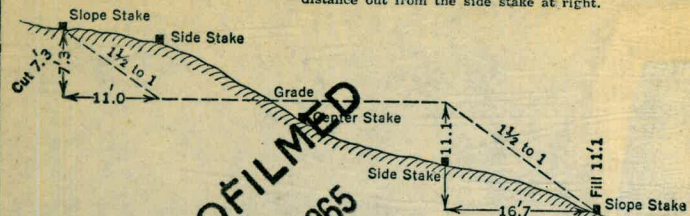


99

MISSION BAY

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



M.B. No 99

| Cut or Fill | Distance out from Side or Shoulder Stake | | | | | | | | | Cut or Fill | |
|-------------|--|------|------|------|------|------|------|------|------|-------------|----|
| | 0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | | .9 |
| 0 | 0.0 | 0.2 | 0.3 | 0.5 | 0.6 | 0.8 | 0.9 | 1.1 | 1.2 | 1.4 | 0 |
| 1 | 1.5 | 1.7 | 1.8 | 2.0 | 2.1 | 2.3 | 2.4 | 2.6 | 2.7 | 2.9 | 1 |
| 2 | 3.0 | 3.2 | 3.3 | 3.5 | 3.6 | 3.8 | 3.9 | 4.1 | 4.2 | 4.4 | 2 |
| 3 | 4.5 | 4.7 | 4.8 | 5.0 | 5.1 | 5.3 | 5.4 | 5.6 | 5.7 | 5.9 | 3 |
| 4 | 6.0 | 6.2 | 6.3 | 6.5 | 6.6 | 6.8 | 6.9 | 7.1 | 7.2 | 7.4 | 4 |
| 5 | 7.5 | 7.7 | 7.8 | 8.0 | 8.1 | 8.3 | 8.4 | 8.6 | 8.7 | 8.9 | 5 |
| 6 | 9.0 | 9.2 | 9.3 | 9.5 | 9.6 | 9.8 | 9.9 | 10.1 | 10.2 | 10.4 | 6 |
| 7 | 10.5 | 10.7 | 10.8 | 11.0 | 11.1 | 11.3 | 11.4 | 11.6 | 11.7 | 11.9 | 7 |
| 8 | 12.0 | 12.2 | 12.3 | 12.5 | 12.6 | 12.8 | 12.9 | 13.1 | 13.2 | 13.4 | 8 |
| 9 | 13.5 | 13.7 | 13.8 | 14.0 | 14.1 | 14.3 | 14.4 | 14.6 | 14.7 | 14.9 | 9 |
| 10 | 15.0 | 15.2 | 15.3 | 15.5 | 15.6 | 15.8 | 15.9 | 16.1 | 16.2 | 16.4 | 10 |
| 11 | 16.5 | 16.7 | 16.8 | 17.0 | 17.1 | 17.3 | 17.4 | 17.6 | 17.7 | 17.9 | 11 |
| 12 | 18.0 | 18.2 | 18.3 | 18.5 | 18.6 | 18.8 | 18.9 | 19.1 | 19.2 | 19.4 | 12 |
| 13 | 19.5 | 19.7 | 19.8 | 20.0 | 20.1 | 20.3 | 20.4 | 20.6 | 20.7 | 20.9 | 13 |
| 14 | 21.0 | 21.2 | 21.3 | 21.5 | 21.6 | 21.8 | 21.9 | 22.1 | 22.2 | 22.4 | 14 |
| 15 | 22.5 | 22.7 | 22.8 | 23.0 | 23.1 | 23.3 | 23.4 | 23.6 | 23.7 | 23.9 | 15 |
| 16 | 24.0 | 24.2 | 24.3 | 24.5 | 24.6 | 24.8 | 24.9 | 25.1 | 25.2 | 25.4 | 16 |
| 17 | 25.5 | 25.7 | 25.8 | 26.0 | 26.1 | 26.3 | 26.4 | 26.6 | 26.7 | 26.9 | 17 |
| 18 | 27.0 | 27.2 | 27.3 | 27.5 | 27.6 | 27.8 | 27.9 | 28.1 | 28.2 | 28.4 | 18 |
| 19 | 28.5 | 28.7 | 28.8 | 29.0 | 29.1 | 29.3 | 29.4 | 29.6 | 29.7 | 29.9 | 19 |
| 20 | 30.0 | 30.2 | 30.3 | 30.5 | 30.6 | 30.8 | 30.9 | 31.1 | 31.2 | 31.4 | 20 |
| 21 | 31.5 | 31.7 | 31.8 | 32.0 | 32.1 | 32.3 | 32.4 | 32.6 | 32.7 | 32.9 | 21 |
| 22 | 33.0 | 33.2 | 33.3 | 33.5 | 33.6 | 33.8 | 33.9 | 34.1 | 34.2 | 34.4 | 22 |
| 23 | 34.5 | 34.7 | 34.8 | 35.0 | 35.1 | 35.3 | 35.4 | 35.6 | 35.7 | 35.9 | 23 |
| 24 | 36.0 | 36.2 | 36.3 | 36.5 | 36.6 | 36.8 | 36.9 | 37.1 | 37.2 | 37.4 | 24 |
| 25 | 37.5 | 37.7 | 37.8 | 38.0 | 38.1 | 38.3 | 38.4 | 38.6 | 38.7 | 38.9 | 25 |
| 26 | 39.0 | 39.2 | 39.3 | 39.5 | 39.6 | 39.8 | 39.9 | 40.1 | 40.2 | 40.4 | 26 |
| 27 | 40.5 | 40.7 | 40.8 | 41.0 | 41.1 | 41.3 | 41.4 | 41.6 | 41.7 | 41.9 | 27 |
| 28 | 42.0 | 42.2 | 42.3 | 42.5 | 42.6 | 42.8 | 42.9 | 43.1 | 43.2 | 43.4 | 28 |
| 29 | 43.5 | 43.7 | 43.8 | 44.0 | 44.1 | 44.3 | 44.4 | 44.6 | 44.7 | 44.9 | 29 |
| 30 | 45.0 | 45.2 | 45.3 | 45.5 | 45.6 | 45.8 | 45.9 | 46.1 | 46.2 | 46.4 | 30 |
| 31 | 46.5 | 46.7 | 46.8 | 47.0 | 47.1 | 47.3 | 47.4 | 47.6 | 47.7 | 47.9 | 31 |
| 32 | 48.0 | 48.2 | 48.3 | 48.5 | 48.6 | 48.8 | 48.9 | 49.1 | 49.2 | 49.4 | 32 |
| 33 | 49.5 | 49.7 | 49.8 | 50.0 | 50.1 | 50.3 | 50.4 | 50.6 | 50.7 | 50.9 | 33 |
| 34 | 51.0 | 51.2 | 51.3 | 51.5 | 51.6 | 51.8 | 51.9 | 52.1 | 52.2 | 52.4 | 34 |
| 35 | 52.5 | 52.7 | 52.8 | 53.0 | 53.1 | 53.3 | 53.4 | 53.6 | 53.7 | 53.9 | 35 |
| 36 | 54.0 | 54.2 | 54.3 | 54.5 | 54.6 | 54.8 | 54.9 | 55.1 | 55.2 | 55.4 | 36 |
| 37 | 55.5 | 55.7 | 55.8 | 56.0 | 56.1 | 56.3 | 56.4 | 56.6 | 56.7 | 56.9 | 37 |
| 38 | 57.0 | 57.2 | 57.3 | 57.5 | 57.6 | 57.8 | 57.9 | 58.1 | 58.2 | 58.4 | 38 |
| 39 | 58.5 | 58.7 | 58.8 | 59.0 | 59.1 | 59.3 | 59.4 | 59.6 | 59.7 | 59.9 | 39 |
| 40 | 60.0 | 60.2 | 60.3 | 60.5 | 60.6 | 60.8 | 60.9 | 61.1 | 61.2 | 61.4 | 40 |

The paper in this book No. 373 A
 is made of 50% high grade rag stock
 with a WATER RESISTING surface sizing.

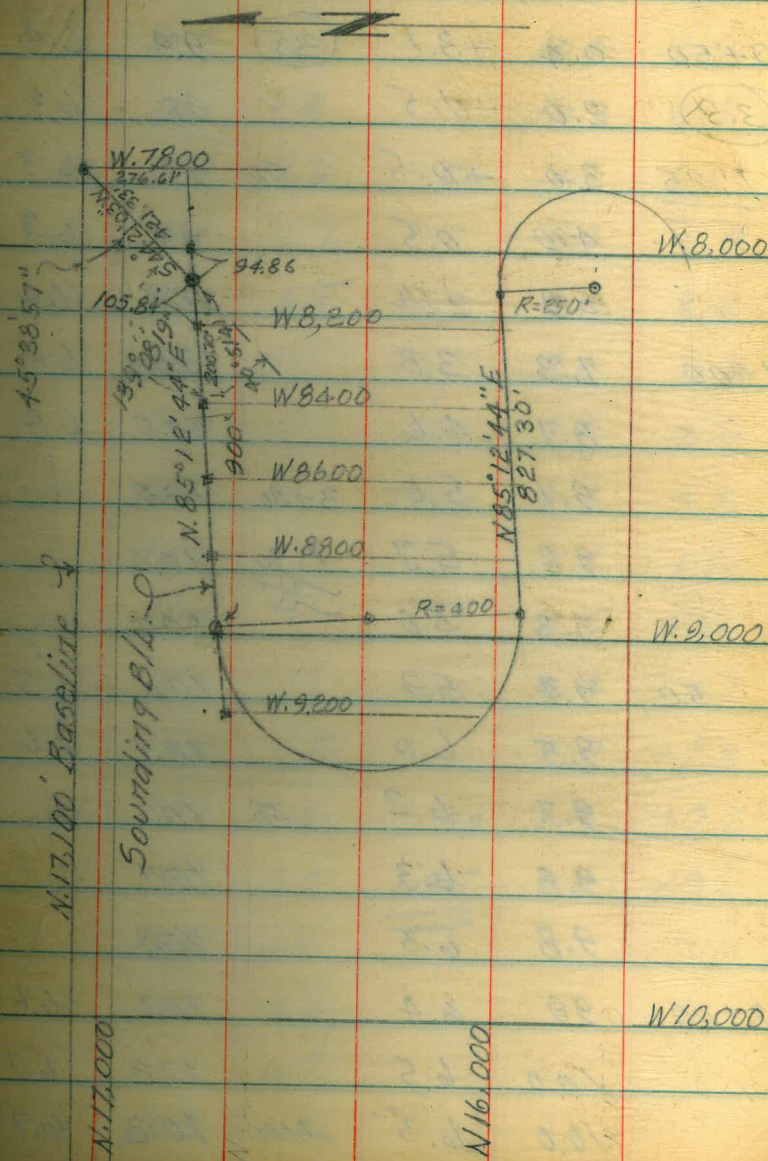
SOUNDING BASELINE DE ANZA COVE

W.O: 65402

1-7-57 T.A. Stammer

Ref MB. 104 Additional Soundings

| Sta | B/L Dist | Bearing |
|------------------|----------|--------------|
| N16823.39 W.7800 | 200.70 | N.85°12'44"E |
| N16806.64 W.8000 | " | " |
| N16789.89 W.8200 | " | " |
| N16773.14 W.8400 | " | " |
| N16756.39 W.8600 | " | " |
| N16739.64 W.8800 | " | " |
| N16722.89 W.9000 | " | " |
| N16706.14 W.9200 | 200.70' | N.85°12'44"E |



1-8-57
SOUNDINGS DE ANZA COVE

W. 80+00 CONTD SOUTH. ②
Dist Sound Elev Dist Sound Elev

| W. 80+00: 0+00 = N. 16,806.64' | | | SOUND SOUTH | | | (3.5) 10.3 6.8 | | | (3.5) 10.5 7.0 | | |
|--------------------------------|-------|------|--------------|-------|------|----------------|-------|------|----------------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
| 0+50 | 0.4 | +3.1 | (3.5) | 9.9 | 6.4 | | 10.2 | 6.7 | | 10.3 | 6.8 |
| (3.5) | 2.0 | +1.5 | | 9.8 | 6.3 | | 10.2 | 6.7 | | 10.4 | 6.9 |
| <u>11.25</u> | 3.0 | +0.5 | 50 | 9.8 | 6.3 | 50 | 10.1 | 6.6 | 50 | 10.1 | 6.6 |
| | 4.0 | 0.5 | | 9.8 | 6.3 | | 10.1 | 6.6 | | 9.8 | 6.3 |
| | 5.9 | 2.4 | | 9.9 | 6.4 | | 10.0 | 6.5 | | 9.0 | 5.5 |
| 1+00 | 7.3 | 3.8 | | 9.9 | 6.4 | | 10.0 | | | 8.0 | 4.5 |
| | 8.1 | 4.6 | | 10.0 | 6.5 | | 10.0 | | | 7.1 | 3.6 |
| | 9.1 | 5.6 | 3+00 | 10.0 | | 5+00 | 10.0 | | 7+00 | 6.0 | 2.5 |
| | 9.2 | 5.7 | <u>11.30</u> | 10.0 | | | 10.0 | | | 5.3 | 1.8 |
| | 9.3 | 5.8 | | 10.0 | | | 10.0 | | | 4.5 | 1.0 |
| 50 | 9.4 | 5.9 | | 10.0 | 6.5 | | 10.0 | | | 3.4 | +0.1 |
| | 9.5 | 6.0 | | 10.1 | 6.6 | | 10.0 | 6.5 | | 2.2 | +1.3 |
| | 9.7 | 6.2 | 50 | 10.1 | | 50 | 10.1 | 6.6 | 50 | 1.3 | +2.2 |
| | 9.8 | 6.3 | | 10.1 | | | 10.0 | 6.5 | <u>11.35</u> | 0.0 | +3.5 |
| | 9.8 | 6.3 | | 10.1 | | | 10.0 | 6.5 | | | |
| 2+00 | 9.9 | 6.4 | | 10.1 | 6.6 | | 10.1 | 6.6 | | | |
| | 10.0 | 6.5 | | 10.2 | 6.7 | | 10.2 | 6.7 | | | |
| | 10.0 | 6.5 | 4+00 | 10.2 | 6.7 | 6+00 | 10.3 | 6.8 | | | |

1-8-57
 W. 82+00; 0+00 = N/16, 789.89: SOUND SOUTH

W. 82+00 CONTD SOUTH ③

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| 0+40 | 0.0 | +3.3 | (3.5) | 9.6 | 6.1 | (3.5) | 9.9 | 6.4 | (3.5) | 9.7 | 6.2 |
| 0+50 | 1.2 | +2.3 | (3.5) | 9.6 | 6.1 | | 9.9 | 6.4 | | 9.3 | 5.8 |
| (3.5) | 2.3 | +1.2 | 50 | 9.6 | 6.1 | 50 | 9.8 | 6.3 | 50 | 8.9 | 5.4 |
| 1:42 | 3.7 | 0.2 | | 9.7 | 6.2 | | 9.9 | 6.4 | | 8.1 | 4.6 |
| | 5.8 | 2.3 | | 9.6 | 6.1 | | 10.0 | 6.3 | | 7.6 | 4.1 |
| | 7.2 | 3.7 | | 9.6 | 6.1 | | 10.0 | 6.5 | | 7.1 | 3.6 |
| 1+00 | 8.2 | 4.7 | | 9.5 | 6.0 | | 9.8 | 6.3 | | 6.2 | 2.7 |
| | 9.0 | 5.5 | 3+00 | 9.6 | 6.1 | 5+00 | 9.9 | 6.4 | 7+00 | 5.5 | 2.0 |
| | 9.1 | 5.6 | | 9.6 | | | 9.9 | 6.4 | | 4.8 | 1.3 |
| | 9.0 | 5.5 | | 9.6 | | | 10.0 | 6.5 | | 3.5 | 0.0 |
| | 9.2 | 5.7 | | 9.6 | | | 10.0 | | | 2.0 | +1.5 |
| 50 | 9.2 | 5.7 | | 9.6 | 6.1 | | 10.0 | | 11:50 | 0.8 | +2.7 |
| | 9.3 | 5.8 | 50 | 9.8 | 6.3 | 50 | 10.0 | | 7:45 | 0.0 | +3.5 |
| | 9.5 | 6.0 | 11:45 | 9.8 | 6.3 | | 10.0 | | | | |
| | 9.3 | 5.8 | | 9.6 | 6.1 | | 10.0 | | | | |
| | 9.4 | 5.9 | | 9.8 | 6.3 | | 10.0 | 6.5 | | | |
| 2+00 | 9.5 | 6.0 | | 9.8 | 6.3 | | 10.1 | 6.6 | | | |
| | 9.6 | 6.1 | 4+00 | 9.9 | 6.4 | 6+00 | 10.1 | 6.6 | | | |
| | 9.5 | 6.0 | | 9.9 | 6.4 | | 10.0 | 6.5 | | | |
| | 9.4 | 5.9 | | 9.9 | 6.4 | | 9.8 | 6.3 | | | |

1-8-57
 W.84+06; 0+00=N.16,773.14 SOUND SOUTH

W.84+00 CONTD SOUTH
 Dist Sound Elev Dist Sound Elev (2)

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| 0+40 | 0.0 | | | | | (3.5) | 10.1 | 6.6 | (3.5) | 9.8 | 6.3 |
| 0+50 | 1.3 | +2.2 | (3.5) | 10.2 | 6.7 | | 10.2 | 6.7 | 2:00 | 9.9 | 6.4 |
| (3.5) | 2.2 | +1.3 | 50 | 10.0 | 6.5 | 50 | 10.2 | 6.7 | 50 | 9.3 | 5.8 |
| <u>1:55</u> | 3.8 | 0.3 | | 9.9 | 6.4 | | 10.1 | 6.6 | | 9.0 | 5.5 |
| | 5.6 | 2.1 | | 9.8 | 6.3 | | 10.0 | 6.5 | | 8.9 | 5.4 |
| | 7.0 | 3.5 | | 9.9 | 6.4 | | 10.0 | 6.5 | | 8.1 | 4.6 |
| 1+00 | 8.1 | 4.6 | | 10.0 | 6.5 | | 9.8 | 6.3 | | 7.5 | 4.0 |
| | 8.8 | 5.3 | 3+00 | 9.9 | 6.4 | 5+00 | 9.9 | 6.4 | 7+00 | 6.7 | 3.2 |
| | 9.1 | 5.6 | | 9.8 | 6.3 | | 10.0 | 6.5 | | 6.0 | 2.5 |
| | 9.2 | 5.7 | | 10.0 | 6.5 | | 10.0 | | | 4.8 | 1.3 |
| | 9.4 | 5.9 | | 10.0 | | | 10.0 | | | 3.0 | +0.5 |
| 50 | 9.6 | 6.1 | | 10.0 | | | 10.0 | 6.5 | | 2.0 | +1.5 |
| | 9.8 | 6.3 | 50 | 10.0 | | 50 | 9.9 | 6.4 | 50 | 0.6 | +2.9 |
| | 9.9 | 6.4 | | 10.0 | | | 9.9 | | | | |
| | 9.9 | 6.4 | | 10.0 | | | 9.9 | | | | |
| | 10.1 | 6.6 | | 10.0 | 6.5 | | 9.9 | 6.4 | | | |
| 2+00 | 10.1 | 6.6 | | 10.1 | 6.6 | | 10.0 | 6.5 | | | |
| | 10.2 | 6.7 | 4+00 | 10.0 | 6.5 | 6+00 | 10.0 | 6.5 | | | |
| | 10.2 | 6.7 | | 10.1 | 6.6 | | 9.9 | 6.4 | | | |
| | 10.2 | 6.7 | | 10.1 | 6.6 | | 9.9 | 6.4 | | | |

1-8-57
W. 86+00; 0+00 = N. 16756.39; SOUND SOUTH

W. 86+00 CONTD SOUTH ⑤
Dist Sound Elen Dist Sound Eled

| Dist | Sound | Elen | Dist | Sound | Elen |
|-------------|-------|------|-------------|-------|------|
| 0+40 | 0.0 | +3.5 | | | |
| 0+50 | 1.1 | +2.4 | (35) | 10.4 | 6.9 |
| (35) | 2.2 | +1.3 | 50 | 10.4 | 6.9 |
| <u>2:07</u> | 3.6 | 0.1 | | 10.1 | 6.6 |
| | 5.1 | 1.6 | | 10.1 | 6.6 |
| | 6.8 | 3.3 | | 10.3 | 6.8 |
| 1+00 | 8.0 | 4.5 | | 10.4 | 6.9 |
| | 9.5 | 6.0 | 3+00 | 10.5 | 7.0 |
| | 9.8 | 6.3 | | 10.5 | 7.0 |
| | 10.0 | 6.5 | | 10.5 | 7.0 |
| | 10.0 | 6.5 | | 10.5 | 7.0 |
| 50 | 10.1 | 6.6 | <u>2:10</u> | 10.7 | 7.2 |
| | 10.1 | | 50 | 10.8 | 7.3 |
| | 10.1 | | | 10.8 | 7.3 |
| | 10.1 | 6.6 | | 10.8 | 7.3 |
| | 10.2 | 6.7 | | 10.9 | 7.4 |
| 2+00 | 10.2 | 6.7 | | 10.9 | |
| | 10.4 | 6.9 | 4+00 | 10.9 | |
| | 10.5 | 7.0 | | 10.9 | |
| | 10.5 | 7.0 | | 10.9 | 7.4 |

| Dist | Sound | Elen | Dist | Sound | Eled |
|------|-------|------|-------------|-------|------|
| (35) | 10.9 | 7.4 | (35) | 10.8 | 7.3 |
| | 10.9 | 7.4 | | 10.9 | 7.4 |
| 50 | 11.0 | 7.5 | 50 | 11.0 | 7.5 |
| | 11.0 | 7.5 | | 10.9 | 7.4 |
| | 11.0 | 7.5 | | 10.3 | 6.8 |
| | 10.9 | 7.4 | | 9.8 | 6.3 |
| | 10.9 | 7.4 | | 8.3 | 4.7 |
| 5+00 | 10.8 | 7.3 | 7+00 | 7.1 | 3.6 |
| | 10.7 | 7.2 | | 6.0 | 2.5 |
| | 10.5 | 7.0 | | 5.1 | 1.6 |
| | 10.5 | 7.0 | | 4.2 | 0.7 |
| | 10.6 | 7.1 | | 2.8 | +0.7 |
| 50 | 10.5 | 7.0 | 50 | 1.3 | +2.2 |
| | 10.6 | 7.1 | <u>2:15</u> | 0.0 | +3.5 |
| | 10.6 | 7.1 | | | |
| | 10.8 | 7.3 | | | |
| | 10.6 | 7.1 | | | |
| 6+00 | 10.8 | 7.3 | | | |
| | 10.8 | 7.3 | | | |
| | 10.8 | 7.3 | | | |

1-8-57
 W.88+00; 0+00 = N/16, 739.64; SOUND SOUTH

W.88+00 CONTD SOUTH
 Dist Sound Elev Dist Sound Elev ⁽⁸⁾

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|------|-------|------|------|-------|------|-------|-------|------|
| | | | | | | (33) | 11.2 | 7.7 | (3.5) | 11.2 | 7.7 |
| 0+45 | 0.0 | +3.3 | | | | | | | | | |
| 0+50 | 1.0 | +2.3 | (35) | 10.8 | 7.3 | | 11.3 | 7.8 | 2.25 | 11.0 | 7.5 |
| (3.5) | 2.2 | +1.3 | 50 | 10.8 | 7.3 | 50 | 11.4 | 7.9 | 50 | 10.3 | 6.8 |
| 2.20 | 3.8 | 0.3 | | 10.9 | 7.4 | | 11.7 | 8.2 | | 9.9 | 6.4 |
| | 5.0 | 1.5 | | 11.0 | 7.5 | | 11.7 | 8.2 | | 9.7 | 6.2 |
| | 6.6 | 3.1 | | 11.1 | 7.6 | | 11.5 | 8.0 | | 9.5 | 6.0 |
| 1+00 | 8.0 | 4.5 | | 11.2 | 7.7 | | 11.4 | 7.9 | | 8.9 | 5.4 |
| | 9.3 | 5.8 | 3+00 | 11.1 | 7.6 | 5+00 | 11.3 | 7.8 | 7+00 | 7.9 | 4.4 |
| | 10.2 | 6.7 | | 11.2 | 7.7 | | 11.2 | 7.7 | | 6.9 | 3.4 |
| | 10.6 | 7.1 | | 11.1 | 7.6 | | 11.3 | 7.8 | | 5.8 | 2.3 |
| | 10.8 | 7.5 | | 11.1 | | | 11.1 | 7.6 | | 4.7 | 1.2 |
| 50 | 10.9 | 7.4 | | 11.1 | | | 11.1 | 7.6 | | 2.9 | +0.6 |
| | 10.9 | 7.4 | 50 | 11.1 | | 50 | 11.0 | 7.5 | 50 | 1.3 | +2.2 |
| | 10.9 | 7.4 | | 11.1 | | | 11.1 | 7.6 | | 0.0 | +3.5 |
| | 11.0 | 7.5 | | 11.1 | 7.6 | | 11.2 | 7.7 | | | |
| | 10.9 | 7.4 | | 11.2 | 7.7 | | 11.2 | 7.7 | | | |
| 2+00 | 10.8 | 7.3 | | 11.3 | 7.8 | | 11.1 | 7.6 | | | |
| | 10.8 | 7.3 | 4+00 | 11.5 | 8.0 | 6+00 | 11.1 | 7.6 | | | |
| | 10.8 | 7.3 | | 11.4 | 7.9 | | 11.2 | 7.7 | | | |
| | 10.9 | 7.4 | | 11.2 | 7.7 | | 11.2 | 7.7 | | | |

1-B 57
 W. 90+00; 0+00 = N. 16,722.89; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|------|-------|------|
| 0+50 | 0.7 | +2.7 | (34) | 10.8 | 7.4 |
| (3.4) | 1.9 | +1.5 | 50 | 10.7 | 7.3 |
| <u>2.30</u> | 3.2 | +0.2 | | 10.6 | 7.2 |
| | 5.0 | 1.6 | | 10.7 | 7.3 |
| | 7.1 | 3.7 | | 10.8 | 7.4 |
| 1+00 | 8.8 | 5.4 | | 10.8 | 7.4 |
| | 10.0 | 6.6 | 3+00 | 10.9 | 7.5 |
| | 10.5 | 7.1 | | 11.0 | +7.6 |
| | 10.9 | 7.5 | | 11.0 | |
| | 10.9 | 7.5 | | 11.0 | |
| 50 | 10.9 | 7.5 | | 11.0 | |
| | 11.0 | 7.6 | 50 | 11.0 | |
| | 11.0 | | | 11.0 | |
| | 11.0 | | | 11.0 | |
| | 11.0 | | | 11.0 | |
| 2+00 | 11.0 | | | 11.1 | |
| | 11.0 | | 4+00 | 11.0 | |
| | 11.0 | 7.6 | | 11.1 | |
| | 10.9 | 7.5 | | 11.0 | 7.6 |

