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FROM: National Wildfire Coordinating Group

REPLY TO: NWCG@nifc.gov

**DATE**: 09/28/2001

SUBJECT: SAFETY BULLETIN: Thirtymile Fire Debrief

This is a debrief for the entrapment and fatalities that occurred July 10, 2001 at the Thirtymile Fire on the Okanogan National Forest. The intent of this bulletin is to provide local units with a training tool for safety discussion and accident prevention (see attached document). A narrative with these same discussion points and the incident time line with links to maps and photos can be accessed at this web site: www.fire.blm.gov/training/main.html

The Thirtymile Fire Investigation Report was issued on September 26, 2001. The entire report and other related documents can be accessed at this web site: www.nifc.gov

## **Discussion Points**

- Maintain situational awareness during critical operations.
  - The first action incoming resources must do upon arrival at an incident scene is obtain a briefing from the Incident Commander or their designated representative (regardless of whether the incident is considered Initial Attack, Extended Attack, or beyond).
  - Successive failures to hold a fire after changing tactics or previous decisions to disengage from a fire are key indicators that a fire is setting up to transition from Initial and Extended Attack into a large fire event.
  - Manage work/rest cycles to mitigate fatigue when involved in continuous or extended operations. Acute fatigue degrades situation awareness and decision making ability and may be a valid reason for turning down an assignment.
- Reinforce fire behavior training concepts.
  - Keep informed on the fire behavior potential for your area of operation. If you
    are new to an area, ask and learn about key fire behavior indicators.
  - Important predictive indicators include the Haines Index, the 1000 Hour Fuel Moisture Content, the Live Fuel Moisture Content, and the Energy Release Component.
  - Well developed columns are a characteristic of extreme fire behavior and the interaction of two or more active flaming fronts can cause abrupt and violent changes in fire behavior.
  - Fire behavior often increases in sudden surges rather than in a steady increase of intensity.
  - Channeling effects of terrain features such as narrow canyons can significantly influence convective heat transfer.
- Reinforce fire entrapment training concepts.
  - Crews should routinely practice deployments as a crew throughout the season. Emphasize command of the situation, preparing the site for deployment, and determining if all appropriate PPE is available. The publication "Using Your Fire Shelter – 2001 edition" (NFES 1568) is good reference for fire shelter drills.
  - Important survival factors of deployment site selection include seeking lowest point available, the ability to seal the shelter down on the surface material, and distance separation from burnable fuels/materials.
  - Vehicle traffic hazards must be considered if a road is used as a fire shelter deployment site.

- Bodies of water are viable deployment site options.
- □ Reinforce fire tactics training concepts
  - When a fire escapes initial attack efforts, priority should be to establish a secure anchor point and flanking action.
  - Take every opportunity to utilize water when unlimited sources are available.
- Establish a command structure and support it with good leadership actions.
  - An Incident Commander is in command of the entire incident. This is regardless of whether the individual is attached to a crew or is a single resource. The primary functions of an Incident Commander are to develop a strategy for the incident, put a command structure into place that can implement that strategy, monitor the effectiveness of suppression actions, and adjust strategy and tactics accordingly.
  - Aggressiveness and leadership are not one and the same. Many leadership styles can be effective, but an Incident Commander must project a command presence in order to provide direction during stressful and confusing situations. Clear communication of your intent and getting feedback that your instructions are understood is fundamental to projecting a good command presence.
  - All fireline supervisors must, first and foremost, provide for escape and safety by assessing risks and establishing the LCES system to control those risks. Making sure that all the components of an effective LCES system are in place enables firefighters to aggressively fight fire when the fire behavior allows the opportunity. The Incident Response Pocket Guide (NFES 1077) has checklist tools that can assist fireline supervisors with their communication and risk assessment tasks.
  - Local dispatch centers, FMOs, and AFMOs must monitor the actions of onscene Incident Commanders. Listen for indications that the situation is rapidly changing. Insure the situation is not too complex for the assigned Incident Commander. When an Incident has grown to the Type 3 complexity level ensure that a "stand alone" Incident Commander is assigned. Incident Commanders that are doing double duty as Crew Boss, Engine Foreman, or Helitack Foreman may be quickly overloaded with the multiple inputs, decision points, and actions inherent in a Type 3 Incident.