

Facilities get a report card for Firefighter Safety & Survival

By Larry L Pierson *Carolina Fire Rescue Journal*

We have so much information to process when undertaking a fireground risk benefit analysis. It can be broken down into three simple incident priorities, a slew of acronyms for strategy & tactics, or increased complexity with 13 point size ups or a preplan manual with detailed specifications and conditions. Interview a variety of firefighters and officers at different times on a series of fireground decision making scenarios and you may be surprised at the wide range of answers. If they are very different now, wait till it is a real incident. There are a few questions that are raised.

What is too little information for a solid decision? What is too much information to analyze for a quick enough decision? How many of the personnel understand the decision making process of their department? Why are we or why are we not conducting offensive/defensive operations? Would A-Shift make a very different decision

than B-Shift? Have we actually decided on a strategy & tactics acronym? Some type of system is in place..... does it really cue the fireground responses FOR ALL INVOLVED that it intends?

The last question is really the key point of this article. The collection of fire service decision making acronyms and size-up tools are assessments and indicators just like "type of construction" numbers. For the most part they do not say do or do not, offensive or defensive or tell you a specific level of firefighter risk. They do help build a picture to eventually make a decision but we need something simpler, and something based on the deeper collection of information that is available ahead of time.

When you received an "A" in school you knew what it meant. When you received an "F" in school you knew what it meant especially when your parents got a hold of your report card. What if we graded each preplanned facility based on firefighter safety & survival and the result cued everyone on scene into a desired awareness level?



Figure 1 The Grade can be viewed on a preplan form while enroute

What is the grading based on?

Without covering each criterion in depth here are some areas to consider. Type of Construction (*refer to NFPA220 table 4.1.1*). Needed Fire Flows (*refer to CFRJ Spring 2008 Pg 23 for an overview*). Hazardous materials identification (*refer to NFPA 704*). Knowledge & information from Rapid Intervention training courses. Strategy & tactics foundations (*acronyms that provide size up but some portions can be judged before a fire*). NIOSH Firefighter Fatality reports. Other incident lessons from sources such as previous incidents at the facility, firefighterclosecalls.com and other periodicals.

Again, these sources may not tell us exactly what to do but they build to form a profile of risk. Primarily I would look at safety issues (+ *whatever you want to add*) such as:

1. Structural failure/collapse,
2. Issues that affect FF disorientation, becoming lost or trapped,
3. Fire load, spread and byproducts of combustion
4. Hazardous materials,
5. Water supply and water systems that support the firefighting operation (*Hydrants, Sprinklered, standpipes etc.*),
6. The value. (*A 50 million facility is still not worth one of our lives but a dilapidated building that needs torn down anyway makes the picture much clearer*),
7. Communications (*A facility may be so large that interior crews can be out of contact or a facility has installed communication enhancements for FFs. Facilities may have area that hinder communications such as freezers/coolers or high interference electronic equipment*)
8. The department's capability (*personnel experience/skill levels and equipment availability*).

A facility with a grade "C" in one jurisdiction may be a "D" in another because of resource availability. This grading scale is only judged for the potential effect on firefighter safety & survival not how tough the firefight will be. It is not whether we will "save the building"..... the grade is about how we will save our people.

The Report Card

A, B, C, D or F. You may add in B+ or B- and other sub levels but the idea is to keep it simple. The facility with a grade "A", although not 100% safe, is the best we could hope for. Grade "A" is likely to conduct interior operations provided that an on scene sizeup still warrants it. A grade "F" is automatically considered a deathtrap. It is likely that

we would not conduct any interior operations even if the fire was in an incipient phase and we would question even being in the structure without fire. A "D" facility could be interior if in incipient phase but any more fire growth may move it to exterior operations. This is not a set standard. Your department may choose its own criteria for each level. If anything, decide which facilities already fit into a "D" or "F" without having to decipher As, Bs and Cs.

Preplanning

The system requires preplanning efforts which should already be a part of any FD operations. Visit facilities and gather fact & data. Construct good drawings and run some table top scenarios with experienced personnel. Have some thought provoking conversations which may bring about specific issues to integrate into the grade. In some organizations a building inspections department can forward information pertinent to the grade.

Summary

Nothing in this idea should take away the ability to judge, assess or size up what is happening on scene or to integrate in depth information but it does translate into something tangible for all experience levels. It should start you making sound decisions for our safety & survival before the incident occurs. ... we all go home.



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