W. 90+00 CONTD SOUTH (1)

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|------|-------|------|
| (3.4) | 11.0 | 7.6 | (34) | 10.5 | 7.1 |
| <u>2.35</u> | 11.1 | 7.7 | | 10.3 | 6.9 |
| 50 | 11.2 | 7.8 | 50 | 10.3 | 6.9 |
| | 11.0 | 7.6 | | 10.3 | 6.9 |
| | 11.0 | | | 10.2 | 6.8 |
| | 11.0 | | | 10.2 | 6.8 |
| | 11.0 | 7.6 | | 10.0 | 6.6 |
| 5+00 | 10.9 | 7.5 | 7+00 | 9.0 | 5.6 |
| | 10.8 | 7.4 | | 7.5 | 4.1 |
| | 10.7 | 7.3 | | 5.9 | 2.5 |
| | 10.5 | 7.1 | | 3.8 | 0.4 |
| | 10.2 | 6.8 | | 2.2 | +1.2 |
| 50 | 10.1 | 6.7 | 50 | 0.5 | +2.9 |
| | 10.1 | 6.7 | | | |
| | 10.3 | 6.9 | | | |
| | 10.5 | 7.1 | | | |
| | 10.5 | 7.1 | | | |
| | 10.5 | 7.1 | | | |
| 6+00 | 10.4 | 7.0 | | | |
| | 10.5 | 7.1 | | | |
| | 10.5 | 7.1 | | | |

1-8-57
 W. 92+00; 0+00 = N. 16, 706.14; Sound South

W. 92+00 CONTD SOUTH
 Dist Sound Elev Dist Sound Elev

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | |
|-------|-------|------|-------|-------|------|-------|-------|------|------|
| | | | (3.4) | 10.2 | 6.8 | (3.4) | 3.1 | +0.3 | |
| 0+50 | | | (3.4) | 10.2 | 6.8 | | 2.0 | +1.4 | |
| | | | 50 | 10.2 | 6.8 | 50 | 10.1 | 6.7 | |
| | | | | 10.3 | 6.9 | | 50 | 1.3 | +2.1 |
| | | | | 10.3 | 6.9 | | | 0.0 | +3.4 |
| (3.4) | | | | 10.2 | 6.8 | | | | |
| 1+00 | | | | 10.1 | 6.7 | | | | |
| | | | 3+00 | 10.0 | 6.6 | 5+00 | 10.0 | | |
| 2:45 | 0.3 | +3.1 | | 9.9 | 6.5 | | 10.0 | | |
| | 1.0 | +2.4 | | 9.9 | 6.5 | | 10.0 | | |
| | 2.3 | +1.1 | | 9.9 | 6.5 | 2:50 | 10.0 | 6.6 | |
| 50 | 4.0 | 0.6 | | 10.0 | 6.6 | | 9.8 | 6.4 | |
| | 5.0 | 1.6 | 50 | 9.9 | 6.5 | 50 | 9.8 | 6.4 | |
| | 6.0 | 2.6 | | 9.9 | | | 9.6 | 6.2 | |
| | 7.0 | 3.6 | | 9.9 | | | 9.0 | 5.6 | |
| | 8.0 | 4.6 | | 9.9 | 6.5 | | 8.2 | 4.8 | |
| 2+00 | 8.8 | 5.4 | | 10.0 | 6.6 | | 7.3 | 3.9 | |
| | 9.2 | 5.8 | 4+00 | 10.0 | 6.6 | 6+00 | 6.5 | 3.1 | |
| | 9.9 | 6.5 | | 10.0 | 6.6 | | 5.1 | 1.7 | |
| | 10.0 | 6.6 | | 10.1 | 6.7 | | 4.5 | 1.1 | |

COORDINATES OF CROWN FILL

AREA MISSION BAY PROJ 65401

| N. | W. | Elev | N. | W. | Elev |
|----------|--------|------|----------|--------|------|
| N 10,000 | W 7520 | 14.2 | N 13 600 | W 6960 | 14.4 |
| N 10,200 | W 7550 | 14.5 | N 13 800 | W 6965 | 14.5 |
| N 10,400 | W 7558 | 15.1 | N 14 000 | W 6970 | 14.5 |
| N 10,600 | W 7545 | 15.3 | N 14 200 | W 6965 | 14.5 |
| N 10,800 | W 7530 | 15.5 | N 14 400 | W 6960 | 14.5 |
| N 11,000 | W 7505 | 15.5 | N 14 600 | W 6955 | 14.4 |
| N 11 200 | W 7475 | 15.5 | N 14 800 | W 6920 | 13.8 |
| N 11 400 | W 7435 | 15.5 | N 15 000 | W 6910 | 13.1 |
| N 11 600 | W 7395 | 15.5 | N 15 200 | W 6900 | 12.5 |
| N 11 800 | W 7330 | 15.5 | N 15 400 | W 6915 | 12.1 |
| N 12 000 | W 7265 | 15.4 | N 15 600 | W 6975 | 11.1 |
| N 12 200 | W 7200 | 15.3 | N 15 800 | W 7005 | 11.0 |
| N 12 400 | W 7135 | 15.2 | | | |
| N 12 600 | W 7100 | 14.9 | | | |
| N 12 800 | W 7040 | 14.5 | | | |
| N 13 000 | W 7010 | 14.1 | | | |
| N 13 200 | W 6990 | 14.2 | | | |
| N 13 400 | W 6970 | 14.3 | | | |

W.O. 64501

SOUNDINGS N.WLY. AREA MISSION BAY

NOTE: For Baseline Layout See M.B. No. 97

(10)

W. 156+00; SOUTH

W. 156+00; 0+00 = N. 10, 200; Sound South Dist Sound Elev

Dist Sound Elev Dist Sound Elev (6.1) 12.8 6.7

0+00 7.0 0.8 (6.2) 15.4 9.2 9.20 12.0 5.9

(6.2) 7.2 1.0 15.1 8.9 10.0 3.9

9.15 7.4 1.2 2+00 15.0 8.8 7.2 1.1

8.0 1.8 15.3 9.1 4+00 6.5 0.4

8.0 1.8 15.2 9.0 6.2 0.1

50 9.0 2.8 15.0 8.8 5.0 +1.1

10.3 4.1 14.7 8.5 4.8 +1.3

12.1 5.9 50 14.5 8.3 4.4 +1.7

13.0 6.8 14.6 8.4 50 4.0 +2.1

14.0 7.8 14.5 8.3 3.8 +2.3

1+00 14.0 7.8 14.6 8.4

14.2 8.0 15.0 8.8

14.8 8.6 3+00 15.0

14.8 8.6 15.0 5+00

15.0 8.8 15.0 8.8

50 15.0 8.8 14.6 8.4

15.2 9.0 14.0 7.8

15.2 9.0 50 13.6 7.4

10-9-57

W155+00; 0+00 = N10,200; Sound South

Dist Sound Elev Dist Sound Elev

0+00 5.2 +1.1 (6.2) 15.5 9.3

(6.3) 5.2 +1.1 2+00 15.6 9.4

9.05 5.4 +0.9 15.1 8.9

6.5 0.2 15.1 8.9

9.8 3.5 15.1 8.9

50 13.0 6.7 15.5 9.3

14.1 7.8 50 15.8 9.6

14.2 7.9 15.8 9.6

14.2 7.9 15.4 9.2

14.6 8.3 15.2 9.0

1+00 15.0 8.7 15.0 8.6

15.0 8.7 3+00 14.8 8.6

14.8 8.5 9.10 14.8 8.6

14.8 8.5 14.6 8.4

15.0 8.7 13.2 7.0

50 15.0 12.6 6.4

15.0 50 11.0 4.0

15.0 8.7 6.8 0.0

15.7 9.4 5.2 +1.0

W155+00; SOUTH 10-9-57

Dist Sound Elev Dist Sound Elev

4.5 +1.7

3.8 +2.4

4+00 3.2 +3.0

| 10-9-57 | | | W157+00; SOUTH | | | W157+00; SOUTH | | | (12) | | |
|-------------|-------|------|----------------|-------|------|----------------|-------|------|-------------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
| 0+00 | 6.5 | 0.4 | (6.1) | 15.2 | 9.1 | (6.1) | 13.8 | 7.7 | (6.0) | 6.6 | 0.6 |
| (6.1) | 7.1 | 1.0 | 2+00 | 15.2 | 9.1 | 4+00 | 13.7 | 7.6 | | 6.2 | 0.2 |
| <u>2:25</u> | 6.8 | 0.7 | | 15.2 | 9.1 | | 13.3 | 7.2 | 6+00 | 5.9 | +0.1 |
| | 6.8 | 0.7 | | 15.1 | 9.0 | | 13.3 | 7.2 | | 6.0 | 0.0 |
| | 6.7 | 0.6 | | 15.0 | 8.9 | | 13.3 | 7.2 | | 6.0 | 0.0 |
| 50 | 6.8 | 0.7 | | 14.7 | 8.6 | | 13.1 | 7.0 | | 6.0 | 0.0 |
| | 6.9 | 0.8 | 50 | 14.3 | 8.2 | 50 | 12.7 | 6.6 | | 5.9 | +0.1 |
| | 7.8 | 1.7 | | 14.3 | 8.2 | | 11.3 | 5.2 | 50 | 5.8 | +0.2 |
| | 9.9 | 3.8 | <u>9:30</u> | 14.4 | 8.2 | | 9.6 | 3.5 | <u>9:35</u> | 5.6 | +0.4 |
| | 12.9 | 6.8 | | 14.3 | 8.2 | | 8.3 | 2.2 | | 5.9 | +0.1 |
| 1+00 | 13.6 | 7.5 | | 14.3 | 8.2 | | 7.7 | 1.6 | | 6.2 | 0.2 |
| | 14.4 | 8.7 | 3+00 | 14.2 | 8.1 | 5+00 | 7.7 | 1.6 | | 6.8 | 0.8 |
| | 14.9 | 8.8 | | 14.1 | 8.0 | | 7.4 | 1.3 | 7+00 | 7.7 | 1.7 |
| | 15.0 | 8.9 | | 14.2 | 8.1 | | 7.3 | 1.2 | | 9.0 | 3.0 |
| | 15.2 | 9.1 | | 14.5 | 8.4 | | 7.3 | | | 10.0 | 4.0 |
| 50 | 15.5 | 9.4 | | 14.5 | 8.4 | | 7.3 | | | 10.9 | 4.9 |
| | 15.4 | 9.3 | 50 | 14.3 | 8.2 | 50 | 7.3 | 1.2 | | 11.8 | 5.8 |
| | 15.2 | 9.1 | | 14.1 | 8.0 | | 7.5 | 1.4 | 50 | 12.0 | 6.0 |
| | 15.2 | 9.1 | | 13.9 | 7.8 | | 7.4 | 1.3 | | 12.8 | 6.8 |
| | | | | | | | 7.1 | 1.0 | | 13.1 | 7.0 |

W157+00 CONTD SOUTH 10-9-57

| Dist | Sound | Elev. |
|-------------|-------|-------|
| (6:0) | 13.3 | 7.4 |
| | 13.4 | 7.4 |
| 8+00 | 13.4 | 7.4 |
| | 13.3 | 7.3 |
| | 13.1 | 7.1 |
| | 12.8 | 6.8 |
| | 12.5 | 6.5 |
| 50 | 12.2 | 6.2 |
| <u>9:37</u> | 11.4 | 5.4 |
| | 10.8 | 4.8 |
| | 10.7 | 4.7 |
| | 9.7 | 3.7 |
| 9+00 | 7.2 | 1.2 |
| | 5.2 | +0.8 |
| | 4.4 | +1.6 |
| | 3.8 | +2.2 |
| | 3.0 | +3.0 |
| 50 | 2.2 | +3.8 |

10-9-57
W158+00:0+00=N 10,200; Sound/South (13)

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|-------------|-------|------|
| 0+00 | 6.0 | 0.1 | (5.9) | 14.8 | 8.9 |
| (5.9) | 6.0 | 0.1 | 2+00 | 14.6 | 8.7 |
| <u>9:45</u> | 6.1 | 0.2 | | 14.5 | 8.6 |
| | 6.6 | 0.6 | | 14.5 | 8.6 |
| | 7.0 | 1.1 | | 14.2 | 8.3 |
| 50 | 7.2 | 1.3 | | 14.2 | } |
| | 7.5 | 1.6 | 50 | 14.2 | |
| | 8.3 | 2.4 | | 14.2 | 8.3 |
| | 10.0 | 4.1 | | 14.1 | 8.2 |
| | 12.8 | 6.9 | | 14.1 | 8.2 |
| 1+00 | 14.0 | 8.1 | <u>9:50</u> | 14.2 | 8.3 |
| | 14.8 | 8.9 | 3+00 | 14.0 | 8.1 |
| | 15.0 | 9.1 | | 14.0 | 8.1 |
| | 15.2 | 9.3 | | 13.8 | 7.9 |
| | 15.2 | 9.3 | | 13.2 | 7.3 |
| 50 | 15.4 | 9.5 | | 13.2 | 7.3 |
| | 15.2 | 9.3 | 50 | 13.6 | 7.7 |
| | 15.0 | 9.1 | | 13.6 | 7.7 |
| | 14.8 | 8.9 | | 13.6 | 7.7 |

| W158+00 CONTD: SOUTH 10-9-57 | | | N. 158+00; SOUTH | | | | | | (74) | | |
|------------------------------|-------|------|------------------|-------|------|-----------------|-------|------|-------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
| (5.9) | 14.2 | 8.3 | (5.8) | 13.3 | 7.5 | (5.8) | 13.8 | 8.0 | (5.8) | 12.5 | 6.7 |
| | 14.2 | 8.3 | | 13.3 | | | 13.8 | | | 11.1 | 5.3 |
| 4+00 | 14.2 | 8.3 | 6+00 | 13.3 | | 8+00 | 13.8 | | 10+00 | 7.2 | 1.4 |
| | 14.0 | 8.1 | | 13.3 | | | 13.8 | | | 4.9 | +0.9 |
| | 14.0 | 8.1 | | 13.3 | | | 13.8 | | | 3.2 | +2.6 |
| | 14.5 | 8.6 | 9.55 | 13.3 | 7.5 | 9.57 | 13.8 | 8.0 | | | |
| | 14.2 | 8.3 | 9.55 | 13.5 | 7.1 | 9.57 | 14.0 | 8.2 | | | |
| 50 | 14.5 | 8.6 | 50 | 13.5 | 7.1 | 50 | 14.0 | | | | |
| | 14.1 | 8.2 | | 13.4 | 7.6 | | 14.0 | | | | |
| | 14.0 | 8.1 | | 13.5 | 7.1 | | 14.0 | | | | |
| | 14.1 | 8.2 | | 13.5 | 7.1 | | 14.0 | 8.2 | | | |
| | 14.0 | 8.1 | | 13.5 | 7.1 | | 14.2 | 8.4 | | | |
| 5+00 | 14.0 | 8.1 | 7+00 | 13.3 | 7.5 | 9+00 | 14.2 | | | | |
| | 14.0 | 8.1 | | 13.1 | 7.3 | | 14.2 | | | | |
| | 13.8 | 7.9 | | 13.1 | 7.3 | | 14.2 | 8.4 | | | |
| | 13.6 | 7.7 | | 13.4 | 7.6 | | 13.8 | 8.0 | | | |
| | 13.1 | 7.2 | | 13.4 | 7.6 | | 13.6 | 7.8 | | | |
| 50 | 13.0 | 7.1 | 50 | 13.2 | 7.4 | 50 | 13.6 | 7.8 | | | |
| | 13.0 | 7.1 | | 13.5 | 7.6 | | 13.6 | 7.8 | | | |
| | 13.0 | 7.1 | | 14.0 | 8.1 | | 13.2 | 7.4 | | | |

W 59+00 SOUTH (15)

W 159+00; 0+00 = N 10, 200; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|--------------|-------|------|-------|-------|------|--------------|-------|------|
| | | | (5.6) | 13.7 | 8.1 | (5.6) | 12.7 | 7.1 | | | |
| 0+00 | 6.2 | 0.6 | (5.6) | 14.0 | 8.4 | | 13.0 | 7.4 | | | |
| (5.6) | 6.2 | 0.6 | 2+00 | 14.0 | 8.4 | 4+00 | 13.7 | 8.1 | 6+00 | 12.8 | 7.2 |
| <u>10:07</u> | 6.8 | 1.2 | | 14.0 | 8.4 | | 13.9 | 8.3 | | 12.8 | 7.2 |
| | 7.5 | 1.9 | | 14.3 | 8.7 | | 13.9 | 8.3 | <u>10:15</u> | 13.0 | 7.4 |
| | 8.0 | 2.4 | | 14.6 | 9.0 | | 13.7 | 8.1 | | 13.0 | |
| 50 | 8.3 | 2.7 | <u>10:10</u> | 14.6 | 9.0 | | 13.9 | 8.3 | | 13.0 | |
| | 8.3 | 2.7 | 50 | 14.4 | 8.9 | 50 | 13.4 | 7.8 | 50 | 13.0 | 7.4 |
| | 9.0 | 3.4 | | 14.4 | 8.9 | | 13.4 | 7.8 | | 12.8 | 7.2 |
| | 9.5 | 3.9 | | 14.2 | 8.7 | | 13.2 | 7.6 | | 12.5 | 6.9 |
| | 10.3 | 4.7 | | 14.0 | 8.5 | | 13.2 | | | 12.6 | 7.0 |
| 1+00 | 12.4 | 6.8 | | 13.8 | 8.3 | | 13.2 | | | 12.8 | 7.2 |
| | 13.7 | 8.1 | 3+00 | 14.0 | 8.5 | 5+00 | 13.2 | | 7+00 | 13.0 | 7.4 |
| | 14.2 | 8.6 | | 14.0 | | | 13.2 | 7.6 | | 13.2 | 7.6 |
| | 14.8 | 9.2 | | 14.0 | | | 13.0 | 7.4 | | 13.8 | 8.2 |
| | 14.8 | 9.2 | | 14.0 | | | 13.0 | 7.4 | | 13.8 | 8.2 |
| 50 | 14.6 | 9.0 | | 14.0 | | | 12.8 | 7.2 | | 13.8 | 8.2 |
| | 14.6 | 9.0 | 50 | 14.0 | | 50 | 12.2 | 6.6 | 50 | 13.0 | 7.4 |
| | 14.2 | 8.6 | | 14.0 | 8.4 | | 12.5 | 6.9 | | 13.1 | 7.5 |
| | 14.2 | 8.6 | | 13.7 | 8.1 | | 12.7 | 7.1 | | 13.1 | 7.5 |

W159+00 CONTD SOUTH
 Dist Sound Elev Dist Sound Elev

10-9-57 (16)
 W160+00; 0+00 = N10,200; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| (5.6) | 13.3 | 7.7 | (5.6) | 12.0 | 6.4 | | | | | | |
| | 13.3 | 7.7 | | 12.0 | 6.4 | 0+00 | 7.8 | 2.4 | (5.4) | 14.6 | 9.2 |
| 8+00 | 13.0 | 7.4 | 10+00 | 11.8 | 6.2 | (5.4) | 9.3 | 3.9 | 2+00 | 14.8 | 9.4 |
| | 12.7 | 7.1 | | 10.8 | 5.9 | 1027 | 10.9 | 5.5 | | 14.7 | 9.3 |
| | 12.9 | 7.3 | | 8.8 | 3.2 | | 11.1 | 5.7 | 1030 | 14.8 | 9.4 |
| | 13.0 | 7.4 | | 5.0 | +0.6 | | 9.9 | 4.5 | | 14.8 | 9.4 |
| | 13.0 | | | 3.8 | +1.5 | 50 | 8.4 | 3.0 | | 14.5 | 9.1 |
| 50 | 13.0 | | 50 | 2.7 | +2.5 | | 7.5 | 2.1 | 50 | 14.3 | 8.9 |
| | 13.0 | | | | | | 6.9 | 1.5 | | 14.2 | 8.8 |
| | 13.0 | | | | | | 6.9 | 1.5 | | 13.7 | 8.3 |
| | 13.0 | | | | | | 10.2 | 4.8 | | 13.7 | 8.3 |
| | 13.0 | | | | | 1+00 | 12.0 | 6.6 | | 13.8 | 8.4 |
| 9+00 | 13.0 | 7.4 | | | | | 12.7 | 7.3 | 3+00 | 13.8 | 8.4 |
| | 13.2 | 7.6 | | | | | 13.3 | 7.9 | | 13.6 | 8.2 |
| | 12.8 | 7.2 | | | | | 13.8 | 8.4 | | 13.3 | 7.9 |
| | 12.6 | 7.0 | | | | | 14.0 | 8.6 | | 13.1 | 7.7 |
| | 12.6 | 7.0 | | | | 50 | 14.1 | 8.7 | | 13.1 | 7.7 |
| 50 | 12.5 | 6.9 | | | | | 14.2 | 8.8 | 50 | 12.9 | 7.5 |
| | 12.4 | 6.8 | | | | | 14.3 | 8.9 | | 12.9 | 7.5 |
| | 12.0 | 6.4 | | | | | 14.5 | 9.1 | | 12.9 | 7.5 |

| W/60+00 CONTD SOUTH | | | 10-9-57 | | | W/60+00; SOUTH | | | ⑬ | | |
|---------------------|-------|------|---------|-------|------|----------------|-------|------|-------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
| (5.4) | 12.9 | 7.5 | (5.3) | 13.1 | 7.8 | (5.2) | 13.5 | 8.3 | (5.2) | 8.0 | 2.8 |
| | 12.9 | 7.5 | | 13.1 | | | 13.6 | 8.4 | | 5.0 | +0.2 |
| 4+00 | 12.9 | 7.5 | 6+00 | 13.1 | | 8+00 | 13.6 | 8.4 | 10+00 | 3.7 | +1.5 |
| | 13.0 | 7.6 | | 13.1 | | | 13.7 | 8.5 | | 2.8 | +2.4 |
| | 13.1 | 7.7 | | 13.1 | | | 13.7 | 8.5 | | 2.3 | +2.9 |
| | 13.2 | 7.8 | | 13.1 | 7.8 | | 13.7 | 8.5 | | | |
| | 13.3 | 7.9 | | 12.8 | 7.5 | | 13.6 | 8.4 | | | |
| 50 | 13.3 | 7.9 | 50 | 12.4 | 7.1 | 50 | 13.5 | 8.3 | | | |
| | 13.5 | 8.1 | | 12.5 | 7.2 | | 13.5 | 8.3 | | | |
| | 13.7 | 8.3 | | 12.6 | 7.3 | | 13.5 | 8.3 | | | |
| | 13.8 | 8.4 | 1035 | 12.8 | 7.5 | 1038 | 13.3 | 8.1 | | | |
| | 13.8 | 8.4 | | 12.9 | 7.6 | | 13.2 | 8.0 | | | |
| 5+00 | 13.4 | 8.0 | 7+00 | 13.0 | 7.7 | 9+00 | 13.2 | 8.0 | | | |
| | 13.3 | 7.9 | | 13.1 | 7.8 | | 13.1 | 7.9 | | | |
| | 13.3 | 7.9 | | 13.2 | 7.9 | | 13.1 | 7.9 | | | |
| | 13.2 | 7.8 | | 13.3 | 8.0 | | 12.9 | 7.7 | | | |
| | 13.1 | 7.7 | | 13.3 | 8.0 | | 12.7 | 7.5 | | | |
| 50 | 13.1 | | 50 | 13.3 | 8.0 | 50 | 12.1 | 6.9 | | | |
| | 13.1 | | | 13.4 | 8.1 | | 11.5 | 6.3 | | | |
| | 13.1 | 7.7 | | 13.5 | 8.2 | | 8.3 | 3.1 | | | |

10-9-57

W 161+00; 0+00 - N 10 200; SOUND SOUTH

N 161+00 SOUTH (18)

| Dist | Sound | Elev | Mist | Sound | Elev | (5.0) | 13.4 | 8.4 | | | |
|--------------|-------|------|-------|-------|------|--------------|------|------|------|--|--|
| 0+00 | 7.1 | 2.0 | (5.1) | 14.7 | 9.6 | | 13.2 | 8.2 | | | |
| (5.1) | 5.4 | 0.3 | 2+00 | 14.6 | 9.5 | 4+00 | 13.5 | 8.3 | 6+00 | | |
| <u>10:48</u> | 5.2 | 0.1 | | 14.9 | 9.8 | | 13.1 | 8.1 | | | |
| | 4.0 | +1.1 | | 14.8 | 9.7 | | 13.0 | 8.0 | | | |
| | 3.8 | +1.3 | | 14.4 | 9.3 | | 12.9 | 7.9 | | | |
| 50 | 3.7 | +1.4 | | 14.1 | 9.0 | | 12.9 | 7.9 | | | |
| | 3.7 | +1.4 | 50 | 14.0 | 8.9 | 50 | 12.4 | 7.4 | 50 | | |
| | 3.7 | +1.4 | | 13.9 | 8.8 | | 12.2 | 7.2 | | | |
| | 4.3 | +0.8 | | 14.0 | 8.9 | <u>10:55</u> | 11.0 | 6.0 | | | |
| | 6.0 | 0.9 | | 13.6 | 8.5 | | 9.9 | 4.9 | | | |
| 1+00 | 9.6 | 4.5 | | 13.0 | 7.9 | | 7.2 | 2.2 | | | |
| | 12.0 | 6.9 | 3+00 | 13.2 | 8.1 | 5+00 | 6.3 | 1.3 | 7+00 | | |
| | 13.0 | 7.9 | | 13.2 | 8.1 | | 4.0 | +1.0 | | | |
| | 13.7 | 8.6 | | 13.3 | 8.2 | | 3.1 | +1.9 | | | |
| | 13.9 | 8.8 | | 13.2 | 8.1 | | 2.6 | +2.4 | | | |
| 50 | 14.0 | 8.9 | | 13.3 | 8.2 | | 2.3 | +2.7 | | | |
| | 14.1 | 9.0 | 50 | 13.2 | 8.1 | 50 | | | 50 | | |
| | 14.3 | 9.2 | | 13.3 | 8.2 | | | | | | |
| | 14.3 | 9.2 | | 13.4 | 8.3 | | | | | | |

