Rope Rescue Technician

Course Justification

The current FIRESCOPE-US&R-OSD 120-1 document lists the “Minimum Task Capabilities” of a Type I US&R Company, a Type I US&R Crew, a Regional US&R Task Force, and a State/National US&R Task Force. That document specifically states that the personnel assigned to such units must meet certain training requirements as set forth in subsections a-g (pgs 33-34). This proposed curriculum specifically deals with the items in subsection (e).

Subsection (e) states “Personnel shall be trained in the procedures for performing high angle rescue (including highline systems*) involving accessing, packaging, treating and removing victims. Training should include but not be limited to the following:

1. Rope system anchors
2. Evacuation litters
3. Rescuer and victim packaging
4. Lowering and raising systems
5. Mechanical advantage systems
6. Fall protection and/or limiter systems

*The OSD defines a highline system as “a system using rope suspended between two points for movement of persons or equipment over an area that is a barrier to the rescue operation, including systems capable of movement between points of equal or unequal height”.

There is currently no class within the State Fire Training system that covers construction and operation of highline systems. This proposed curriculum will fill in that missing link.

In addition, Fire Departments nationwide are concerned with NFPA compliance, specifically NFPA 1006 (Standard for Technical Rescuer Professional Qualifications) and NFPA 1670 (Standard on Operations and Training for Technical Search and Rescue Incidents). This proposed curriculum will address the skills sets as identified in these documents (specifically Chapter 6 of NFPA 1006 and Chapter 5 Sections 5.4.2 1-9 of NFPA 1670). In other words this class will also teach students specific skills sets not identified in the OSD but required for NFPA compliance. These skills include:

- Construction and operation of compound rope mechanical advantage systems.
- Ascending a fixed rope and negotiating obstacles.
- Completing assignments while suspended from a high angle rope system (pick offs)
- Lead climbing (tower rescue scenarios)
- Rope system physics and system safety factors
- High angle litter tending
- Artificial high directional’s
- Litter tending in highline rope systems

The committee has also met with Patrick Bell of Cal-OSHA and run this proposed curriculum through D.O.S.H. It is important to understand that California, as an OSHA State Plan State, exempts no one from regulatory compliance. Cal-OSHA compliance (within applicable standards) is mandatory.

NFPA 1670 (2009 Edition) Section 4.1.13 also states “the AHJ shall comply with all applicable local, state and federal laws”.

California is currently the only State in the nation that has an OSHA regulation dealing with work on ropes. CCR 3270.1 (Use of Rope Access Equipment) is that standard.

CCR 3207 defines Rope Access as “the use of rope access equipment where ropes are used as the primary means of support, as a means of protection or positioning, and where an employee descends or ascends on a rope, or traverses along a rope”.

CCR 3270.1 does state that Emergency Search and Rescue Operations are exempt. Training for such incidents, however, is not. D.O.S.H felt that this proposed curriculum would be a model for all State Firefighters. They further stated this completed curriculum may be used as a Code of Safe Practices for rope rescue.

This proposed curriculum will ensure compliance the current FIRESCOPE OSD, CCR 3270.1, NFPA 1006 and NFPA 1670 as well as Cal-OSHA’s Use of Rope Access Equipment (CCR 3270.1) & Injury and Illness Prevention Program (CCR 3203).

I think that the Reference to Patrick Bell should be at the front as the application (code of safe practices) is to the widest audience. I also believe that it should state that DOSH would look at this class as the code of safe practices and that affects every firefighter / rescue person in the state. Then, it should move to the OSD requirement which is the next largest audience. My thoughts guys what do you think?