

# Hurricane Katrina After Action Report

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**Nebraska Urban Search and Rescue Task Force One**  
September 18, 2005 through September 28, 2005

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Nebraska Task Force One  
1801 Q Street  
Lincoln, NE 68508

Phone: 402-441-8799

## Executive Summary

On Friday September 16 NE-TF1 received an Alert Order from FEMA to prepare our Task Force to deploy a Type I Task Force (70 personnel plus 10 ground transport drivers) for a second deployment to the Hurricane area. We began to roster a Type I team from our White Task Force Rotation. At 2217 on the 16<sup>th</sup> we received the Activation order for a Type I Task Force for response to the New Orleans area, this Activation Order was effective 0800 Saturday, September 17, 2005. We were directed to staff a 20 person Type I task force equipment transportation team. This team was made up of ten ground support personnel and ten members of our deploying Type I task force. They were ordered to arrive at Metairie, LA no later than 0600 Monday, September 19, 2005. The team Roster for the 20 person ground transport crew and the 60 remaining members was faxed to ESF-9 in the NRCC within the allotted time, we also faxed our 60 member manifest for the flight to ESF-9 a short time later. As our Type I cache is pre-staged on the trucks and our Type III cache components were just rehabbed and loaded, logistically the team was ready in less then 2 hours.

The 20 personnel for ground transport completed Medical Screening, were issued position equipment and briefed at our Logistics building on Saturday the 17<sup>th</sup> prior to leaving for New Orleans. They maintained contact with ESF-9 and Lincoln Fire and Rescue throughout their transit. At 0655 on September 18<sup>th</sup> NE-TF1 received the Activation Order for the remaining 60 personnel of our Type I Team effective 0800 Sunday, September 18, 2005. This order directed NE-TF1 to respond by air transport and arrive no later than 0600 Monday September 19<sup>th</sup> in Metairie LA. Logistics had arranged air transport through Premier Charter Network Inc. The aircraft was from Champion Air. All financial arrangements were approved through ESF-9 and the City of Lincoln. The remainder of the task force completed Medical Screening the morning of the 18<sup>th</sup>, all position equipment was issued.

The team boarded buses at 1100 for transport to the airport. NE-TF1 was wheels up at 1230hrs. Contact was maintained with ESF-9 and Lincoln Fire and Rescue at 2 hour intervals. The team arrived in New Orleans at 1415 and was transported by bus to the New Orleans Saints training facility which was the Base of Operations for this mission as established by the IST. Our ground transportation team had arrived approx 4 hours prior but was unable to establish the NE-TF1 BoO because the area was not vacated by demobilizing task force.

IST had arranged an over-flight of the city by helicopter. They had 2 helicopters available for 2 persons each. TFL selected 4 personnel to conduct an over-flight of the city. Pictures were taken during the flight to aid in planning.

IST briefings were scheduled for 0600, 1700 and 1900 daily. NE-TF1 attended their first briefing at 1700. IST objective for the mission was to conduct secondary searches of homes that meet the criteria established in an agreement with local parishes. This agreement allows forced entry into homes that have had at least 5.5 feet of water depth above the finished floor as measured from the outside of the house. Estimates by local authorities and Unified Command put the number at 22,000 homes that met the criteria.

Due to PA-TF1 not arriving on time, NE-TF1 was reassigned to Recovery Group and Special Ops. This operation required splitting into NE-TF1a and NE-TF1b. Recovery

Group was assigned to assist the private contractor Kenyon with recovery of H.R. (Human Remains) and Special Ops was assigned to respond to the back-log of 911 calls. We conducted these missions for 2 days.

