

APPENDIX D

WJKN FIELD STRENGTH MEASUREMENTS

Extracted from WJKN (formerly WJCO)
1962 Full Proof of Performance (BL-9925)

JOHN H. MULLANEY AND ASSOCIATES

A DIVISION OF MULTRONICS, INC.

TABLE II

RADIAL MEASUREMENT DATA

RADIO STATION WJCO
 JACKSON, MICHIGAN
 1510KC - 5KW - DA-D

RADIAL B N-43°-E

<u>Point Number</u>	<u>Distance (miles)</u>	<u>Non-DA Field (mv/m)</u>	<u>DA Day Field (mv/m)</u>
1	0.22	680	---
2	0.28	600	---
3	0.40	280	---
4	0.50	225	---
5	0.63	190	---
6	0.70	170	185
7	0.80	135	130
8	0.88	135	135
9	1.00	105	133
10	1.10	105	122
11	1.20	100	112
12	1.30	93	99
13	1.40	82	88
14	1.50	84	91
15	1.60	72	72
16	1.82	48	52.5
17	1.90	41	44.5
18	1.95	36	40
19	2.01	31	37
20	2.25	32	46.5
21	2.95	22	34
22	3.50	17	21
23	3.60	12	18
24	3.90	14.5	20
25	4.05	14	20.5
26	4.35	10	14
27	4.90	10.5	15
28	6.00	4.3	6.1
29	8.15	1.6	1.75
30	10.0	1.35	1.7
31	12.0	0.74	0.95
32	14.1	0.75	0.96
33	16.8	0.72	0.95
34	18.4	0.54	0.76
35	20.0	0.50	0.72

