

Ray Downey's The Rescue Company

What Rescue's About

eighteen-month-old baby girl rescued after being trapped for 58 hours in an abandoned well." "Earthquake victims rescued after three days in cellar of collapsed office building." "Firefighters rescue family of four from raging, early-morning house fire." These are the stories we hear of regularly in the media.

Webster's dictionary defines rescue as "to free from confinement, danger, or evil."

Future installments of this column will describe the tasks, the equipment, the personnel, the training, and the incidents in detail. But first I want to make clear in what sense I'll be using the word rescue, because in fire service jargon, it has a multitude of meanings.

Firefighters often use the word to describe the heroic acts involved in sav-

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ing a life. Although rescue company members often perform in a way that fits this definition, many firefighters in other types of companies do, too. For the most part, I won't be covering basic firefighting skills here.

In some departments, rescue is used to identify units that provide emergency medical and ambulance services. That's a definition I won't be using.

Other departments in various parts of the country designate a rescue company - or "heavy rescue," "squad," or "utility" company-to combine firefighting with special operations involving such activities as extrication, building collapse, hazardous-materials response, and scuba diving.

All these and more are tasks carried out by a rescue company as this column will be defining it.

For our purposes here, a rescue company is a specialized firefighting unit equipped with a large variety of special tools and equipment, whose personnel are specially trained to handle any fire or emergency.

A rescue company should be provided with the most efficient and effective equipment available and the training that goes along with its use. (The training may come from the manufacturer, the department, or an outside contractor.)

The amount and type of equipment carried will depend on the nature of the incidents most frequently encountered. But several major categories are likely to be covered:

· Extrication equipment, ranging from hydraulic-, air-, or electric-oper-

ated spreading and pulling jaws, cutters, and rams of various sizes; oxygen -acetylene cutting equipment; and jackhammers.

· Rigging and shoring equipment.

· Generators capable of supplying lights and power.

 Meters for testing explosive or toxic atmospheres, oxygen levels, carbon monoxide levels, and radiation.

Scuba equipment.

· Sites for cutting wood, metal, and concrete.

Hazardous-materials equipment.

The need to transport this huge array of tools accounts for the easily distinguishable design of a rescue company's apparatus. Its box-like shape is covered and filled with compartments to store the tools in an orderly way.

The firefighters who work in a rescue company must be multitalented, highly experienced, and tremendously motivated. Their attitude is "Never give up."

Often a prerequisite for joining a rescue company is prior experience in construction or mechanical work. Prior training as a paramedic, emergency medical technician, or military medic is also of great assistance.

Many rescue firefighters are military veterans with combat experience, and they tend to compare fighting the "red devil" with fighting the enemy. Just as their eventual assignment to a rescue company requires out-of-the-ordinary skills, their military backgrounds often include assignment to specialized units such as reconnaissance, airborne, special forces, and underwater demolition teams.

Ideally, a rescue company will consist of six to seven firefighters, exclusive of the officer. Realistically, most ride with four to six members—three teams of two members each.

Any fire or emergency

Although an incident commander may assign a rescue company to handle routine firefighting assignments such as ventilation, entry, and search, as well as attack, the company's main purpose is to respond to other-thannormal situations which other companies have neither the tools nor the expertise to handle. What follows is a sampling of what these might be:

• Auto accidents. Spreaders, pullers, cutters, extending rams, jacks, blocks and steering wheel cutters may all have to be used during the course of a single extrication. Doing all this while also providing medical care for the victim is a team effort. At a recent building collapse, for instance, a former combat medic used his medical training and some psychological reassurance to stabilize a trapped construction worker for two hours as other firefighters used their mechanical talents to free the victim.

 Building collapse. The equipment required at the scene of a collapse can be a few hand tools, or those plus power tools, cranes, and other heavy equipment.

Collapses can happen in many sizes and types of structures. In the past year, I worked at three different types of collapses: a four-story, wood frame building under renovation, at which trench jacks, a reciprocating saw, and an entrenching tool were used to rescue a trapped worker; a major fire and explosion which caused the collapse of three occupied, two-story brick and joist buildings and required cranes, payloaders, forklifts, and trucks to remove the debris; and a vacant, wood frame structure at which it took air

bags, hand saws, small hand shovels, and a spreading and lifting tool to free the victim.

Elevator fires and emergencies.
Fires can occur in the car itself, on top of the car, or in the elevator pit, or can involve the cables or rails that the elevator rides on.

Elevator emergencies can consist of minor power losses or mechanical problems. I once responded to an elevator emergency to find the building superintendent with his arm stuck between the elevator and the hallway shaft, where he got trapped trying to reach in to trip the electrical contact to open the door. An air bag pushed the car back enough to free the man's arm.

- Subways and trains. The rush hour fire that killed a fire officer in a British subway clearly brings out the dangers involving this type of fire. Anytime you're faced with a fire or emergency involving a railroad car in a tunnel, you have the additional problems of finding a way to reach the scene, evacuating crowds, stretching hose, avoiding electrified rails, maintaining communication, and working in smoke that reduces visibility to zero. Incidents with freight trains may be complicated by haz mats.
- Industrial accidents. Disentangling a person from machinery is a complex job and not one for those who are weak in the stomach. Many curious emergency workers crowded in on an operation to rescue a restaurant worker whose arm had been pulled into a meat grinder; as it neared conclusion, many of the curious slowly backed away.

Miscellaneous types of rescue.
Other operations might involve caveins, impaled victims, live electrical wires, hanging scaffolding, drownings, ice rescue, trench rescue, and rescues from manholes and confined spaces.

No two incidents are likely to be the same for a rescue company. There are still lessons to learn from each one, but because of the variety, critiques, record keeping, and drill periods that simulate special operations are all extremely important.

In all types of fires and emergencies, the preincident planning and training must be interwoven with good communication, coordination, control, and teamwork. A "nothing is impossible" attitude is one of the characteristics that distinguishes rescue company members from other firefighters. Each article in this column will be written to convey the information that helps make out-of-the-ordinary rescue operations possible.

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