Part C

Exercise Design Observations/Lessons Learned

Exercise Design & Execution-Steering Committee

Note

The joint design and evaluation teams (JDT & JET) attempted to capture the best practices and lessons that were learned during the design and execution of this exercise. The intent of this section is to provide a tool for future design and evaluation teams when designing exercises in Prince William Sound or designing exercises similar to the scope of this one in any other location.

Observations

A joint steering committee was formed and had their first meeting approximately 11 months before the exercise week.

The joint steering committee was comprised of senior representatives of the following agencies/organizations:

- USCG, Captain of the Port (COTP)
- ADEC, Prevention and Emergency Response Program (PERP)
- ADEC, Industry Preparedness Program (IPP)
- APSC/SERVS
- ConocoPhillips Alaska, Inc. (CPAI)
- ConocoPhillips Marine/Polar Tankers, Inc.

The steering committee was very valuable for determining the amount of Tier 1 response capability that would be exercised. This committee set the exercise budgetary guidelines (primarily for industry involvement) and also provided 4 primary objectives for the exercise:

- IMT transition was to be exercised.
- Field operations were to occur concurrently with the command post exercise.
- Exercise Port of Refuge decision protocols
- The Jack Bay GRS was to be deployed for validation.

In this case, the steering committee went two steps beyond setting the 4 primary objectives noted above: They provided the JDT with a list of PREP core components that were to be evaluated and provided a draft scenario.

Lessons Learned

The latest PREP guidelines leave room for interpretation on exactly what amount of Tier 1 response capability will be exercised during an Area Exercise.

The 17th Coast Guard District (marine safety division) developed a worksheet to assist the COTP and steering committee in

Lessons Learned (Cont'd)

determining the level of Tier 1 capability to be exercised. This worksheet proved to be very useful for this process. This worksheet can be found on the exercise website: http://www.akrrt.org/pwsareaex04.

As important as it is for the steering committee to provide clear, overall objectives for these exercises, it is also important that the objectives are compatible with one another. In this case, effectively exercising the IMT transition was not 100% compatible with exercising concurrent field/command post operations. Exercising the transition required a scenario that was large enough to warrant an IMT transition, but as a result, this scenario then required more response equipment than the committee agreed to deploy. This meant that a portion of the field operations would be "actual" and another, much larger, portion would be simulated. The JDT was very concerned with being able to maintain adequate exercise control with this combination of actual and simulated field ops. In the final execution, field ops *did* occur simultaneously with the command post-portion of the exercise, but the exercise was designed to "isolate" the actual field ops from the command post players. In order to ensure that exercise play was not de-railed by confusion over real vs. simulated equipment, all communications between the field and the command post were relayed through exercise control.

The steering committee should avoid being prescriptive regarding specifics of exercise design. The steering committee should meet early in the exercise conceptualization process and then "hand-off" the design to the design team. Steering committee decisions that are made after the start of the design process prevents completion of design-level tasks and impedes design team progress. Once the design team begins its work, the steering committee should only be convened as requested by the design team to resolve identified problems. In other words, the steering committee provides the "what," and the JDT provides the "how."

The actual PREP core components and supporting objectives to be evaluated should be chosen by the JDT. It is important that these evaluation objectives are the result of a logical process that involves identifying what core components have been exercised as part of the current PREP triennial cycle, and researching lessons learned, challenges, etc. from previous

Exercise Design & Execution-Steering Committee (Cont'd)

Lessons Learned (Cont'd)	exercises or actual responses. An Area Exercise is not designed to be an entire *triennial* PREP program wrapped up into one event.
Recommendation	Future steering committees and design teams should consider incorporating the applicable lessons learned above into their design process.

Exercise Design & Execution-Joint Design Team

Note

The joint design and evaluation teams (JDT & JET) attempted to capture the best practices and lessons that were learned during the design and execution of this exercise. The intent of this section is to provide a tool for future design and evaluation teams when designing exercises in Prince William Sound or designing exercises similar to the scope of this one in any other location.

Observations

A JDT was formed and held their first meeting approximately 7 months prior to the exercise week. This team held regular, 2-3 day design meetings approximately once a month leading up to exercise week.