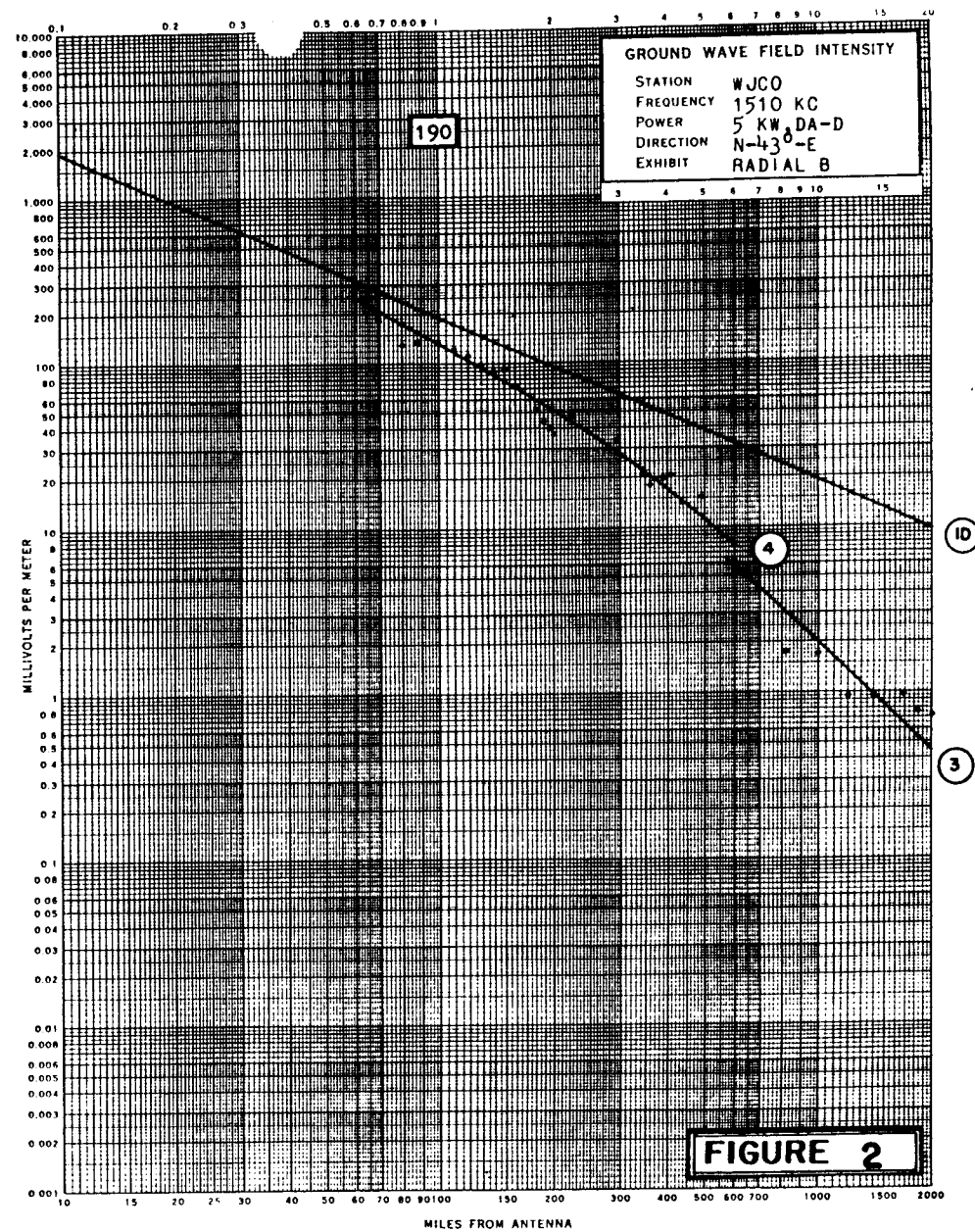
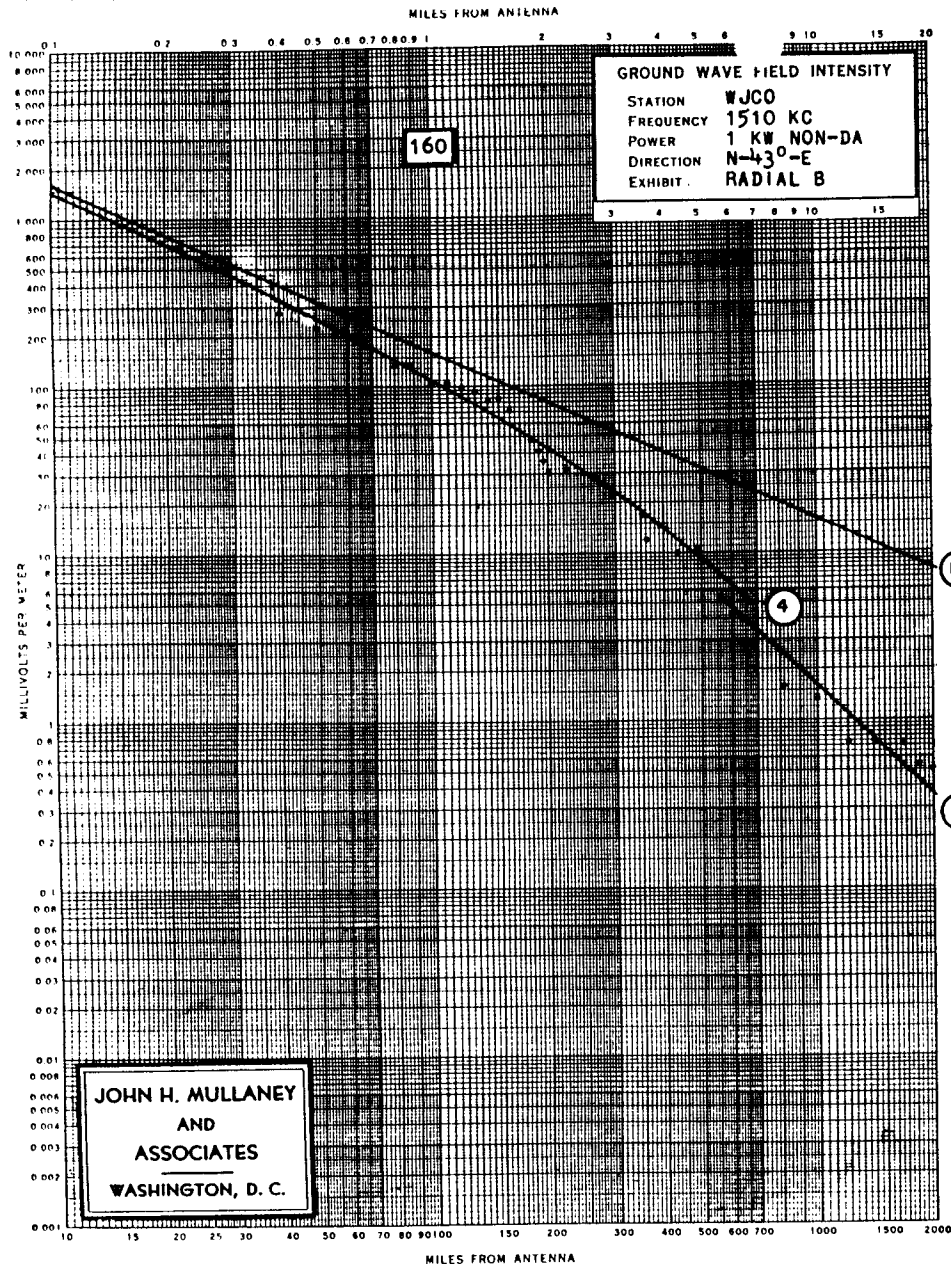


