



The 407th Brigade Support Battalion in Operation Unified Response Expeditionary Logistics

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WEDNESDAY, 13 JANUARY 2010, turned out to be more than the usual exciting day in the 2nd Brigade Combat Team (BCT), 82nd Airborne Division. The brigade's cavalry reconnaissance squadron, the 1-73 Cavalry, was alerted to respond to the earthquake in Haiti. As the commander of the 407th Brigade Support Battalion, I immediately had my staff launch into planning and preparing the response for the rest of the brigade. The 1-73rd was ready to fly by noon. Four days later I was on the ground in Port-au-Prince, and 12 days later the 407th Brigade Support Battalion's troops had closed in Haiti. The battalion would grow to 335 paratroopers; it supported the brigade's arrival in Port-au-Prince, sustained the BCT throughout the humanitarian assistance mission, and facilitated the brigade's return to Fort Bragg where it would reassume the Global Response Force mission.

The deployment was exactly what the battalion needed to validate its preparations. For the previous 18 months, we had trained for the Global Response Force mission, which involved conducting six Joint forced-entry exercises (each one including a parachute assault to seize an airfield), a mission rehearsal exercise, two battalion field exercises, and many training sessions at company and below. While this training certainly provided a framework for us to flow into an airfield under both semi-permissive and permissive conditions, the exercises were not large enough to replicate the complexity of real-world operations. Ironically, we were preparing for a January Joint exercise when we were notified and subsequently deployed to Haiti.

I gave the rear detachment commander the overall responsibility to out load the battalion. We needed to quickly centralize efforts to out load not only the 407th, but also the BCT. We selected five key nodes to accomplish this:

- Our internal unit loading and control center, where we would inspect battalion vehicles and equipment prior to movement by sea or air.
- The soldier readiness program site.
- The passenger departure airfield at Pope Air Force Base (commonly known as the "green ramp").

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PHOTO: Key personnel of the 2nd Brigade Combat Team prepare to receive the first relief vessel during the Haiti earthquake emergency, 6 February 2010. (Photo courtesy of author)

- The heavy-drop rig site, where we would weigh and check loads on vehicles for airworthiness.

- The Pope Air Force Base arrival/departure airfield control group site, where the Air Force would conduct Joint inspections on equipment to ensure its air worthiness, and where the equipment's operators would wait, sometime for days depending on the priority of his equipment, for a flight.

The 407th established an ad hoc rear detachment center at the battalion headquarters to track and centralize information. Additionally, the battalion maintained a planner inside the brigade's cell, which was quickly filling each flight manifest during the initial hours. Running short on manpower, the 407th struggled with whether to man these nodes with deploying personnel or fill them with rear detachment personnel. In the end, the battalion had to do both. Further, it had a few tasks, mostly unit-level, which did not fit into these nodes, but still had to be done. The battalion conducted rules of engagement briefings. Soldiers were issued permethrin to treat uniforms against mosquitoes (rampant in Haiti), a six-hour process that is good for six months, and given the antibiotic doxycycline for protection against malaria. The battalion requested mosquito

nets, but there were none available (we would eventually receive them in Haiti). The unit also tracked the packing of containers and the status of storing personally owned vehicles. The 407th had to upgrade all Blue Force Tracker systems with Haiti maps, so it surged to upgrade and install Blue Force Tracker in its distribution company's vehicles prior to departure, and continued installation while deployed. It eventually had Blue Force Tracker installed in 21 out of 31 systems during the deployment.

Strategic Deployment

Fifty-two percent of the BCT's fleet deployed by air, beginning on 13 January and terminating on 25 January. The remainder of the BCT's deployed equipment arrived in Port-au-Prince on three vessels on 7, 8, and 14 February. Through the previous Joint force exercises, the BCT had developed a prioritized vehicle listing of how to flow its priorities in any airfield. However, because of the situation on the ground in Haiti and conflicting priorities and disconnects with the Air Force, what the BCT received in Haiti via air did not mirror the prioritized list. Some battalions received more equipment than others did, and some equipment



(Photo courtesy of author)

There is little substitute for daily face-to-face coordination among logistic operators to successfully sustain the force. We began this critical meeting on Day 2 and continued throughout the operation.

arrived completely out of order (for example, ancillary medical equipment before first-line responder items; containerized kitchens ahead of unit trucks). The 407th went heavy on trucks and distribution assets, which it required immediately; conversely, it did not need the ancillary medical equipment as quickly.