The JDT was comprised of representatives from the following agencies/organizations:

- USCG, Marine Safety Office Valdez
- USCG, 17th Coast Guard District (m)
- USCG, National Strike Force Coordination Center
- ADEC, Prevention and Emergency Response Program (PERP)
- ADEC, Industry Preparedness Program
- APSC/SERVS
- ConocoPhillips
- PWS Regional Citizens Advisory Council (PWS RCAC)

Lessons Learned

Each organization represented on the JDT needs to identify one person from their organization who meets the following criteria:

- Familiar with the area-specific plans and response issues.
- Capable of attending all JDT meetings.
- Empowered to speak and or make commitments for their respective agency/organization.

A JDT coordinator must be identified. This person's role is critical, especially between JDT meetings. The JDT coordinator should act as the "hub" of the JDT and maintain the overall design picture. One of the most important functions of this person is keeping up with the status of the tasks assigned to the various members between meetings.

The JDT should constantly identify, and limit when possible, any artificialities being designed into the exercise. The team must be creative and flexible in developing ways to overcome any artificiality.

Exercise Design & Execution-Joint Design Team (Cont'd)

Lessons Learned (Cont'd)

An exercise website was used effectively to post event planning information, task lists for JDT members, meeting minutes and participant info. This exercise's website can be viewed at: http://www.akrrt.org/pwsareaex04/index.html.

The PWS RCAC was involved in the design process from the first JDT meeting. Having RCAC involved from the beginning was beneficial to the planning process.

Recommended Actions

Future steering committees and design teams should consider incorporating the applicable lessons learned above into their design process.

Recommend that all JDT meetings for exercises of this scope, be scheduled for three days. The dates for all of the meetings for the entire process should be agreed upon and scheduled during the first meeting.

JDT meetings should be held in "neutral territory" whenever possible. This will avoid any members from being sidetracked by their normal jobs during the meetings.

For an Area exercise it is highly recommended that the JDT planning process start at least one year in advance of the exercise executions dates. This is essential to assist with industry budgeting processes.

Note

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Lessons Learned

Scenario development should not be taken lightly. It may be necessary to bring in "experts" who are not members of the JDT in order to help develop the scenario.

It is critical that the JDT "game-thru" the scenario response for the expected duration of the command post play. Before the exercise even starts, the design team and exercise control should have a good idea of how the scenario will be responded to and should have identified any weaknesses in the scenario. This is especially important for multi-day scenarios.

The main purpose of the scenario is to support, or ensure the accomplishment of, the exercise objectives. As such, the scenario should not be considered complete until all of the exercise objectives have been identified. Once the objectives are identified, the scenario should be detailed enough to ensure that the players will address all of the chosen objectives by responding to it.

The JDT should not be given too many constraints by their respective organizations during scenario development (e.g, the JDT was given limits as to the quantity of oil spilled). As discussed in the steering committee lessons learned on page C-2, the JDT must be empowered to decide "how" the exercise objectives are met with as little outside influence as possible.

Recommended Actions

Future steering committees and design teams should consider incorporating the applicable lessons learned above into their design process.

One of the steering committee's primary objectives, concurrent field/command post ops, was not completely tested during this exercise. By the design team filtering the communications between the field and the command post through exercise control, the *true interaction* between the command post and field units was not actually tested. If it is desired to test this

Recommended Actions (Cont'd)

interaction in future exercises (which is recommended), the scenario used should address the following:

- The scenario must involve a spill small enough that the costs of *actually* deploying *all* the resources required to respond to it do not exceed the acceptable limits for the exercise, or
- If a large spill scenario is chosen, the participating agencies must agree to fund the deployment of all the actual response equipment that would be deployed in an actual response to a similar size spill, or
- Another possible method would be to simulate all on-water activities during the command post exercise (Day One). Then choose several ICS-204s from the IAP developed during Day One and brief them to the field units for *actual deployment* on Day Two. This does not truly test the interaction between the IMT and the field in real-time, but it should effectively test the *primary* conduit of communications between the IMT and the field: the ICS-204s and the Ops Briefing.
- This JDT felt that maintaining effective exercise control was critical to the success of the exercise. If neither of the three options above are chosen when designing a concurrent ops exercise, it will result in a *portion* of the field ops being simulated. This should be avoided.

Exercise Design & Execution-Exercise Control

Note

The joint design and evaluation teams (JDT & JET) attempted to capture the best practices and lessons that were learned during the design and execution of this exercise. The intent of this section is to provide a tool for future design and evaluation teams when designing exercises in Prince William Sound or designing exercises similar to the scope of this one in any other location.