TABLE III

RADIAL MEASUREMENT DATA

RADIO STATION WJCO
JACKSON, MICHIGAN
1510KC - 5KW - DA-D

RADIAL C N-73°-E

<u>Point Number</u>	<u>Distance (miles)</u>	<u>Non-DA Field (mv/m)</u>	<u>DA Day Field (mv/m)</u>
1	0.20	740	---
2	0.30	520	---
3	0.43	400	---
4	0.46	355	---
5	0.62	260	---
6	0.70	230	25
7	0.80	190	20
8	0.87	205	17
9	0.99	130	13
10	1.19	120	12.5
11	1.26	115	14
12	1.38	100	8
13	1.50	82	5.5
14	1.59	73	5.0
15	1.65	69	4.5
16	1.75	68	4.5
17	1.94	62	4.1
18	2.00	62	4.0
19	2.09	63	3.0
20	2.37	47.5	2.9
21	3.02	21	3.2
22	3.81	19	3.1
23 (mp)	5.38	14	2.6
24	5.65	14.5	3.1
25	5.88	11	1.6
26	7.21	7.9	1.8
27	8.05	4.9	0.78
28	10.2	2.7	0.45
29	12.2	1.5	0.32
30	14.6	1.0	0.23
31	16.3	0.7	0.11
32	18.5	0.8	0.11
33	19.6	0.75	0.09

