Fact Sheet

US Army Corps of Engineers
Urban Search and Rescue Program

February 2009

The Urban Search and Rescue Program

Primary Mission Definition: To provide Structures Specialist (StS) support to the DHS Federal Emergency Management Agency (FEMA) mission response effort under Emergency Support Function #9 (ESF 9), Urban Search and Rescue (US&R), of the National Response Framework (NRF). This includes developing, training, and equipping USACE structural engineers to support the US&R Task Forces and the US&R Incident Support Team (IST) engineering cell. The USACE US&R program also develops and provides training for all US&R Structures Specialists.

Additional Mission Priorities:

- Provide technical assistance to local jurisdictions regarding rescue efforts.
- Provide technical assistance to military personnel that provide light to heavy US&R support.
- Provide other agency technical support (e.g., FBI, DEA, ATF, NIST, etc.).

World Trade Center

Training

Background: After USACE was formally tasked in 1991 by U.S. Army Forces Command (FORSCOM), structural engineers from USACE were solicited for participation in US&R StS training. Deployments include Oklahoma City Bombing (1995), World Trade Center (2001), and multiple hurricane responses. The pilot training course was conducted in 1992, and the formation of the Structures Specialist Cadre was initiated. An "Advanced Structures Specialist" class was first offered in 2004 as recommended training.

Facts: Urban Search and Rescue is a dangerous undertaking conducted in buildings that are fully or partially collapsed. Typically, these structures are multi-storied and contain heavy debris with a high potential for additional collapse. Engineers trained as Structures Specialists can evaluate a damaged building or hazard in order to reduce the risks to rescue personnel and victims.

The Corps provides US&R training courses for Structures Specialists from both USACE and FEMA. In addition, other agencies attend the aforementioned training course, such as the Army's 911th Technical Rescue Engineering Company, State and Regional Task Forces, and foreign countries involved with urban search and rescue. Specialized Structural Collapse Technician training can be provided or facilitated as well. The Corps' Structures Specialists Cadre is comprised of USACE personnel with at least 5 years of engineering experience consisting of Structural design and basic construction techniques for wood, masonry, concrete, and steel. Structures Specialists design shoring systems to stabilize structures for rescuers to gain safe access to the victims. The Structures Specialists are trained in Rescue Systems 1 (a basic rescue skills course). They also receive instruction in structural collapse patterns, hazard identification and building monitoring, rapid assessment of buildings, building triage and marking systems, advance shoring and shoring calculations. Mission durations are short, usually 6 to 10 days.

The Corps Structures Specialist Cadre is an essential component of the Urban Search and Rescue Task Forces and the IST with the ability for fast deployment in a life saving mission. The Structures Specialist brings engineering expertise to the Urban Search and Rescue Task Force. Responsible for evaluating the immediate structural conditions at the incident and recommending the appropriate hazard mitigation, the Structures Specialist serves a vital function to the Task Force.

Points Of Contact: For additional information regarding the US Army Corps of Engineers Urban Search and Rescue Program, please contact one of the following US&R Subject Matter Experts (SMEs):

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