



The Urban Search and Rescue Program

Introduction:

The Corps of Engineers Urban Search and Rescue Program (US&R) provides technical and operational support to the Federal Emergency Management Agency (FEMA) US&R program and other state, local and International Urban Search and Rescue Programs. The Corps leads the Training for Structures Specialists, and maintains a cadre of Structures Specialists that are deployed as part of Incident Support Team Engineering Cell, and US&R Task Forces.

Background: Formally tasked by Department of Defense Forces Command (FORSCOM) in 1991, to build and maintain a Urban Search and Rescue Engineer Program, structural engineers from the U. S. Army Corps of Engineers were solicited for participation in US&R Structures Specialist training. The pilot training course was held in 1992, and the formation of the Structures Specialist Cadre was initiated. This Training has become required for all Structure Specialists who are members of FEMA US&R Task forces, and the ones who are part of the Corps Cadre. An Advanced Structures Specialist training class has also recently been developed and is now mandatory.



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 in order to reduce the risks to rescue personnel and victims.

Currently the Corps provides US&R training courses for the Structures Specialists from both USACE and FEMA. In addition, other agencies attend the aforementioned training course, such as the Army's Military District of Washington (MDW) Heavy Rescue Company, local fire departments, engineering consultants and foreign countries involved with urban search and rescue. The 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), Critical Incident Stress Awareness and Management, and Hazardous Material (HAZMAT) Awareness. 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 8 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.

For more information on Structures Specialist, and to download a copy of the Field Operations Guide (FOG) go to www.disasterengineer.org

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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