A PANORAMIC SALM FIRE FINDER SKIRT AS DEVELOPED ON THE SAN BERNADINO NATIONAL FOREST

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The fire finder skirt was born of the need for a better method to acquaint lookouts with their country--for a locator that could actually point out on a map the location of a fire when cross readings were not available and when the topography was blacked-out by darkness--for a way to better perpetuate the intimate knowledge of an area gained by the experience of veteran lookouts and rangers--for a lookout's map that would give locations accurately as seen on the ground through the fire finder's sight.

The principles employed were adapted to the standard Osborne Fire Finder in a way that its operation was unchanged, except to be improved in a small way, such as to make it no longer necessary to sometimes have to lift the instrument from track to track to miss local obstructions in the line of sight.

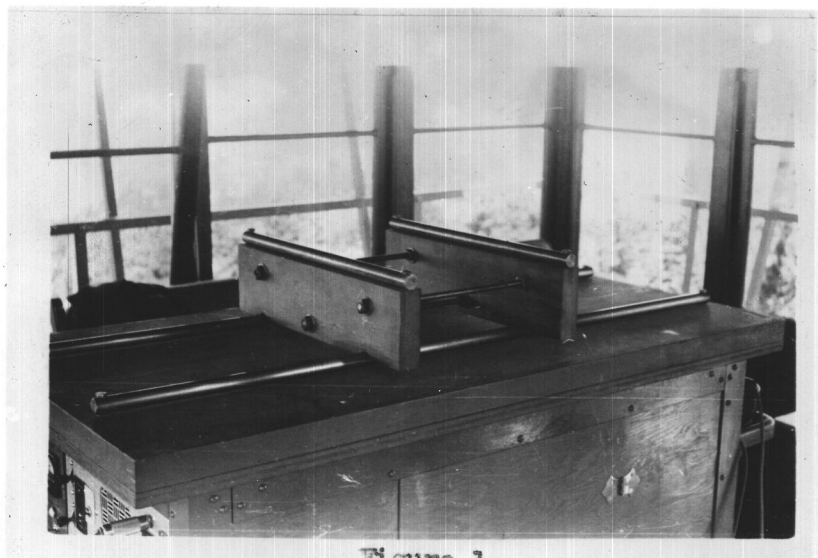

Figure 1

In order to raise the fire finder to make space for the skirt, the buildup shown in Figure 1 was used. The tracks on top the buildup permit the fire finder to be slid four ways. This arrangement has been found to help keep the instrument in better orientation than when it was necessary to have to lift it from track to track and has helped to reduce possibilities of accident and loss of time.

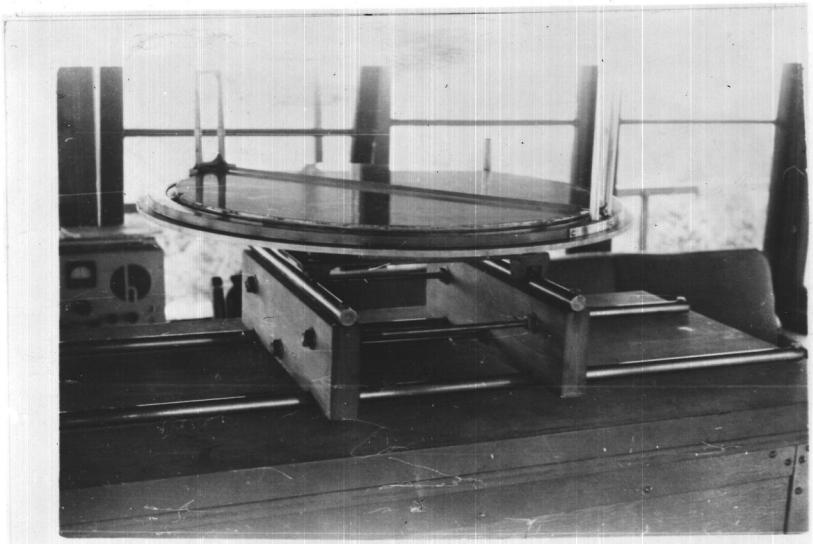

Figure 2

Figure 2 shows the Osborne Fire Finder resting on the buildup and able to be slid in four directions. The third base track has been removed, since it is no longer needed.

