

Shasta - Trinity Unit Lightning Plan

CAL FIRE



SHASTA/TRINITY UNIT LIGHTNING PLAN

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TABLE OF CONTENTS

- I. INTRODUCTION
- II. ACTIVATION
- III. LIGHTNING COORDINATION AREAS (LCA)
- IV. OPERATIONS
 - A. OBJECTIVE
 - B. ORGANIZATION
 - 1. INCIDENT COMMANDER
 - 2. INCIDENT DISPATCHER
 - 3. LOGISTICS SECTION CHIEF
 - 4. PLANS SECTION CHIEF
 - 5. FINANCE SECTION CHIEF
 - C. ACTIVATION
 - D. DETECTION
 - E. FORMS
 - F. FIRE NAME & NUMBERING SYSTEM
 - G. COMMUNICATION
 - H. LCA DISPATCHING
 - I. SUPPORT
 - J. EMERGENCY COMMAND CENTER
 - K. MAPS
 - 1. MAP PACKETS
 - 2. 7.5 QUADS
 - 3. MAP COORDINATES
 - L. PLOTTING FIRES
 - M. BATTALION OPERATION PLANS
- V. ESCAPED FIRES
- VI. DEACTIVATION

- EXHIBIT A – Incident Dispatcher
- EXHIBIT B – Logistics Section Chief
- EXHIBIT C – Plans Section Chief
- EXHIBIT D – Finance Section Chief

I. Introduction

Within the boundaries of the Shasta - Trinity Unit are located three mountain ranges, the Coastal Range, the Cascade Range, and the Sierra Nevada Range. Each of these ranges, when combined with the hot, dry climate of the Northern Sacramento Valley, produce ideal weather and fuel bed for lightning fires. The Unit has a long history of multiple lightning fires. The same history has shown that suppression action must take place within the first burning period to prevent them from becoming major fires. This Lightning Plan has been developed to allow for the quick and effective reporting, tracking, staffing, and suppression of multiple lightning fires utilizing the Incident Command System.

It should be noted that this Lightning plan can also be utilized as a Multiple Incident Command Plan (i.e.: major earthquake, floods, weather event, etc.)

II. Activation

The Lightning Plan will be initiated in two phases:

Phase 1: Upon lightning activity within SHU modified dispatching and the LCA fire name and numbering system will be initiated by the ECC.

- A. Modified Dispatching will consist of one engine, one fire crew, and one air attack or helicopter (if available)
- B. See Section IV, Sub Section F for LCA fire naming system description.
- C. One Master Incident number will be issued at the onset of Phase 1 to be used by the ECC and Battalions for the duration of the Lightning Plan activation.

Phase 2: Lightning Plan will be activated in the form of a Lightning Coordination Area (LCA), when the potential of overextending Redding ECC capabilities is approached. It may be prudent to activate a LCA based on the weather forecast, prior to the start any fires. This decision will be made by the Unit Duty Chief with input from the ECC Chief and the affected field Battalion Chief. Boundaries of each LCA's sphere of influence will be delineated on an Incident Map with copies for the ECC, Battalion Chief, and Unit Duty Chief. The Unit Duty Chief, Battalion Chief, and Forestry Logistics Officer (FLO) will be advised that staffing personnel have been identified and ordered. Primary staffing for LCA expansion is required.

III. Lightning Coordination Areas (LCA)

The Shasta - Trinity Unit may be divided into LCA's to facilitate management of the fire situation. The intent is to maintain an effective span of control through adjustment in workload.

Areas:

The SHU Lightning Plan will be used as the basis for the LCA Operational Plan. Each Battalion will develop an Operational Plan attached to the Lightning Plan as addendums. These Operational Plan addendums will address specific issues the Battalion has to activate and operate a LCA successfully. Although developed for entire Battalions, the LCA Operational Plan will be flexible so that actual boundaries may be delineated based on specific needs. Each Battalion may become a separate LCA, if required, or portions of two Battalions may be adjusted to become one LCA. Kits containing required materials for the operation of a LCA will be available at each Battalion headquarters.

The naming of incidents will still be based on what battalion the incident is in, regardless of how the activation occurs.

Example: A lightning fire occurs just east of Hillcrest FFS and Battalion 2 is not in a LCA. Battalion 1 has included within their LCA the Hillcrest area. The LCA fire name of this incident shall be 2-1.

