



Urban Search & Rescue Mission Overview



US Army Corps of Engineers®

Questions, comments, and suggestions related to this overview are encouraged. For more information, please contact the U.S. Army Corps of Engineers, Office of Homeland Security, Civil Emergency Management, 441 G Street NW, Washington, DC 20314-1000.

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Mission Definition

To provide efficient and effective physical and technical support to the Federal Emergency Management Agency (FEMA) mission response effort under Emergency Support Function (ESF) #9 of the National Response Plan (NRP). This includes developing, training, and equipping USACE structural engineers to operate as support to the FEMA Urban Search and Rescue (US&R) Task Forces and the FEMA US&R Incident Support Team (IST) engineering cell. The US&R program also provides training for all FEMA 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.)



Background

Formally tasked by U.S. Forces Command (FORSCOM) beginning in January 1991, 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. An “Advanced Structures Specialist” training class was offered beginning in September of 2004 as the recertification class.



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. 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



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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 and 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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