



“LCES and Other Thoughts”

LCES stands for lookout(s), communication(s), escape routes and safety zone(s). These are the same items stressed in the FIRE ORDERS and "Watchout" Situations. I prefer to look at them from a "systems" point of view, that is, as being interconnected and dependent on each other. It is not only important to evaluate each one of these items individually but also together.....

A key concept-- the LCES system is identified to *each firefighter prior* to when it must be used. The nature of wildland fire suppression dictates continuously evaluating and, when necessary, re-establishing LCES as time and fire growth progress.....

Lookout(s) or scouts (roving lookouts) need to be in a position where *both* the objective hazard and the firefighter(s) can be seen. Lookouts must be trained to observe the wildland fire environment and to recognize and anticipate wildland fire behavior changes..... The whole idea is when the objective hazard becomes a danger the lookout relays the information to the firefighter so they can reposition to the safety zone.....

Communications(s) is the vehicle which delivers the message to the firefighters, alerting of the approaching hazard.communications must

be prompt and clear. Radios are limited and at some point the warning is delivered by word of mouth it is important to maintain promptness and clearness

Escape Routes are the path the firefighter takes from their current locations, exposed to the danger, to an area free from danger..... Unlike the other components, there always must be more than one escape route available to the firefighter.....

Escape routes are probably the most elusive component of LCES. Their effectiveness changes continuously. As the firefighter works along the fire perimeter, fatigue and spatial separation increases the time required to reach the safety zone. The most common escape route (or part of an escape route) is the fireline. On indirect or parallel fireline, situations become compounded. Unless safety zones have been identified ahead, as well as behind, firefighters retreat may not be possible.

Safety Zone(s) are locations where the threatened firefighter may find refuge from the danger. Unfortunately shelter deployment sites have been incorrectly called safety zones. Safety zones should be conceptualized and planned as a location where no shelter is needed..... Fireline intensity and safety zone topographic location determine safety zone effectiveness.

Again, a key concept - the LCES system is identified prior to when it must be used. That is lookouts must be posted with communications to each firefighter, and a minimum of two escape routes form the firefighter's work location to a safety zone (not a shelter deployment site) every time the firefighter is working around an objective hazard.

Safety and tactics should not be considered as separate entities.....

*Taken from Lookouts, Communication, Escape Routes, Safety Zones
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By Paul Gleason, former ZigZag Hotshot Superintendent, June, 1991*