

Effective Use of Resilient Design and Technology to Conduct Major Exercises and Training During a Pandemic

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The limitations placed on travel and in-person gatherings during the 2020 – 2021 COVID pandemic placed a strain on traditional approaches to readiness training for many companies. Initial responses to these challenges were to shift to virtual platforms and to rely on the surplus of experience within response teams.

As 2020 drew to a close, planners began looking to 2021 for normalized exercise schedules. Great strides were made to address C-19, including increased mobility, however similarities to 2020 remained, with inconsistencies in lockdowns that made planning large gatherings of global teams for exercises and training challenging.

Recognizing that the global conditions were unlikely to favor a traditional approach to exercises, the ExxonMobil Regional Response Teams (RRTs) committed to undertaking a functional exercise that would involve each of the three regions, Americas, EAME, and AP. The exercise was designed to use a common scenario which each region would respond to, sequentially, over a two-day period.

An innovative tri-hub model was used that allowed members who could be physically present to gather in one of three regions, while those that were not able to travel joined virtually. Over 28-hrs consecutively, each hub was tasked with a separate phase of the incident involving each region handing off to the next.

Planning process

Planning for this exercise took place over a long advance period and involved participation from each of the regions that were part of the exercise. In addition to the two exercise coordinators, who are the RRT Coordinators, the planning sessions were attended by the lead exercise designer, and the virtual coordinators from each of the three regions.

Each of the regions communicated their objectives for the exercise to the lead coordinators, based on the specific needs of the teams participating. These objectives were communicated to the design team for inclusion in the exercise script. Additionally, specific simulations and participants were added to accommodate the support of each region, including specific oil spill response organizations as appropriate. In the UK hub, this took the form of OSRL deploying a selection of equipment to simulate the setup of a staging area, and in the Houston hub, it was Social Simulator to put the PIO and JIC to the test with extensive social media injects.

Design process

The exercise design team took on the unique objectives and ensured the injects and scenario progression were tailored to suit the expectations of the teams. Despite the

inherent complication , spanning three regions and running continuously for 28 hours with over 300 participants, the design was relatively straight forward. The scenario simply had to be played out for an extended, uninterrupted period, with minor modifications made to suit some smaller time advances, that kept the unfolding events paced with the teams as they came online.

Exercise logistics

Special care and effort went into ensuring that those that would be traveling to a hub location met the origin and destination, COVID screening and testing requirements. For example, in the UK, personnel arriving at the exercise location underwent PCR testing on site through an arrangement with a local clinic, and were issued daily antigen tests for use each morning. These measures, plus social distancing measures (eating outside got chilly some nights!), helped to ensure that the exercise participants were not at an elevated risk of contracting the virus during their stay.

Exercise hybrid features

With a large number of players participating remotely, over Zoom, there was a need for strong virtual coordination in each of the regions, as well as new operating norms for the subsets of teams within each response organization. With some players working face to face, and others online, it was important that those present in the command posts be available on their laptops in meetings and during work collaboration periods, so they could connect with their work-team that was operating remotely. Some synergies did evolve, with online teams taking specific work products while present members collaborated locally with physical response activities that were occurring.

Exercise kickoff

Exercise control was maintained in the UK hub, so at a very late hour on day one, the opening scenario reveal was made to the initial response team at the Singapore hub. The team quickly got oriented to the current situation, as communicated by the Simulation Cell, and very quickly the team was managing the initial response phase of the incident, which they would work until they handed off the response in the form of a 201 to the UK hub, supported by the Prague team.

Exercise conduct and challenges by region

Each of the three regions had the exercise for about 9-hours each, conducting a hand-off between the teams during a one-hour overlap where the section leads and key personnel would provide critical information to each of their counterparts. Then, to make the handover thorough, the Simulation Cell leader would provide a summary of the current status of the scenario, with any time-related updates.

The key challenges faced during the hand-off process were related to bandwidth issues, which varied greatly across the many locations, ranging from West Africa to Asia Pacific, and even some difficulties associated with the Houston hub. As inconvenient as this was at the time, the team had worked through these issues so frequently in the past that they were able to get past them with back-up information exchange avenues available

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in the form of email, instant messaging, and the use of a common-operating-picture and WebIAP for exercise documentation.

Exercise outcome

The overall effect of the exercise was to a net positive impact on the global regional response teams, reconnecting members that had not been able to exercise as a team for a prolonged period due to COVID lockdowns. The trans-regional approach was novel and proved to be a big success in exposing the teams to the handover process and building on each other's work products as operational periods progressed.

In the words of the initial incident commander, who had kicked off the response 28-hours previous, upon receiving the last briefing from the Americas Team "The Incident Action Plan that we received was the IAP that we would have created ourselves".

Lessons learnt

Hybrid response structures with in-person and remote participants is a realistic and sustainable response model.

Zoom fatigue, connection issues, and teamwork among the hybrid players will be the behaviors and barriers that we must manage in the future.

The experience of hybrid participation in the exercise, the use of virtual tools, and resilient exercise design demonstrated that global teams can continue to train together successfully, despite global travel limitations.