



Building a Homeland Response Force Joint Operations Area

*How to create an effective consequence management system
to support homeland security efforts*

A White Paper

EXECUTIVE SUMMARY

Since the attacks of September 11, 2001, the United States has placed a greater emphasis on homeland security than ever before. The continuous development of advanced weaponry and biological agents as well as large-scale natural and accidental catastrophes, such as Hurricane Katrina in 2005 and the recent BP oil spill, have made it clear that officials must be ready to respond to a wide range of disasters.

At the forefront of increased homeland security efforts has been a growing synergy between civilian agencies and military forces, primarily members of the National Guard. From Chemical, Biological, Radiological/Nuclear, and Explosive (CBRNE)-Enhanced Response Force Packages (CERFP) to Weapons of Mass Destruction Civil Support Teams (WMD CST), the National Guard has implemented several programs to assist state authorities in the event of a widespread emergency.

The Department of Defense (DoD) has now once again expanded its homeland security operations with the creation of the Homeland Response Force (HRF), which was first initiated in the 2010 Quadrennial Defense Review Report. Expected to be established in each of the country's ten Federal Emergency Management Agency (FEMA) regions, HRFs will enhance the National Guard's ability to respond to disaster by bringing a range of capabilities – command and control, medical, search and extraction, decontamination and security – to the incident scene.

Such a wide range of responsibilities, however, will require HRFs to have equipment, primarily the facilities in which they will execute operations, that is as versatile as they are. For that reason, HRF members must create a system that can be rapidly deployed whenever and wherever disaster strikes.

EXPANDING HOMELAND SECURITY: WHY NOW?

Events of the past decade have forever erased the mindset that the United States, seemingly protected by two oceans and its vast size, is immune to homeland attacks. Such realization has also made it clear that in the event of a wide-scale natural or manmade disaster, coordination between civilian agencies and military forces is critical.

Past Efforts at Increased Capability

Though most often expected to play only a supporting role in disaster response, the U.S. Military has taken several significant steps to expand its homeland defense capabilities in recent years. In 2002, U.S. Northern Command (USNORTHCOM) was established to provide command and control to homeland defense forces, as well as to coordinate military support provided to civilian officials.

Likewise, the National Guard has implemented several programs designed to assist in homeland security operations, such as CERFPS, who provide immediate assistance in search and extraction, medical triage and decontamination, and WMD CSTs, who assist in the identification and handling of potentially dangerous materials.

Congress has made amendments to U.S. Code Title 32 to ensure that these and other such assets can easily and quickly be called upon to provide assistance through either the Department of Homeland Security or a State’s Governor.

A Need for Better Coordination

While efforts made by the U.S. Military and federal government have helped improve consequence management capabilities in recent years, real-life disasters have proven that there are still pitfalls in coordination between military and civilian authorities. In 2005, for example, confusion over command and control authority hindered response efforts during Hurricanes Rita, Wilma and, most notably, Katrina.

Many also fear that the current response times of most National Guard packages would not suffice in the event of a surprise attack or multiple simultaneous disasters.

Such drawbacks coupled with the continuously growing threat of terrorism against the United States have made it clear that more robust response forces must be established.

