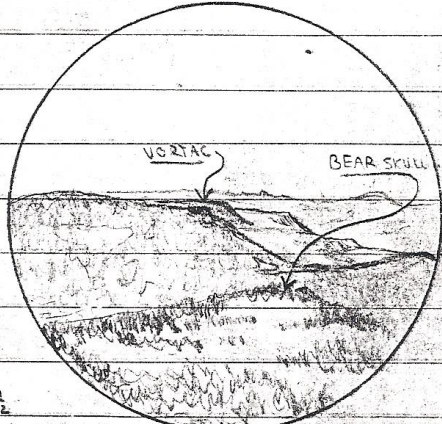
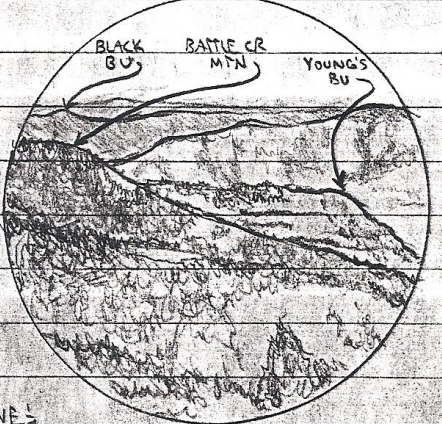


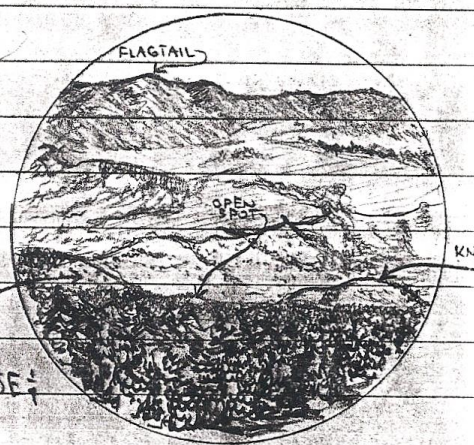
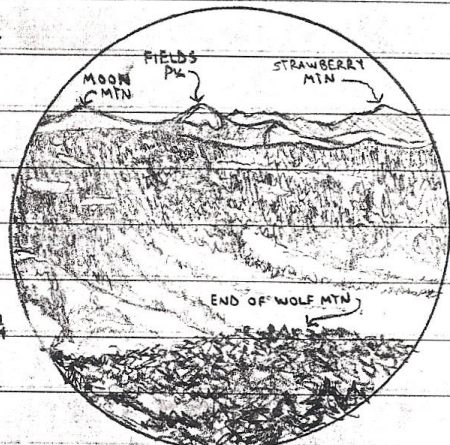
REFERENCE POINTS | WOLF MOUNTAIN LOOKOUT

