better situational awareness and a better idea of the information they need to make an informed and appropriate decision.

Potential Action Items
NRT should consider providing consultation to the ACP to develop treatment and waste management guidelines and options.

Observation #8
Initially during exercise play, there was confusion regarding the role of the Public Information Officer (PIO). This situation stalled the flow of communications with the public early on during the exercise; however, it did improve as the exercise progressed.

Recommendations
Additional training (e.g., taking calls from media) should be provided to the PIO.

Potential Action Items
Provide Joint Information Center (JIC) training and guidance to address management of media calls.

Observation #9
Not all response personnel playing in the exercise were properly trained and qualified to carry out their ICS duties. In some cases, individuals were put in positions where they were forced to make decisions that they were not qualified to make.

Recommendations
Additional ICS training and exercises are needed to ensure response personnel are prepared and qualified to fulfill their assigned roles.
Develop training and qualification guidelines for ICS positions. Secondly, develop and test procedures for the ACP to request and NRT to deploy Incident Management Assist Teams (IMATs).

Command, Control, and Coordination

Observation #10
Some exercise participants had a difficult time playing their assigned role, and only their assigned role, throughout the entirety of the exercise. This caused frustration and confusion among the players.

Recommendations
When individuals fill a specific role during an incident or exercise, it is critical that they “stay in their lanes” and fulfill their responsibilities.

Potential Action Items
Exercise participants should attend ICS team and position-specific training.

Observation #11
Safety officers maintained operational picture of ongoing field activities throughout the exercise.

Recommendations
The Safety Officer assigned to the EOC gave the field safety briefing on Day One. In addition, he made two more field trips throughout the exercise. However, it was noted that safety officers should be involved in all of the briefings and should be in continuous communication with field response personnel.

Potential Action Items
Train assistant safety officers to monitor field operations during responses.

Observation #12
Lack of documentation within each ICS section hindered the development of a common operating picture and situational awareness.

Recommendations
Ensure unit logs and other appropriate ICS forms are used during exercises and response.

Potential Action Items
Stress documentation in ICS training unit.

Observation #13
The Finance Section representatives did not attend other section meetings, which slowed their response processes.

Recommendations
The Finance Section should be present during all section meetings. This would allow Finance to have greater situational awareness and process requests more quickly.

*Potential Action Items*
Integrate Finance Section into planning meetings.

**Exercise Design Observations**

*Exercise Design Strengths*
- Using an integrated control staff with both Panamanians and Americans was extremely helpful. Having representatives from various U.S. government agencies provided comprehensive knowledge of the capabilities and resources that were available.
- The exercise location was ideal as it allowed players to become familiar with resources that would be available during an actual incident.
- The timeouts were very helpful. They were included in the design and proved to be very beneficial in allowing individuals to get organized and understand their roles during the CPX.
- Coaches did a very good job across the board providing guidance to players during the exercise.

*Exercise Design Areas for Improvement*

**Observation #1**
Sufficient read-ahead materials and background information were not provided to players prior to the exercise.

*Recommendations*
For future exercises, the Exercise Planning Team should help provide exercise players with a better understanding of the scope of the exercise (without presenting the full scenario information) by circulating additional read-ahead materials. This would allow each ICS section to have a better idea of what the other sections are doing as part of the response structure.

Conducting ICS training sessions prior to future exercises would also be beneficial.

*Potential Action Items*
Hold training prior to the exercise and provide read-ahead materials.

**Observation #2**
The Exercise Planning Team/Design Team did not include representation from the full spectrum of organizations with experience in all facets of an oil spill response.

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**Recommendations**
In planning for future exercises, the Design Team membership should be expanded to include stakeholders experienced in all aspects of canal operations and navigational issues. Such a team could answer technical and procedural questions and enable development of more realistic injects.

**Potential Action Items**
Cast larger net in Design Team makeup during next exercise development.
Conclusion and Outcomes

The United States recognizes the mutual goals of safe and uninterrupted Canal operation and agrees to facilitate the deployment of these resources in accordance with the 2002 ACP-NRT MOA. As such, the CPX helped reaffirm the strengths of the MOA while highlighting those areas where coordination can be improved.

The 2002 agreement requires, at a minimum, that one functional exercise be conducted annually to ensure continuity of communications, planning, and operations. Since the signing of the agreement, the ACP and NRT have taken a stepwise approach, starting with a simple notification exercise in 2002 with the ultimate goal of performing a full-scale exercise with equipment deployment. This training and command post exercise, including the inaugural use of the ACP EOC, increased understanding between the U.S. and Panama of the response capabilities of the NRT and ACP and marks a significant step toward meeting the ultimate goal of seamless requests for mobilization of U.S. response resources to the Canal.