10-9-57
W. 162+00; 0+00=N/10, 200; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|--------------------------|-------|------|
| | | | (48) | 14.0 | 9.2 |
| 0+00 | 4.0 | +0.8 | (48) | 14.1 | 9.3 |
| (48) | 3.6 | +1.2 | 2+00 | 14.2 | 9.4 |
| <u>11:03</u> | 3.5 | +1.3 | | 14.3 | 9.5 |
| | 3.2 | +1.6 | | 14.9 | 10.1 |
| | 3.1 | +1.7 | | 14.7 | 9.9 |
| 50 | 3.2 | +1.6 | | 14.4 | 9.6 |
| | 3.1 | +1.7 | 50 | 14.0 | 9.2 |
| | 3.0 | +1.8 | | 13.8 | 9.1 |
| | 3.6 | +1.2 | | 13.9 | 9.1 |
| | 4.9 | 0.1 | | 13.8 | 9.0 |
| 1+00 | 6.1 | 1.3 | | 13.6 | 8.8 |
| | 9.6 | 4.8 | 3+00 | 13.7 | 8.9 |
| | 11.0 | 6.2 | | 13.9 | 9.1 |
| | 12.1 | 7.3 | | 13.9 | 9.1 |
| | 13.1 | 8.3 | | 13.8 | 9.0 |
| 50 | 13.9 | 9.1 | | 13.2 | 8.4 |
| | 13.9 | 9.1 | <u>11:05</u> 50 | 12.9 | 8.1 |
| | 13.8 | 9.0 | Re-sound <u>11:15</u> | 12.8 | 8.1 |
| | 14.2 | 9.4 | (47) | | |

W. 167+00; 507H

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|------|-------|------|
| (46) | 12.4 | 7.8 | | | |
| | 11.6 | 7.0 | | | |
| 1+00 | 9.8 | 5.2 | | | |
| | 9.0 | 3.4 | | | |
| <u>11:19</u> | 6.0 | 1.4 | | | |
| | 3.7 | +0.9 | | | |
| | 2.4 | +2.2 | | | |
| 50 | 1.7 | +2.9 | | | |
| | 1.2 | +3.4 | | | |

10-9-57
 W. 163+00; 0+00 = N. 10, 200; SOUND SOUTH

W. 163+00; SOUTH
 Dist Sound Elev

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| | | | (4.5) | 9.8 | 5.3 |
| 0+00 | 2.6 | +1.9 | (4.3) | 14.5 | 10.0 |
| (4.5) | 2.9 | +1.6 | 2+00 | 14.4 | 9.9 |
| <u>11:23</u> | 3.0 | +1.5 | | 14.3 | 9.8 |
| | 2.8 | +1.7 | | 14.2 | 9.7 |
| | 2.8 | +1.7 | | 14.0 | 9.5 |
| 50 | 2.8 | +1.7 | | 14.0 | 9.5 |
| | 2.8 | +1.7 | 50 | 14.0 | 9.5 |
| | 2.9 | +1.6 | | 14.1 | 9.6 |
| | 3.8 | +0.7 | | 14.6 | 10.1 |
| | 5.1 | 0.6 | | 14.7 | 10.2 |
| 1+00 | 7.8 | 3.3 | | 14.7 | 10.2 |
| | 11.0 | 6.5 | 3+00 | 14.8 | 10.3 |
| | 12.2 | 7.7 | | 14.8 | 10.3 |
| | 13.0 | 8.5 | | 14.7 | 10.2 |
| | 13.1 | 8.6 | | 14.1 | 9.6 |
| 50 | 13.3 | 8.8 | | 12.9 | 8.4 |
| | 13.6 | 9.1 | 50 | 12.0 | 7.5 |
| | 14.0 | 9.5 | | 11.6 | 7.1 |
| | 14.3 | 9.8 | | 11.6 | 7.1 |

10-9-57
W. 164+00; 0+00 = N. 10, 200; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|------|-------|------|
| 0+00 | 2.5 | +1.8 | (43) | 14.4 | 10.1 |
| (43) | 2.6 | +1.7 | 2+00 | 14.3 | 10.0 |
| <u>11:35</u> | 2.6 | +1.7 | | 14.5 | 10.2 |
| | 2.6 | +1.7 | | 14.9 | 10.6 |
| | 2.7 | +1.6 | | 14.7 | 10.4 |
| 50 | 2.6 | +1.7 | | 14.7 | 10.4 |
| | 2.7 | +1.6 | 50 | 15.0 | 10.7 |
| | 2.7 | +1.6 | | 15.0 | 10.7 |
| | 2.9 | +1.4 | | 15.0 | 10.7 |
| | 4.0 | +0.3 | | 14.7 | 10.4 |
| 1+00 | 4.8 | 0.5 | | 14.6 | 10.3 |
| | 7.2 | 2.9 | 3+00 | 14.2 | 9.9 |
| | 9.7 | 5.4 | | 14.0 | 9.7 |
| | 11.8 | 7.0 | | 13.6 | 9.3 |
| | 12.8 | 8.5 | | 13.3 | 9.0 |
| 50 | 13.3 | 9.0 | | 13.1 | 8.8 |
| | 14.0 | 9.7 | 50 | 12.6 | 8.3 |
| | 14.3 | 10.0 | | 11.2 | 6.9 |
| | 14.6 | 10.3 | | 9.9 | 5.6 |

W. 164+00; 500TH.
Dist Sound Elev

(25)
(43) 7.6 3.3
7.0 2.7
4+00 3.3 +1.0
2.7 +1.6
1.5 +2.8

10-9-57
 W. W. 165+00; 0+00 = N. 10,200; SOUND SOUTH

| D | Dist | Sound | Elev | Dist | Sound | Elev |
|---|--------------|-------|------|-------|-------|------|
| | | | | (4.1) | 14.9 | 10.6 |
| 0 | 0+00 | 2.4 | +1.7 | (4.1) | 14.9 | 10.6 |
| | (7.1) | 2.2 | +1.9 | 2+00 | 15.0 | 10.7 |
| | <u>11:45</u> | 2.1 | +2.0 | | 14.7 | 10.6 |
| | | 2.1 | +2.0 | | 14.7 | 10.6 |
| | | 2.2 | +1.9 | | 14.4 | 10.3 |
| | 50 | 2.1 | +2.0 | | 14.6 | 10.5 |
| | | 2.1 | +2.0 | 50 | 14.7 | 10.6 |
| | | 2.1 | +2.0 | | 14.5 | 10.4 |
| | | 2.3 | +1.8 | | 14.3 | 10.2 |
| | | 3.2 | +0.9 | | 14.0 | 9.9 |
| 1 | 1+00 | 4.9 | 0.8 | | 13.9 | 9.6 |
| | | 7.8 | 3.7 | 3+00 | 14.0 | 9.9 |
| | | 10.8 | 6.7 | | 13.8 | 9.7 |
| | | 12.9 | 8.8 | | 13.3 | 9.2 |
| | | 13.1 | 9.0 | | 12.9 | 8.8 |
| | 50 | 13.6 | 9.5 | | 11.9 | 7.8 |
| | | 14.0 | 9.9 | 50 | 10.9 | 6.8 |
| | | 14.3 | 10.2 | | 10.0 | 5.9 |
| | | 14.8 | 10.7 | | 8.3 | 4.2 |

W 165+00; SOUTH
 Dist Sound Elev

| Dist | Sound | Elev |
|--------------|-------|------|
| (4.0) | 7.6 | 3.6 |
| <u>11:50</u> | 7.0 | 3.0 |
| 4+00 | 4.2 | 0.2 |
| | 2.7 | +1.3 |
| | 1.9 | +2.1 |

10-10-57

W. 166+00; 0+00 = N. 10200; SOUND SOUTH

| Dist | Sound | Elev. | Dist | Sound | Elev. |
|-------------|-------|-------|-------------|-------|-------|
| 0+00 | 4.3 | +2.1 | (6.9) | 16.3 | 9.9 |
| (6.9) | 4.3 | + } | 2+00 | 16.5 | 10.1 |
| <u>9:22</u> | 4.3 | + } | <u>9:25</u> | 16.6 | 10.2 |
| | 4.3 | +2.1 | | 17.0 | 10.6 |
| | 4.2 | +2.2 | | 17.1 | 10.7 |
| 50 | 4.2 | +2.2 | | 17.1 | 10.7 |
| | 4.1 | +2.3 | 50 | 17.0 | 10.4 |
| | 4.1 | +2.3 | | 16.9 | 10.5 |
| | 4.1 | +2.3 | | 17.0 | 10.6 |
| | 4.4 | +2.0 | | 16.8 | 10.4 |
| 1+00 | 6.8 | 0.4 | | 16.6 | 10.2 |
| | 8.4 | 2.0 | 3+00 | 16.6 | 10.2 |
| | 12.7 | 6.3 | | 15.5 | 9.1 |
| | 14.2 | 7.8 | | 15.7 | 9.3 |
| | 15.6 | 9.2 | | 15.3 | 8.9 |
| 50 | 16.3 | 9.9 | | 15.3 | 8.9 |
| | 16.3 | 9.9 | 50 | 14.5 | 8.1 |
| | 16.2 | 9.8 | | 13.2 | 6.8 |
| | 16.2 | 9.8 | | 12.5 | 6.1 |

W/ 66+00; SOUTH

(23)

Dist Sound Elev

| | | |
|-------------|------|------|
| (6.4) | 11.7 | 5.3 |
| <u>9:28</u> | 10.7 | 4.3 |
| 4+00 | 7.6 | 1.2 |
| | 5.2 | +1.2 |
| | 4.4 | +2.0 |
| | 3.7 | +2.7 |
| | 2.9 | +3.5 |
| 50 | 2.3 | +4.1 |
| | 1.8 | +4.6 |

10-10-57
 W/167+00; 0+00=N/10,200; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| 0+00 | 4.6 | +1.8 | (6.4) | 17.4 | 11.0 |
| (6.4) | 4.0 | +2.4 | 2+00 | 17.8 | 11.4 |
| <u>9:34</u> | 4.2 | +2.2 | | 16.9 | 10.5 |
| | 4.1 | +2.3 | | 16.8 | 10.4 |
| | 4.0 | +2.4 | | 16.6 | 10.2 |
| 50 | 4.0 | + | | 16.9 | 10.5 |
| | 4.0 | + | 50 | 16.8 | 10.4 |
| | 4.0 | + | | 16.8 | 10.4 |
| | 4.0 | +2.4 | | 16.3 | 9.9 |
| | 4.2 | +2.2 | | 16.1 | 9.7 |
| 1+00 | 4.9 | +1.5 | | 15.9 | 9.5 |
| | 5.9 | +0.5 | 3+00 | 15.8 | 9.4 |
| | 9.7 | 3.3 | | 15.7 | 9.3 |
| | 13.5 | 7.1 | | 15.3 | 8.9 |
| | 15.0 | 8.6 | | 15.0 | 8.6 |
| 50 | 15.8 | 9.4 | | 14.8 | 8.4 |
| | 16.6 | 10.2 | 50 | 14.6 | 8.2 |
| | 17.0 | 10.6 | | 14.3 | 7.9 |
| | 17.3 | 10.9 | | 13.3 | 6.9 |

W/167+00; SOUTH
 Dist Sound Elev

| Dist | Sound | Elev |
|-------------|-------|------|
| (6.4) | 12.0 | 5.6 |
| <u>9:40</u> | 10.7 | 4.3 |
| 4+00 | 9.0 | 2.6 |
| | 6.2 | +0.2 |
| | 5.1 | +1.3 |
| | 4.7 | +3.7 |
| | 4.0 | +2.4 |
| 50 | 3.3 | +3.1 |
| | 2.9 | +3.5 |
| | 2.2 | +4.2 |

10-10-57

W/68+00; 0+00=N/10200; SOUND SOUTH

Dist Sound Elev Dist Sound Elev

0+00 2.9 +3.5 (6.4) 17.0 10.6

(6.4) 3.9 +2.5 2+00 17.0 10.6

9.45 4.0 +2.4 50+ 17.2 10.8

3.9 +2.5 81+ 17.3 10.9

3.9 +2.5 78+ 17.3 10.9

50 3.8 +2.6 9.50 17.1 10.73.8 +2.6 50 16.9 10.5

4.0 +2.4 28+ 16.7 10.3

4.3 +2.1 28+ 16.3 9.9

5.1 +1.3 15.9 9.5

1+00 6.1 +0.3 15.6 9.2

8.4 2.0 3+00 15.7 9.3

12.0 5.6 15.7 9.3

13.8 7.4 15.8 9.4

14.8 8.4 15.7 9.3

50 15.7 9.3 15.4 9.0

16.0 9.6 50 14.5 8.1

16.7 10.3 13.6 7.2

16.7 10.3 13.4 7.0

W/68+00; SOUTH

Dist Sound Elev

(6.4) 13.0 6.6

11.7 5.3

4+00 10.4 4.0

9.8 3.4

8.4 2.0

6.1 +0.3

4.7 +1.7

50 4.1 +2.3

3.6 +2.8

3.2 +3.2

2.8 +3.6

2.2 +4.2

5+00 1.6 +4.8

(25)

10-10-57

W.169+00; 0+00=N.10,200; SOUND SOUTH

W.169+00; SOUTH DIST SOUND Elev

DIST SOUND Elev DIST SOUND Elev

0+00 3.6 +2.7 (6.2) 16.6 10.4

(6.3) 3.6 +2.7 2+00 16.6 10.4

9:57 3.6 +2.7 10:00 16.4 10.2

3.6 +2.7 16.7 10.5

3.8 +2.5 16.9 10.7

50 4.1 +2.2 16.5 10.3

4.9 +1.4 50 16.3 10.1

5.6 +0.7 16.0 9.8

6.2 +0.1 16.0 9.8

9.5 3.2 15.9 9.7

1+00 11.0 5.7 15.7 9.5

12.9 6.6 3+00 15.6 9.4

13.8 7.5 15.3 9.1

14.2 7.9 15.3 9.1

14.9 8.6 14.9 8.7

50 15.3 9.0 14.9 8.7

16.1 9.8 50 14.8 8.6

16.2 9.9 14.8 8.6

16.3 10.0 14.3 8.1

(6.1) 13.2 7.1

12.6 6.5

4+00 12.0 5.9

11.6 5.5

10:05 10.0 3.9

8.8 2.7

7.5 1.4

50 5.9 +0.2

5.0 +1.1

4.4 +1.7

3.7 +2.4

3.1 +3.0

5+00 3.0 +3.1

2.7 +3.4

2.5 +3.6

2.0 +4.1

10-10-57
 W. 170+00; 0+00 = N. 10, 200; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|--------------|-------|------|
| 0+00 | 3.8 | +2.2 | (6.0) | 14.8 | 8.8 |
| (6.0) | 4.0 | +2.0 | 2+00 | 15.2 | 9.2 |
| <u>10/10</u> | 4.5 | +1.5 | | 15.2 | 9.2 |
| | 5.1 | +0.9 | | 15.2 | 9.2 |
| | 5.7 | +0.3 | | 15.0 | 9.0 |
| 50 | 7.0 | 1.0 | | 15.0 | 9.0 |
| | 10.3 | 4.3 | 50 | 15.4 | 9.4 |
| | 13.1 | 7.1 | | 15.4 | 9.4 |
| | 13.8 | 7.8 | | 14.9 | 8.9 |
| | 13.9 | 7.9 | | 15.1 | 9.1 |
| 1+00 | 14.0 | 8.0 | | 15.3 | 9.3 |
| | 14.0 | 8.0 | 3+00 | 15.6 | 9.6 |
| | 14.2 | 8.2 | <u>10/15</u> | 15.2 | 9.2 |
| | 14.2 | 8.2 | | 15.2 | 9.2 |
| | 14.7 | 8.7 | | 14.7 | 8.7 |
| 50 | 14.8 | 8.8 | | 14.7 | 8.7 |
| | 14.0 | 8.0 | 50 | 14.5 | 8.5 |
| | 13.9 | 7.9 | | 14.2 | 8.2 |
| | 14.4 | 8.4 | | 14.2 | 8.2 |

W. 170+00; SOUTH (27)
 Dist Sound Elev Dist Sound Elev

| | | | | | |
|--------------|------|------|------|-----|------|
| (6.0) | 14.2 | 8.2 | 5+80 | 2.3 | +3.7 |
| | 14.2 | 8.2 | | | |
| 4+00 | 14.0 | 8.0 | | | |
| | 13.1 | 7.1 | | | |
| | 13.5 | 7.5 | | | |
| | 13.1 | 7.1 | | | |
| | 12.7 | 6.7 | | | |
| 50 | 12.0 | 6.0 | | | |
| | 11.0 | 5.0 | | | |
| | 10.0 | 4.0 | | | |
| | 8.9 | 2.9 | | | |
| | 8.2 | 2.2 | | | |
| 5+00 | 7.1 | 1.1 | | | |
| | 5.8 | +0.2 | | | |
| | 5.0 | +1.0 | | | |
| | 4.4 | +1.6 | | | |
| <u>10/18</u> | 3.8 | +2.2 | | | |
| 50 | 3.2 | +2.8 | | | |
| | 3.0 | +3.0 | | | |
| | 2.8 | +3.2 | | | |

10-10-57

N. 102+00; 0+00 = W. 17,000; SOUND EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|--------------|-------|------|
| 0+00 | | | (5.9) | 3.4 | +2.5 |
| (5.9) | 3.4 | +2.5 | 2+00 | 3.5 | +2.4 |
| <u>10:22</u> | 3.3 | +2.6 | | 3.7 | +2.2 |
| | 3.3 | + | | 3.7 | + |
| | 3.3 | + | | 3.7 | + |
| 50 | 3.3 | +2.6 | <u>10:25</u> | 3.7 | +2.2 |
| | 3.2 | +2.7 | 50 | 3.8 | +2.1 |
| | 3.2 | + | | 3.8 | +2.1 |
| | 3.2 | + | | 3.8 | +2.1 |
| | 3.2 | + | | 3.9 | +2.0 |
| 1+00 | 3.2 | + | | 3.8 | +2.1 |
| | 3.2 | +2.7 | 3+00 | 4.0 | +1.9 |
| | 3.3 | +2.6 | | 3.9 | +2.0 |
| | 3.3 | +2.6 | | 3.8 | +2.1 |
| | 3.4 | +2.5 | | 4.0 | +1.9 |
| 50 | 3.6 | +2.3 | | 3.9 | +2.0 |
| | 3.6 | +2.3 | 50 | 4.0 | +1.9 |
| | 3.6 | +2.3 | | 4.0 | +1.9 |
| | 3.4 | +2.5 | | 4.0 | +1.9 |

N. 102+00; EAST

(28)

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|--------------|-------|------|
| (5.9) | 4.0 | +1.9 | (5.8) | 4.0 | +1.8 |
| | 3.9 | +2.0 | | 4.1 | +1.7 |
| 4+00 | 4.0 | +1.9 | 6+00 | 4.0 | +1.8 |
| | 3.9 | +2.0 | | 4.0 | + |
| | 3.9 | + | | 4.0 | + |
| | 3.9 | + | | 4.0 | +1.8 |
| | 3.9 | +2.0 | | 4.1 | +1.7 |
| 50 | 4.0 | +1.9 | 50 | 4.2 | +1.6 |
| | 4.0 | +1.9 | | 4.2 | +1.6 |
| | 3.9 | +2.0 | | 4.1 | +1.7 |
| | 3.9 | +2.0 | | 4.1 | +1.7 |
| | 4.0 | +1.9 | | 4.0 | +1.8 |
| 5+00 | 3.9 | +2.0 | 7+00 | 4.0 | + |
| | 3.8 | +2.1 | <u>10:30</u> | 4.0 | + |
| | 4.0 | +1.9 | | 4.0 | +1.8 |
| | 4.0 | +1.9 | | 4.1 | +1.7 |
| | 4.0 | +1.9 | | 4.3 | +1.5 |
| 50 | 4.1 | +1.8 | 50 | 4.3 | +1.5 |
| | 4.0 | +1.9 | | 4.2 | +1.6 |
| | 4.0 | +1.9 | | 4.5 | +1.3 |

N102+00 CONTD EAST 10-10-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|--------------|-------|------|
| (5.8) | 4.4 | +1.4 | (5.7) | 9.8 | 4.1 |
| | 4.4 | +1.4 | | 8.3 | 2.6 |
| 8+00 | 5.0 | +1.8 | 10+00 | 8.0 | 2.3 |
| | 5.0 | +1.8 | | 7.8 | 2.1 |
| | 4.4 | +1.4 | | 7.4 | 1.7 |
| | 4.2 | +1.6 | | 7.8 | 2.1 |
| | 4.1 | +1.7 | | 7.8 | 2.1 |
| 50 | 4.3 | +1.5 | 50 | 7.3 | 1.6 |
| | 5.0 | +0.8 | | 7.0 | 1.3 |
| | 5.9 | 0.1 | <u>10.35</u> | 6.8 | 1.1 |
| | 6.1 | 0.3 | | 6.3 | 0.6 |
| | 6.8 | 1.0 | | 6.3 | 0.6 |
| 9+00 | 8.0 | 2.2 | 11+00 | 6.1 | 0.4 |
| | 8.8 | 3.0 | | 6.3 | 0.6 |
| | 9.1 | 3.3 | | 6.4 | 0.7 |
| | 9.8 | 4.0 | | 6.3 | 0.6 |
| <u>10.33</u> | 9.9 | 4.1 | | 6.2 | 0.5 |
| 50 | 10.0 | 4.2 | 50 | 6.1 | 0.4 |
| | 10.1 | 4.3 | | 6.0 | 0.3 |
| | 10.0 | 4.2 | | 5.8 | 0.1 |

N102+00; EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|--------------|-------|------|
| (5.7) | 6.0 | 0.3 | (5.7) | 6.7 | 1.0 |
| | 5.8 | 0.1 | | 6.5 | 0.8 |
| 12+00 | 5.7 | 0.0 | 14+00 | 6.2 | 0.5 |
| | 5.7 | | | 6.2 | 0.5 |
| | 5.7 | | | 6.2 | 0.5 |
| | 5.7 | | | 5.9 | 0.2 |
| | 5.7 | | | 5.7 | 0.0 |
| 50 | 5.7 | 0.0 | 50 | 5.7 | 0.0 |
| | 5.9 | 0.2 | | 5.7 | 0.0 |
| | 5.9 | 0.2 | | 5.6 | +0.1 |
| | 6.0 | 0.4 | <u>10.40</u> | 5.0 | +0.7 |
| | 6.0 | | | 5.0 | +0.7 |
| 13+00 | 6.0 | | 15+00 | 4.9 | +0.8 |
| | 6.0 | | | 4.8 | +0.9 |
| | 6.1 | 0.4 | | 4.6 | +1.1 |
| | 6.1 | 0.4 | | 4.5 | +1.2 |
| | 6.2 | 0.5 | | 4.7 | +1.0 |
| 50 | 6.8 | 1.1 | 50 | 4.4 | +1.3 |
| | 6.7 | 1.0 | | 4.4 | +1.3 |
| | 6.5 | 0.8 | | 4.6 | +1.1 |

N.102+00; CONTD EAST. 10-10-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (5.7) | 4.7 | +1.0 | (5.6) | 14.9 | 9.3 |
| | 5.0 | +0.7 | 10.45 | 14.9 | 9.3 |
| 16+00 | 5.8 | 0.1 | 18+00 | 15.0 | 9.4 |
| | 6.0 | 0.3 | | 15.0 | 9.4 |
| | 6.3 | 0.6 | | 15.0 | 9.4 |
| | 6.4 | 0.7 | | 14.9 | 9.3 |
| | 6.9 | 1.2 | | 15.0 | 9.4 |
| 50 | 7.9 | 2.2 | 50 | 14.7 | 9.1 |
| | 9.3 | 3.6 | | 14.6 | 9.0 |
| | 9.5 | 3.8 | | 14.5 | 8.9 |
| | 9.5 | 3.8 | | 14.6 | 9.0 |
| | 9.3 | 3.6 | | 14.3 | 8.7 |
| 17+00 | 9.9 | 4.2 | 19+00 | 14.5 | 8.9 |
| | 10.1 | 4.4 | | | |
| | 11.2 | 5.5 | | | |
| | 13.0 | 7.3 | | | |
| | 14.7 | 9.0 | | | |
| 50 | 15.0 | 9.3 | | | |
| | 15.2 | 9.5 | | | |
| | 15.0 | 9.3 | | | |

10-10-57

(30)

N103+00; 0+00 = W.17,000; SOUND EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| 0+00 | 3.0 | +2.5 | (5.4) | 3.5 | +1.9 |
| (5.5) | 2.9 | +2.6 | 2+00 | 3.5 | +1.9 |
| 10.57 | 3.0 | +2.5 | | 3.6 | +1.8 |
| | 3.0 | +2.5 | | 3.8 | +1.6 |
| | 3.1 | +2.4 | | 3.7 | +1.7 |
| 50 | 3.2 | +2.3 | | 3.6 | +1.8 |
| | 3.1 | +2.4 | 50 | 3.7 | +1.7 |
| | 3.2 | +2.3 | | 3.6 | +1.8 |
| | 3.3 | +2.2 | | 3.3 | +2.1 |
| | 3.3 | +2.2 | | 3.3 | +2.1 |
| 1+00 | 3.3 | +2.2 | | 3.3 | +2.1 |
| | 3.3 | +2.2 | 3+00 | 3.6 | +1.8 |
| | 3.3 | +2.2 | | 3.6 | +1.8 |
| | 3.3 | +2.2 | | 3.5 | +1.9 |
| | 3.4 | +2.1 | | 3.4 | +2.0 |
| 50 | 3.4 | +2.1 | | 3.3 | +2.1 |
| | 3.4 | +2.1 | 50 | 3.5 | +1.9 |
| | 3.4 | +2.1 | | 3.5 | +1.9 |
| | 3.4 | +2.1 | | 3.5 | +1.9 |