On September 21, NE-TF1 was reassigned to search the West Golf Course Division. We maintained the 2 team assignments and divided the area in half for search ops. Our 4 Canine teams were reassigned by IST to FL-TF1 to conduct Canine search ops in the 9<sup>th</sup> Ward Division. On September 23, the West Golf Course Division was split into 3 divisions (Seattle, Lakeview and West Golf Course) due to the size of the area. NE-TF1 was assigned Seattle Division. MO-TF1 and FL-TF1 assigned the other 2. Due to flooding in the Seattle Division NE-TF1 was reassigned on September 25 to the Lakeview Division with FL-TF1, this assignment was completed. On September 26 NE-TF1 was assigned to the University Division with VA-TF2 to assist PA-TF1, our area of assignment was completed. On September 27 NE-TF1 was reassigned to the Robertson Division to assist FL-TF2, UT-TF1, CA-TF5. This assigned area was also completed.

On September 25, NE-TF1 demobilized 3 canine handlers and their dogs. The searches that remained were not conducive to Canine search and the handlers had all previously activated with the NE-TF1 Type III Task Force to Mississippi, the first week following Hurricane Katrina. Permission to demobilize these personnel early was given verbally by IST Leader Dewey Perks.

STS Larsen was demobilized on September 27 after he informed TFL Staberg that his employer was insisting NE-TF1 honor the MOU which stated in part that deployments would last no longer than 7 to 10 days. STS Larsen stated that his employer told him if he did not show up to work on September 28 he would be fired. Verbal permission was given by ESF-9 Leader Webb to demobilize Larsen who was transported by air home on the 27<sup>th</sup>.

The IST had requested assistance with personnel from the Task Forces. NE-TF1 was able to supply MTM Mlinek to IST Medical. His absence from the field did not impact task force operations significantly as we were not in 24 hour operations. MTM Mlinek was sent as a member of the Advance IST Team to establish a Spike Camp in Lake Saint Charles LA prior to Hurricane Rita land fall. He rejoined Camp Zypher IST when the Advance Team returned a couple of days later. STS Scott was requested by the IST to assume IST Structural Specialist duties. He helped evaluate levee conditions and coordinate information exchange with the Corps of Engineers. CSP Davis and CSP Doehling were requested by IST Comms. They assisted with repeater placement and repair throughout the city of New Orleans to help maintain communications during the incident.

All Task Forces along with the IST were tasked with implementing contingency plans for Hurricane Rita and possible evacuation. Evacuation Plans were drafted by IST for the evacuation of the BoO to safer inland areas if the Hurricane should appear to be making land fall in the New Orleans area. NE-TF1 was tasked along with the other task forces to prepare contingency plans in case of tornados. These plans were given to the task forces prior to arrival of Hurricane Rita. Rita hit west of our location. Storm surge caused some further levee failures and flooded the 9<sup>th</sup> Ward, Robertson and Seattle Divisions again. Due to dangerous conditions and levee failures NE-TF1 was forced to retreat from the Seattle Division after our force protection was pulled from the area. 9-24 was a stand down day ordered by IST until conditions could be assessed. Levee failures

were being controlled by the Corps of Engineers and search ops were resumed on the 25<sup>th</sup>.

Search Ops were suspended on September 28 with mission complete 22,264 secondary searches were completed by US&R assets. All assigned areas completed. PA-TF1, VA-TF1 and VA-F2 assigned to special ops, all other task forces beginning demobilization process.

September 28, 2005 was a stand down day for NE-TF1, cache was repacked for transport home. NE-TF1 talked to IST leader about having ground transport leave on the 28<sup>th</sup> so they would be able to arrive at POA approx same time as the rest of the team that flies home. This would allow them to participate in the welcome home ceremonies. IST approved this plan. NE-TF1 ground transport vehicles with 8 personnel left Zypher Base at 1000 hours of the 28<sup>th</sup>; they maintained contact with ESF-9 NRCC and Lincoln Fire and Rescue on 2 hour intervals. There was a planned stop in St. Lewis MO for over night and continued to Lincoln on the 29<sup>th</sup>. The Ground Transportation Team arrived in Lincoln at 1400 hours 9-29. At 1230 hours on the 29<sup>th</sup>, IST Leader informed NE-TF1 that air transport had been arranged and the team needed to be at Gulf Port Mississippi airport by 1400. The team was loaded on buses for transit to Gulf Port. NE-TF1 was wheels up at 1700 from Gulf Port, maintained contact with ESF-9/NRCC every 2 hours. Arrived Lincoln at 1900 and reported to ESF-9/NRCC that NE-TF1 was home from mission. Loaded buses for transport to Logistics Building at 1915 hours. Arrived at Logistics Building 1935 hours to welcome home from families.