IV. LCA Operations

A. Objective

The objective of this Operational Plan is to facilitate the quick and orderly extinguishment of lightning fires in each Battalion utilizing the Lightning Coordination Area (LCA) concept. Resources and personnel will be used in an effective and cost efficient manner. This will be accomplished utilizing the following guidelines:

1. Have sufficient initial attack capabilities to contain all fires to one burning period and to prevent firefighter fatigue.
2. Provide necessary follow-up resources to control and patrol all fires.
3. Identify personnel to fill support positions at the time of LCA activation.
4. Keep the ECC current on LCA activities and resources assigned.
5. Maintain personnel and resources to assist the Unit with Initial Attack activities.
6. Keep Cooperators informed of present conditions and forecasted activity.

7. Immediately notify the appropriate agency of any fire within 1 mile of a DPA Boundary.

IV. Operations cont.

B. Organization

The LCA will operate in accordance with the Incident Command System. LCA's may supplement the minimum requirements to the level of organization required to meet their needs.

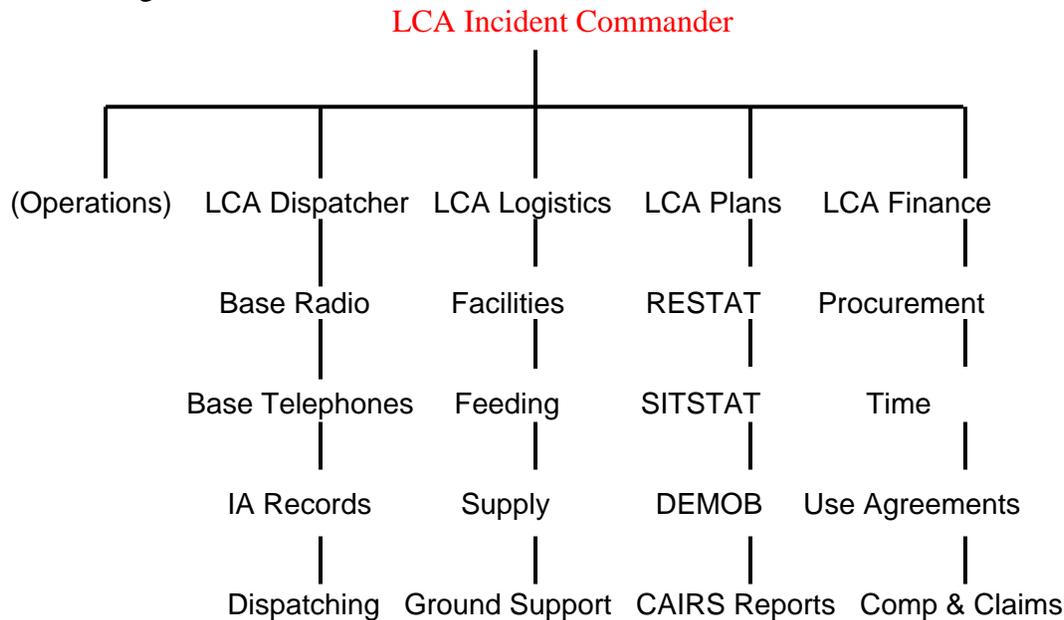
The following positions are suggested minimum organization requirements to activate a LCA.

1. LCA Incident Commander
2. LCA Incident Dispatcher*** Exhibit 1
3. LCA Logistics Section Chief*** Exhibit 2
4. LCA Plans Section Chief*** Exhibit 3
5. LCA Finance Section Chief*** Exhibit 4

*** It is NOT mandatory these positions be filled with persons fully qualified or a trainee.

Any additional ICS positions utilized, also do not have to be filled with persons fully qualified or a trainee.

Organizational Chart:



IV. Operations Cont.

When three or more LCA's are activated, it may be necessary for the unit to institute an Area Command structure. The function of the Area Command will be to develop broad objectives for the LCA's and coordinate the development of individual LCA objectives and strategies. Additionally, the Area Command will set priorities for the use of critical resources allocated to the LCA's.

The organization of the Area Command will normally be small with personnel assigned to Command, Planning, Logistics, and Finance.

C. Activation

Activation of LCA's will be in accordance with Section II and III of this Plan. A definite time will be decided on to initiate LCA dispatching so the affected LCA has time to staff up for the operation and activate their LCA Operational Plan.

