

BY RAY DOWNEY

The first workshop to address the feasibility of instituting a National Urban Search and Rescue (US&R) response system convened in Seattle, Washington, in January 1990. Since

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The first opportunity to prove these "doubting Thomases" wrong came in the fall of 1992, when the National Urban Search and Rescue response system responded to hurricanes Andrew in Florida and Iniki in Hawaii and was placed on alert for typhoons Brian and Elsie in the Pacific Islands (Guam and the Mariana Islands). In fact, lessons learned from these inci-

dents, especially Hurricane Andrew, led to revisions in the FEMA national response system that have made it the most effective response team in the world.

BACKGROUND

A number of devastating earthquakes, such as those that had occurred in Mexico City and Soviet Armenia, had heightened the awareness of rescue teams around the world to the challenges disasters of this magnitude presented to them. But it was the Loma Prieta (often referred to as the "World Series") earthquake that provided the impetus for forming a National Urban Search and Rescue network.

Beginning with the first workshop

FEMA US&R TEAMS

in 1990, a variety of national experts in the area of urban search and rescue met on a number of occasions before the 25 national teams were selected in September 1991 (see the October 1990 and May 1992 issues of *Fire Engineering*).

FEMA had been severely criticized for its slow response to disasters and emergencies, and this federal response plan is designed to address the consequences of any disaster or emergency situation that warrants federal response assistance. This plan uses a functional approach to group the types of federal assistance a state is most likely to need under the 12 Emergency Support Functions (ESFs): transportation, communications, public works and engineering, firefighting, information and planning, mass care, resource support, health and medical services. US&R, hazardous materials, food, and energy. Each ESF is headed by a primary agency chosen according to its authority, resources, and capabilities appropriate to a particular functional area. Urban Search and Rescue is under ESF #9, the scope of which includes locating, extricating, and providing immediate medical treatment to victims trapped in collapse situations. The President of the United States offers the federal assistance to any affected state.

NUMEROUS DISASTERS

During the period from October 1991 to October 1992, FEMA had declared more than 50 disasters. On Sunday, August 23, 1992, fearing that Hurricane Andrew would hit the Miami area, FEMA placed 17 US&R task forces on alert, which allows teams to begin to prepare for activation and mobilization. When activated, the teams are required to meet a six-hour call-out requirement: They must report to their point of departure with equipment and manpower within that time.

In addition to alerting the teams, FEMA notified Dade County, Florida, that the US&R teams were on alert and that a request from the state was all that would be required for their response. The hurricane hit, and FEMA continued to remind the government of Florida that the teams were available, but a request for their services never came.

On Monday, August 24, FEMA took all but five of the 17 alerted task forces off alert; and when no request from the state of Florida had been received by Tuesday, August 25, only two task forces were kept on alert. These two teams, New York City and Montgomery County, Maryland, were kept on alert until Saturday, August 29.

TECHNICAL ADVISORY TEAM

On Thursday, August 27, FEMA organized and deployed a five-man Technical Advisory Team (TAT), of which I was a member, to Florida. This was the first use of a TAT. Its mission was to coordinate with the defense coordinating officer and to assist local officials in determining the need for urban search and rescue services. Since the assessment did not take place until more than 72 hours after Hurricane Andrew had hit land, the need for urban search and rescue teams had diminished. The TAT recommended that the teams not be deployed. The last two teams were taken off alert at 0630 hours on Saturday, August 29.

TAT team members observed that the task forces could have been used during the early days of the disaster. As part of the TAT, I witnessed the many challenges rescuers faced during this devastating disaster. A tip of the hat to all those who performed so valiantly during a most trying time.

TAT members noted that the state of Florida did not request FEMA assistance for several reasons, including the following:

- The state of Florida was reluctant to assume the 25 percent cost-share of the teams' deployment; this became a moot issue several days later when the President waived the payment.
- The Department of Defense official in charge lacked full knowledge of

the ESF #9 Urban Search and Rescue component of the federal response plan and the assistance it made available through the Disaster Field Office. This limited the federal government's ability to provide the state of Florida with valuable information pertaining to the capabilities of the task forces.

• The state also lacked knowledge of the national US&R program, despite the fact that the state of Florida sponsors one of the 25 funded task forces in FEMA's National US&R Response System, Ironically, this team is in the hurricane-hit Dade County area.

The TAT made a number of recommendations, the most significant among them was that the scope of the task force be expanded from medium to heavy search and rescue in collapsed structures to include all appropriate aspects of first responder support, such as the following:

- provide lifesaving support and humanitarian assistance;
- help direct people to required services such as medical assistance, food, water, shelter, and other recovery services;
- clear streets and highways of trees and other debris;
 - · assess damage and needs; and
- help local officials coordinate their disaster response efforts.

The TAT also emphasized the need to educate members of the Department of Defense, FEMA-headquarters and regional staffs, and state and local governments with regard to the potential uses of the task forces and the importance of quickly committing them for US&R or other first-response activities within disaster response operations. This would mean prestaging the groups in the area so that they could be deployed as soon as the affected state and local jurisdictions identify a need for them. The TAT also pointed out the need to formally educate the 33 states without staterun programs on FEMA's US&R response system.

The TAT suggested that two task forces be prestaged in an area close to the area predicted to be affected. These changes in the US&R response system recommended to FEMA would

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be used for future incidents that could be foreseen, such as hurricanes, typhoons, and similar potential disasters. Obviously, they could not be used for earthquakes or other disasters that do not give forewarnings. FEMA approved the changes, which were implemented for future disasters.