To overcome the shortfalls in organizational equipment until surface vessels arrived, the 407th detached teams to units it knew would need them. The largest mobility package went to 2nd Battalion, 325th Airborne Infantry Regiment; 407th detached three HMMWVs, eight utility trucks, and two ambulances, all with crews, to assist the battalion in its mission near the epicenter of the earthquake. It also detached three HMMVs, three utility trucks, and one ambulance to the 1-73rd, along with a forward area refueling team.

The 407th ran “logpac” missions to battalion operating bases steadily for approximately two weeks until battalions received their forward support company capabilities through the airflow from Fort Bragg.

The 407th received three different ships at the main seaport in Port-au-Prince, at Port Varreux, and at Port Les Moins. Determining arrival times for ships transporting deploying equipment and sustainment cargo was initially difficult, largely because of the immature theater and difficulties working through host nation ports. Teams rehearsed the first ship’s reception with elements from all battalions (mainly teams from forward support companies). The maintenance company led the operation, receiving the three ships, battle tracking the download, and releasing all equipment from the port to final destination. The maintenance company’s previous experience downloading vessels and training as the BCT arrival/departure airfield control group during past exercises, plus the terrific teamwork across the BCT, enabled successful vessel reception.

Text messaging was the most efficient way to communicate during the first days in Haiti.

Operating in a non-secure environment, the 407th staff used Blackberries with international cell phone capabilities to communicate with Fort Bragg via email and text. Text messaging was the most efficient way to communicate during the first days in Haiti. The staff primarily used the Blackberry to gain visibility on inbound personnel and cargo. Still, this method was limited: if you did not have a Blackberry, you did not have the information.

The 407th had no problem gaining control of arriving personnel. Cargo generally went well. The Air Force’s contingency response group moved cargo from arriving C17s and C130s to an intermediate cargo yard on the west end of the landing pad. Then either the response group or the 407th moved the cargo to the rapidly growing cargo yard. The 831st Rapid Port Opening Element also ran a cargo yard, directly to the north of the center of the landing pad. At times the contingency response group unloaded BCT cargo in this yard when there was an overflow or extended aircraft operations at the west end of the ramp. On occasion, poorly marked or mismarked cargo wound up in the contingency response group yard. The 407th stationed one of its arrival/departure airfield control group operators there to expedite throughput.

The Operation

While the 407th Brigade Support Battalion made a direct contribution to the 2nd Brigade Combat Team’s humanitarian assistance mission, the majority of the battalion’s effort went into sustaining the brigade. In doing so, the 407th issued 42,157 cases of purified bottled water, 131,452 gallons of bulk water, 39,598 cases of MREs (meals, ready-to-eat), 43,091 gallons of fuel, and 1,064 rolls of concertina wire. It moved 1,462 soldiers, performed 28 biannual services, and treated 733 patients.

The BCT operational area consisted of 20 square kilometers divided into five sectors. The 407th Brigade Support Battalion established the BCT logistics hub, Logistics Support Area (LSA) Gold, at the Toussaint Airfield. Our supported units included 2nd BCT; Headquarters and Headquarters Company, 18th Airborne Corps; and, for a short period during the initial response, other elements from 3rd Expeditionary Sustainment Command and the United States Navy, Air Force, and Marine Corps.

Twenty-two percent (52 of 234) of the total logistics missions performed were for non-BCT units.

The climate was the first “threat” we encountered in Haiti. With families experiencing snow days back at Fort Bragg, we deployed into an area with a daily average temperature of 94 degrees and a UV index peaking at 14. Mosquitoes came out at night, and the occasional heavy rainfalls became more intense toward the summer months. To protect troops from the environment, the 407th distributed medium-sized tents on Day 8 and mosquito nets on Day 10, all arriving from Fort Bragg. An Air Force engineer had a ditch dug to protect us from runoff from the steep hill to our left and also developed a drainage pattern for LSA Gold. Still, even a light rain would quickly turn the logistics support area into a mud pit. Further, the malaria threat loomed large, so it was vital that we take our doxycycline pill every day at the same time.