Lessons Learned

Having the "right" people in control was critical to the success of this exercise. This exercise used actual division/group supervisors and staging area managers as controllers. These personnel provided detailed, accurate, and highly realistic inputs to the command post that would have normally come from the field. Bottom line: If any portion of the field is being simulated, the people that would normally be in the field should be in exercise control acting as if they are in the field.

Controllers must be adequately trained on the JDT's expectations for supporting the exercise scenario and their roles as part of the design process.

Control must have access to detailed, accurate "truth data" (e.g. anticipated encounter rates, recovery rates, wildlife data, etc).

Participant rules, artificialities, and acceptable levels of simulation must be clearly identified as part of participant training and be included in the player's handbook. When players simulate portions of the response that were intended to be exercised, it creates unnecessary control problems.

The video teleconference system discussed on page B-38 was originally designed to maintain exercise control of the planning meetings by preventing an artificial number of observers in the room. This system was found to be very valuable for maintaining control during the exercise. The use of this system was also noted as a recommended action for actual responses.

Evaluators and coaches had the dual role of controllers for this exercise. This role was often neglected as they concentrated more on their primary functions.

Exercise Design & Execution-Exercise Control (Cont'd)

Recommended Actions

Future design teams should incorporate any of the applicable lessons learned above into their design process.

Future exercises should use dedicated controllers within the command post.

Emphasize at participant training and consider posting the portion of the exercise schedule that is not to be determined or modified by the players (e.g. start and stop times, player debriefs, etc). This would include clearly defining and specifying the operational periods that will be exercised.

Carefully consider the end-of-exercise debriefs. As noted above, there is a danger of some personnel wanting to rush through these debriefs because the exercise is officially over. Consideration should be given to doing these debriefs the day following the exercise. Whatever method is decided upon, ensure that the players fully understand the debrief expectations. Also ensure that strong facilitators are chosen and that they understand the expectations as well. This process normally provides closure to the exercise and should be as positive a process as possible.

APSC Mobile Command Post used as an exercise control room during the exercise

Exercise Design & Execution-Use of Coaches

Note

The joint design and evaluation teams (JDT & JET) attempted to capture the best practices and lessons that were observed during the design and execution of this exercise. The intent of this section is to provide a tool for future design and evaluation teams when designing exercises in Prince William Sound or designing exercises similar to the scope of this one in any other location.

Lessons Learned

Coaches were used effectively during Day Two of the exercise.

Providing exercise-specific training for the coaches is critical. This training should include:

- The desired coaching style/etiquette (passive, active, etc)
- Any area-specific technical issues (the use of the IMH vs. AIMS, planning meeting attendees, etc)
- Relationship with exercise control and evaluators
- Identify which coaches attend what meetings and their specific roles within the meetings

It is critical that ALL coaches attend the training recommended above.

In general, it was noted that coaches should be encouraged to limit their coaching to the section chiefs/unit leaders in the areas that they are assigned (i.e. let the section chief brief their own section).

Recommended Actions

Future design teams should incorporate any of the applicable lessons learned above into their design process.

A growing trend seems to be the utilization of coaches, or ICS technical experts, during exercise as well as actual responses. Response organizations should consider developing guidance which clarifies the authority of coaches (i.e., to advise IMT members vs. act as an IMT member by representing the interests of the party they were hired by).

Exercise Design & Execution-Evaluation

Note

The joint design and evaluation teams (JDT & JET) attempted to capture the best practices and lessons that were learned during the design and execution of this exercise. The intent of this section is to provide a tool for future design and evaluation teams when designing exercises in Prince William Sound or designing exercises similar to the scope of this one in any other location.

Observations

The evaluation of this exercise was conducted by a joint evaluation team (JET). The JET was comprised of representatives from the same agencies/organizations as listed in the joint design team section on page C-4.

Data collection/observation teams were used to observe specific areas of the exercise and to capture the data that was used by the JET for their evaluation. Because this was a government-led exercise, each of these data collection teams (referred to as evaluation teams in the evaluation plan) was led by a state or federal government agency representative. Each of these teams was comprised of personnel representing a cross-section of the response community (federal & state government, industry, and stakeholders). It was important to the JET that the data being collected was well rounded and balanced.