The circular skirt is made of 16 gauge metal and has a narrow inside shoulder at the top edge. When the skirt

is slipped on, the shoulder comes to rest upon the azimuth circle ring of the fire finder. It is locked in position by a single dog attached to the skirt which slides into a notch cut into the azimuth ring as the skirt is slipped on. The skirt is very easily removed to make accessible all adjustments. It is painted with chromium paint, and the culture is drawn on with waterproof ink.

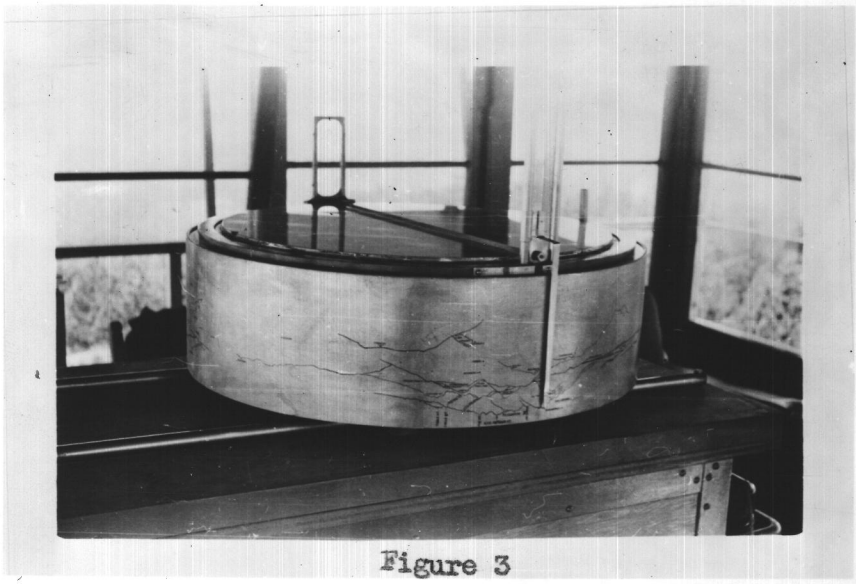

Figure 3

A pointer made of spring bronze was attached to the peep sight so that it could slide up and down with the sight and along the face of the skirt. Figure 3 shows the skirt in place and the pointer arrangement. At the time the photograph was taken, the culture was being drawn on the skirt.

To the front sight was added a horizontal cross

hair between the two regular cross hairs. This is the only cross hair used when getting a location from or adding one to the skirt map. The regular cross hairs remain unchanged and are used as before. However, at stations located in high country where minus vertical readings are used, the added cross hair will not be needed as the lower front sight cross hair can be used. Conversely, stations located at low elevations and surrounded by high country need only to use the upper front sight cross hair. A center cross hair sight has to be added only to give maximum efficiency at stations surrounded by both high and low terrain.

To draw the culture on the skirt the lookout, after making certain that the fire finder is oriented, looks through the peep sight and using the center or designated cross hair of the front sight, follows ridges, roads, trails, drainages, etc., up, down and around. As he does this, the pointer travels up, down and around on the face of the skirt, and he draws in its path as he goes. Symbols are used for section corners, structures, camps, control points, etc. Many points that the lookout cannot pick out will be given to him by mirror flash during the day or flashing light at night by men traveling in the field. The culture will necessarily appear on the skirt map in reverse. However, this seemingly objectional feature has not confused anyone who has operated the instrument so

far. If the culture is viewed in a mirror held at a right angle to and at the bottom of the skirt, it will appear right side up.

The four square feet of the skirt's surface give ample room for much detail, such as the spotting in and identifying of individual houses in a summer home tract.

The instrument has sufficient range to work well in either rough or low rolling country.

The skirt shown in Figure 3 is 7½ inches deep. A shorter one of 3 or 4 inches is sufficient for flat rolling country, or one as deep as 9 inches may be used in very precipitous terrarin. It was originally built for an experimental working model at a cost of $3.80 and has proved so satisfactory that it has not been worthwhile to improve or change it.

In both the hands of new men and veterans the fire finder skirt has been a valuable adjunct through two fire seasons in improving the detection technique and lookout reliability. Not to be left unmentioned is the fact that this instrument served as an excellent focal point for public interest in the detection field.