N. 103+00 CONTD EAST. 10-10-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------------|-------|------|
| (5.4) | 3.4 | +2.0 | (5.4) | 3.9 | +1.5 |
| | 3.5 | +1.9 | | 4.1 | +1.3 |
| 4+00 | 3.5 | +1.9 | 6+00 | 4.1 | +1.3 |
| | 3.5 | +1.9 | | 3.9 | +1.5 |
| | 3.6 | +1.8 | 1100 | 3.8 | +1.6 |
| | 3.7 | +1.7 | <u>1100</u> | 3.7 | +1.7 |
| | 3.8 | +1.6 | | 3.6 | +1.8 |
| 50 | 3.8 | +1.6 | 50 | 3.6 | +1.8 |
| | 3.7 | +1.7 | | 3.6 | +1.8 |
| | 3.6 | +1.8 | | 3.6 | +1.8 |
| | 3.7 | +1.7 | | 3.6 | +1.8 |
| | 3.6 | +1.8 | | 3.6 | +1.8 |
| 5+00 | 3.6 | +1.8 | 7+00 | 3.6 | +1.8 |
| | 3.7 | +1.7 | | 3.6 | +1.8 |
| | 3.8 | +1.6 | | 3.7 | +1.7 |
| | 3.7 | +1.7 | | 3.7 | +1.7 |
| | 3.6 | +1.8 | | 3.7 | +1.7 |
| 50 | 3.6 | +1.8 | 50 | 3.8 | +1.6 |
| | 3.6 | +1.8 | | 4.0 | +1.4 |
| | 3.6 | +1.8 | | 4.1 | +1.3 |

N. 103+00 EAST (31)

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (5.4) | 4.7 | +0.7 | (5.3) | 6.9 | 1.6 |
| | 5.2 | +0.2 | 1103 | 6.7 | 1.4 |
| 8+00 | 5.5 | 0.1 | 10+00 | 6.7 | 1.4 |
| | 6.0 | 0.6 | | 6.8 | 1.5 |
| | 7.4 | 2.0 | | 6.8 | 1.5 |
| | 9.3 | 3.9 | | 6.8 | 1.5 |
| | 9.9 | 4.5 | | 6.7 | 1.4 |
| 50 | 12.7 | 7.3 | 50 | 6.4 | 1.1 |
| | 13.4 | 8.0 | | 6.0 | 0.7 |
| | 10.1 | 4.7 | | 6.0 | 0.7 |
| | 7.3 | 1.9 | | 6.0 | 0.7 |
| | 6.3 | 0.9 | | 5.8 | 0.5 |
| 9+00 | 6.1 | 0.7 | 11+00 | 5.8 | 0.5 |
| | 6.0 | 0.6 | | 5.8 | 0.5 |
| | 5.9 | 0.5 | | 5.8 | 0.5 |
| | 5.9 | 0.5 | | 5.8 | 0.5 |
| | 6.0 | 0.6 | | 5.8 | 0.5 |
| 50 | 6.7 | 1.3 | 50 | 5.7 | 0.9 |
| | 6.8 | 1.4 | | 5.6 | 0.3 |
| | 6.8 | 1.4 | | 5.5 | 0.2 |

N.103+00; CONTD EAST 10-10-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (53) | 5.4 | 0.1 | (53) | 5.1 | +0.2 |
| 1105 | 5.4 | 0.1 | | 5.1 | +0.2 |
| 12+00 | 5.3 | 0.0 | 14+00 | 5.0 | +0.3 |
| | 5.0 | +0.3 | | 4.8 | +0.5 |
| | 5.1 | +0.2 | | 4.7 | +0.6 |
| | 5.2 | +0.1 | | 4.7 | +0.6 |
| | 5.2 | +0.1 | | 4.7 | +0.6 |
| 50 | 5.4 | 0.1 | 50 | 4.7 | +0.6 |
| | 5.5 | 0.2 | | 4.7 | +0.6 |
| | 5.7 | 0.4 | | 4.7 | +0.6 |
| | 5.8 | 0.5 | | 4.7 | +0.6 |
| | 5.8 | 0.5 | | 4.8 | +0.5 |
| 13+00 | 5.7 | 0.4 | 15+00 | 4.8 | +0.5 |
| | 5.7 | 0.4 | | 4.7 | +0.6 |
| | 5.7 | 0.4 | | 4.8 | +0.5 |
| | 5.7 | 0.4 | | 4.9 | +0.4 |
| | 5.6 | 0.3 | | 5.0 | +0.3 |
| 50 | 5.5 | 0.2 | 50 | 5.1 | +0.2 |
| | 5.2 | +0.1 | | 5.2 | +0.1 |
| | 5.2 | +0.1 | | 5.2 | +0.1 |

N103+00 EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (53) | 5.2 | +0.1 | (53) | 5.1 | +0.2 |
| | 5.2 | +0.1 | | 5.1 | +0.2 |
| 16+00 | 5.2 | +0.1 | 18+00 | 5.1 | +0.2 |
| | 5.2 | +0.1 | | 5.1 | +0.2 |
| | 5.2 | +0.1 | | 5.2 | +0.1 |
| | 5.5 | 0.2 | | 5.4 | 0.1 |
| | 5.8 | 0.5 | | 5.6 | 0.3 |
| 50 | 5.9 | 0.6 | 50 | 5.7 | 0.4 |
| | 6.0 | 0.7 | | 5.7 | 0.4 |
| | 6.3 | 1.0 | 11+00 | 5.7 | 0.4 |
| | 6.0 | 0.7 | | 5.8 | 0.5 |
| | 5.8 | 0.5 | | 7.3 | 2.0 |
| 17+00 | 5.4 | 0.1 | 19+00 | 10.2 | 7.9 |
| | 5.0 | +0.3 | | 11.0 | 5.7 |
| | 5.0 | +0.3 | | 12.0 | 6.7 |
| | 5.0 | +0.3 | | 13.3 | 8.0 |
| | 4.8 | +0.5 | | 13.9 | 8.6 |
| 50 | 5.0 | +0.3 | 50 | 14.1 | 8.8 |
| | 5.0 | +0.3 | | 14.1 | 8.8 |
| | 5.1 | +0.2 | | 14.4 | 9.1 |
| | | | | 14.3 | 9.0 |
| | | | | 14.6 | 9.3 |
| | | | 20+00 | 14.6 | 9.3 |

(38)

10-10-57

N104+00; 0+00 = W. 17,000; SOUND EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|--------------|-------|------|
| 0+00 | 2.7 | +2.5 | (5.1) | 2.9 | +2.2 |
| (5.2) | 2.8 | +2.4 | 2+00 | 3.0 | +2.1 |
| <u>11/22</u> | 2.8 | +2.4 | | 3.0 | +2.1 |
| | 2.9 | +2.3 | | 3.1 | +2.0 |
| | 2.9 | +2.3 | | 3.1 | +2.0 |
| 50 | 2.9 | +2.3 | | 3.1 | +2.0 |
| 5 | 2.9 | +2.3 | 50 | 3.1 | +2.0 |
| | 2.8 | +2.4 | | 3.2 | +1.9 |
| | 2.8 | +2.4 | <u>11/25</u> | 3.3 | +1.8 |
| | 2.9 | +2.3 | | 3.6 | +1.5 |
| 1+00 | 2.9 | +2.3 | | 3.6 | +1.5 |
| | 2.8 | +2.4 | 3+00 | 3.3 | +1.8 |
| | 2.9 | +2.3 | | 3.3 | +1.8 |
| | 2.9 | +2.3 | | 3.2 | +1.9 |
| | 2.9 | +2.3 | | 3.2 | +1.9 |
| 50 | 3.0 | +2.2 | | 3.6 | +1.5 |
| | 3.0 | +2.2 | 50 | 3.5 | +1.6 |
| | 2.9 | +2.3 | | 3.8 | +1.3 |
| | 2.9 | +2.3 | | 3.4 | +1.7 |

N104+00; EAST

(33)

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|--------------|-------|------|
| (5.1) | 3.4 | +1.7 | (5.0) | 3.6 | +1.4 |
| | 3.6 | +1.5 | | 3.7 | +1.3 |
| 4+00 | 3.7 | +1.4 | 6+00 | 3.6 | +1.4 |
| | 3.8 | +1.3 | | 3.6 | +1.4 |
| | 3.8 | +1.3 | | 3.3 | +1.7 |
| | 3.7 | +1.4 | | 3.2 | +1.8 |
| | 3.6 | +1.5 | | 3.2 | +1.8 |
| 50 | 3.6 | +1.5 | 50 | 3.5 | +1.5 |
| | 3.8 | +1.3 | <u>11/30</u> | 4.4 | +0.6 |
| | 3.9 | +1.2 | | 4.9 | +0.1 |
| | 3.8 | +1.3 | | 5.3 | 0.3 |
| | 4.0 | +1.1 | | 5.3 | 0.3 |
| 5+00 | 4.0 | +1.1 | 7+00 | 5.8 | 0.6 |
| | 3.6 | +1.5 | | 6.2 | 1.2 |
| | 3.7 | +1.4 | | 7.0 | 2.0 |
| | 3.6 | +1.5 | | 8.0 | 3.0 |
| | 3.9 | +1.2 | | 8.0 | 3.0 |
| 50 | 4.0 | +1.1 | 50 | 8.8 | 3.8 |
| | 4.0 | +1.1 | | 8.2 | 3.2 |
| | 3.7 | +1.4 | | 7.0 | 2.0 |

N104+00 CONTDEAST 10-10-57

| DIST | Sound | Elev | DIST | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| (5.0) | 6.1 | 1.1 | (4.9) | 7.2 | 2.3 |
| | 6.0 | 1.0 | | 6.9 | 2.0 |
| 8+00 | 5.8 | 0.8 | 10+00 | 6.1 | 1.2 |
| | 5.8 | 0.8 | | 6.0 | 1.1 |
| | 6.0 | 1.0 | | 5.8 | 0.9 |
| | 6.0 | 1.0 | | 5.8 | 0.9 |
| | 6.1 | 1.1 | | 5.6 | 0.9 |
| 50 | 6.5 | 1.5 | 50 | 5.2 | 0.3 |
| | 6.9 | 1.9 | | 5.2 | 0.3 |
| | 7.2 | 2.2 | | 5.1 | 0.2 |
| | 7.2 | 2.2 | | 5.0 | 0.1 |
| | 7.0 | 2.0 | | 5.0 | 0.1 |
| 9+00 | 7.1 | 2.1 | 11+00 | 5.0 | 0.1 |
| | 7.0 | 2.0 | | 4.8 | +0.1 |
| | 7.2 | 2.2 | | 4.5 | +0.4 |
| | 7.2 | 2.2 | | 4.3 | +0.6 |
| <u>11:35</u> | 7.4 | 2.4 | | 4.3 | +0.6 |
| 50 | 7.5 | 2.5 | 50 | 4.1 | +0.8 |
| | 7.2 | 2.2 | | 4.0 | +0.9 |
| | 7.2 | 2.2 | | 4.0 | +0.9 |

N.104+00; EAST

| DIST | Sound | Elev | DIST | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| (4.8) | 4.0 | +0.8 | (4.7) | 3.5 | +1.2 |
| | 4.0 | +0.8 | | 3.4 | +1.3 |
| 12+00 | 4.2 | +0.6 | 14+00 | 3.2 | +1.5 |
| <u>11:40</u> | 4.2 | +0.6 | | 3.2 | +1.5 |
| | 4.0 | +0.8 | | 3.3 | +1.4 |
| | 4.0 | +0.8 | | 3.4 | +1.3 |
| | 3.9 | +0.9 | | 3.4 | +1.3 |
| 50 | 4.0 | +0.8 | 50 | 3.6 | +1.1 |
| | 4.1 | +0.7 | | 3.2 | +1.5 |
| | 4.0 | +0.8 | | 3.6 | +1.1 |
| | 4.0 | +0.8 | | 3.5 | +1.2 |
| | 4.0 | +0.8 | | 3.5 | +1.2 |
| 13+00 | 4.0 | +0.8 | 15+00 | 3.5 | +1.2 |
| | 3.9 | +0.9 | | 3.8 | +0.9 |
| | 3.9 | +0.9 | | 3.8 | +0.9 |
| | 3.8 | +1.0 | | 3.7 | +1.0 |
| | 3.8 | +1.0 | | 3.7 | +1.0 |
| 50 | 3.6 | +1.2 | 50 | 3.6 | +1.1 |
| | 3.6 | +1.2 | | 3.5 | +1.2 |
| | 3.5 | +1.3 | | 3.3 | +1.4 |

(39)

N.104+00 CONTD EAST 10-10-57

| DIST | SOUND | ELEV | DIST | SOUND | ELEV |
|--------------|-------|------|-------|-------|------|
| (4.7) | 3.4 | +1.3 | (4.6) | 4.2 | +0.9 |
| <u>11:45</u> | 3.2 | +1.5 | | 4.5 | +0.1 |
| <u>16+00</u> | 3.1 | +1.6 | 18+00 | 4.5 | +0.1 |
| | 3.1 | +1.6 | | 4.5 | +0.1 |
| | 3.0 | +1.7 | | 4.6 | 0.0 |
| | 3.2 | +1.5 | | 4.6 | 0.0 |
| | 3.8 | +0.9 | | 4.6 | 0.0 |
| 50 | 3.9 | +0.8 | 50 | 4.5 | +0.1 |
| | 3.8 | +0.9 | | 4.6 | 0.0 |
| | 3.2 | +1.5 | 11:50 | 4.6 | 0.0 |
| | 2.8 | +1.9 | | 4.5 | +0.1 |
| | 2.9 | +1.8 | | 4.6 | 0.0 |
| 17+00 | 3.0 | +1.7 | 19+00 | 4.4 | +0.2 |
| | 3.1 | +1.6 | | 4.2 | +0.9 |
| | 3.0 | +1.7 | | 4.6 | 0.0 |
| | 3.2 | +1.5 | | 4.6 | 0.0 |
| | 3.5 | +1.2 | | 4.5 | +0.1 |
| 50 | 4.0 | +0.7 | 50 | 4.5 | +0.1 |
| | 4.0 | +0.7 | | 4.5 | +0.1 |
| | 4.0 | +0.7 | | 4.6 | 0.0 |
| | 4.0 | +0.7 | | 4.5 | +0.1 |
| | | | | 4.6 | 0.0 |
| | | | 20+00 | 4.6 | 0.0 |

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(35)

N105+00: 0+00 = W. 17,000; SOUND EAST

| DIST | SOUND | ELEV | DIST | SOUND | ELEV |
|-------|-------|------|-------|-------|------|
| 0+00 | 4.0 | +2.4 | (6.4) | 4.5 | +1.9 |
| (6.4) | 4.0 | +2.4 | 2+00 | 4.5 | +1.9 |
| 9:25 | 4.1 | +2.3 | | 4.6 | +1.8 |
| | 4.2 | +2.2 | | 4.7 | +1.7 |
| | 4.1 | +2.3 | | 4.8 | +1.6 |
| 50 | 4.2 | +2.2 | | 4.9 | +1.5 |
| | 4.2 | +2.2 | 50 | 4.9 | +1.5 |
| | 4.2 | +2.2 | | 4.9 | +1.5 |
| | 4.2 | +2.2 | | 5.0 | +1.4 |
| | 4.2 | +2.2 | | 4.9 | +1.5 |
| 1+00 | 4.2 | +2.2 | | 4.8 | +1.6 |
| | 4.2 | +2.2 | 3+00 | 4.8 | +1.6 |
| | 4.3 | +2.1 | | 4.9 | +1.5 |
| | 4.3 | +2.1 | | 5.0 | +1.4 |
| | 4.3 | +2.1 | | 4.9 | +1.5 |
| 50 | 4.3 | +2.1 | | 4.8 | +1.6 |
| | 4.3 | +2.1 | 50 | 4.8 | +1.6 |
| | 4.4 | +2.0 | | 4.8 | +1.6 |
| | 4.5 | +1.9 | | 4.7 | +1.7 |

| N105+00 CONTD EAST | | | | | |
|--------------------|-------|------|-------------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev |
| (6.4) | 4.7 | 4.7 | (6.4) | 5.7 | +0.7 |
| | 4.8 | +1.6 | | 6.1 | +0.3 |
| 4+00 | 4.7 | +1.7 | 6+00 | 6.1 | +0.3 |
| | 4.7 | +1.7 | | 6.0 | +0.4 |
| | 4.7 | +1.7 | | 6.2 | +0.2 |
| | 4.7 | +1.7 | <u>9130</u> | 6.5 | 0.1 |
| | 4.7 | +1.7 | | 6.7 | 0.3 |
| 50 | 4.7 | +1.7 | 50 | 7.1 | 0.7 |
| | 4.7 | +1.7 | | 7.2 | 0.8 |
| | 4.7 | +1.7 | | 7.0 | 0.6 |
| | 4.6 | +1.8 | | 6.9 | 0.5 |
| | 4.5 | +1.9 | | 6.9 | 0.5 |
| 5+00 | 4.5 | +1.9 | 7+00 | 6.8 | 0.4 |
| | 4.5 | +1.9 | | 6.8 | 0.4 |
| | 4.5 | +1.9 | | 6.8 | 0.4 |
| | 4.5 | +1.9 | | 7.1 | 0.7 |
| | 4.6 | +1.8 | | 7.4 | 1.0 |
| 50 | 4.7 | +1.7 | 50 | 8.0 | 1.6 |
| | 4.8 | +1.6 | | 8.2 | 1.8 |
| | 5.0 | +1.4 | | 8.1 | 1.7 |

| N105+00; EAST | | | | | |
|---------------|-------|------|-------------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev |
| (6.4) | 8.3 | 1.9 | (6.4) | 5.4 | +1.0 |
| | 8.6 | 2.2 | | 5.3 | +1.1 |
| 8+00 | 8.8 | 2.4 | 10+00 | 5.3 | +1.1 |
| | 8.9 | 2.5 | | 5.3 | +1.1 |
| | 9.4 | 3.0 | | 5.2 | +1.2 |
| | 9.5 | 3.1 | | 5.2 | +1.2 |
| | 9.5 | 3.1 | <u>9:33</u> | 5.2 | +1.2 |
| 50 | 9.7 | 3.3 | 50 | 5.2 | +1.2 |
| | 9.5 | 3.1 | | 5.2 | +1.2 |
| | 9.0 | 2.6 | | 5.2 | +1.2 |
| | 8.7 | 2.3 | | 5.4 | +1.0 |
| | 8.4 | 2.0 | | 5.4 | +1.0 |
| 9+00 | 8.4 | 2.0 | 11+00 | 5.0 | +1.4 |
| | 8.8 | 2.4 | | 4.7 | +1.7 |
| | 8.3 | 1.9 | | 4.3 | +2.1 |
| | 8.1 | 1.7 | | 4.2 | +2.2 |
| | 8.0 | 1.6 | | 4.0 | +2.4 |
| 50 | 7.3 | 0.9 | 50 | 4.0 | +2.4 |
| | 7.2 | 0.8 | | 3.9 | +2.5 |
| | 6.3 | +0.1 | | 3.8 | +2.6 |

N.105+00 CONTD EAST 10-11-57

Dist Sound Elev

(64) 3.6 +2.8

9.35 3.4 +3.0

12+00 3.7 +2.7

3.0 +3.4

2.5 +3.9

1.6 +4.8

10-11-57

N.106+00; 0+00 = W.17000; SOUND EAST (37)

Dist Sound Elev Dist Sound Elev

0+00 4.4 +2.0 (64) 2.6 +1.8

(64) 4.4 +2.0 2+00 4.3 +2.1

9.45 4.6 +1.8 4.5 +1.9

4.6 +1.8 4.5 +1.9

4.5 +1.9 4.5 +1.9

50 4.6 +1.8 4.7 +1.7

4.6 +1.8 50 4.7 +1.7

4.6 +1.8 4.8 +1.6

4.3 +2.1 9.47 4.8 +1.6

4.6 +1.8 4.8 +1.6

1+00 4.6 +1.8 4.8 +1.6

4.6 +1.8 3+00 5.0 +1.4

4.4 +2.0 5.0 +1.4

4.4 +2.0 4.7 +1.7

4.4 +2.0 4.7 +1.7

50 4.6 +1.8 4.8 +1.6

4.6 +1.8 50 4.5 +1.9

4.8 +1.6 4.5 +1.9

4.8 +1.6 4.3 +2.1

N 106+00 CONTD EAST 10-11-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|------|-------|------|------|-------|------|
| (64) | 4.3 | +2.1 | (64) | 7.0 | 0.6 |
| | 4.7 | +1.7 | | 6.8 | 0.4 |
| 4+00 | 4.6 | +1.8 | 6+00 | 6.7 | 0.3 |
| | 4.6 | +1.8 | | 6.9 | 0.5 |
| | 4.4 | +2.0 | | 6.4 | 0.0 |
| | 4.6 | +1.8 | | 6.4 | 0.0 |
| | 4.4 | +2.0 | | 6.2 | +0.2 |
| 50 | 4.3 | +2.1 | 50 | 6.1 | +0.3 |
| | 4.4 | +2.0 | | 6.1 | +0.3 |
| | 4.6 | +1.8 | | 6.3 | +0.1 |
| 9:50 | 4.6 | +1.8 | | 6.6 | 0.2 |
| | 4.5 | +1.9 | | 6.9 | 0.5 |
| 5+00 | 5.0 | +1.4 | 7+00 | 7.1 | 0.7 |
| | 5.4 | +1.0 | | 8.1 | 1.7 |
| | 6.0 | +0.9 | | 8.9 | 2.5 |
| | 6.1 | +0.3 | | 9.0 | 2.6 |
| | 6.3 | +0.1 | | 9.0 | 2.6 |
| 50 | 6.7 | 0.3 | 50 | 9.1 | 2.7 |
| | 6.7 | 0.3 | | 9.4 | 3.0 |
| | 6.9 | 0.5 | | 9.5 | 3.1 |

N 106+00 EAST EAST 30

| Dist | Sound | Elev | Dist | Sound | Elev |
|------|-------|------|-------|-------|------|
| (64) | 9.8 | 3.4 | (64) | 4.1 | +2.3 |
| | 9.8 | 3.4 | | 4.1 | +2.3 |
| 8+00 | 9.8 | 3.4 | 10+00 | 4.0 | +2.4 |
| | 9.8 | 3.4 | | 4.0 | +2.4 |
| | 9.8 | 3.4 | | 4.0 | +2.4 |
| | 9.7 | 3.3 | | 3.8 | +2.6 |
| | 9.5 | 3.1 | | 3.8 | +2.6 |
| 50 | 9.5 | 3.1 | 50 | 3.5 | +2.9 |
| | 9.3 | 2.9 | | 3.3 | +3.1 |
| | 9.1 | 2.7 | | 2.8 | +3.6 |
| | 9.0 | 2.6 | 9:57 | 2.8 | +3.6 |
| | 8.6 | 2.2 | | 2.6 | +3.8 |
| 9+00 | 8.0 | 1.6 | 11+00 | 2.6 | +3.8 |
| | 7.5 | 1.1 | | 2.5 | +3.9 |
| | 6.8 | 0.4 | | 2.0 | +4.4 |
| | 6.0 | +0.4 | | 2.0 | +4.4 |
| | 5.3 | +1.1 | | | |
| 50 | 4.9 | +1.5 | 50 | | |
| | 4.9 | +1.5 | | | |
| | 4.6 | +1.8 | | | |

10-11-57
N. 107+00; 0+00 - W 17000 SOUND EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|------|-------|------|
| 0+00 | 4.5 | +1.9 | (64) | 4.8 | +1.6 |
| (64) | 4.6 | +1.8 | 2+00 | 5.0 | +1.9 |
| <u>10:05</u> | 4.6 | +1.8 | | 5.0 | +1.4 |
| | 4.6 | +1.8 | | 4.8 | +1.6 |
| | 4.4 | +2.0 | | 4.8 | +1.6 |
| 50 | 4.6 | +1.8 | | 4.8 | +1.6 |
| | 4.6 | +1.8 | 50 | 4.9 | +1.5 |
| | 4.5 | +1.9 | | 4.7 | +1.7 |
| | 4.6 | +1.8 | | 4.8 | +1.6 |
| | 4.6 | +1.8 | | 4.8 | +1.6 |
| 1+00 | 4.6 | +1.8 | | 4.8 | +1.6 |
| | 4.8 | +1.6 | 3+00 | 4.6 | +1.8 |
| | 4.5 | +1.8 | | 4.7 | +1.7 |
| | 4.6 | +1.8 | | 4.7 | +1.7 |
| | 4.9 | +1.5 | | 4.6 | +1.8 |
| 50 | 4.9 | +1.5 | | 4.6 | +1.8 |
| | 4.6 | +1.8 | 50 | 4.7 | +1.7 |
| | 4.7 | +1.7 | | 4.7 | +1.7 |
| | 4.8 | +1.6 | | 4.5 | +1.9 |

N. 107+00 EAST

(39)

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|------|-------|------|
| (64) | 4.5 | +1.9 | (64) | 6.7 | 0.3 |
| <u>10:10</u> | 4.5 | +1.9 | | 6.7 | 0.3 |
| <u>4+00</u> | 4.7 | +1.7 | 6+00 | 6.4 | 0.0 |
| | 4.7 | +1.7 | | 6.0 | +0.4 |
| | 4.6 | +1.8 | | 5.8 | +0.6 |
| | 4.6 | +1.8 | | 5.8 | +0.6 |
| | 4.9 | +1.5 | | 5.8 | +0.6 |
| 50 | 5.0 | +1.4 | 50 | 6.0 | +0.4 |
| | 5.0 | +1.4 | | 6.8 | 0.4 |
| | 5.0 | +1.4 | | 7.0 | 0.6 |
| | 5.2 | +1.2 | | 8.0 | 1.6 |
| | 6.0 | +0.4 | | 9.0 | 2.6 |
| 5+00 | 6.1 | +0.3 | 7+00 | 9.5 | 3.1 |
| | 6.5 | 0.1 | | 9.8 | 3.4 |
| | 6.3 | +0.1 | | 9.8 | 3.4 |
| | 6.8 | 0.4 | | 10.0 | 3.6 |
| | 6.8 | 0.4 | | 10.0 | 3.6 |
| 50 | 6.6 | 0.2 | 50 | 10.2 | 3.8 |
| | 6.6 | 0.2 | | 10.2 | 3.8 |
| | 6.8 | 0.4 | | 10.2 | 3.8 |

