

Sea Services Feel More Prepared After Complicated 2017 Hurricane Season

NATIONAL HARBOR, Md. – What has been described as a complicated hurricane season brought new challenges for the maritime forces in 2017. With hurricanes hitting Texas and Florida in back-to-back months, it was the first year on record that two category four storms made landfall in mainland United States.

On top of that, islands such the Virgin Islands and Puerto Rico were hit hard by Hurricane Maria, causing massive wind damage and power outages.

While taxing at first, sea service leaders at the Hurricane Update Panel at the Sea-Air-Space Exposition April 11, said they were pleased with their combined efforts to help the affected areas during the time of crisis and feel more prepared for the expected above-average 2018 hurricane season.

The panelists collectively had years of storm relief experience but even that wasn't enough to fully prepare for the four major hurricanes in 2017.

Maj. Gen. Pat Murphy, director of the National Guard Bureau Joint Staff, led the National Guard's response efforts for Hurricane Sandy when it hit the Northeast in 2012. But not even Sandy could compare to Hurricane Harvey, Irma and Maria individually, let alone collectively.

"Hurricane Sandy was originally referred to as 'Super Storm Sandy,'" Murphy joked, "but since the summer of 2017, I've not heard it called 'super' anymore. Because it really paled in comparison to what happened in 2017. I would categorize Sandy as a different type of event and not to the magnitude of the

past summer's events."

Handling the historic meteorological events quickly became a joint command effort once Hurricane Irma and Maria left, according to Rear Adm. Jeffery Hughes, former commander, Expeditionary Strike Group.

"Relationships are absolutely critical," Hughes said. "At no point in my near 30-year career have I ever placed a higher premium on relationships, because it drives that unity of effort."

Hughes also was reassured that they had full control on when and where they were allowed to respond.

"At no point did I ever not have the authorities to allow me to respond immediately," he said. "At no point was I waiting to say, 'I would really like to do something, but I'm waiting to be told that I could.' We had the authorities in place, and we had the unity of effort throughout the entire response team, from the federal and territorial level, to allow us to go in and save lives."

However, the response effort didn't go as smoothly as anticipated, at first. Most of the relief-related issues stemmed from Hurricane Maria's damage to the Virgin Islands and Puerto Rico. The sea services successfully sent the needed resources to the islands, but the lack of power and the situation of the islands slowed down the distribution process.

Of course, lack of power wasn't the only challenge for the relief effort. Murphy later pointed out the limited capability of Puerto Rico's resources also made delivering equipment in a timely fashion difficult.

VR Training Making Major Strides, Still Room to Improve

NATIONAL HARBOR, Md. – The future of virtual reality (VR) and augmented reality (AR) in terms of training and new innovations is still an ongoing process, experts from the Navy, Marine Corps, industry and academic fields said during the Innovation in Training Through Video Games Panel at the Sea-Air-Space Exposition April 10.

While these fields are making great strides incorporating and expanding VR capabilities, costs and connectivity still prove to be “big constraints.”

Lucien Parsons, director of the Mixed/Augmented/Virtual Reality Innovation Center and professor at the University of Maryland, curbed panel attendees’ expectations when it comes to fully incorporating VR and AR training. Dubbed the “Debby Downer” by moderator Cmdr. James Phillips, Parsons pointed out the costs for fragile, user-unfriendly technology is still as high as a million dollars. Granted, that’s quite the drop from \$300 million nearly 30 years ago, according to Parsons.

“I’ve worked on a game that costs \$100,000 to make, and I worked on a game that almost cost a \$100 million,” Parsons said, applying his real-life experiences. “What you’re aiming for makes a very big difference in what your budget is.”

For the military, the “game” they are aiming for is a simulation that is “reliable, realistic and reusable,” according to the three service officials on the panel.

Col. J. Bollock, director of the Training and Doctrine Command and capability manager, Integrated Training Environment, outlined the Army’s future solution for VR training, synthetic

training environment (STE). Unlike the current model, STE will fully incorporate live, VR and AR training.

“The STE will provide immersive and intuitive capabilities that keep pace with a changing operational environment,” an accompanying video brought by Bollock stated. “Giving commander’s the ability to overcome today’s limitations and take on the challenges of tomorrow.”

“In focusing on training simulations, we can really enhance human training and performance,” said Dr. Kendy Vierling of the Marine Corps Training & Education Command’s Future Learning Group.

Parsons concluded his remarks by assuring that successful VR integration is very possible, but only if designers focus on designs and usability, avoid building a “multiverse” and never underestimate the serious concerns of security.