



CAL FIRE



Commonly Used Fire Terminology

Containment and Control

Containment: A fire is contained when it is surrounded on all sides by some kind of boundary but is still burning and has the potential to jump a boundary line. The boundary may be a “fire line” which is a strip of area where the vegetation has been removed to deny the fire fuel, or a river, a freeway or some other barrier which is expected to stop the fire. Hose lines from fire engines may also contribute to a fire being surrounded and contained.

Control: A fire is controlled when there is no further threat of it jumping a containment line. While crews continue to do mop-up work within the fire lines, the fire fight is over.

Initial Attack and Extended Attack

Initial attack means the first attack on the fire. The number of resources sent on the first dispatch to a wildfire depends upon the location of the fire, the fuels in the area (vegetation, timber, homes, etc) and current weather conditions. Municipal fire departments would call this the first alarm. Most fires are caught within the first burn period (the first two hours). Therefore, the vast majority of the fires CAL FIRE responds to are considered initial attack fires.

Extended attack means that the fire has burned beyond the area or building of origin, and beyond the initial attack phase, and additional resources are called. If the fire cannot be confined in the area or building of origin even with a substantial addition of resources, and a long-term resource commitment and logistical support will be required, then it is considered a major attack or a major fire.

Air attack means support of the ground forces from the air by aircraft. Air attack planes fly overhead directing the air tankers and helicopters to critical areas of the fire for retardant and water drops. CAL FIRE has 13 air attack and nine helitack bases located statewide. Aircraft can reach most fires within 20 minutes and can access areas too steep, rocky or unsafe for ground forces to gain entry. CAL FIRE has an air force of 23 airtankers, 11 helicopters and 15 air attack aircraft.

CAL FIRE Hand Crew

CAL FIRE operates 196 hand crews, housed in 39 Conservation Camps throughout the state. A CAL FIRE hand crew consists of a fire captain and 15 to 17 firefighting inmates. The firefighters that make up these crews are minimum-security inmates and wards from the California Department of Corrections and Rehabilitation (CDCR). These fire crews are directly supervised by a CAL FIRE fire captain. CAL FIRE inmate hand crews are the infantry of the Department’s firefighting “ground attack” resources. Their primary function is to construct fire line by hand in areas where heavy machinery can not be used because of steep topography, rocky terrain, or areas that may be considered environmentally sensitive.

Strike Teams

*There are three kinds of strike teams:
engine strike teams, crew strike teams, and dozer strike teams*

An **engine strike team** consists of five fire engines of the same type and a lead vehicle. There are three or four personnel on each engine and one or two personnel in the lead vehicle. The strike team leader is usually a captain or a battalion chief.

A **CAL FIRE crew strike team** consists of a strike team leader, and two fire crews. All CAL FIRE fire crews are Type I crews. These crews are highly trained wildland firefighters and are fully equipped to respond to wildland fires anywhere in the state with minimal support. Each fire crew carries enough supplies and food to last for about two days. The only additional support that would be needed is drinking water and fuel for chainsaws. The minimum staffing for a Type I crew strike team is 30 firefighters.

A **dozer strike team** consists of two dozers, a dozer tender, and a leader (a dozer tender carries extra supplies such as oil, tools, etc.).

Fire Weather Watch and Red Flag Warning:

*A fire weather watch or red flag warning simply indicates
a state of readiness (there is no actual flag).*

The National Weather Service initiates the process. If they believe weather conditions could exist in the next 12-72 hours which may result in extreme fire behavior, they will notify the fire service of a **fire weather watch**. A **red flag warning** is issued for events that will occur within 24 hours.

These watches and warnings are called because of a combination of high temperatures, low humidity, and high winds. They can also be issued when there is a possibility of dry lightning. The concern is that if a fire starts in those conditions it has a better chance of spreading very rapidly and erratically.

Red flag warnings were in effect during the 1991 Oakland Hills fire, and the 2003 and 2007 fire sieges.

Each CAL FIRE unit has its own plan for how to react to these conditions. They may increase their dispatch levels, cancel days off, order volunteer patrols, cancel burning permits, etc.

Remote Automated Weather Stations

RAWS means Remote Automated Weather Station. A RAWS is a tower equipped with computerized sensing equipment that samples weather conditions every hour and transmits data to a satellite. CAL FIRE uses the weather observations to calculate fire danger throughout the day and dispatch appropriate levels of resources to incidents. CAL FIRE has 78 permanent RAWS located throughout the state. In addition, CAL FIRE has 21 portable RAWS used to monitor weather conditions at emergency incidents and during control burns. The weather stations are part of an interagency network of over 350 RAWS located throughout the state and utilized by CAL FIRE and other wildland fire fighting agencies.