N. 107+00 CONTD EAST 10-11-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| (63) | 10.4 | 4.1 | (63) | 2.0 | +4.3 |
| | 10.3 | 4.0 | | 2.0 | +4.3 |
| 8+00 | 10.2 | 3.9 | 10+00 | 1.8 | +4.5 |
| | 10.6 | 4.3 | | 1.5 | +4.8 |
| | 10.6 | 4.3 | | 1.5 | +4.8 |
| <u>1015</u> | 10.6 | 4.3 | | | |
| | 9.8 | 3.5 | | | |
| 50 | 9.0 | 2.7 | 50 | | |
| | 8.0 | 1.7 | | | |
| | 6.7 | 0.4 | | | |
| | 5.4 | +0.9 | | | |
| | 4.8 | +1.5 | | | |
| 9+00 | 4.0 | +2.3 | 11+00 | | |
| | 3.9 | +2.4 | | | |
| | 3.2 | +3.1 | | | |
| | 3.0 | +3.3 | | | |
| | 3.0 | +3.3 | | | |
| 50 | 2.5 | +3.8 | | | |
| | 2.3 | +4.0 | | | |
| | 2.2 | +4.1 | | | |

10-11-57

(40)

N. 107+00; 0+00 = W. 17000; SOUND WEST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|------|-------|------|
| 0+00 | | | (62) | 4.3 | +1.9 |
| (62) | 4.5 | +1.7 | 2+00 | 4.3 | +1.9 |
| <u>1025</u> | 4.5 | +1.7 | | 4.2 | +2.0 |
| | 4.6 | +1.6 | | 4.2 | +2.0 |
| | 4.5 | +1.7 | | 4.6 | +1.6 |
| 50 | 4.5 | +1.7 | | 4.6 | +1.6 |
| | 4.4 | +1.8 | 50 | 4.5 | +1.7 |
| | 4.4 | +1.8 | | 4.5 | +1.7 |
| | 4.3 | +1.9 | | 4.4 | +1.8 |
| | 4.3 | +1.9 | | 4.3 | +1.9 |
| 1+00 | 4.4 | +1.8 | | 4.3 | +1.9 |
| | 4.3 | +1.9 | 3+00 | 4.3 | +1.9 |
| | 4.3 | +1.9 | | 4.2 | +2.0 |
| | 4.4 | +1.8 | | 4.3 | +1.9 |
| | 4.4 | +1.8 | | 4.3 | +1.9 |
| 50 | 4.4 | +1.8 | | 4.3 | +1.9 |
| | 4.4 | +1.8 | 50 | 4.3 | +1.9 |
| | 4.4 | +1.8 | | 4.3 | +1.9 |
| | 4.3 | +1.9 | | 4.3 | +1.9 |

N. 107+00 CONTD WEST 10-11-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|------|-------|------|--------------|-------|------|
| (62) | 4.3 | +1.9 | (6.2) | 4.2 | +2.0 |
| | 4.3 | +1.9 | | 4.1 | +2.1 |
| 4+00 | 4.3 | +1.9 | 6+00 | 4.1 | +2.1 |
| | 4.2 | +2.0 | | 4.1 | +2.1 |
| | 4.2 | +2.0 | | 4.1 | +2.1 |
| | 4.2 | +2.0 | | 4.1 | +2.1 |
| | 4.2 | +2.0 | | 4.1 | +2.1 |
| 50 | 4.2 | +2.0 | 50 | 4.0 | +2.2 |
| | 4.2 | +2.0 | | 4.0 | +2.2 |
| | 4.2 | +2.0 | | 4.0 | +2.2 |
| | 4.2 | +2.0 | | 3.9 | +2.3 |
| | 4.3 | +1.9 | | 3.8 | +2.4 |
| 5+00 | 4.3 | +1.9 | 7+00 | 3.8 | +2.4 |
| | 4.3 | +1.9 | <u>10.30</u> | 3.8 | +2.4 |
| | 4.3 | +1.9 | | 3.8 | +2.4 |
| | 4.3 | +1.9 | | 3.7 | +2.5 |
| | 4.3 | +1.9 | | 3.7 | +2.5 |
| 50 | 4.3 | +1.9 | 50 | 3.7 | +2.5 |
| | 4.3 | +1.9 | | 3.6 | +2.6 |
| | 4.2 | +2.0 | | 3.6 | +2.6 |

N. 107+0.0; WEST. 10-21-57 (41)

| Dist | Sound | Elev | Dist | Sound | Elev |
|------|-------|------|--------------|-------|------|
| (62) | 3.7 | +2.5 | (62) | 4.8 | +1.4 |
| | 3.6 | +2.6 | 1032 | 5.0 | +1.2 |
| 8+00 | 3.6 | +2.6 | <u>10+00</u> | 5.3 | +0.9 |
| | 3.6 | +2.6 | 9.12 | 5.1 | +0.8 |
| | 3.5 | +2.7 | (5.9) | 5.2 | +0.7 |
| | 3.5 | +2.7 | | 5.5 | +0.4 |
| | 3.4 | +2.8 | | 5.9 | 0.0 |
| 50 | 3.4 | +2.8 | 50 | 6.0 | 0.1 |
| | 3.5 | +2.7 | | 6.2 | 0.3 |
| | 3.5 | +2.7 | | 6.6 | 0.2 |
| | 3.6 | +2.6 | | 7.7 | 1.8 |
| | 3.8 | +2.4 | | 8.9 | 3.0 |
| 9+00 | 3.8 | +2.4 | 11+00 | 10.1 | 4.2 |
| | 3.9 | +2.3 | | 13.7 | 7.8 |
| | 3.9 | +2.3 | | 15.3 | 9.4 |
| | 4.0 | +2.2 | | 15.3 | 9.4 |
| | 4.1 | +2.1 | | 15.0 | 9.1 |
| 50 | 4.2 | +2.0 | 50 | 15.0 | 9.1 |
| | 4.2 | +2.0 | | 14.8 | 8.9 |
| | 4.4 | +1.8 | | 14.0 | 8.0 |

N107+00 CONTD WEST 10-21-57

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------|-------|------|-------|-------|------|
| | 14.0 | 8.2 | (58) | 14.0 | 8.2 |
| 9:15 | 13.9 | 8.1 | | 14.0 | 8.2 |
| 12+00 | 13.9 | 8.1 | 14+00 | 14.0 | 8.2 |
| (5.8) | 14.0 | 8.2 | | 13.9 | 8.1 |
| | 14.0 | 8.2 | | 14.0 | 8.2 |
| | 14.0 | 8.2 | | 14.0 | 8.2 |
| | 13.7 | 7.9 | | 14.2 | 8.4 |
| 50 | 13.2 | 7.4 | 50 | 14.2 | 8.4 |
| | 13.2 | 7.4 | | 14.0 | 8.2 |
| | 13.4 | 7.6 | | 14.3 | 8.5 |
| | 13.6 | 7.8 | | 14.0 | 8.2 |
| | 13.6 | 7.8 | | 14.0 | 8.2 |
| 13+00 | 13.6 | 7.6 | 15+00 | 14.0 | 8.2 |
| | 13.9 | 8.1 | | 14.0 | 8.2 |
| | 13.9 | 8.1 | | 14.0 | 8.2 |
| | 13.7 | 7.9 | | 14.0 | 8.2 |
| | 14.1 | 8.3 | | 13.8 | 8.0 |
| 50 | 14.0 | 8.2 | 50 | 13.8 | 8.0 |
| | 14.0 | 8.2 | | 13.9 | 8.1 |
| | 14.0 | 8.2 | | 14.1 | 8.3 |

N107+00; WEST (42)

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (57) | 14.2 | 8.5 | (5.7) | 14.3 | 8.6 |
| | 14.2 | 8.5 | | 14.2 | 8.5 |
| 16+00 | 14.0 | 8.3 | 18+00 | 14.1 | 8.4 |
| | 14.5 | 8.8 | | 14.9 | 9.2 |
| | 14.2 | 8.5 | | 14.6 | 8.9 |
| | 13.8 | 8.1 | | 14.2 | 8.5 |
| | 14.0 | 8.3 | | 14.0 | 8.3 |
| 50 | 14.2 | 8.5 | 50 | 13.9 | 8.2 |
| | 13.4 | 7.7 | | 12.9 | 7.2 |
| | 13.2 | 7.5 | | 12.8 | 7.1 |
| | 13.2 | 7.5 | | 12.6 | 6.9 |
| 9:20 | 13.3 | 7.6 | | 12.5 | 6.8 |
| 17+00 | 13.1 | 7.4 | 19+00 | 11.2 | 5.5 |
| (5.7) | 13.0 | 7.3 | | 10.3 | 4.6 |
| | 13.2 | 7.5 | | 9.5 | 3.8 |
| | 13.2 | 7.5 | | 8.5 | 2.8 |
| | 13.5 | 7.8 | | 8.0 | 2.3 |
| 50 | 13.5 | 7.8 | 50 | 7.5 | 1.8 |
| | 14.0 | 8.3 | | 7.2 | 1.5 |
| | 14.1 | 8.4 | | 6.7 | 1.0 |

| N107+00 CONTD | | | WEST 10-21-57 | | | N107+00, WEST | | | 10-21-57 | | |
|---------------|-------|------|---------------|-------|------|---------------|-------|------|----------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
| (5.6) | 6.0 | 0.4 | (5.6) | 12.0 | 6.4 | (5.5) | 14.9 | 9.4 | (5.4) | 14.2 | 8.8 |
| | 5.8 | 0.2 | | 13.0 | 7.4 | 9:30 | 15.0 | 9.5 | | 14.2 | 8.8 |
| 20+00 | 5.7 | 0.1 | 22+00 | 13.3 | 7.7 | 24+00 | 15.0 | 9.5 | 26+00 | 14.3 | 8.9 |
| | 5.6 | 0.0 | | 13.7 | 8.1 | (5.5) | 15.0 | 9.5 | | 14.2 | 8.8 |
| | 5.2 | +0.4 | | 13.8 | 8.2 | | 15.2 | 9.7 | | 14.0 | 8.6 |
| | 5.0 | +0.6 | | 14.0 | 8.4 | | 15.0 | 9.5 | | 14.0 | 8.6 |
| | 5.0 | +0.6 | | 14.0 | 8.4 | | 15.0 | 9.5 | | 13.8 | 8.4 |
| 50 | 5.0 | +0.6 | 50 | 14.3 | 8.7 | 50 | 14.8 | 9.3 | 50 | 13.2 | 7.8 |
| 9:25 | 5.0 | +0.6 | | 14.3 | 8.7 | | 14.0 | 8.5 | | 13.1 | 7.7 |
| | 5.2 | +0.4 | | 14.2 | 8.6 | | 14.0 | 8.5 | | 13.0 | 7.6 |
| (5.6) | 5.5 | +0.1 | | 14.5 | 8.9 | | 14.1 | 8.6 | | 13.0 | 7.6 |
| | 6.8 | 0.2 | | 14.7 | 9.1 | | 14.1 | 8.6 | | 13.0 | 7.6 |
| 21+00 | 8.2 | 2.6 | 23+00 | 15.0 | 9.4 | 25+00 | 14.3 | 8.8 | 27+00 | 13.0 | 7.6 |
| | 9.3 | 3.7 | | 14.9 | 9.3 | | 14.1 | 8.6 | 9:35 | 13.0 | 7.6 |
| | 10.1 | 4.5 | | 14.9 | 9.3 | | 14.2 | 8.7 | (5.4) | 13.1 | 7.7 |
| | 11.1 | 5.5 | | 14.9 | 9.3 | | 14.1 | 8.6 | | 13.0 | 7.6 |
| | 11.2 | 5.6 | | 14.8 | 9.2 | | 14.1 | 8.6 | | 12.9 | 7.5 |
| 50 | 11.4 | 5.8 | 50 | 14.6 | 9.0 | 50 | 14.1 | 8.6 | 50 | 12.9 | 7.5 |
| | 11.0 | 5.4 | | 14.8 | 9.2 | | 14.2 | 8.7 | | 12.6 | 7.2 |
| | 11.0 | 5.4 | | 14.8 | 9.2 | | 14.2 | 8.7 | | 12.0 | 6.6 |

N107+00 CONTD WEST 10-21-57

Dist Sound Elev

| | | |
|-------|------|------|
| (5.4) | 11.5 | 6.1 |
| | 10.9 | 5.5 |
| 28+00 | 9.9 | 4.5 |
| | 9.0 | 3.6 |
| | 8.1 | 2.7 |
| | 7.3 | 1.9 |
| | 7.0 | 1.6 |
| 50 | 6.8 | 1.4 |
| | 6.0 | 0.6 |
| | 4.8 | +0.6 |
| | 3.9 | +1.5 |
| | 3.2 | +2.2 |
| 29+00 | 1.6 | +3.8 |

10-21-57

(44)

N170+00:0+00=N10700 SOUND SOUTH

Dist Sound Elev Dist Sound Elev

| | | | | |
|----------------|-----|-------|------|----------|
| 0+00 | | (5.3) | 2.9 | +2.4 |
| | 3.0 | +2.3 | 2+00 | 2.8 +2.5 |
| 2.4 | 3.0 | +2.3 | | 2.6 +2.7 |
| 5.3 | 3.1 | +2.2 | | 2.8 +2.5 |
| | 3.0 | +2.3 | | 2.7 +2.6 |
| 50 | 3.0 | +2.3 | | 2.7 +2.6 |
| | 3.0 | +2.3 | 50 | 2.8 +2.5 |
| | 2.9 | +2.4 | | 2.8 +2.5 |
| | 2.9 | +2.4 | | 2.7 +2.6 |
| | 3.0 | +2.3 | | 2.7 +2.6 |
| 1+00 | 2.9 | +2.4 | | 2.6 +2.7 |
| | 2.9 | +2.4 | 3+00 | 2.6 +2.7 |
| | 2.9 | +2.4 | | 2.6 +2.7 |
| | 2.9 | +2.4 | | 2.6 +2.7 |
| | 2.8 | +2.5 | | 2.4 +2.9 |
| 50 | 2.7 | +2.6 | | 2.5 +2.8 |
| | 2.7 | +2.6 | 50 | 2.5 +2.8 |
| | 2.7 | +2.6 | | 2.6 +2.7 |
| | 2.7 | +2.6 | | 2.6 +2.7 |

W170+00 CONTD SOUTH 10-21-57
 Dist Sound Elev Dist Sound Elev

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|------|-------|------|
| (5.2) | 2.4 | +2.8 | | | |
| | 2.6 | +2.6 | | | |
| 4+00 | 2.5 | +2.7 | | | |
| | 2.5 | +2.7 | | | |
| | 2.5 | +2.7 | | | |
| | 2.5 | +2.7 | | | |
| | 2.5 | +2.7 | | | |
| 50 | 2.5 | +2.7 | | | |
| | 2.5 | +2.7 | | | |
| | 2.5 | +2.7 | | | |
| | 2.5 | +2.7 | | | |
| | 2.6 | +2.6 | | | |
| 5+00 | 2.6 | +2.6 | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |
| | 2.5 | | | | |

10-21-57
 W171+00; 0+00 = N10,700; SOUND SOUTH (45)

| Dist | Sound | Elev | Dist | Sound | Elev |
|------|-------|------|-------|-------|------|
| 0+00 | | | (4.8) | 2.4 | +2.4 |
| | 2.9 | +2.0 | 2+00 | 2.4 | +2.4 |
| 9.58 | 2.9 | +2.0 | | 2.4 | +2.4 |
| 4.9 | 2.9 | +2.0 | | 2.4 | +2.4 |
| | 2.9 | +2.0 | | 2.4 | +2.4 |
| 50 | 2.9 | +2.0 | | 2.4 | +2.4 |
| | 2.9 | +2.0 | 50 | 2.4 | +2.4 |
| | 2.9 | +2.0 | | 2.4 | +2.4 |
| | 2.9 | +2.0 | 10.00 | 2.4 | +2.4 |
| | 2.9 | +2.0 | (4.8) | 2.5 | +2.3 |
| 1+00 | 2.8 | +2.1 | | 2.4 | +2.4 |
| | 2.8 | +2.1 | 3+00 | 2.4 | +2.4 |
| | 2.8 | +2.1 | | 2.4 | +2.4 |
| | 2.8 | +2.1 | | 2.4 | +2.4 |
| | 2.8 | +2.1 | | 2.3 | +2.5 |
| 50 | 2.8 | +2.1 | | 2.3 | +2.5 |
| | 2.7 | +2.2 | 50 | 2.3 | +2.5 |
| | 2.6 | +2.3 | | 2.3 | +2.5 |
| | 2.5 | +2.4 | | 2.3 | +2.5 |

W171+00 CONTD SOUTH 10-21-57

Dist Sound Elev Dist Sound Elev

(4.8) 2.3 +2.5 13.0 8.3

2.3 +2.5 13.0 8.3

4+00 2.3 +2.5 6+00 13.1 8.4

2.3 +2.5 10.03 13.0 8.3

2.3 +2.5 (4.7) 13.0 8.3

2.3 +2.5 12.4 7.7

2.3 +2.5 12.0 7.3

50 2.2 +2.6 50 12.1 7.4

2.2 +2.6 12.6 7.9

2.6 +2.2 12.6 7.9

3.2 +1.6 12.0 7.3

3.7 +1.1 12.2 7.5

5+00 4.3 +0.5 7+00 12.3 7.6

5.3 0.5 12.0 7.3

7.8 3.0 12.0 7.3

10.8 6.0 12.1 7.9

12.4 7.6 12.2 7.5

50 12.7 7.9 50 13.5 8.8

13.2 8.4 13.9 9.2

13.1 8.3 14.4 9.7

W171+00, SOUTH

Dist Sound Elev Dist Sound Elev

14.3 9.6 (4.7) 11.0 6.3

10.05 14.0 9.3 10.7 6.0

8+00 13.9 9.2 10+00 9.9 5.2

(4.7) 13.9 9.2

13.8 9.1

13.5 8.8

13.4 8.7

50 13.0 8.3

13.0 8.3

13.2 8.5

12.9 8.2

12.8 8.1

9+00 12.8 8.1

12.8 8.1

12.7 8.0

12.6 7.9

12.2 7.5

50 12.1 7.4

11.7 7.0

11.3 6.6

(46)

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W.172+00; D+00=N.10,700; SOUND SOUTH

W.172+00; SOUTH

Dist Sound Elev Dist Sound Elev

(47)

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|------|-------|------|------|-------|------|-------------|-------|------|
| | | | | | | (44) | 1.8 | +2.6 | | 12.0 | 7.6 |
| 0+00 | | | (45) | 2.0 | +2.5 | | 2.0 | +2.4 | <u>1020</u> | 12.0 | 7.6 |
| | 2.6 | +1.9 | 2+00 | 2.0 | +2.5 | 4+00 | 2.1 | +2.3 | 6+00 | 12.3 | 7.9 |
| <u>10:15</u> | 2.4 | +2.1 | | 2.0 | +2.5 | | 2.1 | +2.3 | (7.7) | 12.8 | 8.4 |
| (95) | 2.5 | +2.0 | | 2.0 | +2.5 | | 2.2 | +2.2 | | 13.3 | 8.9 |
| | 2.5 | +2.0 | | 2.0 | +2.5 | | 2.5 | +1.9 | | 13.5 | 9.1 |
| 50 | 2.6 | +1.9 | | 2.0 | +2.5 | | 2.8 | +1.6 | | 12.9 | 8.5 |
| | 2.5 | +2.0 | 50 | 2.0 | +2.5 | 50 | 3.0 | +1.4 | 50 | 12.8 | 8.4 |
| | 2.5 | +2.0 | | 2.0 | +2.5 | | 3.4 | +1.0 | | 12.6 | 8.2 |
| | 2.6 | +1.9 | | 1.9 | +2.6 | | 4.0 | +0.4 | | 12.5 | 8.1 |
| | 2.6 | +1.9 | | 1.9 | +2.6 | | 4.9 | 0.5 | | 12.2 | 7.8 |
| 1+00 | 2.6 | +1.9 | | 1.9 | +2.6 | | 7.0 | 2.6 | | 12.2 | 7.8 |
| | 2.6 | +1.9 | 3+00 | 1.9 | +2.6 | 5+00 | 10.2 | 5.8 | 7+00 | 12.1 | 7.7 |
| | 2.2 | +2.3 | | 1.9 | +2.6 | | 11.9 | 7.5 | | 12.0 | 7.6 |
| | 2.0 | +2.5 | | 1.9 | +2.6 | | 12.6 | 8.2 | | 11.8 | 7.4 |
| | 2.1 | +2.4 | | 1.9 | +2.6 | | 12.5 | 8.1 | | 11.8 | 7.4 |
| 50 | 2.0 | +2.5 | | 1.9 | +2.6 | | 12.5 | 8.1 | | 12.0 | 7.6 |
| | 2.0 | +2.5 | 50 | 2.0 | +2.5 | 50 | 12.2 | 7.8 | 50 | 11.7 | 7.3 |
| | 2.0 | +2.5 | | 1.8 | +2.7 | | 12.2 | 7.8 | | 12.1 | 7.7 |
| | 2.0 | +2.5 | | 1.8 | +2.7 | | 12.1 | 7.7 | | 12.3 | 7.9 |

W172+00 CONTD SOUTH 10-21-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| (4.3) | 12.7 | 8.4 | (4.3) | 12.0 | 7.7 |
| | 13.0 | 8.7 | | 11.2 | 6.9 |
| 8+00 | 13.2 | 8.9 | 10+00 | 11.2 | 6.9 |
| | 13.2 | 8.9 | | | |
| | 13.2 | 8.9 | | | |
| | 13.2 | 8.9 | | | |
| | 13.6 | 9.3 | | | |
| 50 | 13.2 | 8.9 | | | |
| | 13.2 | 8.9 | | | |
| | 13.0 | 8.7 | | | |
| | 12.6 | 8.3 | | | |
| | 12.2 | 7.9 | | | |
| 9+00 | 12.0 | 7.7 | | | |
| | 12.0 | 7.7 | | | |
| <u>10+23</u> | 11.9 | 7.6 | | | |
| | 11.8 | 7.5 | | | |
| (4.3) | 12.0 | 7.7 | | | |
| 50 | 12.0 | 7.7 | | | |
| | 11.9 | 7.6 | | | |
| | 11.9 | 7.6 | | | |

10-21-57 (48)

W173+00; 0+00 = N10,700 SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| 0+00 | | | (4.1) | 1.9 | +2.2 |
| | 2.0 | +2.1 | 2+00 | 1.9 | +2.2 |
| 10+30 | 2.0 | +2.1 | | 1.9 | +2.2 |
| | 2.1 | +2.0 | | 1.9 | +2.2 |
| (4.1) | 2.0 | +2.1 | | 1.9 | +2.2 |
| 50 | 2.0 | +2.1 | | 1.9 | +2.2 |
| | 2.0 | +2.1 | 50 | 1.9 | +2.2 |
| | 2.0 | +2.1 | | 1.9 | +2.2 |
| | 1.9 | +2.2 | | 2.0 | +2.1 |
| | 1.9 | +2.2 | | 2.0 | +2.1 |
| 1+00 | 1.9 | +2.2 | | 2.1 | +2.0 |
| | 1.9 | +2.2 | 3+00 | 2.2 | +1.9 |
| | 1.9 | +2.2 | | 2.3 | +1.8 |
| | 1.9 | +2.2 | | 2.4 | +1.7 |
| | 1.9 | +2.2 | | 2.6 | +1.5 |
| 50 | 1.9 | +2.2 | | 2.8 | +1.3 |
| | 1.9 | +2.2 | 50 | 3.2 | +0.9 |
| | 1.9 | +2.2 | | 3.7 | +0.4 |
| | 1.9 | +2.2 | | 4.1 | 0.0 |

W. 173+00 CONT'D SOUTH 10-21-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (4.0) | 4.9 | 0.9 | (4.0) | 12.8 | 8.8 |
| | 7.8 | 3.8 | | 12.9 | 8.9 |
| 4+00 | 9.8 | 5.8 | 6+00 | 13.0 | 9.0 |
| | 10.7 | 6.7 | | 13.1 | 9.1 |
| | 11.1 | 7.1 | | 13.1 | 9.1 |
| | 11.7 | 7.7 | | 12.6 | 8.6 |
| | 12.0 | 8.0 | | 12.0 | 8.0 |
| 50 | 12.1 | 8.1 | 50 | 11.8 | 7.8 |
| | 11.9 | 7.9 | | 11.2 | 7.2 |
| | 12.0 | 8.0 | | 11.3 | 7.3 |
| 10:35 | 12.0 | 8.0 | | 11.4 | 7.4 |
| (4.0) | 12.1 | 8.1 | | 11.5 | 7.5 |
| 5+00 | 12.3 | 8.3 | 7+00 | 12.0 | 8.0 |
| | 12.3 | 8.3 | | 11.7 | 7.7 |
| | 12.7 | 8.7 | | 11.7 | 7.7 |
| | 12.6 | 8.6 | | 11.4 | 7.4 |
| | 12.9 | 8.9 | | 12.0 | 8.0 |
| 50 | 12.8 | 8.8 | 50 | 12.2 | 8.2 |
| | 12.4 | 8.4 | | 12.5 | 8.5 |
| | 12.5 | 8.5 | | 12.3 | 8.3 |

W. 173+00; SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (3.9) | 12.1 | 8.2 | (39) | 12.1 | 8.2 |
| | 12.0 | 8.1 | | 12.1 | 8.2 |
| 8+00 | 11.8 | 7.9 | 10+00 | 12.1 | 8.2 |
| | 11.9 | 8.0 | | | |
| | 11.4 | 7.5 | | | |
| | 11.4 | 7.5 | | | |
| | 11.3 | 7.4 | | | |
| 50 | 11.1 | 7.2 | | | |
| | 12.0 | 8.1 | | | |
| | 12.7 | 8.8 | | | |
| | 12.3 | 8.4 | | | |
| | 13.3 | 8.4 | | | |
| 9+00 | 13.0 | 9.1 | | | |
| | 13.0 | 9.1 | | | |
| 10:38 | 12.9 | 9.0 | | | |
| (3.9) | 12.8 | 8.9 | | | |
| | 12.7 | 8.8 | | | |
| 50 | 12.6 | 8.7 | | | |
| | 12.7 | 8.8 | | | |
| | 12.4 | 8.5 | | | |