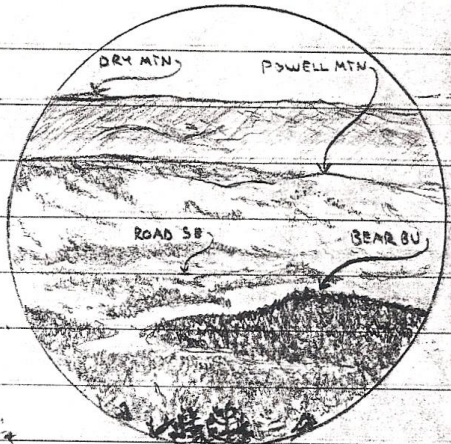
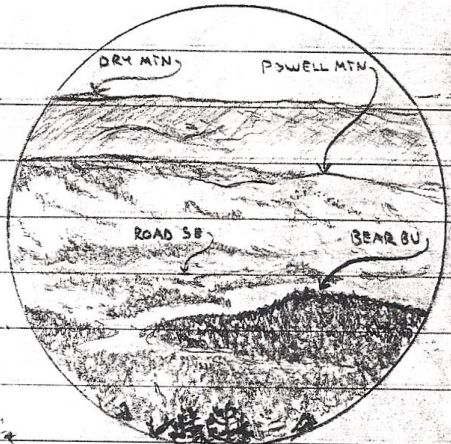
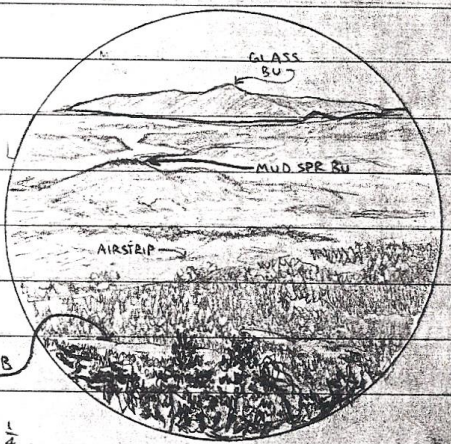
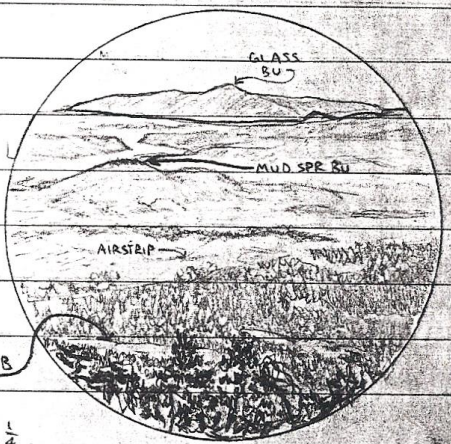
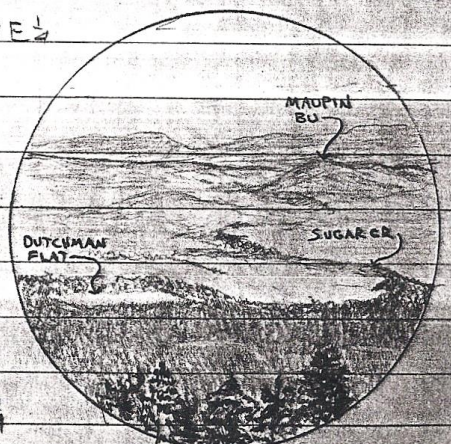
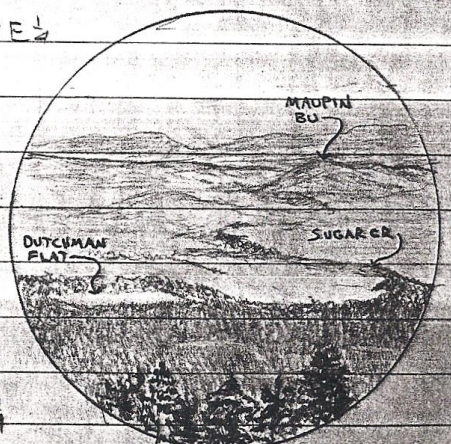
(FOR LOCATING POINTS SEEN, NOT FOR ORIENTING FIREFINDER)

NOTE ABOUT VERTICAL ANGLE: THE NORTH TRACK OF THE WOLF MTN FIREFINDER IS INCLINED ABOUT 13° DOWN TO THE NORTH, RELATIVE TO THE SOUTH TRACK.

AZIMUTH	VERTICAL ANGLE	DISTANCE	LEGAL	
0° 24'	-40'	2.2 MI	T11, R25, S3, NW½	<p>VORTAC TRANSMITTER, WHITE, ON BENCH, 1ST FROM SKY-LINE</p> 
3° 15'	-2° 10'	2½ MI	14, 25, 15, NW	<p>BEAR SKULL, SPARSELY FORESTED HILL, THIS SIDE OF APPARENT SANDIF IN RIDGE</p>
~36° 00'	-30'	2.3 MI	11, 27, 22, E½	<p>RADIO MTN, FLAT TOP RIDGE ON SKY-LINE</p>
62° 35'	-15° 5'	3.2 MI	T12, R30, S8, W½	<p>BLACK BUTTE, HIGH SPOT ON RIDGE, 1ST FROM SKY-LINE</p> 
68° 05'	-1° 55'	7 MI	T14, R26, S10, SE½	<p>YOUNG'S BUTTE, STEEP, ROCKY DROPP-OFF, SPARSELY VEGETATED</p>
82° 15'	+0'	1.8 MI	T14, R28, S16, NE½	<p>DRY CR BUTTE, ROCKY POINT ON SKY-LINE</p>

