All fire suppression personnel must know and apply the warning signs and safety rules in this section.

**EIGHTEEN FIRE SITUATIONS**

The following list entitled, FIRE SITUATIONS THAT SHOUT "WATCH OUT", is included on CAL FIRE-302. The card functions as a quick reference for personnel working on a fireline. (See 4306.3)

- The fire has not been scouted and sized up.
- You are in country you have not seen in daylight.
- Safety Zones and Escape Routes have not been identified.
- You are in an area where you are unfamiliar with local factors influencing fire behavior.
- You are uninformed on strategy, tactics and hazards.
- You have been given an assignment and instructions unclear to you.
- You have no communication link with crew members or supervisors.
- You are constructing fireline without a safe anchor point.
- You are building a fireline downhill, toward a fire.
- You are attempting a frontal assault on a fire.
- You are in heavy cover with unburned fuel between you and the fire.
- You cannot see main fire and you are not in communication with anyone who can.
- You are fighting fire on a hillside where rolling material can ignite fuel below you.
- You feel the weather getting hotter and drier.
• You notice that the wind begins to blow, increase or change direction.

• You are getting frequent spot fires over your line.

• You are away from a burned area where terrain and/or cover makes travel to safety zones difficult and slow.

• You feel like taking a nap near the fire line.

10 STANDARD FIRE ORDERS
(No. 46 August 2003)

All personnel must know and carry out the following ten orders, also included on CAL FIRE-302, in order to safely and effectively control fires. (See 4306.2) Personnel must:

FIRE BEHAVIOR

1. Keep informed on fire weather conditions and forecasts.

2. Know what your fire is doing at all times.

3. Base all actions on current and expected behavior of the fire.

FIRELINE SAFETY

4. Identify escape routes and safety zones, and make them known.

5. Post lookouts when there is possible danger.


ORGANIZATIONAL CONTROL

7. Maintain prompt communication with your forces, your supervisor and adjoining forces.

8. Give clear instructions and insure they are understood.

9. Maintain control of your forces at all times.

IF YOU CONSIDER 1-9, THEN

10. Fight fire aggressively, having provided for safety first.
LOOKOUTS, COMMUNICATIONS, ESCAPE ROUTES, SAFETY ZONES (LCES) 1734.3
(No. 32 August 2001)

The common thread between all fire fatalities and near misses in the past is a lack of or inadequate lookouts, communications, escape routes, and safety zones (LCES). LCES is a systems approach. All components of LCES must be used, as they are interdependent. Awareness of each component and how they interact is necessary to provide the safest working environment. (See 4306.2.1)

FOUR MAJOR COMMON DENOMINATORS OF FIRE-CAUSED TRAGEDIES 1734.4
(No. 32 August 2001)

Fire suppression personnel must be aware of the potential for changes in quiet or apparently safe areas. Tragedies usually occur: (See 4306.4)

- In small fires or in deceptively quiet sectors of large fires.
- In light fuels, such as grass, herbs, and light brush.
- When there is an unexpected shift in wind direction or speed.
- When the fire responds to topographic conditions and runs uphill. Be particularly alert when working in saddles or above chimneys.

FIRE RETARDANT AIR DROP SAFETY 1734.5
(No. 32 August 2001)

The following safety rules apply to personnel who get caught in a target area. Personnel should:

- Move out of the target area if there is time before the drop.
- If caught in the open, lie down facing the incoming airtanker, hold tools firmly and to one side, spread feet for better stability, and make sure that helmet is on and that goggles are in place to protect eyes.
- Indicate their presence to the aircraft by radio and precisely describe their location (not just “in the trees on the flank of the fire”).
- Grab something solid and get behind it. A solid object will break the force of a low drop and keep them from being thrown or pushed along the ground.

- Remain clear of large old trees. A low drop may break off large limbs.

- Move back into the drop area quickly after the drop to take advantage of the retardant's effect.

DOWNHILL LINE CONSTRUCTION 1734.6
(No. 65 August 2007)

It is the policy of CAL FIRE to adopt by reference the most current version of the Downhill Checklist as listed in the National Wildfire Coordinating Group (NWCG) Incident Response Pocket Guide (IRPG) for Downhill Line Construction. The Downhill Checklist shall be CAL FIRE Policy.

(see next section)

(see HB Table of Contents)

(see Forms or Forms Samples)