

RE-THINKING THE USE OF THE 10 STANDARD FIRE ORDERS

For several years some on-the-ground fire people have been attempting to reinstate the original 10 Standard Fire Orders. Some had never converted to the FIRE ORDERS because they had found the old arrangement to be orderly and easy to remember. In June of 2002 the NWCG officially returned to the 10 Standard Fire Orders. The news was slow getting to the field with some units not hearing about it until early 2003.

Conversion to the ‘new’ arrangement of the orders will have little or no affect on firefighter safety unless there is a change in how they are taught and used. Even prior to the South Canyon Fire tragedy; many fire crews had made a practice of memorizing the FIRE ORDERS and its safe to say that became a requirement for all first line firefighters following that incident. Then came the 30-Mile fire, followed by numerous (and on-going) investigations and a renewed awareness of basic fire fighting fundamentals.

In the fall of 2001, there was a large international fire symposium held in Missoula, MT. The basic theme of this gathering was fireline safety. Many notable fire individuals voiced their concerns, advocating different approaches which could be used to reduce firefighter injuries and fatalities. One of the “buzz words” which developed from that symposium was “situational awareness.” That phrase really piqued my interest in regards to fireline safety and the relationships of the 10 Standard Fire Orders, the 18 Situations, and LCES.

“Awareness” is defined as having or showing a realization, perception, or knowledge. Without venturing off into the realm of fireline psychology, I began to think of the “situational awareness” of various individuals involved in the Storm King incident as revealed in John Maclean’s book. (If you own a copy of “Fire on the Mountain” take time to reread it and highlight the comments of the on-the-ground firefighters in regards to their “situational awareness” related to the fire environment. If you don’t own a copy of this book, get it; read it; reread it.) These examples are not meant to address individuals but rather to explore the “collective” awareness of the participants.

Pg 43 crew member awareness of reburn potential in Gambel oak

Pg 47 cutting line downhill

Pg 58 glowing logs cartwheeled down the slope

Pg 58 cold front on the way (NOAA radio)

Pg 60-61 fire continued to grow at night and was considered very active for nighttime conditions.

Pg 70 unusual amount of fire activity....for the cool of the morning; active all night

Pg 71-72 knowledge of red flag warning

Pg 72 “NOAA” – winds 15-25 mph with stronger gusts toward evening

Pg 74 fire had doubled in size since early AM

Pg 76 continuous fuels, unbroken masses of oak

Pg 77 flames under oak only 3-4” high.

These are just a few of the items related to the situational awareness collectively expressed or known by the on-the-ground crew members prior to jumping off Hells Gate ridge. Additionally, there were many firefighters present who had memorized the FIRE ORDERS and could quote them verbatim.

So why, with all the situational awareness (having realization, perception, knowledge) were decisions made which lead to the tragic ending. I’ve come to the belief that over the years we

have never taught our firefighters how to practice the **situational analysis** inherent in the 10 Standard Fire Orders. **Analysis is defined as “an examination of a complex, its elements, and their relationships.”** For use in the fire environment, we must teach firefighters to apply the analysis process habitually, routinely, and in a predetermined order (the design of the 10 Standard Fire Orders).

I'd perceive this analysis to begin with the initial attack forces – be that a 2-person crew or a larger resource. The analysis is not a one-person responsibility, although its initiation would be the duty of the person in charge. If this situational analysis were the universally accepted (and expected) approach, it would have a tendency to reduce the crew's acquiescence to a plan of action in which the participants had no ownership. Personalities would be removed from the process, thus promoting the expressions of “awareness” by those who might feel intimidated by the more experienced person or by established traditions.