AZIMUTH	VERTICAL	DISTANCE	LEGAL	
86° 45'	+10'	25 MI	T14, R29, S22, N½	MOON MTN, BARE POINT ON SKY-LINE
88° 05'	+15'	23 MI	T14, R29, S20, SE¼	FIELDS PK, ROUNDED PEAK ON SKY-LINE
~ 90° 00'	-2° 50'	3 MI	T14, R26, S30, NW¼ OF SW¼	END OF WOLF MTN RIDGE TO EAST
90° 55'	+10'	50 MI	T14, R33, S35	STRAWBERRY MTN, ON SKY-LINE
113° 45'	-3° 10'	6 MI	T15, R26, S9, NE¼	OPEN SLOPE, FACING SOUTHWEST
114° 15'	-10°	24 MI	T16, R29, S18, E½	FLAGTAIL MTN, ROUNDED PEAK ON SKY-LINE
115° 30'	-3° 20'	5 MI	T15, R26, S5, SE¼	OPEN SPOT, ON SW SIDE OF LITTLE BUMP
119° 20'	-3° 10'	9 MI	T15, R26, S14, SE¼	KNOLL, SPARSELY VEGETATED
127° 40'	-3° 50'	6 MI	T15, R26, S17, NE¼	BEND OF N FORK WIND CR



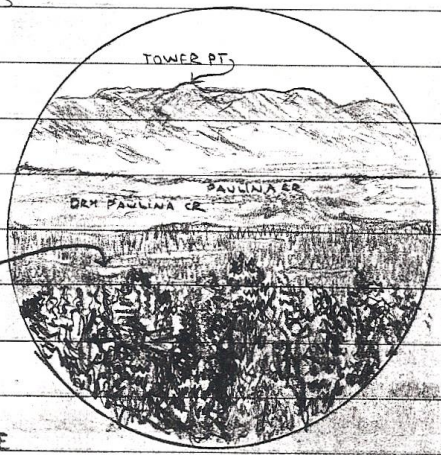
AZIMUTH	VERTICAL	DISTANCE	LEGAL	
173° 0'	-3° 0'	9 MI	T16, R25, S11	
				ROAD 58, SEEN JUST THIS SIDE OF STRIP OF FOREST AT BASE OF HARDCRABBLE.
175° 40'	-1° 20'	11 MI	T16, R25, S26, NW ¼	
				POWELL MTN, RACE END OF HARDCRABBLE RG.
176° 30'	-3° 30'	~5 MI	T15, R25, S27, NW ¼	
				BEAR BUTTE, FORESTED, HOLLOW ON LEFT, ROUND ON RIGHT
196°-199°	-4° 40'	~2 MI	T15, R25, S17, SE ¼	
				SCAB, APPEARING LONG, NARROW, FLAT
197° 50'	-1° 40'	1.9 MI	T17, R24, S2, NE ¼	
				MUD SPR BUTTE, DOUBLE-HUMPED, HIGHER ON LEFT, WITH A LIGHT TIPPING OF TREES.
198° 15'	-3° 30'	~7 MI	T15, R25, S31, SE ¼	
				RAGER AIRSTRIP, LIGHT COLORED, HARD TO SEE. ROAD CROSSES.
205°-208°	-3° 50'	~7 MI	T15, R24, S36, NE ¼	
				DUTCHMAN FLAT, RECTANGULAR FIELD
211° 50'	-50'	21 MI	T17, R24, S2, NE ¼	
				MAUPIN BUTTE, LEFTMOST BUMP, 1ST FROM SKY-LINE, SOME TREES ON TOP.
213° 20'	-3° 20'	~8 MI	T15, R24, S35, SW ¼	
				SUGAR CREEK "DELTA", EXTENSION OF FOREST