In addition to future exercises, the ACP and NRT have expressed their dedication to maintaining the highest levels of coordination by taking active steps through their planning and preparedness programs. The ACP continues to enhance its response capability. This has been accomplished through significant capital investments in response equipment and training within Panama. Additionally, the NRT will continue to work with its member agencies to provide Panama with additional training, such as booming courses and Geographical Information Systems (GIS) workshops. The NRT will also make every effort to provide opportunities for ACP personnel to attend planning and preparedness meetings and exercises such as the Caribbean Regional Response Team (CRRT) and Safe Seas Exercises.
## Appendix A: Acronyms and Abbreviations

### A

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAR</td>
<td>After Action Report</td>
</tr>
<tr>
<td>ACP</td>
<td>Autoridad del Canal de Panamá (Panamá Canal Authority)</td>
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<tr>
<td>AJ</td>
<td>Office of General Counsel</td>
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### C

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CC</td>
<td>National Public Affairs (ACP)</td>
</tr>
<tr>
<td>CCA</td>
<td>Clean Caribbean and Americas</td>
</tr>
<tr>
<td>CPC</td>
<td>Canal Port Captain</td>
</tr>
<tr>
<td>CPX</td>
<td>Command Post Exercise</td>
</tr>
<tr>
<td>CRRT</td>
<td>Caribbean Regional Response Team</td>
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### D

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>DOC</td>
<td>U.S. Department of Commerce</td>
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### E

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>EAC</td>
<td>Environmental Management Division (ACP)</td>
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<tr>
<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
</tr>
<tr>
<td>ERT</td>
<td>Environmental Response Team</td>
</tr>
<tr>
<td>EOC</td>
<td>Emergency Operations Center</td>
</tr>
<tr>
<td>EU</td>
<td>Environmental Unit</td>
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### F

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>FAAE</td>
<td>Procurement, Storehouse and Inventory Division</td>
</tr>
<tr>
<td>FAII-GIS</td>
<td>Geographical Information Systems Unit</td>
</tr>
<tr>
<td>FOSC</td>
<td>Federal On-Scene Coordinator</td>
</tr>
</tbody>
</table>
GIS Geographic Information System
G-RPE Headquarters, Office of Exercise Policy
G-RPP Headquarters, Office of Exercise Policy (G-RPE)
GST Gulf Strike Team


IAP Incident Action Plan
IC Incident Commander
ICS Incident Command System
IMAT Incident Management Assist Team
IO Information Officer
ISA Incident Specific Agreement

JIC Joint Information Center

MTC Marine Transit Control Center
MOA Memorandum of Agreement
MOBEX Mobilization Exercise

NIMS National Incident Management System
NOAA National Oceanic and Atmospheric Administration
NRC  National Response Center
NRP  National Response Plan
NRT  National Response Team

O
OPP  Protection and Emergency Response Division (ACP)
OPT  Transit Operations Division (ACP)

P
PIO  Public Information Officer
PPE  Personal Protective Equipment

R
RHSM  Maritime Training Unit (ACP)

S
SOP  Standard Operating Procedure
SSC  Scientific Support Coordinator
SUPSALV  Supervisor of Salvage (U.S. Navy)

T
TAD  Technical Assistance Document
TAT  Technical Assistance Team

U
USCG  U.S. Coast Guard
Appendix B: List of Participants

Players in EOC

Day 1:
Incident Commander - Captain Miguel Rodriguez
Senior Canal Port Captain (Operations Section Chief) - Diego Porras
  Fire Division - David Cargill
  Security Division – N/A
  MTC Rep - Abraham Saied
Duty Canal Port Captain (Planning Section Chief) - Federico Cockburn
  SSC/Environmental Unit - Rony Arauz
  Situation Unit/Documentation Unit - Gilberto Gasteazoro
  MRTC Chemist/Technical Specialists - Diovane Francis
  Meteorological - Johnny Cuevas
  Resources Unit - Ana Salazar
  GIS Specialist - Luis Berrocal
  Naval Architect - Octavio Stagg
Information Officer - Vicente Barletta
Liaison/Canal Protection Officer - Sergio Rodriguez
Legal Officer - Eugenia Alvarez
Safety Officer - Cesar Murillo
Logistic - Jose Maturell and a Canal Protection Representative
  Procurement Officer - Yazmina Fadul
  Customs Affairs Officer – Denia Barrios
Finance Officer – Lituania Estribi