Hurricane Katrina's Destruction and Requirements Look Similar to What the Country Might Face in Future Scenarios						
	Hurricane Katrina	Radiological Attack	Nuclear Detonation	Biological Attack: Anthrax	Biological Attack: Plague	Natural Disaster: Major Earthquake
Scenario	A large hurricane hits the Gulf Coast; a storm surge floods 80 percent of New Orleans	A dirty bomb containing cesium-137 is detonated in a moderate-to-large city	A 10-kiloton improvised nuclear device is detonated in the business district of a large city	Aerosolized anthrax is released in a major urban area	Pneumonic plague bacteria is released in 3 main areas of a major city	An earthquake measuring 7.2 on the Richter scale hits a major metropolitan area and is followed by an 8.0 aftershock
DESTRUCTION						
Fatalities	1,349	180	Widely variable; possibly tens of thousands	13,000	2,500	1,400
Infrastructure	93,000 square miles	Transportation severely hampered by checkpoints; extensive contamination of about 36 city blocks	Total destruction within a radius of 0.5 to 1 mile; significant damage in a larger area	Minimal damage	No damage	150,000 buildings destroyed, 1 million damaged; significant transportation disruptions
Utilities	2.5 million without power	Some damage near the explosion	Electrical power and telecommunications out for a couple of weeks; damaged in 3-mile radius	Minimal damage	No damage	Widespread water, gas, electricity, and communication outages
REQUIREMENTS						
Evacuations	2,000,000	Downwind populations	450,000 or more	Possibly	Possibly	300,000 households
Medical	Casualty care	Screening and decontaminating thousands of evacuees	Decontamination and short- and long-term care for tens of thousands	Care for over 325,000 exposures	Care for over 10,000 ill victims	Over 100,000 injuries and 18,000 hospitalizations; many medical facilities damaged

While poor communication between military and state entities hindered response efforts during Hurricane Katrina, other disasters posing a threat to U.S. homeland security could prove to be even more catastrophic if not handled properly. Source: *Hurricane Katrina: Lessons for Army Planning and Operations, 2007.*

ESTABLISHMENT OF THE HOMELAND RESPONSE FORCE

Building on lessons learned from previous efforts at creating an effective and fully capable consequence management system, the DoD has called for a restructuring of its current homeland defense efforts in the 2010 Quadrennial Defense Review Report. Among the changes being made under this restructuring will be the implementation of a HRF in each of the country's ten FEMA regions.

Designed to increase the National Guard's operational flexibility and life-saving capabilities, each HRF will provide command and control to multiple CERFPs, WMD CSTs and other National Guard assets for a faster, more effective response during a disaster. Each HRF, which will be able to be called into an incident under U.S. Code Title 10, will also have a focus on planning, training and exercising at the regional level in an effort to help mitigate confusion between the various military forces and agencies often called in to work together during an emergency.

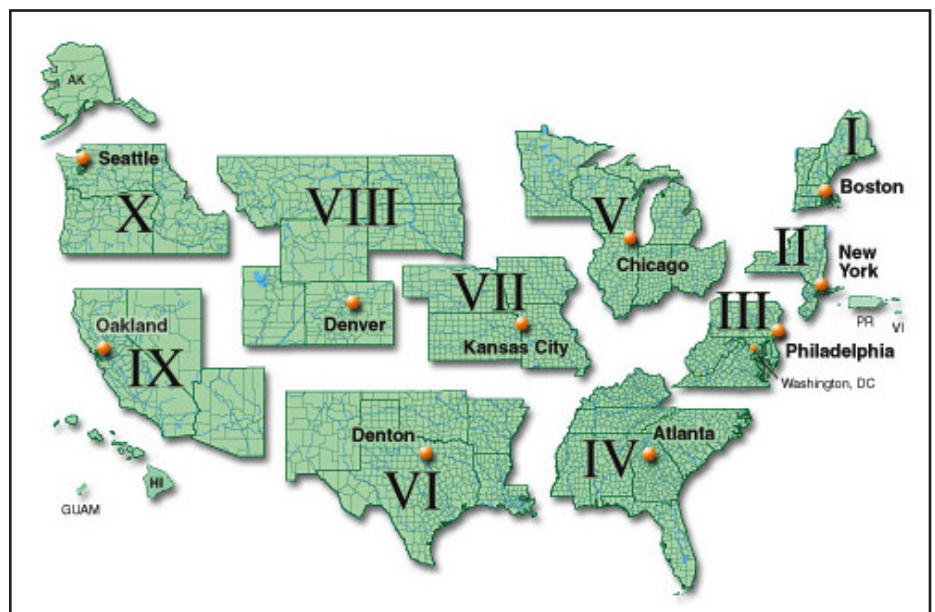
The new HRFs will be expected to have the following capabilities:

A fast response posture. At a time when many officials worry that current homeland response assets would not be able to respond quickly enough in the event of a sudden or widespread disaster, each HRF will be expected to have a 6 to 12 hour response posture.