For distribution, Port-au-Prince’s road network was somewhat constraining because of the earthquake damage, narrow roads, frequent dead ends, and steep terrain. The reconnaissance cavalry squadron established a base on a golf course atop a steep hill, so we could not get heavy trucks or load-handling equipment in to support the squadron. The base had limited internal trafficability—other than the helicopter-landing zone, there were no areas to stage or download large amounts of supplies or equipment. Getting into Forward Operating Base Endurance was also difficult due to narrow approach routes.

Overall, we learned that when supporting an austere architecture, assessing trafficability on all supported unit bases is imperative, particularly for equipment not normally used to support the BCT, such as rough-terrain container handlers, flatbeds, lowboys, or load-handling systems.

Host nation traffic and driving habits also affected distribution. We quickly found that a five-kilometer trip took 90 minutes during the day and 10 minutes at night, so the 407th executed all of its logistic convoys at night to avoid traffic. The battalion command sergeant major worked several consecutive nights to escort and distribute over 200 latrines to battalion and company operating bases across the BCT. While doing so, he was able to initially assess trafficability and provide many alternate routes. His observations enabled deliveries and improved circulation throughout the city.

Managing the terrain to build the BCT’s logistics base was a challenge. During exercises, the 407th arrival/departure airfield control group had trained on receiving and quickly integrating BCT equipment and personnel into units; however, we were not practiced in managing personnel holding areas while unit forward operating bases were being built. In addition, Air Force airfield managers, working to accommodate the Haitian airfield authority, immediately placed limitations on our footprint. We were required to remain 500 meters from a control tower to our west and 500 meters from the fixed-wing runway to our south. A small wall 200 meters to our south prevented locals from entering the airfield, and just to our east, the landing strip and helicopter-landing zone operated 24 hours a day, making it extremely difficult to communicate in person, let alone over the radio or telephone. It was no surprise that units did not want to stay within the small, limiting space the 407th was originally assigned. For the first several days, we played a terrain shell game as we attempted to receive sustainment stocks and establish the brigade



(Photo courtesy of author)

While the majority of workload involved sustaining the BCT, we did perform some distribution of humanitarian assistance items.



On 17 January 2010 we began with a bare piece of land. In less than 60 days we built a robust logistics support area to sustain and redeploy the BCT.

support area, while working around other units in the BCT, foreign armies, and media representatives. Not surprisingly, we went through numerous iterations and arrangements of our footprint before our enduring one evolved.

We also had several functions to integrate that were not thoroughly addressed during the past 18 months of training: a bottled water and MRE yard, a Class I (food, health, and comfort items) point that contained eight 20-foot MILVANS on an average day, a fuel container, a unit container yard, an area for a local vendor, a morale and welfare tent, a workout area, the brigade logistics support team, a bulk water storage area, a medical supply yard containing approximately 80 triwalls (containers), and several unit administrative and logistic operations centers. On 17 January, we occupied an empty piece of ground; 60 days later, we had a combined permanent and transient population exceeding 800 personnel.

As could be expected, the BCT initially flew only a limited amount of sustainment in by air, so our distribution company delivered supplies through traditional unit-type “logpacs” as early as its second night on the ground, executing 234 logpacs in under 60 days. To establish living accommodations and operating bases for all brigade soldiers, the 407th delivered tents shipped from contingency stock at Fort Bragg and from Guantanamo Bay, cots from

the same two locations, and 3,900 mosquito nets from Fort Bragg. In addition to pushing supplies forward from LSA Gold, the distribution company pulled supplies from the 7th Sustainment Brigade and moved a large number of sea and air shipping containers for various missions.

To synchronize distribution, BCT logistics operators met daily at LSA Gold to discuss requirements for the current and next 24 hours. Most of the relationships we had developed over the previous 18 months were still intact and paid great dividends in coordinating support of all types, commodities, and services.

Our toughest time was during our first seven days on the ground, getting sustainment to catch up with requirements and establishing a concept of support. Bulk fuel was initially the greatest challenge. We went black on fuel within the first 96 hours of operations. While distribution was part of the problem, we mainly lacked a higher source of supply that could meet the requirement. We experienced about 24 to 48 hours of “rough living,” living from tanker to tanker and not breaking the black. Finally, the Defense Energy Support Center contracted source kicked in, and after two days of successful “reverse resupply,” complemented with the Defense Energy Support Center spotting a 6,000-gallon stationary fuel container in our LSA, we never had a fuel problem again. On 6 February, the number of support battalion fuel trucks increased from three to seven with the reception of the *Crimson Tide*; on 24 February, the Joint task force cancelled the bulk fuel contract when the 7th Sustainment Brigade assumed the delivery function.

