Title: SAFETY ARTICLE: Training Impact on Safety

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Training improves safety if it is focused, consistent and complete. If any of these three components are missing, the training delivered may actually contribute to unsafe acts and injuries in the workplace.

Focused Training – Departments struggle with the decision of what training should be delivered to keep firefighter skills at their peak. Focused training breaks various training opportunities into four categories; required; low frequency, high risk calls; remedial; and new technology.

- Required training focuses on what is needed to maintain certifications and mandated
 requirements such as the minimum initial and annual SCBA training required in 1910.134(k), the
 hazmat refresher training required by 1910.120(q) and others. While easy to layout, its impact
 upon available training hours and dollars is heavy. A firefighter who is a Florida paramedic, an
 instructor and an inspector must accumulate over 50 continuing education hours per year just
 to maintain those certifications.
- Low frequency, high risk training focuses on those calls that while infrequently occurring, have a
 high risk to them. The infrequency of occurrence limits the experiential factor while the high risk
 demands training from both a performance and safety standpoint. As an example, if your
 community is dominantly residential, the occurrence of warehouse or large square footage fires
 is probably low but the risks to firefighters are very high due lack of experience with them and
 the inherent dangers they present.
- Remedial training focuses on correcting and or improving operations based upon evaluation, feedback, outcomes, critiques and injury reports. While it is important to recognize shortcomings, problems and improvement opportunities, it is critically important to address these issues through training. Without remedial training there is no improvement in operational or safety performance.
- New Technology focuses on those new things around us that can have an impact or be used in our operations. Although often overlooked, this is as important as the other types because it exposes us to the unknown, the new and perhaps the not quite understood. The world around us is evolving and advancing at a rate never seen before. Depending upon which study one references, mankind's knowledge doubles every five to eight years in general and every two years for the scientific community. Misting sprinkler systems, smart buildings, radio frequency oscillating sprinkler systems, firefighting robots, hybrid cars, solar and other alternative power sources, new building / construction techniques, new equipment, are a few examples of what is out there now. The challenge is keeping up with what is here now and what will be here tomorrow and the next day.

Consistent Training – "This is the way we do it on the street, but this is the way you do it for the test." Those words have haunted and caused confusion to students over the years. The training delivered must be stable, unchanging and the same for all involved. Consistent training is training, delivered on a regular basis, that is well supported, encouraged and an integral part of maintaining and improving firefighter safety. Consistent training provides a stable base from which experience and improvement can be realized. Consistent training means all shifts and personnel do things the same way. Consistent

training builds upon uniformity. Uniformity leads to familiarity which stimulates an environment of safety.

Complete Training – Complete training provides:

- A detailed process for accomplishing a skill or acquiring knowledge.
- Instructors who are motivated and well versed in the training to be delivered. This is a critical component as the attitude and enthusiasm of the instructor can make or break any training regime.
- The time and oversight to allow sufficient repetition or practice to attain proficiency. Time is a valuable commodity but without sufficient supervised time to practice, the value of the training delivered becomes questionable.
- A methodology to test and therefore validate the acquisition of the skill / knowledge.
- An opportunity for students to provide feedback, obtain additional information and suggest possible improvements.
- An opportunity to be exposed to new techniques through which can be practiced and perfected before being put into place on the fire ground. If the practice is not complete, the result is incomplete training and the results can be devastating.

Have you ever put something together following the directions only to find that the directions are not complete, do not show enough detail or contain wrong information? In short, the directions were not sufficient to allow assembly without some experimentation, perhaps trial and error or as a last resort pay someone else to complete the assembly. If you have, you have the analogy to incomplete training. The reality of the analogy occurred when firefighter safety and survival was initially taught, a fire department officer returned to train his personnel on ladder bailouts. During the demonstration, the officer bailed out from the second story, went down the ladder headfirst to the ground where he suffered a broken neck and died.

My thanks to Susan Schell, Training Section Supervisor, Bureau Fire Standards and Training for her input and idea for this article.

Low frequency, high risk calls comes from the presentations of Gordon Graham in which all calls are categorized under four conditions; high frequency, high risk; high frequency, low risk; low frequency, high risk; low frequency, low risk.

As always, your feedback and comments are appreciated. Email me at Charlie.brush@myfloridacfo.com or call 352-369-2836