An evaluation plan was developed for this exercise, which explained the evaluation philosophy and process, the objectives, and processes that were being evaluated, and criteria for each process being evaluated. The core evaluation plan can be viewed at:
http://www.akrrt.org/pwsareaex04/PartDocs/EvalPlan.pdf

Player critiques/observations were provided in each participant manual and were incorporated into the data analyzed by the JET.

Section and unit debriefs were conducted by section chiefs/unit leaders and the comments from these debriefs were incorporated into the data analyzed by the JET.

At the conclusion of the exercise, and upon completing the player debriefs by section/unit, the command and general staff briefed the UC on the most significant lessons learned/observations during the exercise.

Exercise Design & Execution-Evaluation (Cont'd)

Lessons Learned

It is critical to the evaluation process that the exercise/evaluation objectives be identified as early in the design process as possible.

A logical process should be developed when identifying exercise/evaluation objectives. This process should begin with identifying exactly where the plan holder is in their triennial PREP cycle, which core components need to be exercised during the current cycle, and collecting all applicable lessons learned and observations from previous exercises in the area. The analysis should focus on identifying processes that need improvement or refining.

Exercising and/or evaluating processes that are not addressed in any applicable plans or guidance should be avoided.

The evaluation plan and associated checklists/observation sheets should be carefully organized in order to be "user friendly" to the data collectors.

Providing data collection teams with personnel from a broad range of qualifications and organizations ensured a well-rounded and balanced evaluation.

Several chosen processes were not evaluated during this exercise for the following reasons:

- Design/control failure to ensure the issues necessary to evaluate the process were raised during the drill,
- The joint evaluation approach (while a best practice in other regards) resulted in several evaluators looking at the same process from different perspectives rather than allowing processes to be divided up between Evaluation Team members.
- Physical separation of portions of the IMT whose activities needed to be observed

Conducting the player debriefs immediately following the exercise was not as productive as hoped. With a few exceptions, many sections/units appeared to rush through this process to "get it over with" and get out the door. Section chiefs and unit leaders are ultimately responsible for implementing future process improvement within their staffs

Exercise Design & Execution-Evaluation (Cont'd)

Lessons Learned (Cont'd)

and should take this opportunity to identify areas for improvement.

Recommendation

Future design teams should incorporate any of the applicable lessons learned above into their design process.

Pre-exercise data collector & controller briefing

Larry Iwamoto (ADEC) and Tony Parkin (RCAC) evaluate public affairs processes

Exercise Design & Execution-Pre-exercise Training

Note

The joint design and evaluation teams (JDT & JET) attempted to capture the best practices and lessons that were learned during the design and execution of this exercise. The intent of this section is to provide a tool for future design and evaluation teams when designing exercises in Prince William Sound or designing exercises similar to the scope of this one in any other location.

Observations

The following training was provided to exercise participants in preparation for this exercise:

Multi-Agency Team Enhancement System (MATES):

A third party contracted by the USCG provided this training. This three-day course is designed to teach the ICS planning process (using the USCG Incident Management Handbook as a guide), the purpose of each phase of the process, and techniques for facilitating the required meetings. One other very important feature of MATES is that it allows many members of the exercise IMT to meet and begin teambuilding before the exercise. The limited quotas to this course were evenly divided between Federal, State, Industry and Stakeholder organizations.

Risk Communications:

This training was provided by the USCG Public Information Assist Team (PIAT) and intended for all organizational levels of the response community. Risk Communications is a science-based approach for communicating effectively in high concern, low trust, sensitive, or controversial situations. The training involves a mix of case studies, university-based research, and class discussion to help professionals increase public knowledge and understanding, enhance their trust and

Observations (Cont'd)

credibility, and resolve conflicts during potentially volatile situations.

Joint Information Center (JIC) Training:

This training was provided by the USCG PIAT as well and was intended for those members of the response community that would potentially be members of the JIC. PIAT JIC training provides participants with an understanding of what a Joint Information Center is, how it fits into the Incident Command System, and how a JIC is run. Special attention is paid to the Information Officer (IO) position and responsibilities and how each JIC position helps the IO carry out his/her responsibilities.