Although we had invested a lot in our water purification battle drill during our Global Response Force training, we continued to learn through the school of hard knocks in Haiti. The best selection for a water source was a 50-foot deep manmade well located on the west end of the airfield’s parking ramp. However, the well’s pump was inoperable, and the 407th had no generator to provide power. (The Air Force eventually provided a generator for this site.) Around D+5, our water problems were more strategic than tactical: we could not fly in bottled water because it took up too much space in the aircraft. We aggressively sought other options, buying time by getting bulk nonpotable water delivery from a local fire department supplier for several

days. We mounted our Forward Area Water Point Supply System on a load handling system and drew 3,000 gallons from the USS *Comfort*; however, this was an all-night course of action with an unequal return, and the 3,000 gallons gained still fell short of our estimated daily requirement of 4,100 gallons. Finally, on 30 January, 407th negotiated a water delivery contract with *Sourveinger Eau* for 12,000 gallons per day. The contract was expanded when the BCT received decontamination Base-X showers shortly thereafter. With arrival of most unit water buffaloes on 6 February, units were able to receive bulk water through supply point distribution from LSA Gold, and *Sourveinger Eau* resupplied forward operating base showers throughout the brigade area of operations. Had it not been for the contracted solution, we would have been hard pressed to sustain the growing water demand throughout the brigade area. Moreover, at the time, no other unit in Haiti possessed an adequate water distribution capability (the 7th Sustainment Brigade received several 3,000-gallon mobile fabric tanks in March). With the help of Army Materiel Command, we increased water storage capacity from 6,000 to 30,000 gallons with new semifabric stationary collapsible tanks.

To counter immature lines of communication, the 407th implemented “just in case” logistics—building stocks to cover disruptions and other friction in strategic or tactical distribution. To do so, we established the “gold standard” (above green) in each commodity area and shared our status in the nightly battle updates.

By D+7 (24 January), mobility assets across the BCT were having maintenance issues because of their constant use and harsh conditions caused by smog and heat. The 407th conducted its first formal maintenance meeting on 26 January and manually requested and tracked repair parts until D+12 (29 January), when the supply technician arrived with automated supply management equipment. The next day we submitted our first automated requisition. We used DHL to receive goods, and the shipping

time took an average of five days. We locally purchased Class III (P) (packaged petroleum, oils, and lubricants) with field ordering officer funds until our unit basic load arrived. When the *Crimson Ace* arrived on 6 February, the status of packaged stocks jumped from black to gold for the remainder of the deployment. The maintenance company completed 33 welding jobs and 47 recovery and container transport missions, and it gauged 370 weapons for the BCT and conducted 12 assistance visits to battalion forward operating bases. Internally, we performed 28 organizational services, eight percent of our total fleet (28/336) and 16 percent of our deployed fleet (28/175), including our 24 generators on the ground, which we serviced every 12 days or 300 hours.

For rations, we delivered and consumed MREs until 14 February, when we received “Jimmy Deans” commercially packaged breakfast meals,” heater meals, boxed milk, orange and apple juice, coffee, and some ice. We also received contracted 40-foot long refrigeration vans on 21 February, but could not put them at all unit locations. Working with the vendor, we were able to position a 20-foot van at Forward Operating Base Endurance, but we were unsuccessful in reaching a solution for Forward Operating Base Gray, where space was limited. We had our first day of hot breakfast in the BCT on 22 February. We had to be creative with field feeding plans because not all of the unit-containerized kitchens made it to Haiti.

For medical support, the BCT ordered and shipped over 100 triwalls of medical supplies. Support battalion medical operations primarily consisted of casualty care from a Level II facility (laboratory, x-ray, pharmacy, medical hold, and medical supply assets) at the airfield approximately 300 meters from LSA Gold. This medical clinic quickly became a Joint clinic, as providers from all services combined to treat all types of patients, including service members, locals, and other civilians. The medical company also collaborated with

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(Photo courtesy of author)

With the assistance of contingency contracting and additional equipment, we quickly expanded our bulk water storage capacity to 12,000 gallons.

the University of Miami Hospital, providing over 3,900 hours of care for local national patients. Simultaneously, our physical therapy, behavioral health providers, and preventive medicine teams conducted regular rotations and assessments of all base camps throughout the BCT's area of operations.