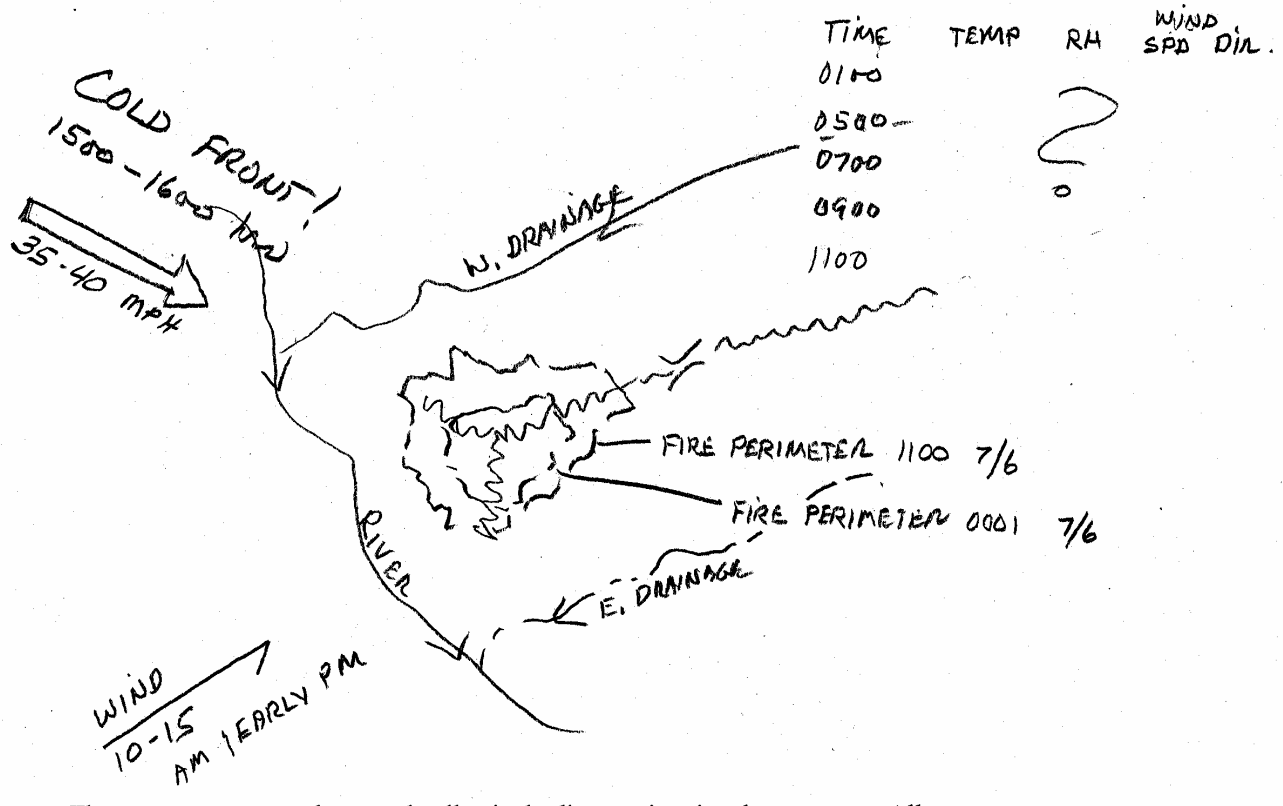
Perhaps the process in the field would precede something like this. At the beginning of a shift the leader calls the crew together. Using a map (this could be as simple as a hand-drawn sketch on paper) to help delineate ridges, drainages, aspects, etc. the IC solicits the environmental and fire related observations of each individual. These are briefly recorded in the notebook. The next step is to initiate the analysis process using the 10 Standard Fire Orders in their specific sequence. Each order is prefaced by the imperative YOU meaning your crew.

The first three Orders address Fire Behavior **No. 1 Keep informed on fire weather conditions and forecasts.** This prompts answers to two questions. The first being what is the latest fire weather forecast? With all the forecasts available to the fire fighter – commercial radio, NOAA, satellite imagery, etc. the fire meteorologist's forecast is the most specific to the fire situation. Do not shortcut this valuable resource! If possible (and conditions warrant it) seek a spot weather forecast.

The second question is to be answered by YOU. What are the weather conditions specific to your fire? A belt weather kit is a must. No crew should be without one. Don't forget the importance of other weather related observations –cloud formations; topographic influences on wind; aspects; elevational changes; etc.

No. 2 Know what the fire is doing at all times. Observe personally, use scouts. Obviously, on very large fires, Order No. 2 cannot be accomplished nor is it relevant. What this relates to is your area of responsibility and adjacent areas which may affect your operations. These observations cannot be made without considering the conditions under which the fire is burning. The affects of relative humidities, wind and topography on the current observed flame lengths are important indicators for anticipated future activity. How is the fire propagating and under what conditions is this occurring: What is likely to change this behavior?

No. 3 Base all actions on current and expected behavior of the fire. Your analysis related to this order is paramount to your safety!! It is the place where you take what you have been taught in the classroom in S-190, S-290, and S-390 and put it to practice. In essence, regardless of the size of your organizations, this step becomes your IAP (Incident Action Plan). If we had made the 10 Standard Orders as an integral part of our fire training instead of a little separate memory exercise for the purpose of passing a course, the situation analysis initiated on Storm King Ridge may have looked something like this:



The crew meets to evaluate and collectively discuss situational awareness. All persons are encouraged to participate. (Reference possible inputs recorded earlier from Maclean's book. In addition assume that fire weather conditions had actually been monitored on a periodic basis by the crew.) The discussion then turns into a brief situational analysis beginning with Orders 1, 2 and 3 – fire behavior (basic weather-fuel-topography).

