



Town of Clayton Fire Department Special Operations



Background

The Town of Clayton Fire Department began training, using outside instructors and resources, for Special Operations response in 1998, and became self sufficient with equipment and instructors in 2001. The equipment used for Special Operations is kept on Heavy Rescue – Rescue 1, Rescue/Pumper – Squad 2, and an Enclosed Trailer – Trench / Collapse 1. Special Operations consists of Technician Level of vehicle and machinery extrication, confined space rescue/recovery, high and low angle/rope rescue/recovery, and trench/collapse rescue/recovery. CFD also provides water rescue/recovery at the Operations Level-Shored Based, and with several personnel trained to the Swift water Rescue Technician certification level. CFD currently has 35 personnel whom are Technical Rescuer certified through NC OSFM and some of the certified personnel hold instructor certifications for the various disciplines. All CFD personnel have to maintain at least an awareness level of all the above disciplines. Any personnel wishing to obtain State of NC Technical Rescuer certification must first complete NC Firefighter Level II certification. Specialized training is required for Special Operations and is done throughout the year with several drills per discipline on top of their regular firefighter training requirements. Currently, the Town of Clayton Fire Department is the only department in Johnston County that is self sufficient at the Technician Level of Confined Space and Trench/Collapse; and CFD is also a provider through the NC Association of Rescue and EMS for Heavy Rescue, High/Low Angle-Rope Rescue, Confined Space Rescue, and Trench/Collapse Rescue

Vehicle and Machinery Extrication

CFD responds to motor vehicle accidents and machinery accidents. In the event a person is trapped or pinned, we have the training and equipment to remove them. Vehicle extrication is the most common Special Operations response CFD deals with. Specialized training is required to deal with certain components, new technologies, and special hazards. CFD uses high pressure hydraulic tools, known as “Jaws of Life” to general public, air tools, and hand tools to spread, cut, push, and pull apart vehicles and machinery. Special lifting and stabilization equipment ranging from standard wood blocks, high and low pressure air bags, motorized winches, and hand operated rescue jacks to lift and stabilize vehicles.

Confined Space

CFD provides confined space rescue/recovery response per OSHA and NFPA standards. The OSHA standard states the a confined space is a space which a human can enter and perform work, has limited means of getting in and out, and is not designed for continuous human occupancy. The biggest cause of deaths in confined spaces is atmospheric hazards. A lot of hazardous atmospheres are odorless and colorless. The Town of Clayton along with several industries throughout our response district make entries into confined spaces on a regular basis and OSHA (NC Dept of Labor) requires those entities to have a rescue plan therefore CFD is trained and equipped to provide the rescue services at the Technician/Entrant level. Personnel go through several drills throughout the year in actual confined spaces such as storm water systems, sewer systems, lift stations, and tanks/vessels. Specialized equipment includes tripods, full body harnesses, rope systems, atmospheric monitors, ventilation systems, supplied air line system, full body protective suits (Tyvek®) and special victim removal devices.



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High and Low Angle/Rope

CFD provides rope rescue response and rope systems are also a part of the other Special Operations disciplines. Man-made and natural objects in our response district such as water towers, cell towers, embankments, confined spaces, trenches, and river/streams cause the need for rope rescue training and response. All personnel that are certified at the technician level of a specialty must also be certified as a rope technician. CFD has over 2,000 feet of rope (lifeline) which is strategically placed and some pre-rigged to assist in the quick deployment during a high angle/rope rescue incident.

Trench/Collapse

CFD provides trench rescue/recovery response per OSHA and NFPA standards. The OSHA standard states that a trench is a narrow excavation (in relation to its length) made below the surface of the ground. With the amount of ongoing construction throughout the area, the probability of trench collapses is increased. Most people do not realize the forces dirt imposes on a human body. A cubic foot of soil (1ft Long x 1ft Wide x 1ft Height) weighs approximately 100lbs. Just 24 inches of soil on a person's chest can weigh up to 1,000lbs and just 18 inches of soil covering a person can weigh in excess of 3,000lbs. CFD is trained and equipped to provide rescue services at the Technician level. Personnel go through several drills throughout the year in actual trenches which have been secured with specialized equipment. Specialized equipment includes ground pads, shoring panels, air struts to secure the panels, atmospheric monitors, ventilation systems, dewatering systems, general construction equipment, and an assortment of timbers. The specialized equipment can also be used to support damaged structures in the event of a structural collapse.

Water

CFD provides water rescue/recovery response at the Operations Level-shored based. The Johnston County Sheriffs Department has a Swiftwater Rescue Team and there are a handful of CFD personnel that are Swiftwater Technicians. CFD uses specialized equipment such as an inflatable raft, Type III and Type V Swiftwater Personal Floatation Devices (PFD's), dry suits, throw bags, and air fill device to fill up fire hose to advance out to people in the water. Most people do not realize the danger water imposes on them and the fact that water moving only 1 ½ mph is considered swift water and can cause a person to lose their balance and fall. Water only 12-18inches deep can displace a motor vehicle causing it to be at the mercy of the current. You should never attempt to cross a flooded road in your vehicle because the depth is unknown as well as knowing whether or not there is still a road there. Another dangerous practice is tying a person off with a rope in fast moving water. This technique is only intended for trained rescuers performing a "live bait" rescue and their tether (line) is attached to a special type of PFD which has a blow-out ring mechanism that can be activated to release them from the dangerous line in the event they are overcome by the current.

For additional information contact the Clayton Fire
Department at (919) 553-1520 during regular business hours
Thank You for Your Interest!!!