Day 2:
Incident Commander - CAPT Agustín Delgado
Senior Canal Port Captain (Operations Section Chief) - Capt. De Sousa
  Fire Division - David Cargill
  Security Division – N/A
  MTC Rep - Abraham Saied
Duty Canal Port Captain (Planning Section Chief) - Federico Cockburn
  SSC/Environmental Unit - Rony Arauz
  Situation Unit/Documentation Unit - Gilberto Gasteazoro
  MRTC Chemist/Technical Specialists - Diovane Francis
  Meteorological - Jorge Espinoza
  Resources Unit - Ana Salazar
  GIS Specialist - Luis Berrocal
  Naval Architect - Octavio Stagg
Information Officer - Octavio Colindres
Liaison/Canal Protection Officer – N/A
Legal Officer - Marissa Vallarino
Safety Officer - Cesar Murillo
Logistic Officer - Jose Maturell and Canal Protection Representative
  Procurement Officer- Yazmina Fadul

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Customs Affairs Officer – Denia Barrios
Finance Officer – Lituania Estribi
Operation Section Chief - CAPT Agustin Delgado

Day 3:
Incident Commander - CAPT Miguel Rodriguez
Senior Canal Port Captain (Operations Section Chief) - Capt. Agustin Delgado
   Fire Division - David Cargill
   Security Division - Antonio Michel
   MTC Rep - Abraham Saied
Duty Canal Port Captain (Planning Section Chief) - Octavio Stagg
   SSC/Environmental Unit - Rony Arauz
   Situation Unit/Documentation Unit - Gilberto Gasteazoro
   MRTC Chemist/Technical Specialists - Diovane Francis
   Meteorological - Jorge Espinoza
   Resources Unit - Ana Salazar
   GIS Specialist - Luis Berrocal
   Naval Architect - Octavio Stagg
Information Officer - Octavio Colindres
Liaison/Canal Protection Officer – N/A
Legal Officer – Rene Villalaz
Safety Officer - Cesar Murillo
Logistic - Jose Maturell and Canal Protection Representative
   Procurement Officer - Yazmina Fadul
   Finance Officer – Lituania Estribi
Operations Section Chief – CAPT Federico Cockburn

Personnel in the Field
Players
(2) Skimmer boats- 3 people per boat
(4) Booming boats- 2 people per boat
(1) Lightering barge w/ Response Trailer- 4 people
(2) Work boats- 2 people per boat
(1) Simulated bad barge- 2 people (w/ 1,000 oranges)
(1) Field Supervisor
(1) Fire Truck- 4 people
(1) Field Safety Officers:
   Field Safety 1 - Carlos Saldana
   Field Safety 2 - Cesar Solis
(1) Ambulance- 2 people
(1) Chemist – Franklin Corro

Controllers
Urho Gonzal
Rafael Rodriguez
Abel Gutierrez

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Coaches (and facilitators for hotwash)
* Incident Command - Gilberto “Tito” Irizary (EPA)
* SSC - Ruth Yender (NOAA)
* Planning Section - Brad Benggio (NOAA)
* Situation Unit / GIS Unit - Renn Hanson (GENWEST/NOAA)
* Operations Section - Ed Bock (USCG)
* Public Information - Mark Makowiak (USCG)
* Finance/Logistics - Meridena Kaufmann (USCG)

Control/SIMCELL
Exercise Director - Octavio D’Meza
Karen Burgan (EPA)
* Deputy - Steve Magaro (USCG)
Information Officer (real media relations) – N/A
* SSC - Ed Levine (NOAA)
MTC Representative – Abraham Saied
Computer Simulator - Julio Rodriguez
Pilots / CPC in the field - Luis Gutiérrez
Clean Caribbean and Americas - Skip Prelomski

Video Conference Technician - Day 2 and 3 ONLY

VIP support - Evy Mendez

Gamboa MOBEX
National Communications Unit - Fernan Molinos

Security
Sergio Rodriguez

Evaluators
* Thomas Schneider (SRA/EPA) and (Hotwash Recorder)
* Dennisses Valdes (EPA)
Capt. Rogelio Altafulla

Media Documentation by ACP
Coordinator- Sacramento Castillo
Videographer