Why, on a large fire in the IAP, is this a team effort while on small incidents we've essentially taught it to be the responsibility of the IC? That approach ignores all the experiences, education and observations of the other participants!

Only after completion of the fire behavior analysis can the next three orders on **Safety** be addressed with any validity.

No. 4. **Have escape routes** (for everyone) **and make them known**. Are these clearly marked and checked out? Is the black truly **black**? Don't get into the game of how quickly you can cover the ground. Leave plenty room for a margin of error. Consider the rates of the slowest person in the crew. Allow for injury – unpredicted wind, fatigue, etc. Remember this take off on the old Kenny Roger's tune, **The Gambler**, - Know when to hold 'em; Know when to fold 'em; Know when to walk away and **you won't have to run**.

No. 5 **Post lookouts when there is possible danger**. This really relates back to fire order No. 2. The lookouts must know what to look for and have the experience, equipment, and communications necessary to accomplish their given assignments.

No. 6 **Be alert! Keep calm! Think clearly! Act decisively!** In January, at the invitation of Rich Dolphin, Superintendent of Smoke Bear Hotshots, I was privileged to attend the “2003 Rocky-Basin Southeast/West Hotshot Workshop in Scottsdale, AZ. Dr. Kevin Gilmartin presented a very informative lecture entitled “Behavioral Science Aspects of High Intensity Firefighters.” (He is also the author of “Emotional Survival for Law Enforcement” which is an excellent book for wildland firefighters, as well.) Dr. Gilmartin relayed the findings of a study related to sleep deprivation and its affect on ones ability to think in the abstract. Going without sleep for 24 hours had the same affect on the thought process as having a blood alcohol level of .10! So, after being awake sometimes more than 30 hours, how can a firefighter possibly conform to Fire Order No. 6? I’d suggest it can be done by addressing, as a team, items related to situational **awareness** (18 Situations that Shout Watchout) and then conduct the **analysis** thru the 10 Standard Fire Orders. The most important word in this order is **THINK!**

The next three orders concern **Operational Control**.

No. 7 **Maintain prompt communications with your crew, your supervisor, and adjoining forces.**

The IAP, no matter how simple, must identify a chain of command in order to fulfill the requirements of this order. Knowing what to communicate, when to communicate (and the means by which it will be done), and to whom the information must be sent is again a team effort easily identified during the development of the IAP.

No. 8 **Give clear instructions and be sure they are understood.**

Involving the “team” in the development of the IAP and displaying the plan on paper provides the basis for both instruction and understanding. I was taught early in my career to put instructions given to me in writing and then repeat those to ensure understanding. The analysis process promotes questions and prompts answers. Giving clear instructions is always a two-way endeavor.

No. 9 **Maintain control of your forces at all times.**

When the “fire behavior” (orders 1, 2, 3) has been (and is repeatedly being) analyzed, when “safety” (orders 4, 5, 6) is being practiced, when lines of communications are established (7) and instructions are clear and understood (8) **maintaining control of your forces has been assured.**

Fire Order No. 10 Fight fire aggressively having provided for safety first.

This order is the most frequently remembered and the first to be initiated. Almost all of our firefighter training is measurable and to some extent could be considered competitive or aggressive. For example: How fast did you do your pack test? How quickly can you set up a pump and layout 500’ of hose? How many pull-ups, push-ups, sit-ups can you do? How many miles a day do you run? What are your saw qualifications? These highly developed skills are all essential to achieving excellence in fire suppression. So why would I want to change this last order when it is the very thing we do best? It also is the order which seems to me to have caused us to take unnecessary risks. We engage the physical effort prior to exercising the mental aspects of firefighting. Therefore, I’d reword this last order to read—**Fight fire intelligently having provided for safety first.**

In conclusion, returning to the 10 Standard Fire Orders will have little or no affect on firefighter safety unless we teach them to be used as a situational analysis process. All of the 18 situations that shout watch out may not be present on every incident. Firefighters will observe and become aware of those that are applicable. The 10 Standard Fire Orders, however, must be applied on EVERY incident if one is to develop and implement a safe and efficient incident action plan.

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