D. Detection

Lookouts will report all smokes to the designated LCA, identifying type of smoke, bearing, distance, landmarks and legal location if it can be determined. If the LCA determines the smoke to be outside of the designated LCA they will notify the proper LCA or ECC.

If there is a Fire Lookout within the LCA that is not staffed, coordinate with the Duty Chief, ECC and the Station that administers the lookout to get it staffed. The Station that administers the lookout will maintain a list of qualified personnel that can be utilized for staffing.

Aerial Recon will be activated in coordination with the ECC and Duty Chief, and used in conjunction with fixed detection, suppression and air tanker operations.

1. ECC will advise recon aircraft of target areas after checking with LCA and/or lookouts in areas of suspected lightning strikes.
2. Air Recon will plot smokes using Lat and Longs and report them to the ECC until advised to report to LCA dispatch.
3. The LCA will order additional recon aircraft as needed through the ECC.
4. Consideration should be given to using a Call When Needed (CWN) aircraft when recon flights are ordered early in the day so that Air Attack 240 will not be timed out before dusk.

E. Forms

Maintain a minimum cache of the following forms at each Battalion H.Q.

- 50 – SHU Lightning Dispatch Action Cards (Exhibit E)
- 50 – T Cards each in the following colors
 - red, green, white, tan, blue & yellow
- 10 – ICS Forms each. 201 – 230
- 25 – AO-34's Emer. Meal & Hotel Roster
- 25 – FC-315's Incident Replacement Request
- 25 – F-72's MRT
- 25 – Cal Fire 101's PL&D
- 25 – FC-42's Time Sheet and Pay Voucher
- 75 – FC-33's Overhead Crew Activity Report
- 10 – OF-294 Emergency Equipment Rental Agreement
- 10 – Dept. of Justice I-9 Employment Eligibility Verification

F. Fire Naming System

LCA fire names will be assigned to each reported sighting. LCA fire naming of fires will be made utilizing the Battalion number as the first digit, a hyphen, then a consecutive number for the LCA. Note: within a LCA, if two battalions are joined into one LCA utilize the battalion number where the fire is located then a consecutive number (Reference Section III Lightning Coordination Areas). As an example:

- Burney LCA 1-1, 1-2, 1-3, etc.
- Shasta LCA 5-1, 5-2, 5-3, etc.
- Weaverville LCA 6-1, 6-2, 6-3, etc.

The dispatch of personnel and equipment will be by the LCA fire name, the legal description, and a landmark if known. The LCA fire names will be given incident numbers when conditions allow coordination between the LCA and ECC (minimum of once per day). The LCA names will remain the Incident Name.

G. Communications

Initial attack resources should use normal dispatching frequencies unless assigned a LCA Command frequency at time of dispatch. The ECC will be responsible for assigning Tactical/Command frequencies to individual LCA's as needed/requested.

H. LCA Dispatching

The LCA Incident Commander will be responsible for all wildland fire activity and resources in their LCA. This includes setting priorities for the LCA wildland fires. Duties will include maintaining records, naming each fire (e.g. 3-1), maintaining records of assigned resources and keeping the ECC current on personnel, equipment, and fire status. All fire suppression resources, while assigned to a LCA, will maintain communications through that LCA's ICP. (i.e.: responding, at scene, available, in quarters, resource needs, etc.). When no longer needed, resource releases will be coordinated by the LCA through the ECC.

SCFD Volunteer Fire Company and Fire Protection District dispatching will remain with their primary dispatch center. LCA's will be immediately notified if SCFD/FPD resources within the LCA are dispatched to any type of fire. If SCFD/FPD resources are needed by the LCA, dispatching will be requested through the ECC. Control of all resources assigned to the LCA will remain with the LCA until released back to the ECC.

I. Support

LCA's will utilize the LCA Operational Plan with any local addendums for their area in the format shown in Exhibit 1. This consists of, but is not limited to, LCA Operations, LCA Dispatching, LCA Plans, LCA Logistics and LCA Finance. All orders for additional ground/air resources will be made through the ECC. The ECC will expand as needed to support the LCA's and the activity at hand.

J. Emergency Command Center

The Unit Duty Chief and ECC will set priorities for all shared resources. As emergency activity increases, dispatch expansion will occur to handle fire activity and resource ordering. Expanded Dispatch staffing should include both a SITSTAT and RESTAT personnel.