133° 35'	-40'	16 MI	T16, R27, S21, SE ¼	
135° 25'	-4° 0'	5 MI	T15, R26, S18, N ½	
138° 20'	-9° 0'	27 MI	T18, R28, S4, SW ¼	
145° 0'	-1° 20'	13 MI	T16, R26, S23, NE ¼	
147° 0'	-3° 30'	~6 MI	T15, R26, S19, SW ¼ SE	
148° 5'	-1° 30'	13 MI	T16, R26, S23, SW ¼	
150° 30'	-2° 50'	8 MI	T15, R26, S31, SE ¼	
154° 40'	-1° 30'	13 MI	T16, R26, S28, E ½	
156° 10'	-0'	27 MI	T18, R27, S32, NE ¼	
161° 0'	-40'	~14 MI	T17, R26, S5, E ½	

222° 15' -S 20' 9 MI T15, R24, S34, NW ¼
LYLE MILLER RANCH, WHERE WOLF CR EMERGES
FROM FOREST.

232° 0' -2° 10' 14 MI T16, R23, S11
FORESTED RIDGE EXTENDING INTO VALLEY IS
BETWEEN N FK WOLF AND DRY PAULINA.

236° -15' -3° 20' 7 MI T15, R24, S16, SE ¼
FLAT SCAB RIDGE TOP, SEEN JUST
ABOVE FOREGROUND TREE TOPS.



237° 10' -30' 34 MI T17, R20, S35, N ½
TOWER POINT, BUMP ON SKY-LINE RIDGE

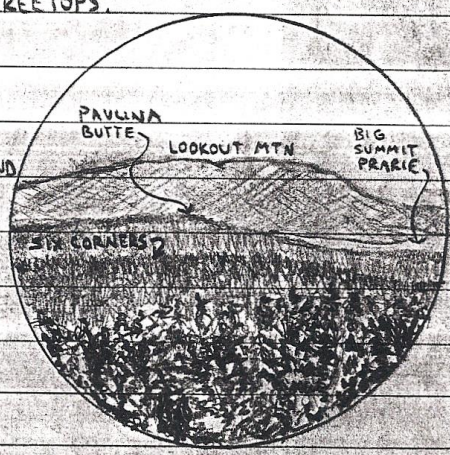
244° 0' -1° 0' 25 MI T16, R21, S24, NW ¼
HILL (RIDGE), 1ST FROM SKY-LINE.

259° 30' -1° 10' 14 MI T15, R23, S8, N ½
ROBA BUTTE, SOUTH END OF RIDGE EXTENDING TO
PAULINA BUTTE, SECOND FROM FOREGROUND TREE TOPS.

267° 45' -1° 20' 8 MI T14, R24, S29, S ½
SIX CORNERS, TOP OF FIRST RIDGE FROM A-GROUND

268° 45' -1° 10' 13 MI T14, R23, S28, SW ¼
PAULINA BUTTE, N END OF MIDDLE RIDGE.

270° 0' -10' 32 MI T14, R20, S30
LOOKOUT MTN, SKY-LINE.



273° 45' - 1° 20' 12 MI T14, R23, S21, SE ¼

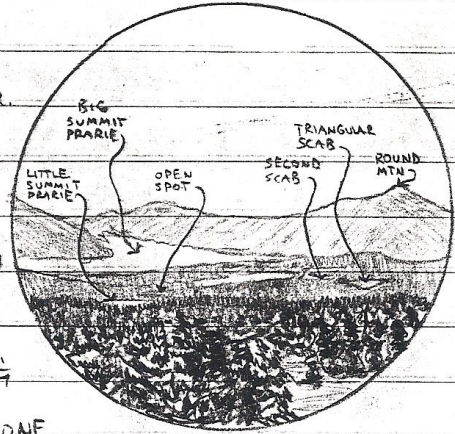
OPEN SPOT, ABOVE AND RIGHT OF LITTLE SUM. PR.