CISD conducted on 30<sup>th</sup> for all personnel. Cache rehab operations will commence on 10-3 to prepare NE-TF1 for deployment to next mission. After Action Report was compiled over the next couple of weeks with a draft version ready for TFL's prior to the 15<sup>th</sup>. Executive Summary completed by TFL's and final version of AAR completed and submitted to FEMA prior to October 29, 2005

# TASK FORCE OPERATIONS

The activation process for NE-TF1 to Hurricane Katrina, the second deployment, went smooth as the pre-rostered team concept seems to improve the process. The team was able to obtain air transport quickly and cost effectively for our flight to Hurricane Katrina. The ground contingent and cache arrived prior to the remainder of the team. The team assembled at assigned area and established NE-TF1 BoO.

On Site Operations went smoothly. There did seem to be a lack of assignments that when a task force completed a mission they could not be reassigned quickly to another. This may have been due in part to a lack of reliable communications, the repeater systems kept failing and the new Motorola Radios on simplex channels have no range. We were unable to communicate even a few blocks without the repeaters. The frequency system now in use also prevents individual US&R Teams from operating their old repeaters. This should be a priority problem. US&R Teams when operating in disaster area with limited or non-existent cell phone service need a radio system that they can rely on! This mission was mostly a search mission with no rescue needed during our deployment. The type I configuration with ground transport personnel enabled TFL's to organize many smaller, mobile search elements. These smaller search elements were able to search more efficiently although more hand tools (haligan bars etc.) were needed for this type of configuration.

Some issues arose during NE-TF1 demob. We waited for information about our departure, then we were given 45 minutes to load 2 buses and travel 75 to 100 miles to Gulf Port to catch a plane. The distance to travel did not allow us to arrive on time. Demob Orders were not provided to NE-TF1 personnel at Zypher Field. Orders were faxed to our program manager in Lincoln. These orders contained conflicting information regarding personnel rehab time and cache rehab time. IST had indicated 72 and 800 hours respectively for rehab. The conflict was resolved before the team was released to rehab.

# Task Force Support

Task Force support from our program management, local officials, families and E.A.P. was excellent. Lincoln Fire and Rescue officials work with our local Employee Assistance Program to provide support for the families of deployed personnel. A family packet of information and contact phone numbers is mailed to families upon deployment of the team. This gives all family members the information of who to contact for information about deployed members, and who can provide any assistance necessary during the time NE-TF1 is deployed. Family conference calls are held each day to provide a unified source for information; one of the deployed TFL's will participate in the conference call to answer questions. We were able to procure a charter aircraft for team transportation to the deployment with little problem. This is due to the excellent working arrangements we have with our City Officials, Purchasing Dept and Fire Dept Administration.

While on deployment we had support from the IST. The Base of Operations at Zyper Field was already established when we arrived, the facilities were excellent with adequate space, food and laundry facilities in place. The arrival of Hurricane Rita caused us to have to tear down our Task Force BoO due to high winds.

Placing 500 plus people into the field house was trying at times but workable. Logistics support was good and kept most supplies available throughout the deployment. FEMA could make the process for procuring aircraft to move US&R assets much more streamlined, this was a problem during our demobilization.