10-22-57

W. 174+00; 0+00 = N. 10,700; SOUND SOUTH

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| 0+00 | | | (6.0) | 4.0 | +2.0 |
| (6.0) | 3.9 | +2.1 | 2+00 | 4.7 | +1.3 |
| <u>9:37</u> | 3.9 | +2.1 | | 5.2 | +0.9 |
| | 3.9 | +2.1 | | 5.8 | +0.2 |
| | 3.9 | +2.1 | | 8.9 | 2.9 |
| 50 | 3.9 | +2.1 | | 11.4 | 5.4 |
| | 3.9 | +2.1 | 50 | 12.6 | 6.6 |
| | 3.9 | +2.1 | | 13.0 | 7.0 |
| | 3.9 | +2.1 | | 13.2 | 7.2 |
| | 3.9 | +2.1 | | 13.4 | 7.4 |
| 1+00 | 3.9 | +2.1 | | 13.4 | 7.4 |
| | 3.9 | +2.1 | 3+00 | 13.5 | 7.5 |
| | 3.9 | +2.1 | | 13.7 | 7.7 |
| | 3.9 | +2.1 | | 13.8 | 7.8 |
| | 3.9 | +2.1 | | 13.7 | 7.7 |
| 50 | 3.9 | +2.1 | | 13.7 | 7.7 |
| | 3.9 | +2.1 | 50 | 13.7 | 7.7 |
| | 3.9 | +2.1 | | 13.8 | 7.8 |
| | 3.9 | +2.1 | | 13.8 | 7.8 |

W. 174+00; SOUTH 10-22-57 (50)

DIST Sound Elev DIST Sound Elev

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| (5.9) | 13.9 | 8.0 | (5.9) | 14.5 | 8.6 |
| | 14.0 | 8.1 | | 14.7 | 8.8 |
| 4+00 | 14.1 | 8.2 | 6+00 | 15.1 | 9.2 |
| <u>9:40</u> | 14.2 | 8.3 | | 15.3 | 9.4 |
| | 14.2 | 8.3 | | 15.5 | 9.6 |
| | 14.0 | 8.1 | | 15.9 | 10.0 |
| | 14.0 | 8.1 | | 15.0 | 9.1 |
| 50 | 14.0 | 8.1 | 50 | 14.6 | 8.7 |
| | 14.3 | 8.4 | | 14.2 | 8.3 |
| | 14.1 | 8.2 | | 13.7 | 7.8 |
| | 14.0 | 8.1 | | 13.6 | 7.7 |
| | 14.0 | 8.1 | | 13.6 | 7.7 |
| 5+00 | 14.0 | 8.1 | 7+00 | 13.6 | 7.7 |
| | 14.0 | 8.1 | | 13.4 | 7.5 |
| | 14.1 | 8.2 | | 13.2 | 7.3 |
| | 14.2 | 8.3 | | 13.1 | 7.2 |
| | 14.3 | 8.4 | | 13.0 | 7.1 |
| 50 | 14.3 | 8.4 | 50 | 12.2 | 6.3 |
| | 14.3 | 8.4 | | 12.3 | 6.4 |
| | 14.2 | 8.3 | | 12.9 | 7.0 |

W. 174+00 CONTD SOUTH 10-22-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------------|------|-------|-------|------|
| (5.8) | 12.9 | 7.1 | (5.8) | 15.1 | 10.3 |
| | 12.9 | 7.1 | | 15.4 | 10.6 |
| 8+00 | 11.9 | 6.1 | 10+00 | 16.2 | 10.8 |
| <u>9.45</u> | <u>12.2</u> | 5.4 | | | |
| | 11.5 | 5.7 | | | |
| | 12.1 | 6.3 | | | |
| | 12.3 | 6.5 | | | |
| 50 | 12.8 | 7.0 | | | |
| | 12.6 | 6.8 | | | |
| | 12.6 | 6.8 | | | |
| | 12.7 | 6.9 | | | |
| | 12.8 | 7.0 | | | |
| 9+20. | 12.7 | 6.9 | | | |
| | 12.6 | 6.8 | | | |
| | 13.7 | 7.9 | | | |
| | 13.5 | 7.7 | | | |
| | 15.2 | 9.4 | | | |
| 50 | 15.1 | 9.3 | | | |
| | 15.0 | 9.2 | | | |
| | 16.0 | 10.2 | | | |

10-22-57 (51)
 W. 175+00: 0+00 = N. 10, 100; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| 0+00 | | | (5.6) | 5.9 | 0.3 |
| (5.6) | 3.7 | +1.9 | 2+00 | 8.6 | 3.0 |
| <u>9.55</u> | 3.6 | +2.0 | | 11.3 | 5.7 |
| | 3.7 | +1.9 | | 11.9 | 6.3 |
| | 3.7 | +1.9 | | 12.1 | 6.5 |
| 50 | 3.7 | +1.9 | | 12.4 | 6.8 |
| | 3.5 | +2.1 | 50 | 12.7 | 7.1 |
| | 3.5 | +2.1 | | 12.8 | 7.2 |
| | 3.5 | +2.1 | | 12.8 | 7.2 |
| | 3.5 | +2.1 | | 12.9 | 7.3 |
| 1+00 | 3.6 | +2.0 | | 12.9 | 7.3 |
| | 3.4 | +2.2 | 3+00 | 13.0 | 7.4 |
| | 3.5 | +2.1 | | 13.0 | 7.4 |
| | 3.3 | +2.3 | | 13.0 | 7.4 |
| | 3.3 | +2.3 | | 13.1 | 7.5 |
| 50 | 3.6 | +2.0 | | 13.2 | 7.6 |
| | 4.0 | +1.6 | 50 | 13.1 | 7.5 |
| | 4.8 | +0.8 | | 13.6 | 8.0 |
| | 5.2 | +0.4 | | 13.6 | 8.0 |

W. 175+00 CONTD SOUTH 10-22-57

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| (5.5) | 13.5 | 8.0 | (5.5) | 14.9 | 9.4 |
| | 13.5 | 8.0 | | 15.3 | 9.8 |
| 4+00 | 13.1 | 7.6 | 6+00 | 15.7 | 10.2 |
| | 13.2 | 7.7 | | 15.7 | 10.2 |
| <u>1000</u> | 13.8 | 8.3 | | 15.5 | 10.0 |
| | 13.7 | 8.2 | | 14.8 | 9.3 |
| | 13.7 | 8.2 | | 14.3 | 8.8 |
| 50 | 14.0 | 8.5 | 50 | 13.8 | 8.3 |
| | 13.4 | 7.9 | | 14.0 | 8.5 |
| | 13.2 | 7.7 | | 13.2 | 7.7 |
| | 13.2 | 7.7 | | 13.0 | 7.5 |
| | 14.1 | 8.6 | | 12.7 | 7.2 |
| 5+00 | 14.0 | 8.5 | 7+00 | 12.7 | 7.2 |
| | 13.8 | 8.3 | | 12.9 | 7.4 |
| | 13.8 | 8.3 | | 13.1 | 7.6 |
| | 14.0 | 8.5 | | 13.0 | 7.5 |
| | 14.6 | 9.1 | | 12.9 | 7.4 |
| 50 | 14.1 | 8.6 | 50 | 13.0 | 7.5 |
| | 14.0 | 8.5 | | 13.0 | 7.5 |
| | 13.9 | 8.4 | | 13.0 | 7.5 |

W. 175+00: SOUTH

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| (5.4) | 12.9 | 7.5 | (5.4) | 11.9 | 6.5 |
| <u>1005</u> | 13.0 | 7.6 | | 12.1 | 6.7 |
| 8+00 | 13.1 | 7.7 | 10+00 | 12.3 | 6.9 |
| | 12.5 | 7.1 | | | |
| | 12.8 | 7.4 | | | |
| | 12.3 | 6.9 | | | |
| | 12.2 | 6.8 | | | |
| 50 | 12.0 | 6.6 | | | |
| | 12.1 | 6.7 | | | |
| | 12.1 | 6.7 | | | |
| | 12.1 | 6.7 | | | |
| | 12.2 | 6.8 | | | |
| 7+00 | 12.3 | 6.9 | | | |
| | 12.1 | 6.7 | | | |
| | 12.5 | 7.1 | | | |
| | 12.8 | 7.4 | | | |
| | 12.8 | 7.4 | | | |
| 50 | 12.4 | 7.0 | | | |
| | 12.0 | 6.6 | | | |
| | 12.0 | 6.6 | | | |

10-22-57
W. 176+00; 0+00 = N. 10,700; SOUND SOUTH

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------------|-------|------|------|-------|------|
| 0+00 | | | (52) | 12.5 | 7.3 |
| (52) | 3.0 | +2.2 | 2+00 | 12.9 | 7.7 |
| <u>1015</u> | 3.0 | | | 13.0 | 7.8 |
| | 3.0 | | | 13.1 | 7.9 |
| | 3.0 | | | 13.4 | 8.2 |
| 50 | 3.0 | | | 13.5 | 8.3 |
| | 3.0 | | 50 | 13.5 | 8.3 |
| | 3.0 | | | 13.5 | 8.3 |
| | 3.0 | | | 13.6 | 8.4 |
| | 3.0 | + | | 13.8 | 8.6 |
| 1+00 | 3.0 | + | | 13.7 | 8.5 |
| | 3.0 | +2.2 | 3+00 | 13.7 | |
| | 3.2 | +2.0 | | 13.7 | |
| | 3.9 | +1.3 | | 13.7 | 8.5 |
| | 4.5 | +0.7 | | 13.8 | 8.6 |
| 50 | 5.1 | +0.1 | | 13.7 | 8.5 |
| | 6.7 | 1.5 | 50 | 13.6 | 8.4 |
| | 10.3 | 5.1 | | 13.4 | 8.2 |
| | 12.0 | 6.8 | | 13.0 | 7.8 |

W. 176+00; SOUTH (53)

| DIST | Sound | Elev | DIST | Sound | Elev |
|------|-------|------|---------------------------------|-------|------|
| (51) | 12.6 | 7.5 | (50) | 14.4 | 9.4 |
| | 12.7 | 7.6 | | 14.5 | 9.5 |
| 4+00 | 12.6 | 7.5 | 6+00 | 14.5 | 9.5 |
| | 12.8 | 7.7 | | 14.5 | 9.5 |
| | 12.7 | 7.6 | | 14.4 | 9.4 |
| | 12.8 | 7.7 | | 14.3 | 9.3 |
| | 12.8 | 7.7 | <u>10'20</u> 9'20 | 14.2 | 9.2 |
| 50 | 13.3 | 8.2 | 50 | 14.2 | 9.2 |
| | 12.9 | 7.8 | | 14.1 | 9.1 |
| | 12.9 | 7.8 | | 14.1 | 9.1 |
| | 12.3 | 7.2 | | 14.1 | 9.1 |
| | 12.7 | 7.6 | | 13.9 | 8.9 |
| 5+00 | 12.9 | 7.8 | 7+00 | 13.4 | 8.4 |
| | 12.8 | 7.7 | | 12.5 | 7.5 |
| | 12.8 | 7.7 | | 11.8 | 6.8 |
| | 13.0 | 7.9 | | 12.0 | 7.0 |
| | 13.2 | 8.1 | | 12.0 | 7.0 |
| 50 | 13.1 | 8.0 | 50 | 10.7 | 5.7 |
| | 13.5 | 8.4 | | 10.8 | 5.8 |
| | 14.0 | 8.4 | | 11.2 | 6.2 |

W. 176+00 CONTD SOUTH.

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------|-------|------|--------------|-------|------|
| (5.0) | 11.4 | 6.4 | (3.0) | 11.9 | 6.9 |
| | 11.5 | 6.5 | <u>10+00</u> | 11.7 | 6.7 |
| 8+00 | 11.5 | 6.5 | 10+00 | 11.2 | 6.2 |
| | 11.8 | 6.8 | | | |
| | 12.3 | 7.3 | | | |
| | 12.4 | 7.4 | | | |
| | 12.5 | 7.5 | | | |
| 50 | 12.2 | 7.2 | | | |
| | 11.6 | 6.6 | | | |
| | 11.5 | 6.5 | | | |
| | 11.5 | 6.5 | | | |
| | 11.6 | 6.6 | | | |
| 9+00 | 12.3 | 7.3 | | | |
| | 12.8 | 7.8 | | | |
| | 11.7 | 6.7 | | | |
| | 11.9 | 6.9 | | | |
| | 12.1 | 7.1 | | | |
| 50 | 12.0 | 7.0 | | | |
| | 12.1 | 7.1 | | | |
| | 12.0 | 7.0 | | | |

10-22-57

(5)

W. 177+00; 0+00 = N. 10,700; SOUND SOUTH

| DIST | Sound | Elev | DIST | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| 0+00 | | | (4.7) | 12.2 | 7.5 |
| (4.7) | 2.5 | +2.2 | 2+00 | 12.2 | 7.5 |
| <u>10+28</u> | 2.5 | + | | 12.3 | 7.6 |
| | 2.5 | + | | 12.4 | 7.7 |
| | 2.5 | +2.2 | | 12.6 | 7.9 |
| 50 | 2.4 | +2.3 | | 12.8 | 8.1 |
| | 2.4 | +2.3 | 50 | 12.7 | 8.0 |
| | 2.5 | +2.2 | | 12.9 | 8.2 |
| | 2.8 | +1.9 | | 13.0 | 8.3 |
| | 3.1 | +1.6 | | 13.0 | 8.3 |
| 4+00 | 3.9 | +0.8 | | 13.0 | 8.3 |
| | 4.3 | +0.4 | 3+00 | 12.9 | 8.2 |
| | 5.2 | 0.5 | | 12.7 | 8.0 |
| | 8.0 | 3.3 | | 12.7 | 8.0 |
| | 10.9 | 6.2 | | 12.2 | 7.5 |
| 50 | 11.6 | 5.9 | | 12.0 | 7.3 |
| | 12.0 | 7.3 | 50 | 12.2 | 7.5 |
| | 12.1 | 7.4 | | 12.1 | 7.4 |
| | 12.1 | 7.4 | | 12.1 | 7.4 |

W. 177400 CONFD SOUTH 10-22-57

Dist Sound Elev Dist Sound Elev

(46) 12.3 7.7 (46) 12.1 7.5

10:34 12.3 7.7 11.9 7.3

4+00 13.0 8.4 6+00 11.7 7.1

12.7 8.1 11.8 7.2

12.6 8.0 11.8 7.2

12.8 8.2 11.8 7.2

12.5 7.9 11.9 7.3

50 12.7 8.1 50 11.9 7.3

12.3 7.7 11.7 7.1

12.2 7.6 11.8 7.2

12.6 8.0 11.8 7.2

13.0 8.4 11.6 7.0

5+00 12.0 7.4 7+00 11.2 6.6

12.6 8.0 11.1 6.5

12.5 7.9 11.1 6.5

11.9 7.3 11.3 6.7

12.5 7.9 11.1 6.5

50 12.8 8.2 50 10.8 6.2

12.6 8.0 11.1 6.5

12.5 7.9 10.9 6.3

W. 177+00 SOUTH

Dist Sound Elev Dist Sound Elev

(45) 10.7 6.2 (45) 10.8 6.3

10.9 6.4 10.3 5.8

8+00 10.6 6.1 10+00 11.0 6.5

10.7 6.2 11.0 6.5

10:40 10.8 6.3 11.2 6.7

10.4 5.9 11.5 7.0

10.4 5.9 11.3 6.8

50 10.4 5.9 50 11.6 7.1

10.5 6.0

10.3 5.8

10.1 5.6

10.0 5.5

9+00 10.1 5.6

10.1 5.6

10.4 5.9

10.7 6.2

10.6 6.1

50 10.8 6.3

11.0 6.5

11.2 6.7

(5)

10-22-57
 W. 178+00; 0+00 = N. 10, 700; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|------|-------|------|
| 0+00 | | | (43) | 11.8 | 7.5 |
| (43) | 1.6 | +2.7 | 2+00 | 11.9 | 7.6 |
| <u>10:50</u> | 1.7 | +2.6 | | 12.0 | 7.7 |
| | 1.8 | +2.5 | | 12.0 | 7.7 |
| | 2.0 | +2.3 | | 12.0 | 7.7 |
| 50 | 2.3 | +2.0 | | 11.9 | 7.6 |
| | 2.8 | +1.5 | 50 | 11.9 | 7.6 |
| | 3.4 | +0.9 | | 11.8 | 7.5 |
| | 4.0 | +0.3 | | 11.8 | 7.5 |
| | 4.8 | 0.5 | | 11.8 | 7.5 |
| 1+00 | 6.8 | 2.5 | | 11.7 | 7.4 |
| | 9.7 | 5.4 | 3+00 | 11.6 | 7.3 |
| | 10.8 | 6.5 | | 11.7 | 7.4 |
| | 10.9 | 6.6 | | 11.8 | 7.5 |
| | 11.3 | 7.0 | | 12.0 | 7.7 |
| 50 | 11.4 | 7.1 | | 12.1 | 7.8 |
| | 11.4 | 7.1 | 50 | 12.0 | 7.7 |
| | 11.5 | 7.2 | | 12.0 | 7.7 |
| | 11.5 | 7.2 | | 12.2 | 7.9 |

W. 178+00; SOUTH (56)
 Dist Sound Elev Dist Sound Elev

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| (4.1) | 11.8 | 7.7 | (4.1) | 12.3 | 8.2 |
| | 12.0 | 7.9 | | 12.3 | 8.2 |
| 4+00 | 12.1 | 8.0 | 6+00 | 12.4 | 8.3 |
| | 12.0 | 7.9 | | 12.4 | 8.3 |
| | 12.0 | 7.9 | | 12.5 | 8.4 |
| | 12.2 | 8.1 | | 12.7 | 8.6 |
| | 12.0 | 7.9 | | 12.8 | 8.7 |
| 50 | 12.0 | 7.9 | 50 | 13.0 | 8.9 |
| | 12.2 | 8.1 | | 13.2 | 9.1 |
| | 13.0 | 8.9 | | 13.8 | 9.7 |
| | 12.9 | 8.8 | | 14.3 | 10.2 |
| | 12.8 | 8.7 | | 13.8 | 9.7 |
| 5+00 | 12.5 | 8.4 | 7+00 | 12.9 | 8.8 |
| <u>10:55</u> | 12.0 | 7.9 | | 11.0 | 6.9 |
| 2 | 12.9 | 8.8 | | 11.0 | 6.9 |
| | 12.8 | 8.7 | | 10.6 | 6.5 |
| | 12.6 | 8.5 | | 9.5 | 5.4 |
| 50 | 12.6 | 8.5 | 50 | 9.4 | 5.3 |
| | 12.5 | 8.4 | | 9.4 | 5.3 |
| | 12.4 | 8.3 | | 9.7 | 5.6 |

W. 178+00 CONTD SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| (40) | 10.2 | 6.2 | (40) | 12.3 | 8.2 |
| | 10.6 | 6.6 | | 12.3 | 8.2 |
| 8+00 | 11.2 | 7.2 | 10+00 | 12.2 | 8.2 |
| | 11.7 | 7.7 | | | |
| <u>10:58</u> | 12.0 | 8.0 | | | |
| | 12.2 | 8.2 | | | |
| | 12.3 | 8.3 | | | |
| 50 | 12.1 | 8.1 | | | |
| | 11.9 | 7.9 | | | |
| | 11.9 | 7.9 | | | |
| | 11.9 | 7.9 | | | |
| | 12.0 | 8.0 | | | |
| 9+00 | 12.0 | 8.0 | | | |
| | 12.2 | 8.2 | | | |
| | 12.1 | 8.1 | | | |
| | 12.2 | 8.2 | | | |
| | 12.3 | 8.3 | | | |
| 50 | 12.3 | 8.3 | | | |
| | 12.2 | 8.2 | | | |
| | 12.3 | 8.3 | | | |

10-22-57

(57)

W. 179+00; 0+00 = N. 10, 700; SOUND SOUTH

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|-------|-------|------|
| 0+00 | | | (3.9) | 12.0 | 8.1 |
| (3.9) | 1.8 | +2.1 | 2+00 | 12.0 | |
| <u>11:05</u> | 2.0 | +1.9 | | 12.0 | |
| | 2.7 | +1.2 | | 12.0 | |
| | 3.2 | +0.7 | | 12.0 | |
| 50 | 3.9 | 0.0 | | 12.0 | 8.1 |
| | 4.8 | 0.9 | 50 | 12.1 | 8.2 |
| | 8.1 | 4.2 | | 12.1 | 8.2 |
| | 10.6 | 6.7 | | 12.1 | 8.2 |
| | 10.9 | 7.0 | | 11.9 | 8.0 |
| 1+00 | 11.5 | 7.6 | | 11.5 | 7.6 |
| | 11.5 | 7.6 | 3+00 | 11.6 | 7.7 |
| | 11.5 | 7.6 | | 12.0 | 8.1 |
| | 11.9 | 8.0 | | 11.7 | 7.8 |
| | 11.9 | 8.0 | | 11.9 | 8.0 |
| 50 | 12.0 | 8.1 | | 11.8 | 7.9 |
| | 12.1 | 8.2 | 50 | 12.2 | 8.3 |
| | 12.2 | 8.3 | | 12.0 | 8.1 |
| | 12.1 | 8.2 | | 11.6 | 7.7 |

W. 179+00 CONTD SOUTH 10-22-57

Dist Sound Elev Dist Sound Elev

| | | | | | |
|-------------|------|-----|------|------|-----|
| (3.8) | 11.8 | 8.0 | (38) | 12.2 | 8.4 |
| <u>1110</u> | 11.8 | 8.0 | | 12.2 | 8.4 |
| <u>4+00</u> | 11.7 | 7.9 | 6+00 | 11.5 | 7.7 |
| | 11.7 | 7.9 | | 11.4 | 7.6 |
| | 11.9 | 8.1 | | 11.3 | 7.5 |
| | 11.8 | 8.0 | | 11.5 | 7.7 |
| | 11.4 | 7.6 | | 11.6 | 7.8 |
| 50 | 11.2 | 7.4 | 50 | 11.6 | 7.8 |
| | 11.2 | 7.4 | | 11.8 | 8.0 |
| | 11.3 | 7.5 | | 12.6 | 8.8 |
| | 11.3 | 7.5 | | 13.0 | 9.2 |
| | 11.9 | 8.1 | | 13.0 | 9.2 |
| 5+00 | 12.2 | 8.4 | 7+00 | 13.1 | 9.3 |
| | 12.3 | 8.5 | | 13.3 | 9.5 |
| | 12.0 | 8.2 | | 13.2 | 9.4 |
| | 12.0 | 8.2 | | 12.7 | 8.9 |
| | 12.1 | 8.3 | | 11.6 | 7.8 |
| 50 | 11.5 | 7.7 | 50 | 11.0 | 7.2 |
| | 11.6 | 7.8 | | 11.0 | 7.2 |
| | 11.9 | 8.1 | | 11.0 | 7.2 |

W. 179+00; SOUTH

Dist Sound Elev Dist Sound Elev

| | | | | | |
|-------------|------|-----|-------|------|-----|
| (37) | 10.5 | 6.8 | (37) | 11.9 | 8.2 |
| <u>1115</u> | 10.3 | 6.6 | | 11.4 | 7.7 |
| <u>8+00</u> | 10.1 | 6.4 | 10+00 | 11.1 | 7.4 |
| | 10.0 | 6.3 | | | |
| | 10.7 | 7.0 | | | |
| | 11.0 | 7.3 | | | |
| | 10.9 | 7.2 | | | |
| 50 | 11.0 | 7.3 | | | |
| | 10.8 | 7.1 | | | |
| | 10.7 | 7.0 | | | |
| | 10.5 | 6.8 | | | |
| | 10.7 | 7.0 | | | |
| 9+00 | 11.1 | 7.4 | | | |
| | 11.3 | 7.6 | | | |
| | 11.4 | 7.7 | | | |
| | 11.4 | 7.7 | | | |
| | 11.6 | 7.9 | | | |
| 50 | 11.8 | 8.1 | | | |
| | 12.0 | 8.3 | | | |
| | 12.0 | 8.3 | | | |

(58)

10-22-57

W. 180+00; 0+00 = N. 10, 700; SOUND SOUTH

W. 180+00; SOUTH

(59)

| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|-------|-------|------|
| | | | (3.4) | 11.6 | 8.2 | (3.3) | 11.5 | 8.2 |
| 0+00 | | | (3.4) | 11.4 | 8.0 | 11:30 | 11.5 | 8.2 |
| (3.4) | 3.3 | +0.1 | 2+00 | 11.1 | 7.7 | 4+00 | 11.8 | 8.4 |
| 11:23 | 4.8 | 1.4 | 11:25 | 11.9 | 8.5 | 6+00 | 11.7 | 8.4 |
| | 7.0 | 3.6 | | 11.7 | 8.3 | | 11.5 | 8.2 |
| | 9.5 | 6.1 | | 11.4 | 8.0 | | 11.8 | 8.5 |
| 50 | 10.1 | 6.7 | | 11.9 | 8.5 | | 11.3 | 8.0 |
| | 11.0 | 7.6 | 50 | 11.5 | 8.1 | 50 | 12.1 | 8.7 |
| | 11.0 | | | 11.4 | 8.0 | | 12.0 | 8.6 |
| | 11.0 | | | 11.1 | 7.7 | | 11.8 | 8.4 |
| | 11.0 | 7.6 | | 11.9 | 8.5 | | 12.1 | 8.7 |
| 1+00 | 11.1 | 7.7 | | 11.7 | 8.3 | | 12.0 | |
| | 11.5 | 8.1 | 3+00 | 11.8 | 8.4 | 5+00 | 11.3 | 7.9 |
| | 11.6 | 8.2 | | 12.2 | 8.8 | 7+00 | 12.0 | 8.7 |
| | 11.5 | 8.1 | | 12.2 | 8.8 | | 11.7 | 8.4 |
| | 11.3 | 7.9 | | 11.8 | 8.4 | | 11.3 | 8.0 |
| 50 | 11.1 | 7.7 | | 11.7 | 8.3 | | 11.0 | 7.6 |
| | 11.0 | 7.6 | 50 | 11.4 | 8.0 | 50 | 11.6 | 8.2 |
| | 11.0 | 7.6 | | 11.2 | 7.8 | | 11.3 | 7.9 |
| | 11.3 | 7.9 | | 11.8 | 8.4 | | 11.0 | 7.6 |
| | | | | | | | 10.9 | 7.6 |
| | | | | | | | 10.3 | 7.0 |
| | | | | | | | 10.0 | 6.7 |
| | | | | | | | 9.7 | 6.4 |
| | | | | | | | 9.8 | 6.5 |