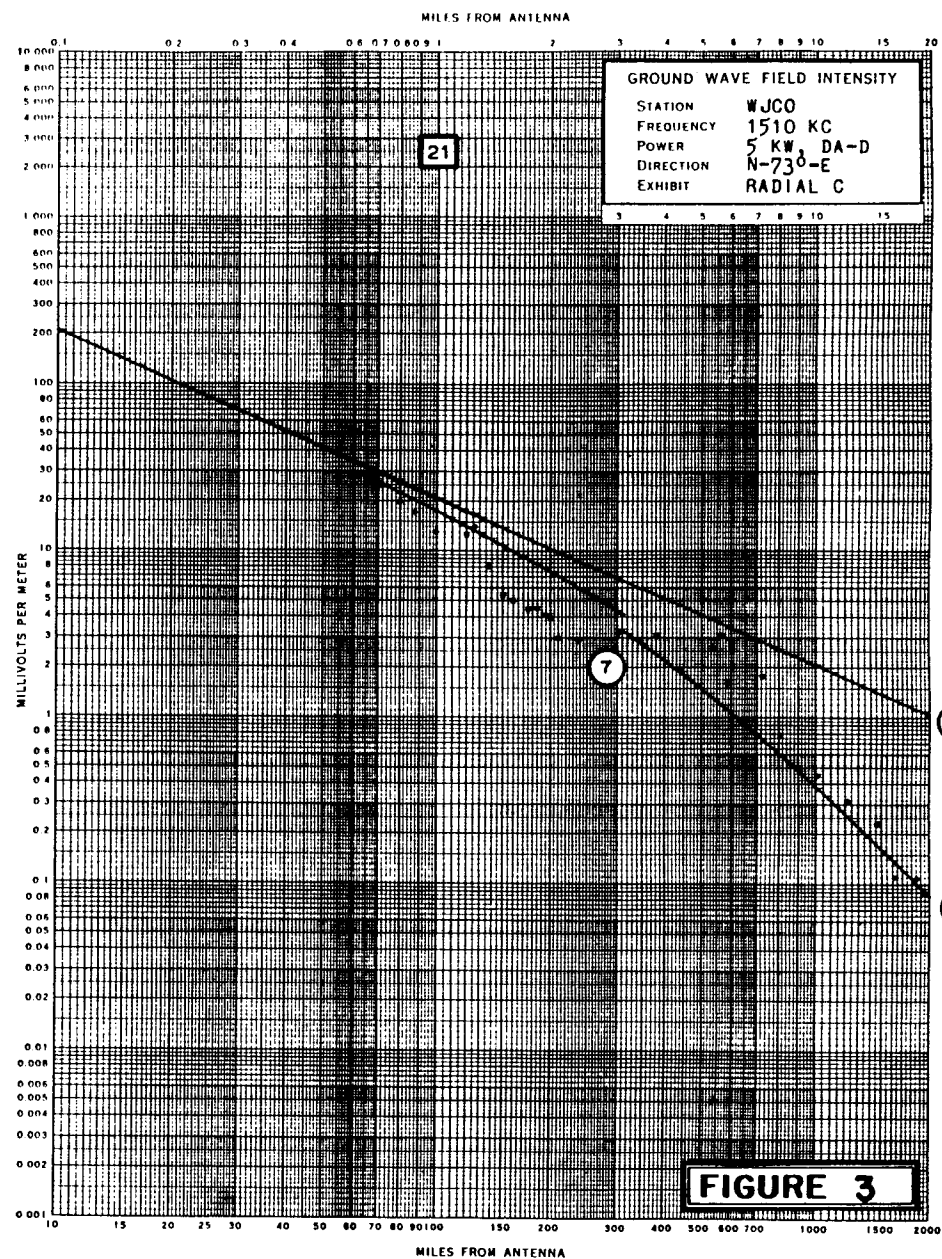
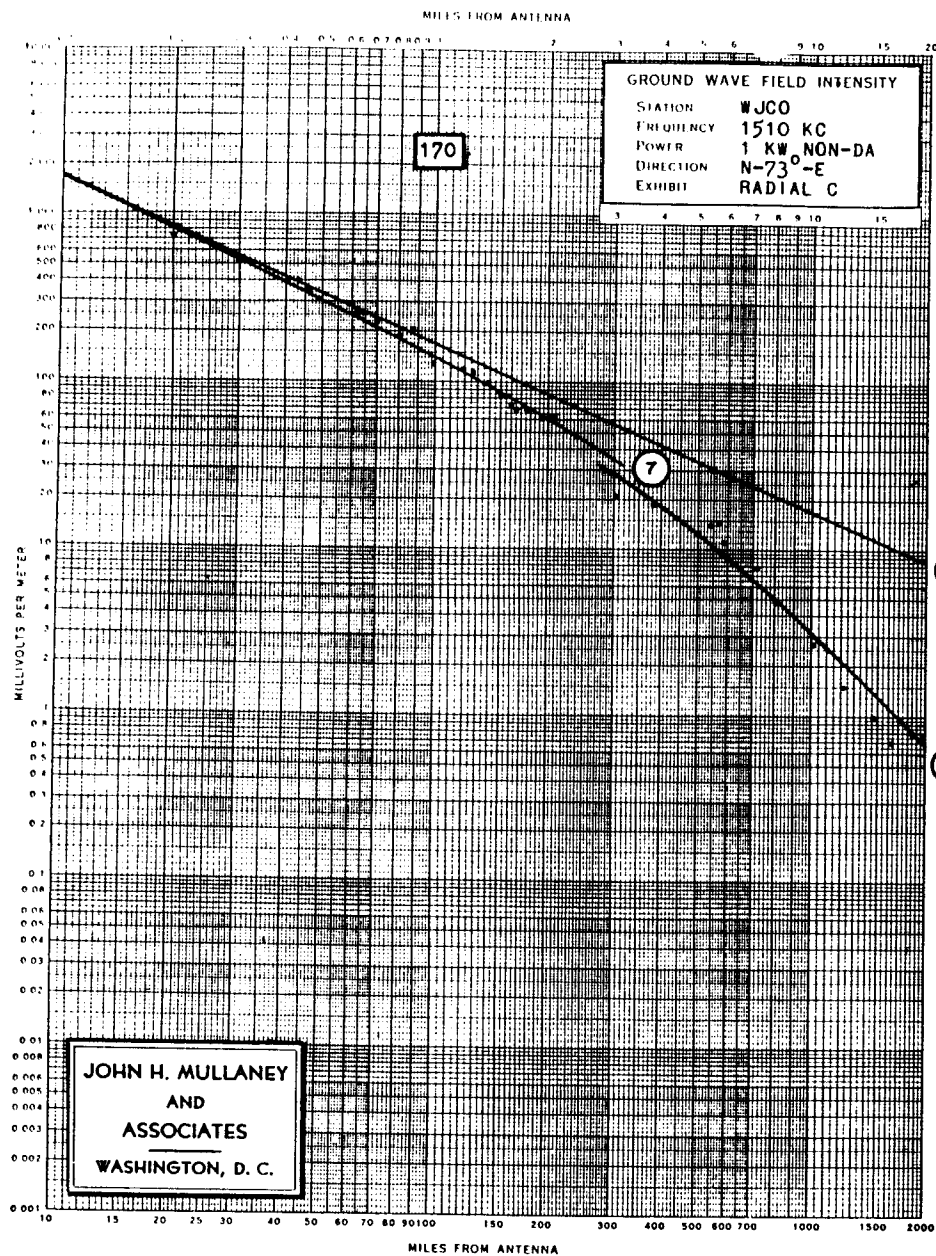