Deployable via ground transport. Expected to respond to large-scale emergencies anywhere within their FEMA region, each HRF will be equipped to travel by ground to the incident site. Each HRF, however, should also be transportable by air if necessary.

A wide range of functions. Though each HRF is expected to bring command and control to existing agencies, they will also be equipped for various other functions. Personnel will be able to provide medical, search and extraction, decontamination and security capabilities at the incident site.

Coordinated communication. Because HRFs will provide command and control to various military assets while also working closely with civilian agencies, it is important that personnel be able to easily and quickly gather information from across the incident scene to properly coordinate and execute operations.



As called for by the 2010 Quadrennial Defense Review Report, a Homeland Response Force will be established in each of the country's ten Federal Emergency Management Agency (FEMA) regions. Source: U.S. Department of Homeland Security. "FEMA Regional Operations." August 2010.

THE NEED FOR AN EFFECTIVE HOMELAND RESPONSE FORCE CAPABILITY

Because HRFs will be expected to bring a wide range of capabilities to an incident scene, they will need to be properly outfitted with a system capable of supporting a diverse set of operations. One key element of this system will need to be a Joint Operations Area (JOA) equipped for all of an HRF's important functions.

When forming their JOA, each HRF must ask themselves if it has the following capabilities:

Rapidly Deployable. If HRFs are going to meet their short response posture, they must have facilities that can be set up quickly and easily. The ideal facility should not only feature a quick-erect design, but require limited loose parts and tools to further reduce deployment time. Additionally, the JOA should require minimal personnel to assist in set up, allowing the majority of forces to focus on actual response efforts.

Easily Transportable. Because they must be transportable via ground, HRFs will need equipment for their joint operations area that can be easily and quickly transported from one location to the next. In addition to meeting military requirements for ground transport, the equipment must also meet requirements for air transport in the event that an HRF must be moved via aircraft to the incident site.

Flexible Design. A JOA must have the proper space to support the wide range of HRF capabilities, from command and control to decontamination to search and extraction. The operations area must also be able to support the various support equipment that will be needed for each of these capabilities, such as communications gear, medical equipment and water heating systems.

Command and Control Ready. Finally, an effective joint operations area must feature command and control equipment that will allow personnel to receive data from various locations across the incident scene to make informed decisions and properly execute response efforts.

A Proven Solution

Though HRF personnel will have several requirements to keep



in mind when obtaining a Joint Operations Area for future use, shelter manufacturer HDT Global, known for its Deployable Rapid Assembly Shelter (DRASH), is offering a solution designed to meet an HRF's diverse needs.

DRASH has already been deployed by armed forces and emergency responders around the globe to support numerous disaster relief operations, including following the September 11, 2001 terrorist attacks, Hurricane Katrina and the 2010 natural disasters that devastated much of Haiti and Chile.

HOW DRASH CAN HELP BUILD A HOMELAND RESPONSE FORCE CAPABILITY

DRASH offers HRFs the first and only system created using equipment that has been fielded as part of the U.S. Army's Standard Integrated Command Post System (SICPS). The only program of record for a standard command post within the U.S. Army, DRASH equipment has already been deployed by National Guard combat brigades in all ten FEMA regions.

Using these tested and trusted shelters, HRFs can construct a Joint Operations Area and, subsequently, a consequence management system capable of supporting their numerous operations.

DRASH is...rapidly deployable.

Most DRASH shelters take just minutes to set up with minimal personnel. The basic DRASH design consists of a frame with two pre-attached covers and a ground cover. This means that setting up a shelter does not require special tools or dealing with loose parts. Additionally, each shelter's frame is comprised of pairs of struts that connect at key points in the framework called hubs. These hubs allow the shelter to be pushed up and out with no locking devices for quick set up or take down.

DRASH is...easily transportable.