While the majority of the effort contributed to sustaining the 2nd Brigade, the 407th performed some missions to directly support the humanitarian assistance mission and restore stability to Haiti. We dispatched one of our medical operations officers to work with the BCT S-9 and the U.S. Agency for International Development to gain approval to transport humanitarian assistance supplies whenever possible. We moved 135,080 pounds of rice, 3,960 humanitarian daily rations, 59,712 bottles of water, 300 survival kits, 200 single tents, and 8,000 shortwave radios. We also dispatched liaison-officer teams to two transfer locations to facilitate bulk distribution of rice and other goods during Operation Flood, Joint Task Force Haiti's initiative to issue larger quantities of food to families throughout Port-au-Prince. To overcome shortcomings in

this system, we established a quick reaction force designed to deliver contingency stocks of rice or escort "lost" host nation trucks. In two weeks, this team completed eight missions, securing 74 trucks and facilitating the delivery of 1,064 tons of rice. Finally, we collaborated with the 2nd Nepal Battalion to establish distribution point 12 in Petionville, located in south Port-au-Prince. This team of 12 soldiers from the battalion helped GOAL (a non-governmental charity organization from Ireland) feed 12,500 families in two weeks.

Major Expeditionary Lessons Learned

1. *Design, train, and maintain a method to out load the BCT and brigade support battalion simultaneously and validate and continually exercise this system well ahead of time.* Include all nodes supporting the BCT: trooper transport from unit areas, individual issue of ammunition, personnel manifesting procedures, and dedicated "push/pull" teams for moving containers and palletized equipment. Include support for both pure passengers with only "to accompany troops" baggage as well

as equipment with drivers. Critical to the readiness standard operating procedures is identifying the relationship with the arrival/departure airfield control group supporting the specific installation and understand the installation's external operating procedures. Immediately upon our redeployment, we constructed and validated a deployment tactical operations center designed to swiftly out load the BCT while maintaining situational awareness.

At the same time, develop a pithy playbook standard operating procedure for the minimum requirements: a battalion rear tactical operations center, a unit loading and control center, and a marshalling area for passengers. While the rear detachment must lead this effort, inevitably the brigade support battalion will have to commit deploying personnel to these activities. Specific manning will be the brigade support battalion's greatest challenge, as it will have to—

- Get Alpha Echelon (first responder) and command and control capability downrange into the fight.
- Synchronize the BCT out load through the rear tactical operations center.
- Out load the battalion itself.

The troop to task across these functions must be complete before the deployment.

2. *Preserve a culture of trained and ready movement leaders.* This is essential for simultaneously out loading the BCT and brigade support battalion rapidly. While it is critical to track and review the status of movement officers, the BCT must continually provide training in the form of movement exercises and hands-on scenarios, both announced and unannounced, to ensure units are movement-ready at a moment's notice. The BCT must conduct systematic leader training in unit movement procedures to maintain proper leader emphasis in these areas. All logistics officers and senior NCOs should gain and maintain proficiency on movement procedures to provide efficient deployment support. Units gain proficiency through inspections of movement plans, teams, and equipment during operational readiness surveys. Keep units in a rapid deployment frame of mind by regular inspections of unit basic loads of blocking, bracing, tie-down, protective wrap, and other materials required to rapidly prepare equipment for air or sea movement

3. *Maintain vigilance on capabilities and limitations.* Before beginning to expand capacity, units

All logistics officers and senior NCOs should gain and maintain proficiency on movement procedures...

must understand their current logistics combat power shortfalls. Over 60 military occupational specialties reside in the brigade support battalion, so this requires regular, in-depth review and discussion of current capabilities among leaders at all levels. Logistics units on the Global Response Force must know their specific shortfalls in terms of required capability and line and national stock number. It is very likely that the support battalion will receive rapid resourcing from other agencies in the event of a no-notice mission. At any time, commanders must be able to provide a wish list of items that contributing organizations can quickly procure. We were fortunate to receive collapsible water storage tanks from Army Materiel Command and general purpose tents from 18th Airborne Corps contingency stocks; however, we were not best postured to provide detailed lists on other specialized items. (After redeploying, I kept some of these wish lists in a folder by my phone.) We also transformed our command and staff into a readiness review group to hone in our limitations.

