130TH EN BN RESPONDS TO LANDSLIDES

Puerto Rico Army National Guard

THE FLEXIBILITY and benefits of a state to employ its Army National Guard under state control, for state purposes, and at the state’s expense has once again shown its value in the latest Puerto Rican response to landslides in central Puerto Rico following sustained rains.

In this instance, a task force from the 130th Engineer Battalion was mobilized under SAD, permitting the state to directly access and utilize the Guard’s vehicles and other equipment to conduct clearing operations and restore one of the primary travel corridors from Arecibo in the north to Ponce in the south. Operations conducted in this status are exclusively under the Mission Command of the Adjutant General, under authority delegated by the Governor of Puerto Rico in accordance with state laws.

During November, more than five inches of rain fell over the center portions of the island, including the municipality of Utuado, Puerto Rico. The extraordinary amount of rainfall in this region caused many of the rivers to overflow their banks, as well as loosening much of the top soil, which is coarse and sandy, in this mountainous central region of the island. The erosion of the terrain and loosening of the soil caused a large number of landslides along private, municipal, and state roads, making them impassable. Unfortunately, the roads in this area are part of one of three main north-south corridors on the island, connecting Arecibo in the north to Ponce in the south, making it a key mobility corridor. As the rain continued, the municipal mayor, the Honorable Ernesto Irizarry Salva, requested that Utuado be declared an “Emergency Zone” and the interim governor of Puerto Rico agreed, with the Honorable Victor Suazo Melendez signing the Executive Order on 22 November 2016.

The state of emergency actually encompassed the entire island due to varying levels of rain throughout the heartland of the island, most receiving more than four inches of rain. As part of the Executive Order, the Puerto Rico Army National Guard (PRAING) was ordered to SAD to provide the manpower, equipment, and expertise necessary to restore this mobility corridor in conjunction with similar municipal and state efforts nearby.

Following the Governor’s order for PRAING assistance under SAD, the 101st Troop Command assigned the mission to 130th EN BN, headquartered in Vega Baja, PR. The 130th EN BN is one of two engineer battalions in the PRAING and is tasked to organize, train, and discipline personnel to conduct engineering operations on support of the Puerto Rico Army National Guard (PRARNG) in Puerto Rico.

The battalion promptly identified a volunteer task force of 24 soldiers, led by 2LT Jose Mercado (OIC) and SFC Edwin Soto (NCOIC), to remove soil and debris along portions of state road PR-140 in order to restore the mobility corridor. Following reconnaissance of the affected areas, the task force conducted meticulous mission analysis, planning, and coordination in support of Operation November Rain, while concurrently preparing equipment at two sites for operations in Utuado. Concurrently at the state level, the PRAING was planning and coordinating with state and local agencies to ensure unity of effort and focused efforts at multiple landslide sites to optimize assets and efforts in the flooded region. Primarily, this was performed with and through the Puerto Rico Emergency Management Agency (PREMA) and the municipal organizations that support it. PREMA is the state agency responsible for the management and coordination of the preparedness, prevention, mitigation, response, and recovery before or after an incident or event that needs the coordination of state support and resources.

After extensive efforts to deconflict and synchronize the collective response, the task force mobilized personnel and equipment on 28 November 2016, from their home station at the CW3 Luis F. Quinones Readiness Center in Vega Baja, PR, and brought additional equipment from Camp Santiago Joint Maneuver Training Center in Salinas, PR, to the work site in Utuado. The equipment required to perform and support this mission included 10-Ton Dump Trucks (M117A1), 20-Ton Dump Trucks (M971A2), 8x8 Light Equipment Transporters (M983A4), 40-Ton Low Bed Trailers (M870A1), hydraulic excavators, Trackway Speed Tractors (D7R0), Heavy Loaders (M966H), and other assorted wheeled vehicles. Following mobilization of personnel and equipment for the mission, operations commenced on 30 November 2016. The concept of the operation was straightforward: remove material to provide equipment access, stabilize the embankment, remove bulk of material and debris that was blocking the road, cut terraces into the embankment and adjacent areas, and ensure future water flow and public service. The biggest concern during operations was the continued rainfall, which continually impacted the stability of the embankment and adjacent areas, and the subsequent threat of a rollover. Careful operation including close supervision of the embankment and work area, combined with expert operation of the equipment mitigated the risk of a rollover. The net results of this cut and haul operation was the removal of more than 1,771 m³ of soil and debris from the affected area. Operations concluded with final grading of the affected area and removal of all remaining material and debris from the road surface. The total level of effort required to execute this mission was about 1,500 man-hours over the course of 9 days.

Upon completion of engineering operations on site, the task force was responsible for demobilizing equipment and personnel, conducting post operation preventive maintenance checks and services, and completing close-out reports required under executive order. Although this mission was fairly simple by horizontal construction standards, it required significant interagency coordination, utilized standardized unit collective training, and required mission command implemented down to the task force level for effective management and execution.