**FEMA NATIONAL US&R RESPONSE SYSTEM  
INCIDENT SUPPORT TEAM**

**TO:** FEMA Program Office  
Section

**FROM:** NE-TF1 Planning

**RE:** After Action Report

**DATE:** 10-28-05

**STATEMENT OF ISSUE**

Transportation by Charter Air

**BACKGROUND DISCUSSION**

For the second deployment of NE-TF1 to Hurricane Katrina, NE-TF1 Type I Team was transported by Air travel to New Orleans LA. This decision allowed the team to arrive rested and ready to work. Ground travel for such long distances reduces the effectiveness of US&R assets. The cost of air travel was less than what it would cost to pay team members and back fill for the extra time involved in ground travel.

**RECOMMENDED ACTION**

FEMA program office should consider air travel for all US&R deployments of 500 miles or more. This will allow the teams to arrive rested and ready to begin mission. There would also be a significant savings to the system. If FEMA maintained pre-existing contracts with air carriers there should be no delay in obtaining aircraft for transporting teams to disaster sites.

**ASSIGNED RESPONSIBILITY** (This section will be completed at the formal After Action Meeting)

**FEMA NATIONAL US&R RESPONSE SYSTEM  
INCIDENT SUPPORT TEAM**

**TO:** FEMA Program Office  
Section

**FROM:** NE-TF1 Planning

**RE:** After Action Report

**DATE:** 10-28-05

**STATEMENT OF ISSUE**

Temporary Reassignment of Personnel to IST

**BACKGROUND DISCUSSION**

Due to the number and length of deployments of IST teams to hurricanes, they were experiencing difficulties with staffing. The IST had requested assistance with personnel from the Task Forces. NE-TF1 was able to supply MTM Mlinek to IST Medical. His absence from the field did not impact task force operations significantly as we were not in 24 hour operations. MTM Mlinek was sent as a member of the Advance IST Team to establish a Spike Camp in Lake Saint Charles LA prior to Hurricane Rita land fall. He rejoined Camp Zypher IST when the Advance Team returned a couple of days later. STS Scott was requested by the IST to assume IST Structural Specialist duties. He helped evaluate levee conditions and coordinate information exchange with the Corps of Engineers. CSP Davis and CSP Doehling were requested by IST Comms. They assisted with repeater placement and repair throughout the city of New Orleans to help maintain communications during the incident.

**RECOMMENDED ACTION**

While the assignment provided invaluable experience for our personnel and even though NE-TF1 is a strong proponent of the IST the reduction in personnel from key positions on our task force places additional responsibilities on the remaining members. Therefore it is recommended that the IST increase it's staffing to allow a minimum of 3 deep on the roster.

**ASSIGNED RESPONSIBILITY** (This section will be completed at the formal After Action Meeting)

**FEMA NATIONAL US&R RESPONSE SYSTEM  
INCIDENT SUPPORT TEAM**

**TO:** FEMA Program Office  
Section

**FROM:** NE-TF1 Planning

**RE:** After Action Report

**DATE:** 10-28-05

**STATEMENT OF ISSUE**

Deploying US&R Task Forces with inadequate communications capabilities.

**BACKGROUND DISCUSSION**

For the Hurricane Katrina deployments the program office directed the task forces to deploy with their new P25 capable Motorola radios. This was not a problem for the Type III task forces but due to the fact that not all the radios have been distributed to the task forces it forced a Type I task force to only have 55 radios. This is an unacceptable risk when deployed in areas that required force protection to always be present. The approach of Hurricane Rita, again presented an unacceptable risk to task force members without having a constant link to safety information.

**RECOMMENDED ACTION**

Do not require task forces to deploy without adequate communications capabilities. Either supply enough radios for task force operations or allow task forces to continue to use the radio equipment we all have on hand.

**ASSIGNED RESPONSIBILITY** (This section will be completed at the formal After Action Meeting)

**FEMA NATIONAL US&R RESPONSE SYSTEM  
INCIDENT SUPPORT TEAM**

**TO:** FEMA Program Office  
Section

**FROM:** NE-TF1 Planning

**RE:** After Action Report

**DATE:** 10-28-05

**STATEMENT OF ISSUE**

IST Logistics needs to secure Monitor Technicians and Support Items for HAZ-MAT Monitors.