TABLE IV

RADIAL MEASUREMENT DATA

RADIO STATION WJCO
JACKSON, MICHIGAN
1510KC - 5KW - DA-D

RADIAL D N-83⁰-E

<u>Point Number</u>	<u>Distance (miles)</u>	<u>Non-DA Field (mv/m)</u>	<u>DA-Day Field (mv/m)</u>
1	0.20	700	---
2	0.30	510	---
3	0.40	370	---
4	0.45	350	---
5	0.60	245	---
6	0.69	210	28
7	0.89	170	22
8	1.00	140	14.5
9	1.10	125	13.5
10	1.55	88	11
11	1.60	79	8.6
12	1.70	74	8.3
13	1.80	72	8.6
14	1.90	66	7.0
15	2.00	56	4.6
16	2.65	35	1.1
17	2.98	35	1.9
18	3.70	17	1.3
19	5.27	10	1.1
20 (mp)	5.91	10	1.5
21	6.32	9.3	1.3
22	7.45	7.8	1.4
23	8.20	5.5	0.95
24	9.67	3.5	0.30
25	12.2	2.6	0.40
26	13.7	1.5	0.23
27	15.8	0.96	0.10
28	17.9	0.67	0.08
29	19.5	0.77	0.09

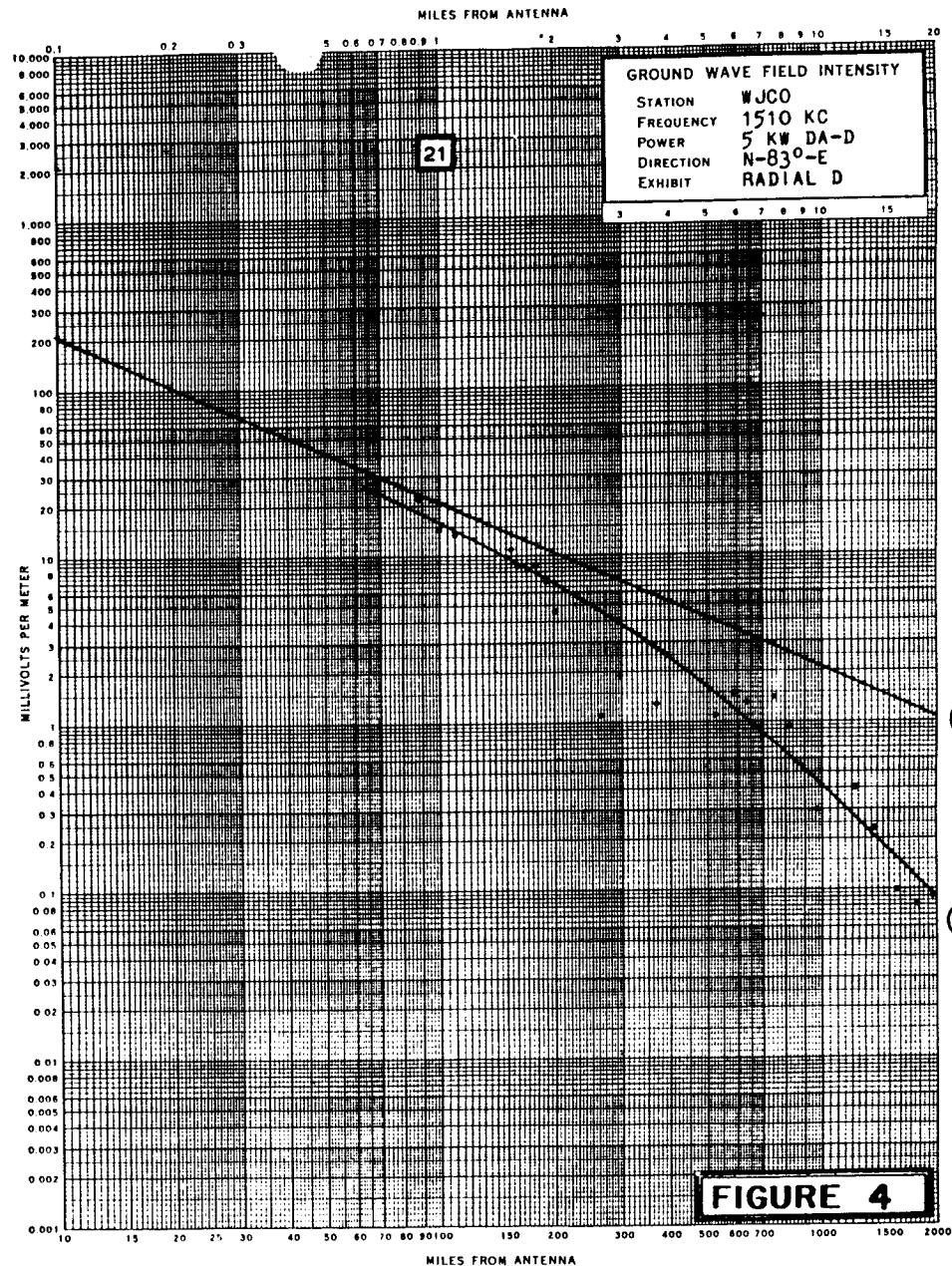
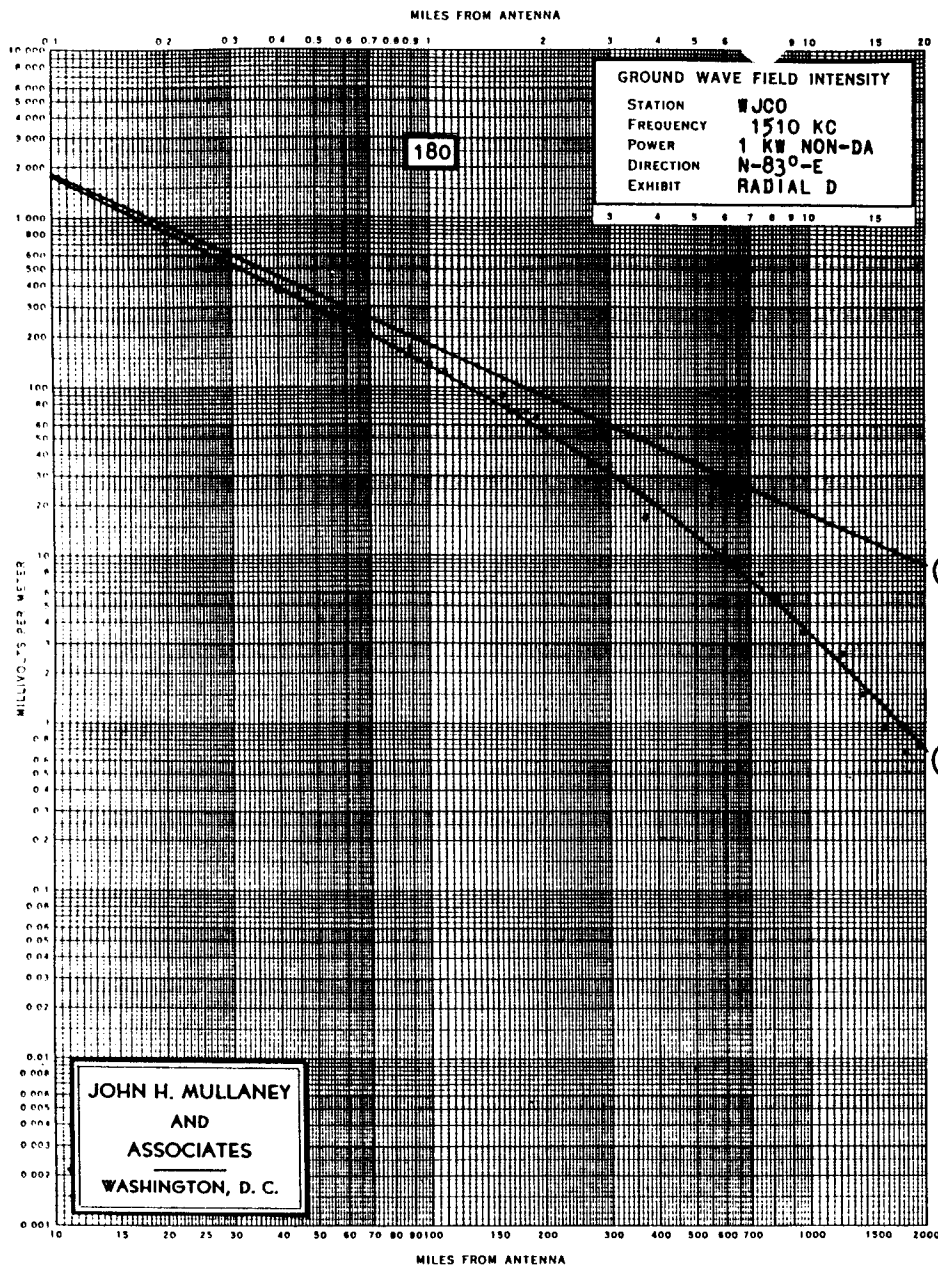