W. 180+00; CONTD SOUTH 10-22-57

DIST SOUND ELEV DIST SOUND ELEV

| DIST | SOUND | ELEV | DIST | SOUND | ELEV |
|--------------|-------|------|--------------|-------|------|
| (32) | 9.1 | 5.9 | (32) | 11.0 | 7.8 |
| <u>11.35</u> | 9.7 | 6.5 | <u>11.35</u> | 11.0 | 7.8 |
| 8+00 | 9.8 | 6.6 | 10+00 | 10.1 | 6.9 |
| | 10.2 | 7.0 | | | |
| | 10.2 | 7.0 | | | |
| | 10.9 | 7.7 | | | |
| | 10.9 | 7.7 | | | |
| 50 | 10.8 | 7.6 | | | |
| | 10.7 | 7.5 | | | |
| | 10.9 | 7.2 | | | |
| | 10.4 | 7.2 | | | |
| | 10.8 | 7.6 | | | |
| 9+00 | 10.8 | 7.6 | | | |
| | 10.7 | 7.5 | | | |
| | 10.7 | 7.5 | | | |
| | 10.8 | 7.6 | | | |
| | 10.6 | 7.4 | | | |
| 50 | 10.6 | 7.4 | | | |
| | 10.9 | 7.7 | | | |
| | 11.0 | 7.8 | | | |

10-23-57

N. 108+00; 0+00 = W. 18,000; SOUND EAST

| DIST | SOUND | ELEV | DIST | SOUND | ELEV |
|-------------|-------|------|-------|-------|------|
| 0+00 | 4.5 | +2.6 | (7.1) | 4.8 | +2.3 |
| (7.1) | 4.5 | + | 2+00 | 4.7 | +2.4 |
| <u>8.55</u> | 4.5 | + | | 4.8 | +2.3 |
| | 4.5 | + | | 4.8 | +2.3 |
| | 4.5 | + | | 4.8 | +2.3 |
| 50 | 4.5 | +2.6 | | 4.9 | +2.2 |
| | 4.6 | +2.5 | 50 | 4.9 | + |
| | 4.5 | +2.6 | | 4.9 | + |
| | 4.6 | +2.5 | | 4.9 | + |
| | 4.5 | +2.6 | | 4.9 | + |
| 1+00 | 4.5 | + | | 4.9 | + |
| | 4.5 | + | 3+00 | 4.9 | +2.2 |
| | 4.5 | + | | 5.0 | +2.1 |
| | 4.5 | +2.6 | | 5.0 | + |
| | 4.6 | +2.5 | | 5.0 | + |
| 50 | 4.7 | +2.4 | | 5.0 | + |
| | 4.7 | +2.4 | 50 | 5.0 | + |
| | 4.8 | +2.3 | | 5.0 | + |
| | 4.8 | +2.3 | | 5.0 | +2.1 |

N.108+00 CONTD EAST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| (7.0) | 5.0 | +2.0 | (7.0) | 5.1 | +1.9 |
| | 5.1 | +1.9 | | 5.2 | +1.8 |
| 4+00 | 5.0 | +2.0 | 6+00 | 5.2 | +1.8 |
| | 5.1 | +1.9 | | 5.3 | +1.7 |
| | 5.1 | + } | | 5.2 | +1.8 |
| | 5.1 | + } | | 5.2 | +1.8 |
| | 5.1 | + } | | 5.4 | +1.6 |
| 50 | 5.1 | + } | 50 | 5.4 | +1.6 |
| | 5.1 | + } | | 5.4 | +1.6 |
| | 5.1 | + } | | 5.5 | +1.5 |
| | 5.1 | + } | | 5.4 | +1.6 |
| | 5.3 | +1.7 | | 5.4 | +1.6 |
| 5+00 | 5.3 | +1.7 | 7+00 | 5.3 | +1.7 |
| | 5.2 | +1.8 | | 5.3 | +1.7 |
| <u>9.00</u> | 5.2 | +1.8 | | 5.4 | +1.6 |
| | 5.2 | +1.8 | | 5.3 | +1.7 |
| | 5.1 | +1.9 | | 5.3 | + } |
| 50 | 5.1 | +1.9 | 50 | 5.3 | + } |
| | 5.1 | +1.9 | | 5.3 | + } |
| | 5.1 | +1.9 | | 5.2 | +1.8 |

N.108+00 EAST (61)

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------------|-------|------|
| (7.0) | 5.2 | +1.8 | (7.0) | 5.1 | +1.9 |
| | 5.2 | + } | | 5.3 | +1.7 |
| 8+00 | 5.2 | + } | 10+00 | 5.3 | +1.7 |
| | 5.3 | +1.7 | | 5.2 | +1.8 |
| | 5.5 | +1.5 | | 5.3 | +1.7 |
| | 5.5 | + } | | 5.2 | +1.8 |
| | 5.5 | + } | | 5.3 | +1.7 |
| 50 | 5.5 | + } | 50 | 5.4 | +1.6 |
| | 5.6 | +1.4 | | 5.4 | + } |
| | 5.6 | +1.4 | | 5.4 | + } |
| | 5.5 | +1.5 | | 5.4 | + } |
| | 5.3 | +1.7 | | 5.5 | +1.5 |
| 9+00 | 5.2 | +1.8 | 11+00 | 5.4 | +1.6 |
| | 5.2 | + } | <u>9.05</u> | 5.4 | +1.6 |
| | 5.2 | + } | | 5.6 | +1.4 |
| | 5.2 | + } | | 5.5 | +1.5 |
| | 5.3 | +1.7 | | 5.5 | +1.5 |
| 50 | 5.3 | +1.7 | 50 | 5.7 | +1.3 |
| | 5.4 | +1.6 | | 5.7 | +1.3 |
| | 5.1 | +1.9 | | 5.4 | +1.6 |

N. 108+00 CONTD EAST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (70) | 5.6 | +1.4 | (69) | 5.1 | +1.8 |
| | 5.7 | +1.3 | | 5.1 | +1.8 |
| 12+00 | 5.5 | +1.5 | 14+00 | 5.0 | +1.9 |
| | 5.6 | +1.4 | | 5.1 | +1.8 |
| | 5.4 | +1.6 | | 5.3 | +1.6 |
| | 5.4 | +1.6 | | 5.3 | +1.6 |
| | 5.3 | +1.7 | | 5.2 | +1.7 |
| 50 | 5.3 | +1.7 | 50 | 5.4 | +1.5 |
| | 5.3 | +1.7 | 9:08 | 5.7 | +1.2 |
| | 5.3 | +1.7 | | 6.1 | +0.8 |
| | 5.2 | +1.8 | | 6.7 | +0.2 |
| | 5.2 | +1.8 | | 7.1 | 0.2 |
| 13+00 | 5.2 | +1.8 | 15+00 | 7.3 | 0.4 |
| | 5.1 | +1.9 | | 7.3 | 0.4 |
| | 5.1 | +1.9 | | 7.3 | 0.4 |
| | 5.2 | +1.8 | | 7.1 | 0.2 |
| | 5.2 | +1.8 | | 7.1 | 0.2 |
| 50 | 5.3 | +1.7 | 50 | 7.0 | 0.1 |
| | 5.1 | +1.9 | | 7.0 | 0.1 |
| | 5.2 | +1.8 | | 6.8 | +0.1 |

N 108+00 EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (69) | 6.8 | +0.1 | (69) | 11.5 | 4.6 |
| | 6.6 | +0.3 | | 11.3 | 4.4 |
| 16+00 | 6.2 | +0.7 | 18+00 | 10.5 | 3.6 |
| | 6.0 | +0.9 | | 9.5 | 2.6 |
| | 6.0 | +0.9 | | 8.6 | 1.7 |
| | 6.1 | +0.8 | | 7.8 | 0.9 |
| | 6.8 | +0.1 | | 6.5 | +0.4 |
| 50 | 7.8 | 0.9 | 50 | 5.3 | +1.6 |
| 9:10 | 9.3 | 2.4 | | 4.9 | +2.0 |
| | 10.3 | 3.4 | | 4.5 | +2.4 |
| | 11.2 | 4.3 | | 4.0 | +2.9 |
| | 11.5 | 4.6 | | 3.8 | +3.1 |
| 17+00 | 11.4 | 4.5 | 19+00 | 3.4 | +3.5 |
| | 11.5 | 4.6 | | 2.8 | +4.1 |
| | 11.6 | 4.7 | | 2.5 | +4.4 |
| | 11.7 | 4.8 | | 2.5 | +4.4 |
| | 11.8 | 4.9 | | 2.7 | +4.2 |
| 50 | 11.6 | 4.7 | 50 | 2.1 | +4.8 |
| | 11.6 | 4.7 | | | |
| | 11.7 | 4.8 | | | |

(62)

N.108+00 SOUND WEST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| 0+00 | | | 2+00 | 14.3 | 7.5 |
| (6.8) | 4.3 | +2.5 | (6.8) | 14.4 | 7.6 |
| 9.25 | 4.3 | +2.5 | | 14.5 | 7.7 |
| | 4.3 | +2.5 | | 14.6 | 7.8 |
| | 4.4 | +2.4 | | 14.8 | 8.0 |
| 50 | 4.4 | +2.4 | 50 | 15.0 | 8.2 |
| | 4.4 | +2.4 | | 15.1 | 8.3 |
| | 4.5 | +2.3 | | 15.2 | 8.4 |
| | 4.7 | +2.1 | | 15.3 | 8.5 |
| | 4.9 | +1.9 | | 15.5 | 8.7 |
| 1+00 | 5.2 | +1.6 | 3+00 | 15.4 | 8.6 |
| | 5.7 | +1.1 | | 15.4 | 8.6 |
| | 6.2 | +0.6 | | 15.2 | 8.4 |
| | 6.9 | 0.1 | | 15.1 | 8.3 |
| | 9.9 | 3.1 | | 14.9 | 8.1 |
| 50 | 12.5 | 5.7 | 50 | 15.0 | 8.2 |
| | 13.4 | 6.6 | | 15.0 | 8.2 |
| | 13.4 | 6.6 | | 15.1 | 8.3 |
| | 14.3 | 7.5 | | 15.1 | 8.3 |
| | 14.3 | 7.5 | | 15.0 | 8.2 |

N.108+00 WEST (63)

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| 4+00 | 14.9 | 8.2 | 6+00 | 14.0 | 7.3 |
| (6.7) | 14.9 | 8.2 | (6.7) | 14.5 | 7.8 |
| | 14.9 | 8.2 | 9.30 | 14.6 | 7.9 |
| | 15.1 | 8.4 | | 14.5 | 7.8 |
| | 15.1 | 8.4 | | 14.4 | 7.7 |
| 50 | 15.0 | 8.3 | 50 | 14.5 | 7.8 |
| | 15.0 | 8.3 | | 14.4 | 7.7 |
| | 14.9 | 8.2 | | 14.4 | 7.7 |
| | 15.0 | 8.3 | | 13.9 | 7.2 |
| | 15.0 | | | 13.8 | 7.1 |
| 5+00 | 15.0 | | 7+00 | 14.0 | 7.3 |
| | 15.0 | | | 14.1 | 7.4 |
| | 14.9 | 8.2 | | 14.2 | 7.5 |
| | 15.2 | 8.5 | | 14.3 | 7.6 |
| | 15.4 | 8.7 | | 14.2 | 7.5 |
| 50 | 15.3 | 8.6 | 50 | 14.2 | 7.5 |
| | 15.2 | 8.5 | | 14.9 | 8.2 |
| | 15.2 | 8.5 | | 14.1 | 7.4 |
| | 15.1 | 8.4 | | 14.9 | 8.2 |
| | 15.0 | 8.3 | | 15.2 | 8.5 |

N. 108+00 CONTD WEST 10-23-57

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------------|-------|------|-------------|-------|------|
| 8+00 | 15.1 | 8.5 | 10+00 | 15.6 | 9.0 |
| (6.6) | 14.3 | 7.7 | (6.6) | 15.5 | 8.9 |
| | 14.7 | 8.1 | | 15.3 | 8.7 |
| | 14.8 | 8.2 | | 15.2 | 8.6 |
| | 15.1 | 8.5 | | 14.7 | 8.1 |
| 50 | 15.2 | 8.6 | 50 | 14.6 | 8.0 |
| | 16.0 | 9.4 | | 14.3 | 7.7 |
| | 16.2 | 9.6 | | 14.2 | 7.6 |
| | 16.5 | 9.9 | | 14.4 | 7.8 |
| <u>9.33</u> | 17.1 | 10.5 | | 14.7 | 8.1 |
| 9+00 | 16.9 | 10.3 | 11+00 | 15.0 | 8.4 |
| | 16.0 | 9.4 | | 15.2 | 8.6 |
| | 15.3 | 8.7 | | 15.2 | 8.6 |
| | 15.0 | 8.4 | <u>9.35</u> | 15.2 | 8.6 |
| | 14.9 | 8.3 | | 15.2 | 8.6 |
| 50 | 15.1 | 8.5 | 50 | 15.1 | 8.5 |
| | 15.2 | 8.6 | | 14.9 | 8.3 |
| | 15.2 | 8.6 | | 14.9 | 8.3 |
| | 15.4 | 8.8 | | 15.2 | 8.6 |
| | 15.8 | 9.2 | | 16.1 | 9.5 |

N. 108+00 WEST

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------|-------|------|-------|-------|------|
| 12+00 | 16.5 | 9.9 | 14+00 | 15.1 | 8.6 |
| (6.6) | 16.5 | 9.9 | (6.5) | 15.2 | 8.7 |
| | 16.8 | 10.2 | | 15.7 | 9.2 |
| | 17.2 | 10.6 | | 15.9 | 9.4 |
| | 17.3 | 10.7 | | 16.1 | 9.6 |
| 50 | 17.5 | 10.9 | 50 | 16.0 | 9.5 |
| | 17.4 | 10.8 | | 15.8 | 9.3 |
| | 15.7 | 9.1 | | 15.7 | 9.2 |
| | 14.8 | 8.2 | | 15.8 | 9.3 |
| | 14.8 | 8.2 | | 16.0 | 9.5 |
| 13+00 | 14.8 | 8.2 | 15+00 | 16.0 | 9.5 |
| | 14.8 | 8.2 | | 16.0 | 9.5 |
| | 14.8 | 8.2 | | 16.1 | 9.6 |
| | 15.0 | 8.4 | | 16.5 | 10.0 |
| | 15.1 | 8.5 | | 16.8 | 10.3 |
| 50 | 15.2 | 8.6 | 50 | 16.8 | 10.3 |
| | 15.3 | 8.7 | | 16.8 | 10.3 |
| | 15.4 | 8.8 | | 16.8 | 10.3 |
| | 15.4 | 8.8 | | 16.8 | 10.3 |
| | 15.1 | 8.5 | | 16.6 | 10.1 |

(64)

N. 108+00 CONTD WEST 10-23-57
 DIST SOUND ELEV DIST SOUND ELEV

| | | | | | |
|-------|------|-----|-------|------|------|
| 16+00 | 16.1 | 9.6 | 18+00 | 10.6 | 4.1 |
| (65) | 16.0 | 9.5 | (65) | 10.1 | 3.6 |
| 9:40 | 16.0 | 9.5 | | 8.9 | 2.4 |
| | 16.1 | 9.6 | | 8.0 | 1.5 |
| | 16.1 | 9.6 | | 7.4 | 0.9 |
| 50 | 15.9 | 9.4 | 50 | 5.8 | +0.7 |
| | 15.3 | 8.8 | | 5.1 | +1.4 |
| | 15.1 | 8.6 | | 4.6 | +1.9 |
| | 14.9 | 8.4 | | 3.8 | +2.7 |
| | 15.0 | 8.5 | | 1.8 | +4.7 |
| 17+00 | 14.7 | 8.2 | 19+00 | | |
| | 14.7 | 8.2 | | | |
| | 14.7 | 8.2 | | | |
| | 14.7 | 8.2 | | | |
| | 14.6 | 8.1 | | | |
| 50 | 14.4 | 7.9 | 50 | | |
| | 14.0 | 7.5 | | | |
| | 13.1 | 6.6 | | | |
| | 11.8 | 5.3 | | | |
| | 11.3 | 4.8 | | | |

10-23-57 (65)
 N. 110+00; 0+00 = W. 18,000; SOUND EAST

| | | | | | |
|------|-------|------|------|-------|------|
| DIST | SOUND | ELEV | DIST | SOUND | ELEV |
| 0+00 | 4.3 | +2.0 | (63) | 4.2 | +2.1 |
| (63) | 4.5 | +1.8 | 2+00 | 4.3 | +2.0 |
| 9:55 | 4.3 | +2.0 | | 4.3 | +2.0 |
| | 4.3 | +2.0 | | 4.3 | +2.0 |
| | 4.5 | +1.8 | | 4.4 | +1.9 |
| 50 | 4.4 | +1.9 | | 4.4 | +1.9 |
| | 4.3 | +2.0 | 50 | 4.3 | +2.0 |
| | 4.3 | +2.0 | | 4.3 | +2.0 |
| | 4.3 | +2.0 | | 4.3 | +2.0 |
| | 4.4 | +1.9 | | 4.4 | +1.9 |
| 1+00 | 4.3 | +2.0 | | 4.5 | +1.8 |
| | 4.3 | +2.0 | 3+00 | 4.4 | +1.9 |
| | 4.3 | +2.0 | | 4.3 | +2.0 |
| | 4.2 | +2.1 | | 4.2 | +2.1 |
| | 4.3 | +2.0 | | 4.2 | +2.1 |
| 50 | 4.4 | +1.9 | | 4.2 | +2.1 |
| | 4.4 | +1.9 | 50 | 4.3 | +2.0 |
| | 4.3 | +2.0 | | 4.4 | +1.9 |
| | 4.3 | +2.0 | | 4.4 | +1.9 |

N 110+00 CONTD EAST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------------|-------|------|
| (6.2) | 4.5 | +1.7 | (6.2) | 5.0 | +1.2 |
| | 4.5 | +1.7 | <u>1000</u> | 5.0 | +1.2 |
| 4+00 | 4.5 | +1.7 | 6+00 | 4.9 | +1.3 |
| | 4.5 | +1.7 | | 4.9 | +1.3 |
| | 4.5 | +1.7 | | 5.0 | +1.2 |
| | 4.5 | +1.7 | | 5.0 | +1.2 |
| | 4.5 | +1.7 | | 5.0 | +1.2 |
| 50 | 4.5 | +1.7 | 50 | 5.0 | +1.2 |
| | 4.5 | +1.7 | | 5.0 | +1.2 |
| | 4.6 | +1.6 | | 5.0 | +1.2 |
| | 4.7 | +1.5 | | 4.9 | +1.3 |
| | 4.6 | +1.6 | | 5.2 | +1.0 |
| 5+00 | 4.7 | +1.5 | 7+00 | 5.1 | +1.1 |
| | 4.7 | +1.5 | | 4.8 | +1.4 |
| | 4.7 | +1.5 | | 5.0 | +1.2 |
| | 4.8 | +1.4 | | 5.0 | +1.2 |
| | 4.8 | +1.4 | | 5.0 | +1.2 |
| 50 | 5.0 | +1.2 | 50 | 4.9 | +1.3 |
| | 5.0 | +1.2 | | 4.8 | +1.4 |
| | 5.0 | +1.2 | | 4.9 | +1.3 |

N 110+00 EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------------|-------|------|
| (6.2) | 5.2 | +1.0 | (6.1) | 5.2 | +0.9 |
| | 5.0 | +1.2 | <u>1003</u> | 5.2 | +0.9 |
| 8+00 | 5.0 | +1.2 | 10+00 | 5.2 | +0.9 |
| | 5.0 | +1.2 | | 5.3 | +0.8 |
| | 5.1 | +1.1 | | 5.2 | +0.9 |
| | 5.0 | +1.2 | | 5.3 | +0.8 |
| | 4.9 | +1.3 | | 5.3 | +0.8 |
| 50 | 5.3 | +0.9 | 50 | 5.2 | +0.9 |
| | 5.1 | +1.1 | | 5.1 | +1.0 |
| | 5.2 | +1.0 | | 5.1 | +1.0 |
| | 5.1 | +1.1 | | 5.2 | +0.9 |
| | 5.1 | +1.1 | | 5.2 | +0.9 |
| 9+00 | 5.3 | +0.9 | 11+00 | 5.0 | +1.1 |
| | 5.4 | +0.8 | | 5.0 | +1.1 |
| | 5.1 | +1.1 | | 5.2 | +0.9 |
| | 5.0 | +1.2 | | 5.2 | +0.9 |
| | 5.1 | +1.1 | | 5.2 | +0.9 |
| 50 | 5.1 | +1.1 | 50 | 5.1 | +1.0 |
| | 5.2 | +1.0 | | 5.1 | +1.0 |
| | 5.2 | +1.0 | | 5.0 | +1.1 |

N 110+00 CONTD EAST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (6.1) | 4.9 | +1.2 | (6.1) | 4.7 | +1.4 |
| 10.05 | 4.9 | +1.2 | | 4.6 | +1.5 |
| 12+00 | 5.0 | +1.1 | 14+00 | 4.8 | +1.3 |
| | 5.0 | +1.1 | | 4.7 | +1.4 |
| | 4.9 | +1.2 | | 4.7 | +1.4 |
| | 4.8 | +1.3 | | 4.7 | +1.4 |
| | 4.8 | +1.3 | | 4.8 | +1.3 |
| 50 | 4.9 | +1.2 | 50 | 4.8 | +1.3 |
| | 4.7 | +1.4 | | 4.8 | +1.3 |
| | 4.7 | +1.4 | | 5.3 | +0.8 |
| | 4.8 | +1.3 | | 6.2 | 0.1 |
| | 4.6 | +1.5 | | 6.1 | 0.0 |
| 13+00 | 4.6 | +1.5 | 15+00 | 6.5 | 0.4 |
| | 4.6 | +1.5 | | 6.5 | 0.4 |
| | 4.7 | +1.4 | | 6.5 | 0.4 |
| | 4.7 | +1.4 | | 6.4 | 0.3 |
| | 4.8 | +1.3 | | 6.4 | 0.3 |
| 50 | 4.6 | +1.5 | 50 | 6.1 | 0.0 |
| | 4.6 | +1.5 | | 6.0 | +0.1 |
| | 4.6 | +1.5 | | 5.7 | +0.4 |

N 110+00 EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (6.1) | 5.7 | +0.4 | (6.1) | 3.4 | +2.7 |
| | 6.7 | 0.6 | | 3.0 | +3.1 |
| 16+00 | 8.0 | 1.9 | 18+00 | 2.2 | +3.9 |
| | 9.9 | 3.8 | | 1.7 | +4.4 |
| 10+10 | 11.0 | 4.9 | | 0.9 | +5.2 |
| | 11.2 | 5.1 | | | |
| | 11.5 | 5.4 | | | |
| 50 | 11.8 | 5.7 | 50 | | |
| | 11.7 | 5.6 | | | |
| | 11.8 | 5.7 | | | |
| | 11.9 | 5.8 | | | |
| | 11.9 | 5.8 | | | |
| 17+00 | 11.8 | 5.7 | 19+00 | | |
| | 11.3 | 5.2 | | | |
| | 10.9 | 4.8 | | | |
| | 10.0 | 3.9 | | | |
| | 8.1 | 2.0 | | | |
| 50 | 6.8 | 0.7 | | | |
| | 4.8 | +1.3 | | | |
| | 4.0 | +2.1 | | | |

(67)

| N. 110 +00 SOUND WEST 10-23-57 | | | | | | N. 110 +00 WEST (68) | | | | | |
|--------------------------------|-------|------|--------------|-------|------|---|-------|------|--------------|-------|------|
| Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev | Dist | Sound | Elev |
| 0+00 | | | (5.3) | 4.0 | +1.3 | (5.3) | 12.4 | 6.8 | (5.3) | 13.8 | 8.5 |
| (5.9) | 3.8 | +2.1 | 2+00 | 4.9 | +0.4 | 4+00 | 12.5 | 7.2 | 6+00 | 13.6 | 8.3 |
| <u>10:22</u> | 3.8 | +2.1 | <u>10:48</u> | 5.6 | 0.3 | <u>10:50</u> | 12.8 | 7.5 | <u>10:53</u> | 13.5 | 8.2 |
| | 4.0 | +1.9 | | 7.0 | 1.7 | | 12.8 | 7.5 | <u>7:00</u> | 13.4 | 8.1 |
| | 4.0 | | | 10.1 | 4.8 | | 13.0 | 7.7 | | 13.2 | 7.9 |
| 50 | 4.0 | | | 12.1 | 6.8 | | 13.0 | 7.7 | | 13.2 | 7.9 |
| | 4.0 | | 50 | 12.4 | 7.1 | 50 | 13.1 | 7.8 | 50 | 13.1 | 7.8 |
| | 4.0 | | | 12.6 | 7.3 | | 12.9 | 7.6 | | 13.0 | 7.7 |
| | 4.0 | | | 13.1 | 7.8 | | 12.9 | | | 12.9 | 7.6 |
| | 4.0 | | | 13.1 | | | 12.9 | | | 13.1 | 7.8 |
| 1+00 | 4.0 | +1.9 | | 13.1 | 7.8 | | 12.9 | 7.6 | | 13.2 | 7.9 |
| | 3.9 | +2.0 | 3+00 | 13.0 | 7.7 | 4+00 | 13.2 | 7.9 | 7+00 | 13.3 | 8.0 |
| | 3.9 | | | 12.9 | 7.6 | | 13.3 | 8.0 | | 13.4 | 8.1 |
| | 3.9 | +2.0 | | 12.8 | 7.5 | | 13.6 | 8.3 | | 13.8 | 8.5 |
| | 3.8 | +2.1 | | 12.7 | 7.4 | | 13.5 | 8.2 | | 14.2 | 8.9 |
| 50 | 3.9 | +2.0 | | 12.6 | 7.3 | | 13.3 | 8.0 | | 14.2 | 8.9 |
| | 3.9 | +2.0 | 50 | 12.4 | 7.1 | 50 | 13.2 | 7.9 | 50 | 14.1 | 8.8 |
| | 4.0 | +1.9 | | 12.3 | 7.0 | | 13.4 | 8.1 | | 14.0 | 8.7 |
| | 4.2 | +1.7 | | 12.0 | 6.7 | | 13.9 | 8.6 | | 13.7 | 8.4 |
| | 4.6 | +1.3 | | 12.0 | 6.7 | | 13.9 | 8.6 | | 13.3 | 8.0 |