**BACKGROUND DISCUSSION**

As dictated by HAZMAT Plan in the IAP – During secondary search operations ensure atmospheric monitoring of newly opened buildings as materials/vapors may have been trapped in the building present a hazard when the building is opened. Use monitoring equipment.

Atmospheric monitoring equipment sensors failed early on due to a mixture of various contaminants in area of operation. Replacement sensors were not readily available from IST Logs and were never able to be procured by IST Logs during the deployment. We had 75% atmospheric monitor failure during the deployment. NE-TF1 had this same issue during response to World Trade Centers after 9/11.

**RECOMMENDED ACTION**

Consider a process to secure monitor service technicians and support items on site at IST base of operations early on at any US&R incident to provide support to task force monitoring equipment.

**ASSIGNED RESPONSIBILITY** (This section will be completed at the formal After Action Meeting)

## **Best Practices/Lessons Learned**

Arrival at New Orleans LA. was well coordinated. IST had established procedures for transportation, assignment of BoO area, food/water distribution, sanitary facilities etc. We were met by IST Leader on arrival at Zypher Field. They had scheduled a helicopter fly-over of area that was very useful in understanding the scope of the operations. The mission for this deployment had been established prior to our arrival, numerous task forces had developed search methods and team structures that allowed the greatest number of secondary searches to be completed in a given operational period. Those teams that had been demobilized took that information with them. Had there been a procedure for leaving lessons learned for the arriving teams to look at, the development of search procedures time would have been lessened.

The IMT/IST did keep information flowing to us most of the time. There were times that the Corps of Engineers was called to a possible problem with one of the levees as noted by a STM from a US&R Task Force. This information did not appear to be taken serious and US&R assets were told that the levee was ok and this was normal. It was not to much later that the levee failed. Maybe more needs to done to inform these other assets of the capabilities of US&R Task Forces.

Communications was always a problem, cell phone service was not reliable, the new P25 radios do not function very well without a repeater. These radios have less range then the old radio system we had (BK's). There were some important issues, namely the "Booby-Traps" that were supposedly found in some homes. This information was first learned from task forces in the field or force protection personnel rather then the IST.

The IST TDYed personnel from our Task Force to fill positions. This seems to support the need for expanded IST rosters. The use of NE-TF1 personnel on the IST provided a tremendous learning opportunity for them and benefit for our team. The downside was a reduction of our capability to support Task Force operations. The potential for numerous IST deployments during hurricane season supports the need for expanding the IST pool to allow for staffing.

# Cache Management/Equipment Performance Report

NE-TF1 deployed as a Type I Task Force with a compliment of 70 task force members and 10 support personnel for a total of 80. The compliment of equipment included a complete Type I equipment cache with WMD and Water Rescue PPE equipment, and the new 2<sup>nd</sup> cache of 55 portable radios. The vehicle fleet consisted of (2) Semi-Tractors w/48' trailers, (2) 24' Temperature Controlled Van Body Trucks, (2) Suburbans, (2) Crew Cab 4 x 4 Pickups, and (2) Kawasaki utility vehicles. A ground support team of 20 personnel activated on September 17 to transport the cache and vehicle fleet to the New Orleans Saints Training facility in Metairie, LA. The remaining 60 personnel were airlifted via charter aircraft on September 18 to the Louis Armstrong Airport in New Orleans, LA. NETF1 contracted with (1) motorcoach and was provided a second coach by the IST for personnel movement for the duration of the deployment.

NE-TF1 deployed with its complete first cache (old cache), and cache of 55 portable radios from the new 2<sup>nd</sup> cache that meet DHS-FEMA guidelines for P-25 compliance. The task force identified that halligan-type bars would be needed to conduct forcible entry so a small quantity of them were acquired from fire department sources to supplement the cache. The new cache is not complete as a Type I cache, and no other new 2<sup>nd</sup> cache items were deployed with the task force.