TABLE V

RADIAL MEASUREMENT DATA

RADIO STATION WJCO
JACKSON, MICHIGAN
1510KC - 5KW - DA-D

RADIAL E N-106°-E

<u>Point Number</u>	<u>Distance (miles)</u>	<u>Non-DA Field (mv/m)</u>	<u>DA-Day Field (mv/m)</u>
1	0.20	770	---
2	0.30	500	---
3	0.40	380	---
4	0.50	305	---
5	0.53	290	---
6	0.60	270	---
7	0.70	205	120
8	0.80	155	95
9	0.90	140	90
10	1.00	115	75
11	1.13	83	54
12	1.20	100	60
13	1.30	88	56
14	1.48	80	50
15	1.56	71	48
16	1.65	72	48
17	1.74	64	40
18	2.51	24.5	17.5
19	2.78	34.5	23
20	3.05	25.5	18
21	3.55	23	16.5
22	4.00	38.5	10
23	6.10	8.7	5.7
24	6.90	6.2	3.9
25	8.39	4.2	2.6
26	9.10	4.2	2.6
27	9.95	2.3	1.4
28	11.0	1.7	0.95
29	13.8	1.0	0.72
30	15.4	1.0	0.57
31	17.0	0.66	0.40
32	18.6	0.66	0.40
33	19.9	0.60	0.36