276° 35' - 1° 10' 15 MI T14, R23, S13, SE ¼

SECOND SCAB, NEARER OF TWO IN THAT DIRECTION

277° 30' - 1° 10' 15 MI T14, R23, S18, SW ¼

TRIANGULAR SCAB, MOST DISTINCT ONE



289° 10' - 10' 27 MI T13, R21, S8 P13

PISGAH, SKYLINE PEAK

289° 10' - 50° ~6 MI T14, R24, S15, W ¼

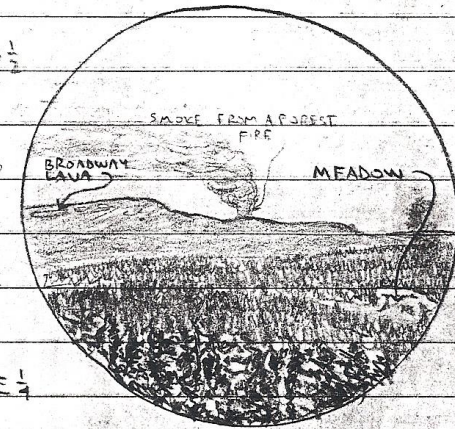
BEAR MTN, FLAT-TOP

296° 40' - 30' 18 MI T13, R22, S14, NE ¼

BROADWAY LAVA, LIGHT STREAK ON MTN SIDE

303° 45' - 1° 50' ~6 MI T14, R24, S10, NE ¼

MEADOW NEAR SADDLE SPRING



310° 30' - 1° 10' 5 ½ MI T14, R24, S2, SE ¼

KNOLL, WHICH DROPS OFF INTO ROCK CR

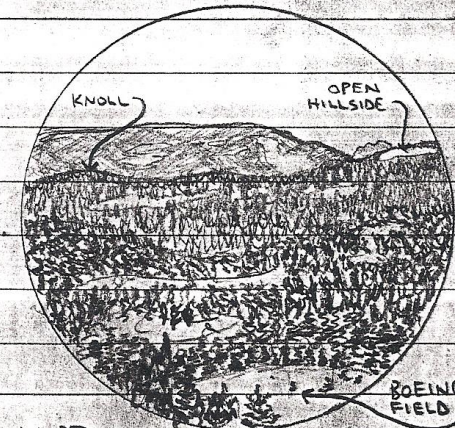
320° 0' - 40' 7 MI T13, R24, S26, SE ¼

OPEN HILLSIDE, ON RIDGE SW OF SPANISH PK.

333° 30' - 2° 40' ~2 MI T14, R25, S16, W ¼

ROAD INTERSECTION, 38/5820,

ALMOST VISIBLE ON OPEN SLOPE BELOW WINDY PT



VERTICAL ANGLE FORMULA

FOR COMPUTING VERTICAL ANGLE OF A POINT OF KNOWN
(OR SUPPOSED) DISTANCE AND ELEVATION (AS TO VERIFY
LOCATION OR DETERMINE THE POSSIBILITY OF SEEING IT)

E ELEVATION, IN FEET, OF POINT ASSUMED TO BE SEEN

D DISTANCE, IN STATUTE MILES, TO POINT

θ VERTICAL ANGLE, IN MINUTES

$$\theta \approx \underbrace{\frac{E - 6585}{1.5 \times D}}_{\text{ANGLE DUE TO ELEVATION DIFFERENCE}} - \underbrace{.1342 \times D}_{\text{ANGLE DUE TO CURVATURE OF EARTH}}$$

EXAMPLE: MT SHASTA, EL 14,160, IS ABOUT 230 MI DISTANT

$$E = 14,160, D = 230$$

$$\theta \approx \frac{14,160 - 6585}{1.5 \times 230} - .1342 \times 230$$

$$\theta \approx 41.41 - 100 = -59'$$

THE AZIMUTH OF MT SHASTA IS ROUGHLY 215° . THE VERTICAL ANGLE
OF THE HORIZON IN THAT DIRECTION IS ABOUT $-40'$. IT IS IMPOSSIBLE
TO SEE ANYTHING BELOW THAT; THEREFORE MT SHASTA, WITH VERTICAL
ANGLE $-59'$, CAN NOT BE SEEN FROM WOLF MTN, REGARDLESS OF VISIBILITY.