Tsunami drills reveal several SEMA system shortcomings

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TOA BAJA

A tsunami drill along Puerto Rico's coastline Wednesday brought to light failings in evacuation plans and the emergency broadcast system that could have left many residents in the dark and could have resulted in many lives being lost.

The local drill, part of a wider U.S. drill officially called LANTEX 10 Northwest Atlantic Tsunami Exercise, involved a simulated 7.5-magnitude earthquake with an epicenter 170 miles southeast of Boston, under the Atlantic Ocean, that took place at 9 a.m.

The simulated tsunami waves, travelling at speeds of up to 600 miles per hour, reached the island's northwest and northern coasts just after noon, bringing simulated swells ranging from up to 25 feet along the Aguadilla shore and up to seven feet in San Juan metro area beaches.

State Emergency Management Agency Heriberto Saurí expressed "satisfaction" with the greater participation of coastal municipalities, commonwealth agencies, schools and businesses in this year's voluntary tsunami drill. But he acknowledged during an afternoon press conference what many radio listeners and television viewers noticed at 10:05 a.m. — the time set for the broadcast of the Emergency Alert System bulletin issued by the National Weather Service of the impending danger. They heard the double-buzz sound characteristic of NWS flash-flooding alerts, but no information was given, or it was delayed. Many radio stations did not transmit the signal at all. The NWS passes on information it receives from the Puerto Rico Seismic Network, based in Mayagüez.

"We will be looking into what the technical reasons were for this to have occurred," said Saurí, who noted that the drill was conducted to detect these failings. He said that coastal towns vulnerable to tsunamis, such as Loíza, have signal strength issues in radio communication that must be fixed.

Alfonso Jiménez Porrata, director of the Emergency Alert System, which includes radio, television and cable stations, said the tsunami drill signal was received only by radio stations based in coastal towns. He acknowledged that such transmission of tsunami alerts must be made compulsory for all radio stations, noting that one of the most popular radio stations in Mayagüez has a license based in Maricao.

He also said that television stations chose to delay transmission of the emergency alert for several minutes because they are allowed to, given that flash-floods and hurricane warnings are not considered to be time sensitive. He said this was not the case with tsunamis, which can strike with just a few minutes notice. Such was the case with the October 11, 1918, tsunami that killed 40 people in Aguadilla after an earthquake centered in the Mona Passage. "We are going to work to ban this delay for tsunami warnings," said Jiménez Porrata, who noted that broadcasting of emergency signals is voluntary. He said they are actually discouraged from participating in the Emergency Alert System because the equipment need for such transmissions is "relatively expensive" and heavily regulated by the Federal Communications Commission.

José Ribas Dominicci, director of the Puerto Rico Radio Broadcasters Association, said the organization will work on "improving" participation in the system in seminars during its next convention, in May.

Jiménez Porrata said his organization is working to set up a Common Alerting Protocol by October involving the sending of tsunami warnings as text and voice messages to cell phones and Internet addresses. He called this "simpler and faster."

"All deficiencies in communication can be solved. It's good that these occurred during a drill and not in a real situation such as Chile," said Christina von Hillebrandt, director of the National Oceanic and Atmospheric Administration's recently created Caribbean Tsunami Warning Program. She said most of the island's 44 coastal municipalities participated in the drill.

In fact, Saurí said next year's drill will be compulsory for all coastal municipalities, as well as for schools and businesses within defined flood zones. He said this would be the only way to test uniform evacuation plans to be approved by the Federal Emergency Management Agency.

The faulty emergency transmission was not the only issue brought to light by Wednesday's tsunami drill. While schools successfully received the tsunami alert through weather band radios, their evacuation plans were lacking. In Levittown, Toa Baja, the Espiritu Santo Academy, located on the marginal road of PR-165, which hugs the Atlantic coast, evacuated its 481 students in 3 minutes, 10 seconds, through a gate in the back of the school. School officials led the students to a playground where they remained as the principal, Dora Adames, explained the importance the exercise. She told the Daily Sun, however, that the evacuation plan did not include where these students would be taken.

"We will have to talk to the mayor to see where we would go, because right now we would be in big trouble if this were real," Adames said.

The only official evacuation in Toa Baja took place at the María Libertad Gómez Intermediate School and the Head Start Center next door, for which the town offered transportation.

Toa Baja Mayor Aníbal Vega Borges told the Daily Sun that the town, which is still not considered tsunami-ready, would need some \$340,000 to prepare, of which the commonwealth has pledged \$120,000. He said the town needs at least seven siren systems for its densely populated coastal areas.