## **Cache Management**

A complete Base of Operations was established and coordinated by logistics. Cache management was coordinated by logistics. The task force was tasked with dividing into 2 groups, one as a rapid response unit for rescue and the other to assist with body location and recovery efforts. A compliment of rescue and extrication equipment was identified and staged on one of the 24' refrigerated van trucks for the rapid response team. A compliment of search/recon/rescue equipment was identified for use and staged on the other 24' refrigerated van truck for the physical search and body recovery team. All cache items were managed from these trucks when operating in the field. The remainder of the cache was staged at the base of operations. After the first day of operations, both teams were assigned to physical search and body recovery operations and would be tasked in the same geographical area. The 24' refrigerated van truck previously utilized for the rapid response team was reconfigured to provide task force support during operations. This van truck was utilized as a basic needs support vehicle to maintain and transport lunch, water, and electrolyte-type drinks. The task force was able to maintain temperatures of at or below 32 degrees Fahrenheit in this truck so was able to maintain ice and all food and fluid items. Most replacement/support items were procured/provided by IST logistics, but some items needed to be purchased off site as the IST logistics did not have the items to adequately meet task force needs. NE-TF1 located other local resources to purchase some needed items.

## **Equipment Performance**

The task force compliment of equipment performed as follows:

### Vehicle Fleet

All vehicles are new and performed well during transport and for on-site use. 48' curtainside trailers allow for easy access to all components of the equipment cache without having to unload the entire trailer. The temperature controlled 24' van trucks are invaluable for continued support of task force ice, food, water, and weather sensitive items and should be a standard items for all TF's. Temperature controlled trucks can also be used for personnel rehab if needed. Light utility 4 x 4 vehicles used for command and support. Small Kawasaki utility vehicles (Mules) invaluable for transport of personnel and equipment from area to area at base of operations or during on-site operations.

### Base of Operations

Due to the heat and humidity, the conditions inside the western shelters were untenable until air conditioning was acquired. NETF1 installed insulation kits in all tents during set-up and acquired several air conditioning units from IST logistics. These few units were installed into the Command & Medical tents. The units were not capable of maintaining an adequate temperature in the medical tent and NE-TF1 logistics procured 12 additional air conditioning units from a local Home Depot. The medical tent was set up with appropriate air conditioning and all remaining tents managing TF functions were equipped with air conditioning.

Due to deteriorating weather conditions as Hurricane Rita approached, NETF1 was forced to demobilize the base of operations. This was not until a short microburst of bad weather caused some damage to tent frames due to high wind conditions. This damage was reported to the accountable property officer on site.

NE-TF1 also had 2 generators that become inoperable due to mechanical malfunctions. Additional generators were acquired from IST logistics but these were of poor quality and also failed just shortly before the base of operations was demobilized.

Use of forklift from IST logistics was sometimes difficult due to only 2 forklifts on site and numerous agencies needing to use them. Task force needs own forklift that can be transported with cache.

### Communications

No capability for local phone or internet service was available at the base of operations site. Phone service lines were not available to connect TF phone equipment. The status of the current equipment cache does not provide the capability for internet access.

The task force cache does not currently contain any repeater or base station equipment compatible with the P25 portable radios that the task force was directed to bring and to use. Base station and portable radio repeater equipment would have been beneficial for communications from the base of operations to the field and during on site operations. In many instances, the portable radios did not provide adequate communications within even short distances between the operating teams. Radio communications between the field and the task force base of operations were non-existent in the beginning but were

eventually established as the IST Comm unit established additional repeater systems in the area.

Cell phones did not provide 100% reliability for communications. Only satellite phones provided almost 100% reliability.

### Field Operations Equipment

Operations included mainly the forcible entry and physical search of residences and structures in the assigned areas for survivors and/or victims.