DRASH shelters can easily be transported using a unit from the DRASH line of Utility Support Transport (UST) Trailers. Designed to operate in all terrain acceptable for military vehicles, DRASH UST Trailers conform to established "safe to transport" criteria by the Military Transport Management Command (MTMC) as suitable for "secondary and unimproved roads."



DRASH Trailers can also be towed by civilian vehicles and/or are certified for air transport aboard military cargo aircraft. Several trailers include genset outputs ranging from 5 kW to 33 kW and/or 5-ton, 8-ton or 12-ton environmental control units (ECUs) as well.

DRASH is...flexible.

Available in 61 models ranging in size from 109 – 1,250 square feet, DRASH shelters have been deployed for countless applications, including as command and control centers, medical facilities, decontamination systems and life support areas. DRASH shelters can also be connected to increase a facility's overall footprint.

A full line of shelter accessories: including generators, lighting, heating and cooling units ensure that personnel can integrate all of the equipment they need to complete their mission into the facility with ease.

DRASH is...command and control ready.

In addition to offering a line of accessories, DRASH shelters can also be equipped with Deployable Command and Control Equipment, or DC2E. Comprised of various-sized displays and audio-visual equipment, DC2E allows users to view multiple feeds of information on a single display system within the command center.



CREATING THE DRASH JOINT OPERATIONS AREA

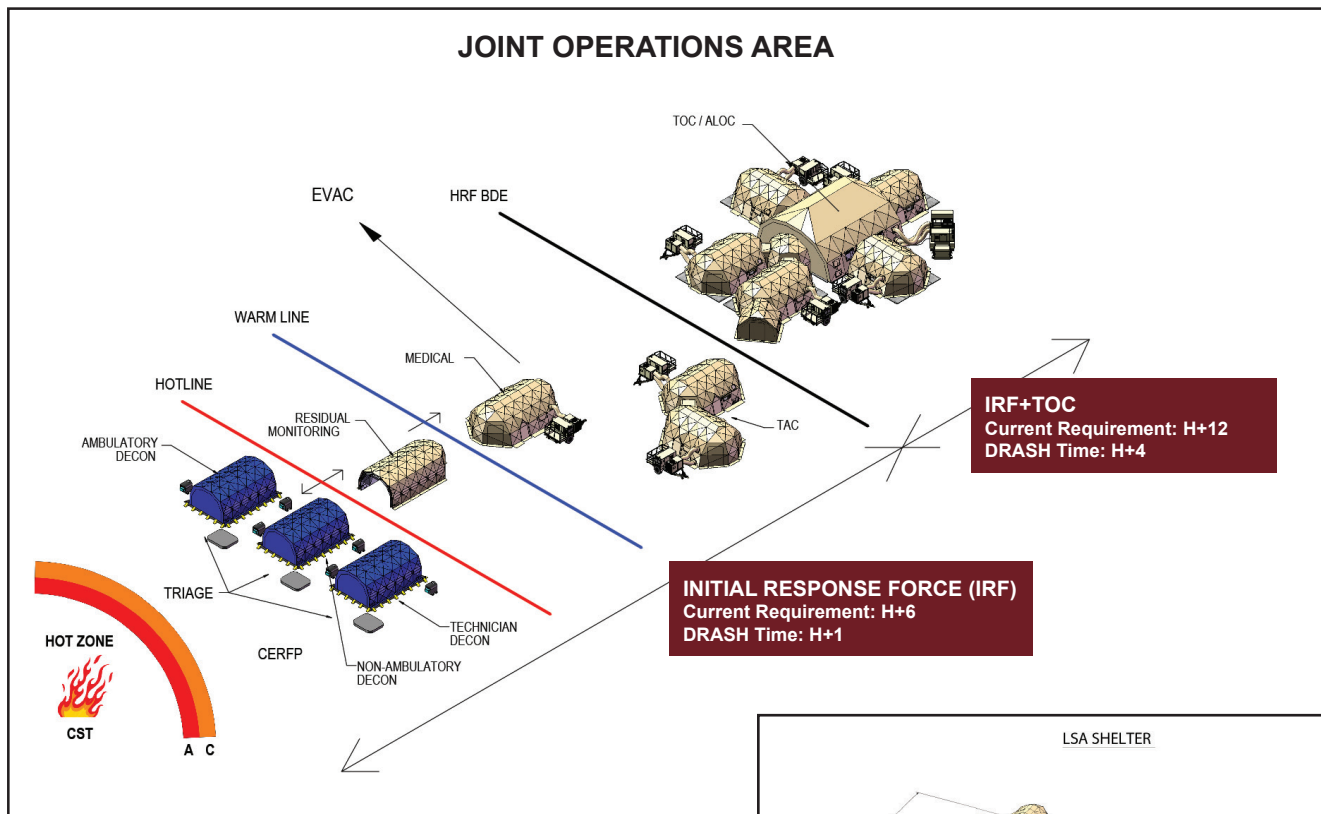
Featuring a quick erect design, DRASH shelters allow HRFs to establish a complete Joint Operations Area (JOA) within hours of arrival at the event scene.