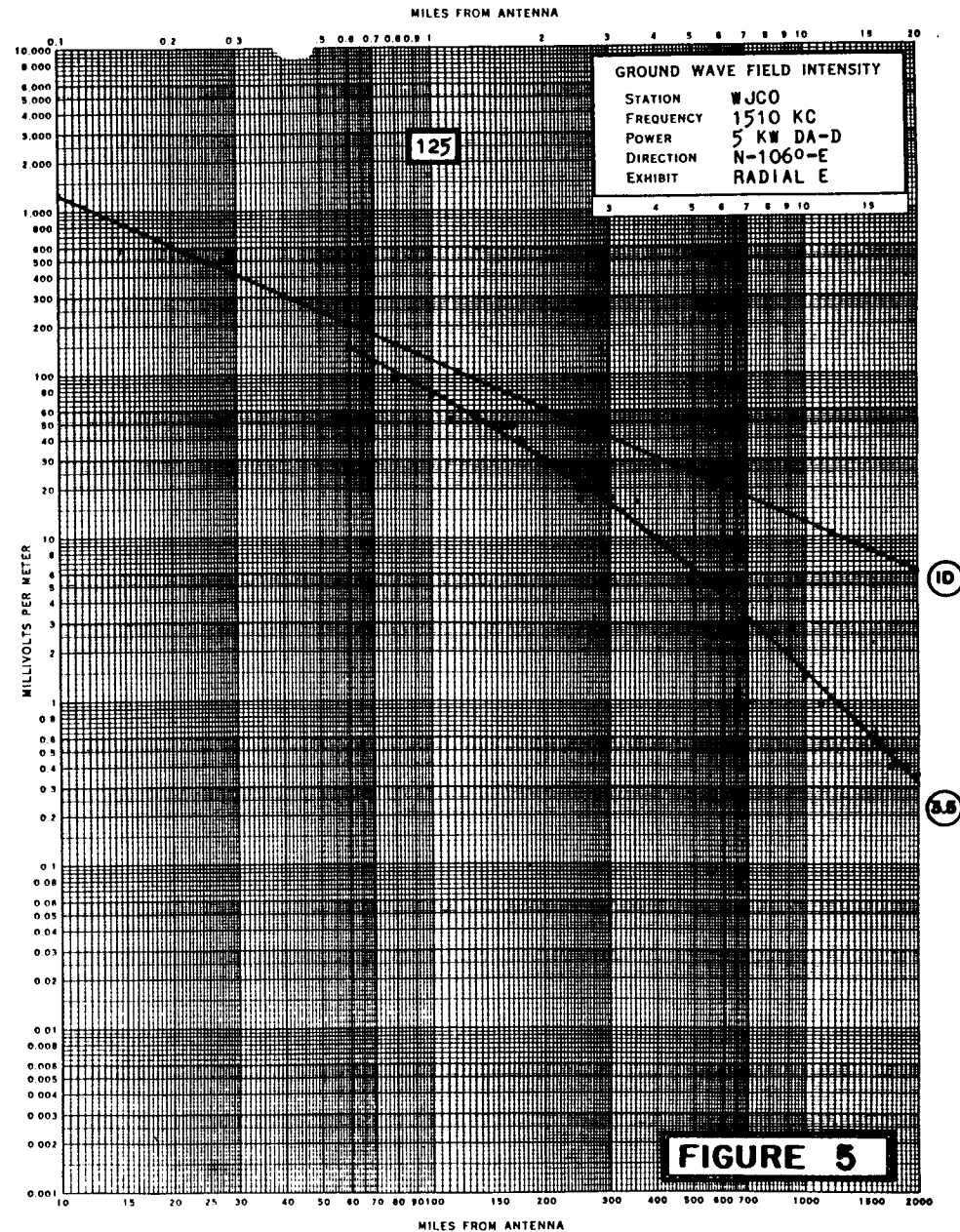
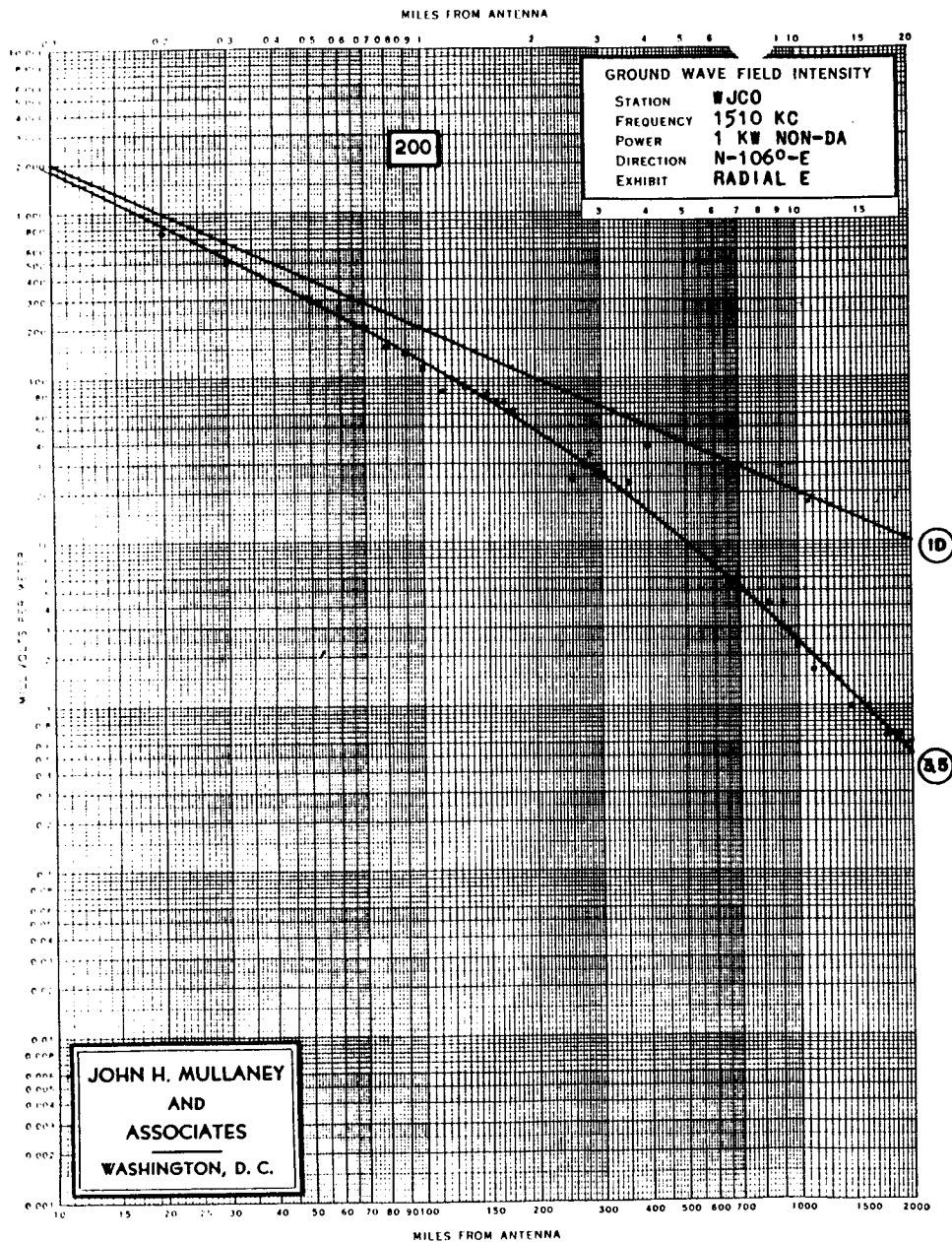


