

From: Mark A Swift  
Sent: Monday, June 16, 2003  
Subject: Re: L-4s in California

The L-4, as I understand it, has regional variations. We could call any L-4 in California a different name, but it is still based on the L-4 design. The 4A, 4AR (I call it a District 5 (D-5) style since I found it called this on one set of plans, AKA Supervisor Hall Special, Region 5 style, California Style), the L-4 Gable, L-4 Hip, L-4 Hip with outriggers (Standard 1936 Design), the C-3, and C-3 with outriggers all were 14 by 14 cabs. I have noted in maintenance records that cab styles were confused.

Many early style cabs of 14x14 size were called L-4 in Region 6 documents of the 1950s, since the L-4 was the common design. Calamity Butte was identified in some documents on the Burns District as an L-4 when it was really a D-5 (4AR) and predated the hip roof L-4 by 5 years, having been built in 1927. I have a feeling that the L-4s in Region 5 were later misidentified as a C-3 style in these 1940s-60s records since the C-3 was the most common style in California.

Regional variation is seen between Regions 6 and 1. The L-4 hip roof as originally designed in Region 1 has 9 panes of glass per window. The Region 6 hip roof L-4s have 4 panes of glass. Only a few L-4 hip built early in 1932 in Region 6 have the 9 pane design, I think it is Evergreen Mtn. (or is it Green Mtn?) MBS NF that is the last 9 pane L-4 in Region 6.

Those lookouts that I consider L-4s in California (excluding the north half of the Six Rivers NF which was part of Region 6 until 1947) have 2 panes of glass per window. Two pane windows were standards for the 4A and D-5, both Region 5 designs. Region 1 redesigned the L-4 windows in the 1950s developing a 4 pane window, with each pane stacked one-atop the other instead of the four quadrants of the Region 6 windows. Maintenance of Regional identity seem to me to be the primary reason for these variations, although distance from trailhead may have dictated part of this variation (packing a new pane into a Montana LO may be much farther than into a California LO). However, there does not seem to be any relax of the regional norms based on accessibility strictly (i.e. a road access Region 1 L-4 still had 9 pane windows, and trail access Region 5 lookouts still had 2 pane windows. Therefore these appear to me to be regional variations on the L-4 design, based primarily on a regional template, and not on a need specific to the lookout site in question. It may be that there are other minor changes not so noticeable that differentiate these regional variations. Only a few Gable Roof L-4s appear to have been built in Region 5, Girard Ridge on the Shasta is one I believe.

The R6 Flat roof lookout replaced the L-4 in Region 1 and 6 in the late 1950s, while Steel flat roof lookouts replaced the C-3 in the 1950s in Region 5. The R6 Flat was a large change from the L-4. In the early years this cab had four windows stacked one atop the other (like the late L-4 in Region 1). Later in the early to mid-1960s, one larger pane was set below two smaller ones, with some of the upper small panes able to be opened. Later this was reduced to two panes one small and one large in place of the other three panes. The most recent R-6 has single windows with one window per wall with two panes, one small opening pane above one large fixed window.

At some point a variation, becomes a new style. How that is determined without specific plans showing a new design name is unclear. All of these lookouts (except possibly the R6 Flat) appear to me to be related, in a nearly genetic sense, and evolved as a concept or idea can evolve.

I doubt that the crew constructing a lookout cab would alter it from the original plans, since most of the lumber was cut to the specifications of the plans. For instance, the door location, which I see as a

significant difference between the L-4 and the C-3, would be difficult to alter since it would require lumber siding cut to different dimensions than the kits provided.

Here are my concepts of these styles, and how they are differentiated.

Many other similarities also exist, i.e. these are all wood cabs, and likely many differences also exist, (such as the window mullions that Mark Thornton pointed out, but these are the dividing characteristics that I have used to differentiate the styles.

Style	Size	#Windows	# Panes	Door Location	Roof Type	Overhead Shutter Supports
4A	14x14	6 windows	2 pane	Door in place of 2 <sup>nd</sup> window in from end of wall	12/12 pitch roof, Hip	None
D5 (4AR)	14x14	5 windows	2 pane	Door in place of window in middle of wall	12/12 pitch roof, Hip	None
L4 Gable	14x14	5 windows	9 pane	Door in place of window at end of wall	8/12 pitch roof, Gable	None
L4 Hip	14x14	5 windows	9,4,2 pane	Door in place of window at end of wall	8/12 pitch roof, Hip	None
C3	14x14	5 windows	2 pane	Door in place of window in middle of wall	8/12 pitch roof, Hip	None
L4 outrigger	14x14	5 windows	4 pane	Door in place of window at end of wall	8/12 pitch roof, Hip	Horizontal joist extensions
C3 outrigger	14x14	5 windows	2 pane	Door in place of window in middle of wall	8/12 pitch roof, Hip	Horizontal joist and diagonal rafter extensions (triangular supports)
(In the C-3 outrigger, the height of cab is elevated above widows to accommodate the extended rafters meeting the extended horizontal joists.)						
R6 Flat	15x15	7 windows	4,3,2 pane	Door in place of 2 windows at end of wall	Flat (nearly)	None (or from roof)

(Roof pitch is rise over run, 12/12 is 12 inches of vertical rise for each 12 inches of horizontal run, 8/12 is 8 inches of rise for each 12 inches of run)

The only C-3 style lookout that I had found (based on these criteria) that did not have outriggers was Miami Mountain Lookout on the Sierra NF. There are likely others, but I have not seen them. Region 5 appears to have the earliest outriggers, as early as 1934, and this may have been the inspiration for the Standard 1936 L-4's outriggers.