4. *Units performing expeditionary logistics will arrive in immature theaters and be required to rapidly build, provide for, and operate in the theater logistics architecture, even if for a short while.* To adequately prepare for this, units must train outside their assigned mission set and across the full spectrum of operations. To visualize these support requirements (and their magnitude), logistics leaders must draw from their own experience while simultaneously researching other deployments, then transfer this visualization into prioritized, extensive, creative, and well-resourced training. Examples of mission requirements may include:

- Arrival/departure airfield control group functions for personnel, equipment, and sustainment cargo.
- Vessel reception and download.
- Rotary wing aircraft refuel.
- Cargo break/trailer transfer.

- Theater medical services and supply support.
- Transient personnel life support.
- Distribution using austere methods, to include sling load, containerized delivery, and low-cost, low-altitude aerial resupply.
 - Water production from a non-natural source.
 - Temporary management of theater-level stocks for medical and other supplies.
 - Management of log base terrain requirements to include bottled water and ration pallet yards, field ration break points, central receiving points, ammunition supply points, and others.
 - Fabrication.
 - Container reception and distribution.
 - Environmental testing and identification of other hazards.
 - Higher-echelon maintenance on nonstandard weapons.

5. *Brigade support battalions must maintain a trained and ready contracting team that can immediately secure contracts upon arrival.* While all companies must maintain field ordering officer and pay agent teams to enhance organizational sustainment, the brigade support battalion contracting team focuses on expanding capacity to increase the BCT's operational reach. This capability implies a battle drill containing security, translators, and field ordering officer and pay agent teams with draft prioritized statements of work at the ready. The contracting team should pursue commodities that are continually required during expeditionary operations. Support and services that directly expand capacity are buses, container handling cranes, 40-foot trailers, lowboys and heavy equipment transport, land/warehouse space, refrigeration vans, power generation and electricity equipment, forklifts, fuel (both as a source of supply and for storage), and water (both transport and delivery). Further, the contracting team should target and secure vendors that can provide floodlights, gravel, and supplemental labor to facilitate and (indirectly) expand support operations.

The employment of this contingency contracting capability must begin with the support battalion's battle staff's military decision making process. The battalion S2 must provide leads for services through the logistics intelligence preparation of the battlefield. In a nonpermissive environment, the support battalion S3 may potentially coordinate with battle space owners for a key leader engagement

to initiate services. The battalion must validate the entire process, from planning to the team's proper employment to realistic home-station training and combat training center exercises.

6. *Maintaining in-transit visibility will be a challenge during expeditionary operations.* Initially, our primary means of strategic in-transit visibility was Blackberry communications with home station; we later gained access to the Single Mobility System and used it heavily to command and control redeployment. However, our deploying combat power battle tracking was largely manual. We were unsuccessful in utilizing data gathered from electronic communications systems such as radio frequency identification. A lack of movement control teams on the ground exasperated the situation. This area begs further research and experimentation. Units should be intimate with how to use in-transit-visibility services or other methods to digitally track and manage in-transit containers and equipment in austere environments.

7. *Water production and distribution proficiency must be a training priority for early-entry sustainers.* This battle drill is simultaneously critical and complex. It has a strategic impact in sustaining soldiers and freeing valuable air-cargo space, and requires specialists in water purification, preventive medicine, and power generation. Because water production teams often employ away from larger units, commanders must ensure this capability is built as a team and has the appropriate leadership, security, and communications to sustain operations and to cultivate synergy through challenging training exercises on tough terrain, specifically manmade, undeveloped deep wells.

8. *Formally build and maintain fieldcraft proficiency through individual and collective training.* Introduce training situations in which units have to develop field-expedient showers with corresponding gray-water management solutions. Regularly inspect field-sanitation kits and expedient-shower units.

Conclusion

Operation Unified Response validated the 407th Brigade Support Battalion's strengths while ruthlessly exposing its weaknesses. The sheer magnitude of the operation tested the battalion's readiness under conditions that could not be reproduced in training and underscored the need for visionary, creative, and disciplined leaders in expeditionary logistics. **MR**