THE REVISED SYSTEM

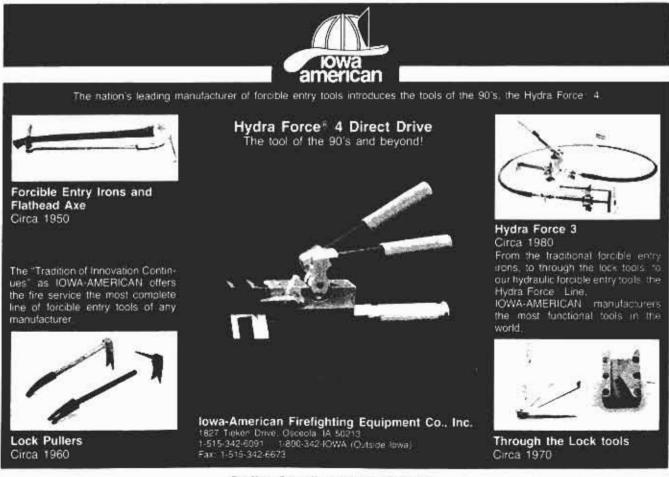
FEMA approved the recommendations, and on September 11, less than two weeks after Hurricane Andrew had struck, FEMA was able to use these recommendations as well as the lessons learned. The National US&R response system was activated for a second time as Hurricane Iniki roared toward Hawaii. FEMA decided to position resources in Hawaii so that they could be used when it was determined they would be needed. On Friday, September 11, FEMA activated two US&R task forces from Los Angeles County and Menlo Park, California. (Note: California has eight US&R teams in the national response system; they rotate on a monthly basis in accordance with the preferred order in which teams are to respond.)

In addition, a TAT comprised of a leader representing the federal government and four specialists-one each in the search, rescue, medical, and technical areas-was created. The TAT coordinated and facilitated the transfer of the incoming task force to an appropriate staging area and worked with the Department of Defense and the deputy federal coordinating officer for response to devise an appropriate plan for their use to present to the state of Hawaii. After the task forces arrived in Hawaii, they were staged at Hickam Air Force Base. The TAT met with the Los Angeles and Menlo Park teams and developed a list of 15 activities they could undertake-such as the first responder support functions listed earlier. Members of the TAT and task forces traveled to the affected island, Kauai, to meet

with local officials to survey its needs. The Hawaiian government determined that there was no need for urban search and rescue, but it agreed to consider other assignments for the task forces, such as assessing damage and needs and assisting local disaster officials.

One task force was demobilized and sent back to California. Two days later, TAT personnel and the other task force returned to California. Although the task forces were not used, the state of California, TAT personnel, and the task forces agreed that the mission set an important precedent and provided many very valuable lessons learned for refining the National US&R response system—for example, the need for the TAT, for predeployment, for retooling and refining tool/equipment needs, and for educating state/local officials regarding US&R.

In addition, the federal government had proactively placed critical, lifesaving resources within the reach of the Hawaii state government if the state had decided they were needed.



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TYPHOONS

One month later, Typhoon Brian threatened Guam and the Mariana Islands. Again, FEMA activated the Orange County (CA) US&R task force. The plans were to predeploy the task force for staging in Hawaii until the storm had passed over Guam. A TAT was immediately deployed to Hawaii. On the same day, an earthquake measuring 4.7 on the Richter scale led the state of California to issue a Level A earthquake alert, based on U.S. Geological Survey and California state projections that this quake might lead to a major quake on the San Andreas fault. The California Office of Emergency Services then requested that the Orange County task force be deactivated in the typhoon operation and return to California to ensure that all eight of the state's US&R teams would be available should a major earthquake occur. The Puget Sound task force out of the Seattle/Pierce County area in Washington state was selected to replace the Orange County task force

All indications were that Typhoon Brian would have an impact similar to that which Hurricane Andrew had in Florida, and it was expected that the task force would be used this time. As the task force finished loading its equipment on the military aircraft and waited for take-off, the storm passed Guam and caused relatively minor damage. The task force was demobilized, and the TAT returned from Hawaii.

During November, Typhoon Elsie threatened the Pacific Islands. FEMA selected TAT members and the New Mexico US&R task force for possible deployment. During preliminary discussions with the New Mexico task force, the typhoon unexpectedly changed course, eliminating the need for the task force. FEMA quickly deactivated all components of the response plan.

LESSONS LEARNED

The responses to these incidents

clearly demonstrate FEMA's commitment to implement the national US&R response system as part of its immediate response package. The lessons learned from Hurricane Andrew were used to improve the responses to Hurricane Iniki and Typhoon Brian.

The system works; it must be used. The state of Florida did not request US&R help from FEMA. That doesn't mean help wasn't needed. Media coverage certainly verified that it was. Early deployment of task force teams to the Florida area would have provided additional assistance to the rescuers in Dade County, who had their hands full and who did a remarkable job.

Mobilizing the task forces for Hurricane Iniki and Typhoon Brian proved to be a valuable lesson for all the teams involved. These teams had to use their call-out procedures and meet equipment packaging, staging, and manpower requirements in a specified time frame for deployment—not a very easy task when the equipment cache includes six to seven pallets weighing up to 10 tons each, personal gear for 56 team members, and canines.

The concept of sending a TAT proved valuable during these operations. Predeployment, when possible, is a must. Having task forces ready to assist local jurisdictions when disasters occur undoubtedly will save lives. Identifying and expanding the scope of the task forces to include all appropriate aspects of first-responder support will result in a national response system whose performance will surpass that of any other emergency response team in the world.

* * *

In December 1992, all 25 task force leaders met to exchange information and lessons learned from the various hurricane and typhoon incidents. The meeting represented one more step up the ladder that will lead to a well-organized, effective, and functional national response system.

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