There are five types of resource data systems currently in use:

- Computer-Aided Dispatching (CAD)
- Resource Ordering and Status System (ROSS)
- Automatic Vehicle Location (AVL)
- Hired Equipment Management System (HEMS)
- Windows Computer Aided Navigation (WINCAN)

All five systems serve the same function in that they retrieve and/or store data in an organized manner so it can be quickly retrieved by Emergency Command Center (ECC) and Operation Coordination Center (OCC) personnel.

**COMPUTER AIDED DISPATCH SYSTEM (CAD)**

The Dispatch System of Record is a comprehensive computer-aided dispatch system that is used to generate incidents and recommend dispatch assignments based on a standard response plan for the incident type and location.

**CAD:**

- Receives Automatic Number Identification (ANI) and Automatic Location Information (ALI) from the E9-1-1 system;
- Can interface with the radio alerting and alpha numeric paging systems to alert resources dispatched to an incident;
- Has the ability to request resources electronically from a neighboring Unit CC (CAD to CAD) as well as through the resource ordering system of record (CAD to ROSS);
- Receives Automatic Vehicle Location used to capture a vehicle’s real-time GPS location

The CAL FIRE Computer Aided Dispatch Business Practices and Data Standards document will be used for the development, maintenance and operation of CAD. This document is maintained by the CAD Steering Committee.

All requests for modifications and/or interfaces with external programs or agencies shall be submitted to the CAD Steering Committee for review and recommendation. Final approval by Fire Protection Program and Information Technology is required prior to implementation or commitment of funds.

Each CC shall maintain a hard copy of the CAL FIRE Computer Aided Dispatch
Business Practices and Data Standards document to be used in the event of a computer or CC system failure.

**RESOURCE ORDERING AND STATUS SYSTEM (ROSS) 8113.2**

(No. 56 June 2015)

(See California ROSS Business Practices and Standards)

ROSS, referred to hereafter as the “Resource Ordering System of Record”, is a computer software program which automates:

- Resource ordering
- Status
- Reporting process

This system enables dispatch offices to electronically exchange and track information near real-time. ROSS tracks all tactical, logistical, service, and support resources mobilized by the incident dispatch community.

In order to meet its mission, CAL FIRE must maintain a safe, well-trained, qualified and tested workforce. ROSS shall be the system used to status current qualifications of CAL FIRE personnel as provided by the Training Chief. (Training HB4039, Incident Command System Employee Development Guidelines.)

The ROSS database (or current Resource Ordering System of Record) shall be updated annually no later than May 1.

The ROSS Business Practice and Standards will be used for the development, maintenance and operation of ROSS within CAL FIRE.

Each CC shall maintain a hard copy of this information to be used in the event of a computer or CC system failure.

**AUTOMATIC VEHICLE LOCATION (AVL) 8113.3**

(May 2017)

See [http://calfireweb.fire.ca.gov/organization/fireprotection/avl/](http://calfireweb.fire.ca.gov/organization/fireprotection/avl/)

Automatic Vehicle Location (AVL) technology captures a vehicle’s real-time GPS location, and transmits this information to the Dispatch System of Record. This real-time location information is used to recommend closest resource dispatch assignments based on a standard response plan for the incident type and location.
HIRED EQUIPMENT MANAGEMENT SYSTEM (HEMS) 8113.4
(No. 56  June 2015)

(See Policy 7761 – Hiring and Utilization Guide)

The Hired Equipment Management System (HEMS) is the system used to order and track Hired Equipment Resources for CAL FIRE emergency incidents.

HEMS is used to store information on Emergency Equipment Rental Agreements (EERAs) generated by the CAL FIRE Units and Sacramento. The system facilitates the ordering of immediate need and planned need hired equipment (fireline bulldozers, water tenders and support equipment) for emergency incidents. HEMS generates data on CAL FIRE hired equipment practices that must be reported annually to control agencies.

HEMS maintains the immediate need and planned need rotational lists for fireline bulldozers and water tenders. HEMS will auto document contractor contact information required by Policy 7761.6.5 – Record of Contact. All Department programs are able to access HEMS to review contractor agreements, print forms, and produce reports.

Each CC shall maintain a hard copy of this information to be used in the event of a computer or CC system failure.

WINDOWS COMPUTER AIDED NAVIGATION (WINCAN) 8113.5
(No. 56  June 2015)

(See http://calfireweb.fire.ca.gov/applications/wincan)

WINCAN, the “Aircraft Proximity System of Record” is a program that provides proximity calculations including bearing and distance for Air Tanker Bases, Helicopter Bases, VHF Omni-directional Range (VOR), user-defined locations (incidents, airports, cities, landmarks, etc.) Military Training Routes (MTR), Military Operating Areas (MOA), Special User Airspaces (SUA), and High Voltage Power Lines on a scalable map.