The ECC will:

1. Maintain close communications with adjoining Command Centers (SIFC, Yreka, Red Bluff), the Redding Fire Weather Offices, and NOPS.
2. Review status of personnel and equipment to determine maximum utilization daily.
3. Notify Industry Coordinator whenever lightning levels of 3 or greater are forecasted and any fires are on industry lands.
4. Check LCA Operational Plans for additional actions.

5. Check availability of recon aircraft with Redding AAB.
6. Notify each LCA of any new fires reported from outside of each respective LCA.
7. Be responsible for all dispatching, other than wildland fires, within the LCA.
8. Notify LCA of resource fill or divert information.
9. Be responsible for all dispatching outside of activated LCA's.
10. Keep North Ops and adjacent agencies advised of the situation and of anticipated needs.
11. Maintain Unit wide map of fire locations and status and update a minimum of once daily.
12. Fill LCA requests for additional personnel, equipment, and special services.
13. Control all inter-LCA resource movement.
14. Provide copies of lightning detection maps to the LCA's in a timely manner as available.

K. Maps

1. Map Packets

Each Battalion will have prepared map packets to equip personnel going to lightning fires. Quantity of prepared packets will be determined from experience during the past ten years. These packets should consist of the type of maps which would be most desirable for use during a "lightning bust". These maps would generally cover only the respective area and possibly nearby portions of adjoining areas. The Battalion should also develop acetate overlay Administrative Maps with boundaries for use in plotting fires. MAPTECH computer generated topographic maps are available in each Battalion and are encouraged for incident specific maps.

2. 7.5 Quads

A supply of USGS 7.5 maps will be maintained at each Battalion HQ. They will cover the entire Battalion and a minimum of 5 ea. will remain in stock at all times.

3. Map Coordinates

In addition to providing the Legal Location (Sec., Town, Range) it is also necessary to plot each fire using Latitude and Longitude. The correct format for the Latitude and Longitude will be as follows:

- a. Map Datum: WGS 84
- b. Position Format: Degrees Decimal Minutes (hddd mm.mmm') aka Degrees Minutes Decimal Minutes or Degrees Minutes Tenths (See Exhibit G for further information)

L. Plotting Fires

Plot fires on a master map utilizing the following symbols;

- Red "X" = A Known Fire
- Black "X" = A Possible Fire
- Red "X" with red circle = Staffed Fire
- Black "X" with black circle = Controlled Fire

To determine latitude and longitude each Battalion HQ shall have on the Station computer, the CAN (Computer Aided Navigation) program. Contact the ECC to download this program or receive training.

Another option for converting to latitude and longitude is the following website:

<http://www.geocities.com/jeremiahobrien/trs2ll.html>

<http://www.fcc.gov/mb/audio/bickel/DDMMSS-decimal.html>

M. Battalion Operations Plans

The Battalion Operation Plans will address the following:

- Incident Command Posts
- Incident Bases
- Staging Areas
- Activation Steps
- LCA Radio Identification
- Personnel
- Notifications
- Helispots
- Battalion ERD
- Battalion Medical Plan

V. Escaped Fires

If one or more fires develop beyond the initial attack stage (starting to run and appears it will become more complex), it will be removed from LCA control after joint decision between the Unit Duty Chief and the affected LCA IC. A separate fire organization will be established and operated through the ECC using expanded dispatch procedures. Also at this point, a new fire name will be given other than the LCA fire name (Ex. 1-1 will now be known as the Venture Inc.).

VI. Deactivation

The following guidelines will be met to deactivate Phase 1 and/or Phase 2(LCA) of the Lightning Plan and return dispatching to the ECC:

- A. All fires under the jurisdiction of the LCA dispatch will be in the mop-up stage (Note: All fires should be monitored until no “smokes” are found for a minimum of 48 hours).
- B. Sufficient Initial Attack resources will be in place or available for ECC dispatch use.
- C. All information pertaining to any incident still in the mop-up stage will be given to Redding ECC (ie: personnel, equipment, and expected needs).
- D. A joint decision is made between the Unit Duty Chief, the ECC Chief, the LCA IC, or the affected Battalion utilizing Phase 1 (modified dispatching).
- E. When possible, the ECC will be notified 12 hours in advance of returning dispatching to them.
- F. Any out-of-Unit resources should be considered for release first. Release approval must be given by the ECC.
- G. Remember that if a new lightning series starts and a LCA is activated prior to the conclusion of previous LCA fires, DO NOT name a fire the same as a fire that is still active.