As depicted below, DRASH set-up time for the JOA beats HRF deployment timelines by a full 8 hours.

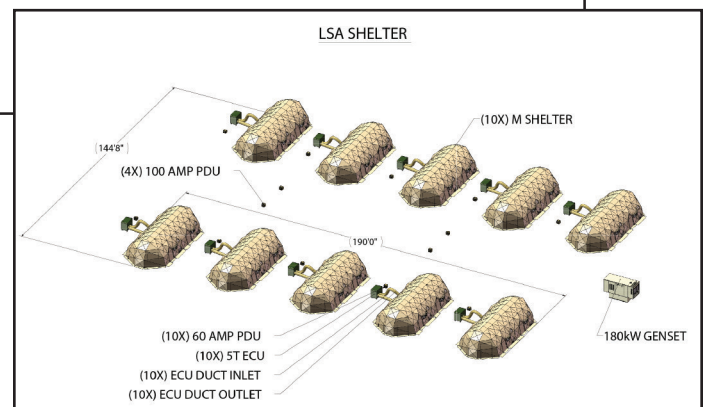
- Decontamination, residual monitoring, medical triage and Tactical Command Post (TAC) facilities are operational in 1 hour.
- The Tactical Operations Center (TOC) and Administrative-Logistics Operations Center (ALOC) is then established providing a full Initial Response Force (IRF) within 4 hours upon arrival.

All of the shelters required to form the Joint Operations Area can be transported using DRASH UST Trailers. In addition to cargo, UST Trailers include the power and HVAC to support the shelter systems. DRASH Trailers are easily towable by common, easy-to-find vehicles, such as civilian super duty pick-up trucks and a variety of standard Army vehicles.

Though HDT Global has already created an HRF footprint based on expected requirements, personnel can also work with one of the company's knowledgeable DRASH representatives located across the country to create a customized layout tailored to meet their unit's specific needs.



Using the entire scope of DRASH systems to include; quick erect shelters, UST Trailers, deployable command and control equipment and decontamination equipment, an HRF can establish all the facilities they need to form a complete Joint Operations Area. A Life Support Area can be established to support personnel remaining at the incident site for an extended period of time.





SUMMARY

To truly be prepared for the numerous dangers threatening our current homeland security, the U.S. Military must establish robust, fully capable response forces unlike any seen before. From command and control to decontamination to search and extraction, HRFs must be prepared to complete a wide range of operations whenever and wherever disaster strikes.

The recent implementation of Homeland Response Forces marks a significant change in the way military forces will assist in response efforts, providing civilian agencies with a more streamlined force that is better equipped to quickly arrive at the incident scene and bring much-needed capabilities and technical expertise to the incident scene.

In order to succeed, however, these forces will need an effective HRF system from which they can run their operations.

DRASH shelters combine the U.S. Army's Standard Integrated Command Post System (SICPS) with a versatile design that can be configured to support the wide range of HRF capabilities. To learn more about how DRASH can help your HRF build a system that supports your mission, visit www.drash.com or contact one of our representatives at 877-GO-DRASH or drash@drash.com.