Due to the conditions in the affected areas, personnel were required to wear water resistant, hip wader-type boots. These boots were provided by IST logistics but all sizes were not available. Some were fire type boots with sole plates and toe protection but many were not. The inappropriate sizes led to many foot and ankle problems from blisters and abrasions to leg skin surfaces. Some hip waders did not include puncture resistant soles and several wounds occurred from objects penetrating through the boots. IST logistics later provided puncture resistant inserts for the hip waders, but they were limited at best and provided no toe protection from items that may have fallen onto a TF member's foot.

Atmospheric monitoring equipment sensors failed early on due to mixture of various contaminants in debris field. Replacement sensors were not readily available from IST logistics and were never able to be procured by IST logistics during our deployment. We brought 8 monitors with us and by the time we left we only had 2 that were operational.

Decon capability during the first few operational periods was inadequate due to the lack of appropriate decon equipment. The equipment cache does not include appropriate decon equipment for the conditions experienced during this deployment. IST logistics was contacted and a small decon system was provided. This small decon system did not adequately decon the sticky muck and mud from the PPE and equipment used during operations. NE-TF1 logistics procured (2) 2800 psi gasoline-powered pressure washer/sprayer units to conduct proper decon of equipment when the task force returned to the base of operations.

The task force brought a small number of halligan-type bars for conducting forcible entry. Due to the amount of area assigned, and the ability to break out the TF into groups of 3-4, additional halligan-type bars and sledge hammers were needed. Initially, only a few sledge hammers and no additional bars were available from IST logistics. NETF1 utilized other pry bars stored in the cache, but they were not appropriate for the operations being conducted. By about the 7<sup>th</sup> day of operations, IST logistics was able to provide some additional sledge hammers and halligan-type bars.

The task force used large quantities of spray paint for marking structures. The current equipment cache does not include enough spray paint for one operational period of these types of operations. Fortunately, IST logistics had plenty of spray paint. Most of it is turn down-type paint. Regular upright spray point is more appropriate for marking structures.

### Recommendations

1. Appropriate air conditioning units identified and added to equipment cache list for hot weather conditions.
2. One large trailer mounted generator for base of operations. Allow unit with 40Kw minimum capability, Whisperwatt design, large fuel capacity, with appropriate master junction boxes. May be installed on existing trailer equipment or allow addition of another semi trailer that can be pulled to site by contract carrier. Identify specs and add to cache equipment rolling stock. Purchase of one large generator will replace a number of smaller generators in cache. One large generator is approx \$25,000.00. Each small generator currently is approx \$3500.00. Better capability and service from 1 large generator at the base of operations. Use smaller ones for field operations.
3. Provide additional capability for communications. P25 ready base stations and repeaters, satellite internet access equipment, and hand held satellite phones instead of cell phones.
4. Issue fire service-type hip wader boots with proper protection to all TF members as part of standard issue equipment. Add to personal gear list of items on equipment cache list.
5. Improve decon capability within task force equipment cache to include gas powered pressure sprayers for cleaning PPE and equipment.
6. Consider process to secure monitor service technicians and support items on site at IST base of operations early on at any US&R incident to provide support to TF monitoring equipment. NE-TF1 had this same issue during response to World Trade Centers after 9/11.
7. Add halligan-type tools and more sledge hammers to equipment cache list. Need at least 8 of each of these for these types of operations.
8. Add more spray paint to equipment cache list. Identify upright paint for marking vertical surfaces on structures.
9. Allow transport and use of small utility vehicles (Kawasaki Mule, John Deere Gator, etc) by task forces. Allow purchase of small flatbed trailers for these vehicles to be pulled by 4 x 4 pick-ups.
10. Allow TF's to transport forklifts during deployment. Allow for purchase of support trailer to transport forklift. May be time to consider a support semi-trailer for the base of operations that includes the 40Kw generator and capability to transport/offload forklift by task forces.