EXHIBIT A

LCA INCIDENT DISPATCHER

- Operates LCA base radio and telephone system.
- Determines, from Expanded Dispatch if activated, tactical frequency assigned to LCA.
225-2427 / 225-2428.
- Records on SHU Lightning Dispatch Card (Exhibit E), incoming fire reporting information from lookouts, air attack, telephone reports, and forwarded information from Expanded Dispatch.
- Plots azimuth readings from lookouts on LCA status map.
- Assigns LCA Incident Name/Number to ALL new reports.
- Advises lookouts and Air Recon (at time of report) of LCA number assigned to smoke.
- Dispatches initial attack resources to incidents under LCA Incident Commander's direction.
- Maintains LCA fire status map under the direction of LCA Plans Section Chief or Situation Unit Leader.
- Notifies LCA Logistics Section Chief if additional radio equipment or telephone lines are needed.
- Contacts ECC once a day (evening is best) and reconciles all incident information.
- Order, through LCA Logistics Section Chief, additional Communication Unit personnel as needed.

NOTE: This position is not required to be a qualified person or a trainee.

EXHIBIT B

LCA LOGISTICS SECTION CHIEF

- Conducts all LCA ordering.
- Establishes LCA Incident Command Post and Base.
 - LCA ICP layout should include separate rooms for:
 - LCA Incident Commander
 - LCA Incident Dispatch
 - LCA Plans
 - LCA Logistics
 - LCA Finance
 - LCA Base should include:
 - Separate sleeping areas for inmate crews and engine crews.
 - Motel rooms if available and authorized by LCA IC.
 - Sleeping area for initial attack crews.
 - Sanitation facilities:
 - Porta-Potties
 - Shower Units
 - Dumpsters
 - Vehicle Repair area.
 - Fueling area and procedure if station fuel pumps are to be used.
 - Feeding area.
 - Briefing Area
- Provide for feeding of all LCA assigned personnel:
 - Restaurant or FC-42 cooks.
 - Lunches
 - Cold drinks for personnel.
 - Ice availability.
- Provide Ground Support Services including:
 - Fueling.
 - Repair.
 - Support vehicles.
 - Time keeping on hired equipment.
- Order additional LCA Logistics personnel if needed.

NOTE: This position is not required to be a qualified person or a trainee.

EXHIBIT C

LCA PLANS SECTION CHIEF

Conduct daily planning meetings, Operational Briefings, and develop and disseminate IAP's daily or as directed by the LCA IC.

RESTAT:

- Maintain check-in list (ICS 211).
- Maintain list of all personnel and their status on "T" cardboard.
- Maintain reconciliation of all resources with the ECC
- Prepare and Maintain ICP resource display.
- Anticipate need for additional resources in cooperation with the LCA IC and place order through the LCA Logistics Unit Leader.
- Prepare Organization Assignment List (ICS203) and Organizational Chart (ICS 207) if required.
- Develop Demobilization Plan and Coordinate with the ECC.

SITSTAT:

- Coordinate the plotting of all reported fires on Incident Map with the Incident Dispatcher.
- Develop individual incident maps using topographic mapping software.
- Maintain and record the current status of all fires on display board.
- Establish communications schedule to check status of fires.
- Collect, organize, and display incident status and situation information.
- Order latest Automated Lightning Detection map from the ECC, if available.
- Compile data for individual CAIRS Reports (FC-18e).
- See that all required CAIRS reports are completed, transmitted and turned in.
- ICS 209 completion or provide ECC the information to complete.

Compile and package all records related to Lightning Coordination Area operations.

Order Planning Unit personnel, through the LCA Logistics Unit, as needed.

NOTE: This position is not required to be a qualified person or a trainee.

EXHIBIT D

LCA FINANCE SECTION CHIEF

- Review all LCA generated finance documents for completeness and accuracy.
- See that all bills are paid.
- Establish a Master Log of all finance documents.
- Establish Personnel Time Recording.
- Provide Cost Estimates
- Maintain Compensation and Claims documentation.

NOTE: This position is not required to be a qualified person or a trainee.