Structures Subgroup

Position: Structures Subgroup Member

Background

Search and rescue operations in the urban disaster environment require the close interaction of all task force elements—search, rescue, medical, and technical personnel—for safe and successful survivor extrications. Once one or more entrapped survivors have been located, rescue extrication, coupled with appropriate medical treatment and survivor removal operations, must be conducted in an organized and safe manner. Members of the Structure Subgroup are subject matter experts in damaged structure stability and the current tactical considerations and general strategies that should constitute a foundation for structural stabilization for safe search and rescue operations. The Structures Subgroup is responsible for developing and maintaining their respective area and integrating them into the System. The members of the group, are chosen based on their management and/or technical expertise to provide advice and recommendations upon which decisions are based. These decisions will be made through consensus, whenever possible.

Under the direction of the Structure Subgroup Leader within the Operations Functional Group in the Advisory Organization, a system wide recruitment for Structure Subgroup members with the knowledge, skills and abilities to assist both the US&R Branch and US&R Task Forces.

Knowledge

- Advanced knowledge in at least one specific area of StS performance, such as task force operations (serving on multiple deployments), construction means and methods, demolition means and methods, structural mechanics, or failure analysis.
- General understanding of all 19 positions and function for Type I US&R Team.
- General understanding of a US&R Incident Support Team (IST)
- General understanding of an Incident Management Team (IMT)
- General understanding of the USACE US&R Program
- General understanding of the FEMA US&R System including Program Directives and the role of the program office.
- Familiarity with the Training Program and Administration Manual (TPAM)

Skills

- Skilled at “seeing the invisible” when confronted with a structural collapse
- Communicate effectively in writing as appropriate for the needs of the audience.
- Good interpersonal communication skills. Give full attention to what other people are saying, taking time to understand the points being made, and asking questions as appropriate.
- Convey information effectively.
- Prioritize work assignments.
- Breakdown complex problems and related information to develop procedures
- Utilize computer programs such as: Word, PowerPoint, Excel, Visio, and Adobe products

Abilities

- Able to tell the difference between theory and reality
- Be currently licensed as a Professional Engineer specialization in structures or equivalent as sanctioned by the FEMA US&R Structures Sub-Group

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Have a minimum of 5 years experience in structure design and analysis to include evaluation of existing structures, field investigation or construction observation experience

- Able to identify features that allow for the determination of the condition of structures subjected to adverse loading from natural and man-made disasters.
- Able to identify vertical load and lateral force resisting framing systems and identify the critical elements within those systems.
- Able to identify failure indications of building materials.
- Able to identify building features that could provide entry or access to victims such as ducts, shafts, etc.
- Able to recommend practical solutions for US&R operations in compromised structures
- Qualified as a FEMA US&R Structures Specialist rostered on one of 28 FEMA US&R Task Forces
- Have taken and successfully completed the Advanced Structures Specialist Training Course (StS2) and at least one Structures Specialist Regional Training Course
- Ability to communicate effectively with multidisciplinary US&R audiences to promote safe and successful survivor extrications
- Member must have support from his/her sponsoring agency to fulfill role which may involve travel.