N 110+00 CONT'D WEST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (5.1) | 12.9 | 7.8 | (5.1) | 14.2 | 9.1 |
| 8+00 | 12.8 | 7.7 | 10+00 | 13.6 | 8.5 |
| | 12.7 | 7.6 | | 13.5 | 8.4 |
| | 12.9 | 7.8 | | 13.4 | 8.3 |
| | 12.9 | 7.8 | | 13.3 | 8.2 |
| | 12.9 | 7.8 | | 13.8 | 8.7 |
| 50 | 13.2 | 8.1 | 50 | 13.9 | 8.8 |
| | 13.4 | 8.3 | | 13.7 | 8.6 |
| | 14.0 | 8.9 | | 13.4 | 8.3 |
| 1055 | 14.9 | 9.8 | | 13.4 | 8.3 |
| | 14.9 | { | | 13.4 | 8.3 |
| 9+00 | 14.9 | 9.8 | 11+00 | 13.4 | 8.3 |
| | 14.8 | 9.7 | | 13.3 | 8.2 |
| | 14.3 | 9.2 | | 12.8 | 7.7 |
| | 14.4 | 9.3 | | 12.9 | 7.8 |
| | 14.5 | 9.4 | | 12.8 | 7.7 |
| 50 | 14.6 | 9.5 | 50 | 13.0 | 7.9 |
| | 14.6 | 9.5 | | 13.1 | 8.0 |
| | 14.7 | 9.6 | | 13.2 | 8.1 |
| | 13.6 | 8.5 | | 13.2 | 8.1 |

N. 110+00 WEST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|-------|-------|------|
| (5.0) | 13.6 | 8.6 | (5.0) | 14.0 | 9.0 |
| 12+00 | 13.9 | 8.9 | 14+00 | 14.1 | 9.1 |
| | 14.0 | 9.0 | | 14.2 | 9.2 |
| | 14.2 | 9.2 | | 14.6 | 9.6 |
| | 14.2 | 9.2 | | 14.8 | 9.8 |
| | 14.2 | 9.2 | | 14.7 | 9.7 |
| 50 | 14.2 | 9.2 | 50 | 14.8 | 9.8 |
| | 13.8 | 8.8 | | 14.7 | 9.7 |
| | 13.7 | 8.7 | | 14.8 | 9.8 |
| | 13.6 | 8.6 | | 14.8 | { |
| | 13.7 | 8.7 | | 14.8 | 9.8 |
| 13+00 | 13.8 | 8.8 | 15+00 | 14.7 | 9.7 |
| | 13.8 | 8.8 | 11+00 | 14.6 | 9.6 |
| | 13.8 | 8.8 | | 14.5 | 9.5 |
| | 13.9 | 8.9 | | 14.4 | 9.4 |
| | 14.0 | 9.0 | | 14.3 | 9.3 |
| 50 | 14.0 | 9.0 | 50 | 14.0 | 9.0 |
| | 13.9 | 8.9 | | 13.0 | 8.0 |
| | 13.8 | 8.8 | | 13.2 | 8.2 |
| | 13.8 | 8.8 | | 13.3 | 8.3 |

N. 110+00 CONTD WEST 10-23-57

Dist Sound Elev Dist Sound Elev

(50) 13.1 8.1 (49) 18.7 3.8

16+00 13.2 8.2 18+00 17.9 3.0

13.6 8.6 1103 6.3 1.4

14.0 9.0 4.8 +0.1

14.0 9.0 4.8 +0.1

13.9 8.9 3.3 +1.6

50 13.9 8.9 50 2.9 +2.0

14.1 9.1 1.6 +3.3

14.4 9.4

14.7 9.7

14.8 9.8

17+00 14.8 9.8 19+00

14.8 9.8

14.9 9.9

15.0 10.0

14.7 9.7

50 14.2 9.2

13.1 8.1

11.9 6.9

9.5 4.5

10-23-57

N. 112+00; 0+00 = N. 18,000 SOUND EAST

Dist Sound Elev Dist Sound Elev

0+00 3.0 +1.6 (46) 3.0 +1.6

(46) 3.0 2+00 3.0 +1.6

11:15 3.0 3.1 +1.5

3.0 3.1 +1.5

3.0 3.0 +1.6

50 3.0 +1.6 3.0 +1.6

2.9 +1.7 50 3.1 +1.5

3.0 +1.6 3.1 +1.5

3.0 +1.6 3.1

2.9 +1.7 3.1

1+00 3.0 +1.6 3.1

2.9 +1.7 3+00 3.1

2.9 +1.7 3.1 +1.5

3.0 +1.6 3.2 +1.9

3.0 +1.6 3.1 +1.5

50 3.0 +1.6 3.1 +1.5

3.1 +1.5 50 3.2 +1.4

3.0 +1.6 3.0 +1.6

3.0 +1.6 3.0 +1.6

(70)

N.112+00 CONTD EAST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|--------------|-------|------|
| (4.6) | 3.0 | +1.6 | (4.5) | 3.3 | +1.2 |
| | 3.2 | +1.4 | <u>11:20</u> | 3.7 | +0.8 |
| 4+00 | 3.3 | +1.3 | 6+00 | 3.8 | +0.7 |
| | 3.0 | +1.6 | | 3.8 | +0.7 |
| | 3.0 | +1.6 | | 4.0 | +0.5 |
| | 3.0 | +1.6 | | 4.0 | +0.5 |
| | 3.1 | +1.5 | | 4.0 | +0.5 |
| 50 | 3.0 | +1.6 | 50 | 4.1 | +0.4 |
| | 3.0 | +1.6 | | 4.2 | +0.3 |
| | 3.1 | +1.5 | | 4.5 | 0.0 |
| | 3.0 | +1.6 | | 4.5 | 0.0 |
| | 3.1 | +1.5 | | 4.4 | +0.1 |
| 5+00 | 3.1 | +1.5 | 7+00 | 4.4 | +0.1 |
| | 3.0 | +1.6 | | 4.3 | +0.2 |
| | 3.1 | +1.5 | | 4.6 | 0.1 |
| | 3.1 | +1.5 | | 4.2 | +0.3 |
| | 3.2 | +1.4 | | 4.1 | +0.4 |
| 50 | 3.2 | +1.4 | 50 | 4.1 | +0.4 |
| | 3.2 | +1.4 | | 4.0 | +0.5 |
| | 3.3 | +1.3 | | 4.0 | +0.5 |

N.112+00 EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------|-------|------|--------------|-------|------|
| (4.5) | 4.0 | +0.5 | (4.4) | 3.1 | +1.3 |
| | 4.0 | +0.5 | | 3.1 | +1.3 |
| 8+00 | 3.7 | +0.8 | 10+00 | 3.2 | +1.2 |
| | 3.5 | +1.0 | | 3.1 | +1.3 |
| | 3.3 | +1.2 | | 3.1 | +1.3 |
| | 3.3 | +1.2 | | 3.1 | +1.3 |
| | 3.4 | +1.1 | | 3.2 | +1.2 |
| 50 | 3.4 | +1.1 | 50 | 3.2 | +1.2 |
| | 3.4 | +1.1 | | 3.0 | +1.4 |
| | 3.4 | +1.1 | | 3.0 | +1.4 |
| | 3.5 | +1.0 | | 3.0 | + |
| | 3.3 | +1.2 | | 3.0 | + |
| 9+00 | 3.4 | +1.1 | 11+00 | 3.0 | + |
| | 3.4 | +1.1 | <u>11:25</u> | 3.0 | + |
| | 3.5 | +1.0 | | 3.0 | + |
| | 3.4 | +1.1 | | 3.1 | +1.3 |
| | 3.4 | +1.1 | | 3.0 | +1.4 |
| 50 | 3.3 | +1.2 | 50 | 3.1 | +1.3 |
| | 3.3 | +1.2 | | 3.0 | +1.4 |
| | 3.1 | +1.4 | | 3.0 | +1.4 |

N112+00 CONT'D EAST 10-23-57

Dist Sound Elev Dist Sound Elev

(4.4) 2.9 +1.5 (4.3) 4.0 +0.3

2.9 +1.5 4.0 +0.3

12+00 3.0 +1.4 14+00 4.3 0.0

3.0 +1.4 4.8 0.5

3.0 +1.4 4.9 0.6

2.9 +1.5 4.9 0.6

2.9 +1.5 5.0 0.7

50 2.9 +1.5 50 5.0 0.7

3.0 +1.4 11:27 5.0 0.7

3.0 +1.4 5.0 0.7

3.0 +1.4 5.5 1.2

3.0 +1.4 6.0 1.7

13+00 3.0 +1.4 15+00 6.8 2.5

3.0 +1.4 7.1 2.8

3.0 +1.4 6.9 2.6

2.9 +1.5 7.2 2.9

2.9 +1.5 7.9 3.6

50 2.9 +1.5 50 8.0 3.7

3.1 +1.3 8.6 4.3

3.3 +1.1 8.8 4.5

N112+00 EAST

Dist Sound Elev

(4.2) 9.0 9.8

11:30 9.1 9.9

16+00 9.3 5.1

9.7 5.5

9.7 5.5

9.7 5.5

9.7 5.5

50 9.3 5.1

8.5 4.3

6.8 2.6

4.6 0.4

3.2 +1.0

17+00 2.6 +1.6

1.9 +2.3

1.1 +3.1

1.1 +3.1

1.1 +3.1

50 1.1 +3.1

1.1 +3.1

1.1 +3.1

(72)

Dist Sound Elev

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

18+00

N. 112+00 SOUND WEST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|-------------|-------|------|
| 0+00 | | | (40) | 2.7 | +1.3 |
| (40) | 2.6 | +1.4 | 2+00 | 2.7 | +1.3 |
| <u>1140</u> | 2.7 | +1.3 | | 2.7 | +1.3 |
| | 2.7 | +1.3 | | 2.8 | +1.2 |
| | 2.7 | +1.3 | | 2.8 | +1.2 |
| 50 | 2.5 | +1.5 | | 2.7 | +1.3 |
| | 2.5 | +1.5 | 50 | 2.6 | +1.4 |
| | 2.5 | +1.5 | | 2.8 | +1.2 |
| | 2.5 | +1.5 | | 2.8 | +1.2 |
| | 2.5 | +1.5 | | 2.9 | +1.1 |
| 1+00 | 2.6 | +1.4 | | 3.0 | +1.0 |
| | 2.8 | +1.2 | 3+00 | 3.9 | +0.1 |
| | 2.8 | +1.2 | | 4.9 | 0.9 |
| | 2.7 | +1.3 | | 7.0 | 3.0 |
| | 2.8 | +1.2 | <u>1143</u> | 10.1 | 6.1 |
| 50 | 2.6 | +1.4 | | 11.1 | 7.1 |
| | 2.6 | +1.4 | 50 | 11.0 | 7.0 |
| | 2.7 | +1.3 | | 10.8 | 6.8 |
| | 2.7 | +1.3 | | 11.0 | 7.0 |
| | 2.7 | +1.3 | | 11.3 | 7.3 |

N. 112+00 WEST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-------------|-------|------|------|-------|------|
| | | | (39) | 11.3 | 7.4 |
| 4+00 | 11.1 | 7.2 | (39) | 11.8 | 7.9 |
| | 11.7 | 7.8 | 6+00 | 11.9 | 8.0 |
| | 11.5 | 7.6 | | 11.5 | 7.6 |
| | 12.0 | 8.1 | | 11.8 | 7.9 |
| | 11.8 | 7.9 | | 11.8 | 7.9 |
| 50 | 11.8 | 7.9 | 50 | 11.9 | 8.0 |
| | 11.9 | 8.0 | | 11.7 | 7.8 |
| | 12.0 | 8.1 | | 11.6 | 7.7 |
| | 12.0 | 8.1 | | 11.4 | 7.5 |
| | 12.0 | 8.1 | | 11.3 | 7.4 |
| | 12.0 | 8.1 | | 11.2 | 7.3 |
| 5+00 | 12.3 | 8.4 | 7+00 | 11.2 | 7.3 |
| <u>1145</u> | 12.1 | 8.2 | | 11.1 | 7.2 |
| | 12.8 | 8.9 | | 12.0 | 8.1 |
| | 12.7 | 8.8 | | 12.4 | 8.5 |
| | 12.7 | 8.8 | | 12.0 | 8.1 |
| 50 | 12.3 | 8.4 | 50 | 11.8 | 7.9 |
| | 12.0 | 8.1 | | 11.9 | 8.0 |
| | 12.0 | 8.1 | | 11.8 | 7.9 |
| | 11.8 | 7.9 | | 11.9 | 8.0 |

(73)

N. 112+00 CONTD WEST 10-23-57

| Dist | Sound | Elev | Dist | Sound | Elev |
|--------------|-------|------|-----------------|-------|------|
| (37) | 11.9 | 8.2 | (37) | 10.2 | 6.5 |
| 8+00 | 12.0 | 8.3 | 10+00 | 9.5 | 5.8 |
| | 12.1 | 8.4 | 11:50 | 7.6 | 3.9 |
| | 12.2 | 8.5 | <u> </u> | 6.2 | 2.5 |
| <u>11.48</u> | 12.0 | 8.3 | | 3.9 | 0.2 |
| | 12.1 | 8.4 | | 3.5 | +0.2 |
| 50 | 12.2 | 8.5 | 50 | 3.0 | +0.7 |
| | 13.1 | 9.4 | | 2.3 | +1.4 |
| | 13.3 | 9.6 | | 1.8 | +1.9 |
| | 13.6 | 9.9 | | 1.0 | +2.7 |
| | 14.0 | 10.3 | | | |
| 9+00 | 13.3 | 9.6 | 11+00 | | |
| | 13.3 | 9.6 | | | |
| | 13.1 | 9.4 | | | |
| | 12.9 | 9.2 | | | |
| | 13.5 | 9.8 | | | |
| 50 | 12.8 | 9.1 | 50 | | |
| | 12.5 | 8.8 | | | |
| | 12.0 | 8.3 | | | |
| | 11.0 | 7.3 | | | |

10-23-57 (74)

N. 114+00; 0+00 = W. 18,000; SOUND EAST

| Dist | Sound | Elev | Dist | Sound | Elev |
|-----------------|-------|------|-------|-------|------|
| 10+00 | 2.3 | +1.2 | (35) | 2.8 | +0.7 |
| (35) | 2.5 | +1.0 | 2+00 | 2.8 | +0.7 |
| 12:00 | 2.9 | +0.6 | | 2.8 | +0.7 |
| <u> </u> | 2.7 | +0.8 | | 2.8 | +0.7 |
| | 2.8 | +0.7 | | 2.8 | +0.7 |
| 50 | 2.7 | +0.8 | | 2.8 | +0.7 |
| | 2.7 | +0.8 | 50 | 2.9 | +0.6 |
| | 2.7 | +0.8 | | 2.9 | +0.6 |
| | 2.6 | +0.9 | | 2.9 | +0.6 |
| | 2.6 | +0.9 | | 2.9 | +0.6 |
| 1+00 | 2.6 | +0.9 | 15:00 | 2.8 | +0.7 |
| | 2.6 | +0.9 | 3+00 | 2.7 | +0.8 |
| | 2.7 | +0.8 | | 2.7 | +0.8 |
| | 2.7 | +0.8 | | 2.8 | +0.7 |
| | 2.7 | +0.8 | | 2.8 | +0.7 |
| 56 | 2.7 | +0.8 | 50 | 2.8 | +0.7 |
| | 2.7 | +0.8 | 50 | 2.9 | +0.6 |
| | 2.7 | +0.8 | | 2.9 | +0.6 |
| | 2.8 | +0.7 | | 2.9 | +0.6 |

N. 114+00 CONTD EAST 10-23-57

| DIST | Sound | Elev | DIST | Sound | Elev |
|----------|-------|------|-------|-------|------|
| (34) | 2.8 | +0.6 | (34) | 3.2 | +0.2 |
| 10+00 | 2.8 | +0.6 | 15+00 | 3.1 | +0.3 |
| 4+00 | 2.8 | +0.6 | 6+00 | 3.1 | +0.3 |
| | 2.7 | +0.7 | | 2.9 | +0.5 |
| | 2.7 | +0.7 | | 2.8 | +0.6 |
| | 2.6 | +0.8 | | 2.7 | +0.7 |
| 50 | 2.5 | +0.9 | | 2.7 | +0.7 |
| 50 | 2.6 | +0.8 | 50 | 2.6 | +0.8 |
| 1203 | 2.6 | +0.8 | | 2.6 | +0.8 |
| <u>2</u> | 2.6 | +0.8 | | 2.6 | +0.8 |
| | 2.6 | +0.8 | | 2.5 | +0.9 |
| 15+00 | 2.7 | +0.7 | | 2.4 | +1.0 |
| 5+00 | 2.9 | +0.5 | 7+00 | 2.3 | +1.1 |
| | 3.0 | +0.4 | | 2.3 | +1.1 |
| | 3.0 | +0.4 | | 2.4 | +1.0 |
| | 3.1 | +0.3 | | 2.4 | +1.0 |
| | 3.3 | +0.1 | | 2.3 | +1.1 |
| 50 | 3.2 | +0.2 | 50 | 2.3 | +1.1 |
| | 3.2 | +0.2 | | 2.2 | +1.2 |
| | 3.2 | +0.2 | | 2.2 | +1.2 |

N. 114+00 EAST

| DIST | Sound | Elev | DIST | Sound | Elev |
|-------------|-------|------|-------|-------|------|
| (34) | 2.2 | +1.2 | (34) | 1.9 | +1.5 |
| | 2.2 | +1.2 | | 1.9 | +1.5 |
| 8+00 | 2.1 | +1.3 | 10+00 | 2.0 | +1.4 |
| <u>1205</u> | 2.0 | +1.4 | | 2.0 | +1.4 |
| | 2.0 | +1.4 | | 2.0 | +1.4 |
| | 2.0 | +1.4 | | 2.0 | +1.4 |
| | 2.0 | +1.4 | | 2.0 | +1.4 |
| 50 | 2.0 | +1.4 | 50 | 2.0 | +1.4 |
| | 2.0 | +1.4 | | 2.0 | +1.4 |
| | 2.1 | +1.3 | | 2.0 | +1.4 |
| | 2.1 | +1.3 | | 2.0 | +1.4 |
| | 2.0 | +1.4 | | 2.0 | +1.4 |
| 9+00 | 2.0 | +1.4 | 11+00 | 2.0 | +1.4 |
| | 2.0 | +1.4 | | 2.1 | +1.3 |
| | 1.9 | +1.5 | | 2.2 | +1.2 |
| | 2.0 | +1.4 | | 2.1 | +1.3 |
| | 2.0 | +1.4 | | 2.0 | +1.4 |
| 50 | 2.0 | +1.4 | 50 | 2.1 | +1.3 |
| | 2.0 | +1.4 | | 2.0 | +1.4 |
| | 1.8 | +1.6 | | 2.0 | +1.4 |

(75)

N. 114+00 CONTD EAST 10-23-57

Dist Sound Elev Dist Sound Elev

(33) 2.0 +1.3 (33) 1.9 +1.4

2.0 +1.3 1.9 +1.4

12+00 2.0 +1.3 14+00 2.0 +1.3

2.0 +1.3 2.2 +1.1

2.0 +1.3 12108 2.9 +0.4

2.0 +1.3 3.3 0.0

1.9 +1.4 3.4 0.1

50 1.9 +1.4 50 3.8 0.5

1.9 +1.4 4.2 0.9

1.9 +1.4 4.6 1.3

1.9 +1.4 4.9 1.6

1.9 +1.4 5.4 2.1

13+00 1.9 +1.4 15+00 6.1 2.8

1.9 +1.4 6.5 3.2

1.9 +1.4 6.8 3.5

1.9 +1.4 7.7 4.4

1.9 +1.4 ~~50~~ 8.0 4.7

50 1.9 +1.4 50 8.2 4.9

1.9 +1.4 8.1 4.8

1.9 +1.4 8.2 4.9

N. 114+00 EAST

Dist Sound Elev

(33) 8.2 4.9

7.8 4.5

16+00 6.8 3.5

1210 5.0 1.7

3.0 +0.3

2.2 +1.1

1.7 +1.6

50 1.1 +2.2

(76)

N 114+00 SOUND WEST 10-23-57

Dist Sound Elev Dist Sound Elev

0+00 (29) 2.3 +0.6

(29) 2.3 +0.6 2+00 2.3 +0.6

2.2 +0.7 2.3 +0.6

1218 2.2 +0.7 2.3 +0.6

2.2 +0.7 2.3 +0.6

50 2.3 +0.6 2.2 +0.7

2.3 +0.6 50 2.4 +0.5

2.2 +0.7 2.5 +0.4

2.2 +0.7 2.5 +0.4

2.2 +0.7 2.4 +0.5

1+00 2.2 +0.7 2.5 +0.4

2.2 +0.7 3+00 2.5 +0.4

2.2 +0.7 2.4 +0.5

2.5 +0.4 2.3 +0.6

2.5 +0.4 2.2 +0.7

50 2.4 +0.5 2.2 +0.7

2.2 +0.7 50 2.2 +0.7

2.2 +0.7 2.2 +0.7

2.2 +0.7 2.5 +0.4

2.2 +0.7 3.2 0.3

N 114+00 WEST ⁽⁷⁰⁾

Dist Sound Elev Dist Sound Elev

(29) 4.0 1.1 (29) 11.2 8.3

4+00 5.7 2.8 6+00 10.9 8.0

1220 8.0 5.1 11.0 8.1

— 9.9 7.0 11.4 8.5

11.1 8.2 11.3 8.4

11.5 8.6 11.2 8.3

50 12.1 9.2 50 11.2 8.3

11.8 8.9 11.2 8.3

12.5 9.6 11.2 8.3

12.5 9.6 11.0 8.1

12.5 9.6 11.0 8.1

5+00 12.3 9.4 7+00 11.0 8.1

12.2 9.3 11.0 8.1

12.7 9.8 10.9 8.0

12.4 9.5 10.9 8.0

12.4 9.5 11.0 8.1

50 11.9 9.0 50 11.1 8.2

11.8 8.9 11.2 8.3

11.8 8.9 11.2 8.3

11.7 8.8 11.2 8.3

N. 114+00 CONTD WEST 10-23-57

(78)

DIST SOUND ELEV DIST SOUND ELEV

| DIST | SOUND | ELEV | DIST | SOUND | ELEV |
|-------|-------|------|----------------------|-------|------|
| (28) | 11.2 | 8.4 | (28) | 9.0 | 6.2 |
| 8+00 | 11.3 | 8.5 | 10+00 | 5.2 | 2.4 |
| 12:25 | 11.4 | 8.6 | | 2.9 | 0.1 |
| | 11.5 | 8.7 | | 2.0 | +0.8 |
| | 11.5 | 8.7 | | 1.5 | +1.3 |
| | 11.5 | 8.7 | | 1.0 | +1.8 |
| 50 | 11.5 | 8.7 | 50 | 0.5 | +2.3 |
| | 11.4 | 8.6 | (Contd Sta's N14.17) | | |
| | 11.4 | 8.6 | M.B. N° 100) | | |
| | 11.3 | 8.5 | (also See MB N° 98) | | |
| | 11.2 | 8.4 | | | |
| 9+00 | 11.3 | 8.5 | 11+00 | | |
| | 11.3 | 8.5 | | | |
| | 11.2 | 8.4 | | | |
| | 11.1 | 8.3 | | | |
| | 11.1 | 8.3 | | | |
| 50 | 10.9 | 8.1 | | | |
| | 10.8 | 8.0 | | | |
| | 10.7 | 7.9 | | | |
| | 10.0 | 7.2 | | | |

B
a

$\frac{c}{a}$

$\frac{b^2}{a^2}$

B),

-B)

the
4 ft.
10' =

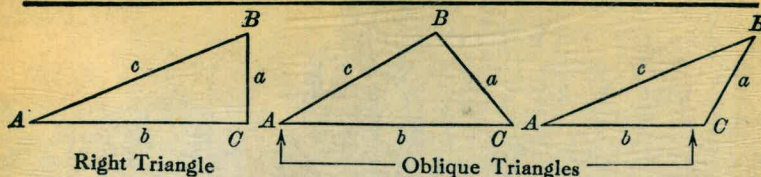
lope
the
low-
0041.

dist-
4 ft.,
t.

—
A



TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

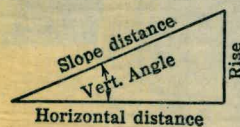
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{a}$, $\operatorname{cosec} = \frac{c}{a}$

| Given | Required | Formulas |
|--------|-----------|---|
| a, b | A, B, c | $\tan A = \frac{a}{b} = \cot B, c = \sqrt{a^2 + b^2} = a \sqrt{1 + \frac{b^2}{a^2}}$ |
| a, c | A, B, b | $\sin A = \frac{a}{c} = \cos B, b = \sqrt{(c+a)(c-a)} = c \sqrt{1 - \frac{a^2}{c^2}}$ |
| A, a | B, b, c | $B = 90^\circ - A, b = a \cot A, c = \frac{a}{\sin A}$ |
| A, b | B, a, c | $B = 90^\circ - A, a = b \tan A, c = \frac{b}{\cos A}$ |
| A, c | B, a, b | $B = 90^\circ - A, a = c \sin A, b = c \cos A$ |

Solution of Oblique Triangles

| Given | Required | Formulas |
|--------------|-----------|--|
| A, B, a | b, c, C | $b = \frac{a \sin B}{\sin A}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$ |
| A, a, b | B, c, C | $\sin B = \frac{b \sin A}{a}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$ |
| a, b, C | A, B, c | $A + B = 180^\circ - C, \tan \frac{1}{2}(A - B) = \frac{(a - b) \tan \frac{1}{2}(A + B)}{a + b}$ $c = \frac{a \sin C}{\sin A}$ |
| a, b, c | A, B, C | $s = \frac{a + b + c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s - b)(s - c)}{bc}}$ $\sin \frac{1}{2}B = \sqrt{\frac{(s - a)(s - c)}{ac}}, C = 180^\circ - (A + B)$ |
| a, b, c | Area | $s = \frac{a + b + c}{2}, \text{area} = \sqrt{s(s - a)(s - b)(s - c)}$ |
| A, b, c | Area | $\text{area} = \frac{bc \sin A}{2}$ |
| A, B, C, a | Area | $\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$ |

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = $5^\circ 10'$. From Table, Page IX. $\cos 5^\circ 10' = .9959$. Horizontal distance = $319.4 \times .9959 = 318.09$ ft. Horizontal distance also = Slope distance minus slope distance times (1 - cosine of vertical angle). With the same figures as in the preceding example, the following result is obtained. $\cos 5^\circ 10' = .9959$. $1 - .9959 = .0041$. $319.4 \times .0041 = 1.31$. $319.4 - 1.31 = 318.09$ ft.

When the rise is known, the horizontal distance is approximately: - the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft. slope distance = 302.6 ft. Horizontal distance = $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.