Crisis Communication Training:

A third party contracted by ConocoPhillips provided this training. This program reviewed crisis communications theory and process with a special focus on Prince William Sound issues. It also explored the attitudes of Unified Commanders toward various stakeholders and challenged the Unified Command to "Think Fast" in determining how it would approach various crisis communications situations. Training included one-on-one interviews, group interviews, development of Unified Command issue strategy, and the psychology of crisis communications. Program scenarios reflected Prince William Sound realities and helped the Unified Command to prepare for the exercise.

ConocoPhillips IMT Training Day:

This training was provided to ConocoPhillips' entire IMT two days before the exercise. The training provided participants with an overview of the concept/scope of the exercise, description of governing response plans, places of refuge, IMT transition, resource ordering & tracking, IAP software, community awareness, the CMT/CMST process, and APSC/SERVS-specific response equipment. This opportunity was also used to brief the IMT on the exercise scenario up to the point that they would be taking over the incident.

Lessons Learned

All of the training listed above was well received and many comments confirmed that the participants were more prepared for the exercise (or an actual response) as a result.

Exercise Design & Execution-Pre-exercise Training (Cont'd)

Lessons Learned (Cont'd)

The ConocoPhillips IMT training just before the exercise was especially useful. By explaining the exercise concept and scenario; familiarizing the team with local response-related features, issues, and pre-planning; and reviewing drill-specific protocols (such as Transition Protocols, unique planning cycle elements, etc.); ConocoPhillips personnel were better able to perform appropriately in the drill.

Recommended Actions

A similar training program to the one described above should be provided for all exercises of this scope. All participating organizations should encourage maximum participation for their personnel in any training offered.

The Unified Command at MATES Training

Command & General Staff Meeting practiced during MATES Training

Exercise Design & Execution-Exercise Logistics

Note

The joint design and evaluation teams (JDT & JET) attempted to capture the best practices and lessons that were learned during the design and execution of this exercise. The intent of this section is to provide a tool for future design and evaluation teams when designing exercises in Prince William Sound or designing exercises similar to the scope of this one in any other location.

Observations

The logistics requirements for executing an exercise of this scope are formidable for any location, but having an exercise in Prince William Sound represents several unique challenges.

Over the course of the exercise week, several hundred participants (player, controllers, evaluators, observers, etc) passed through Valdez and the SERVS VEOC.

Lessons Learned

The industry player (RP) should appoint a professional logistics coordinator to the joint design team for an exercise of this scope. This person should be the single point of contact for all logistics-related issues.

The weather in Valdez is unpredictable year-round and often affects flights in and out. This design team chose to fly most participants into Anchorage (via Shared Services jet) and then transport them by excursion vessel from Whittier to Valdez. This virtually guaranteed that the majority of the participants would arrive for the exercise. Transporting the participants by vessel also allowed them to see the area described in the scenario first-hand, provided a location for additional "just-in-time" training, and encouraged teambuilding/networking among the participants. (Note: It would be wise to have a backup plan for this method as well. The excursion vessel chosen for this exercise suffered a mechanical failure the day before it was to transport the participants and was repaired just in time).

Lessons Learned (Cont'd)

There are limited cabs and no bus service in Valdez. A local tour company was contracted to provide shuttle service between local hotels and the VEOC during exercise week.

The dates of any prospective exercise in Valdez should be carefully selected to avoid occurring simultaneously with other large events (Gold Rush Days, Salmon Derbies, etc).

Any VIP-specific portions of the exercise should be identified as early as possible in the design process. Depending on the requirements, the VIP program could affect the scenario, dates of exercise, location of equipment deployment, etc.

Deadlines for exercise participation confirmation (RSVP) should be set for as early in the design process as possible. Many of the logistics such as hotel rooms, meals, etc require an accurate head-count and cannot be postponed until the last minute. Participating organizations should agree to this RSVP date and emphasize/support the fact that there will be a clear cut-off date on which no one else will be placed on the participant list.

When arranging meals for 200+ people, it was found that serving them in buffet-style was the most effective method. It was also determined that planners should arrange for 25% more meals than anticipated (for the larger events).

Using the shop area in the VEOC for providing meals during the exercise worked extremely well.

Organizations planning to use corporate or chartered aircraft in or out of Valdez (or other AK cities) should research all applicable requirements (manifest, security issues, etc) and develop an SOP before the exercise.

Exercise participants enroute to Valdez aboard the M/V Klondike Express