TABLE VII

RADIAL MEASUREMENT DATA

RADIO STATION WJCO
JACKSON, MICHIGAN
1510KC - 5KW - DA-D

RADIAL G N-155°-E

<u>Point Number</u>	<u>Distance (miles)</u>	<u>Non-DA Field (mv/m)</u>	<u>DA Day Field (mv/m)</u>
1	0.20	800	---
2	0.25	570	---
3	0.38	370	---
4	0.43	280	---
5	0.50	230	---
6	0.60	190	---
7	0.70	150	51
8	0.80	120	38.5
9	0.90	110	30
10	1.00	92	26
11	1.10	82	23
12	1.20	74	22
13	1.30	74	22
14	1.40	63	19
15	1.50	61	17.5
16	1.60	41	14
17	1.70	58	19
18	1.80	46	13
19	1.90	46	13
20	2.00	40	13.5
21	2.75	30	9.6
22	3.11	20.5	6.6
23	3.66	18	5.5
24	3.95	13	4.1
25	4.81	10	4.4
26	5.70	10	3.9
27	7.56	4.9	1.6
28	9.18	3.1	1.0
29	10.6	2.1	0.8
30	12.4	2.0	0.49
31	13.6	1.0	0.36
32	16.1	0.8	0.3
33	17.4	0.62	0.23
34	19.5	0.48	0.14

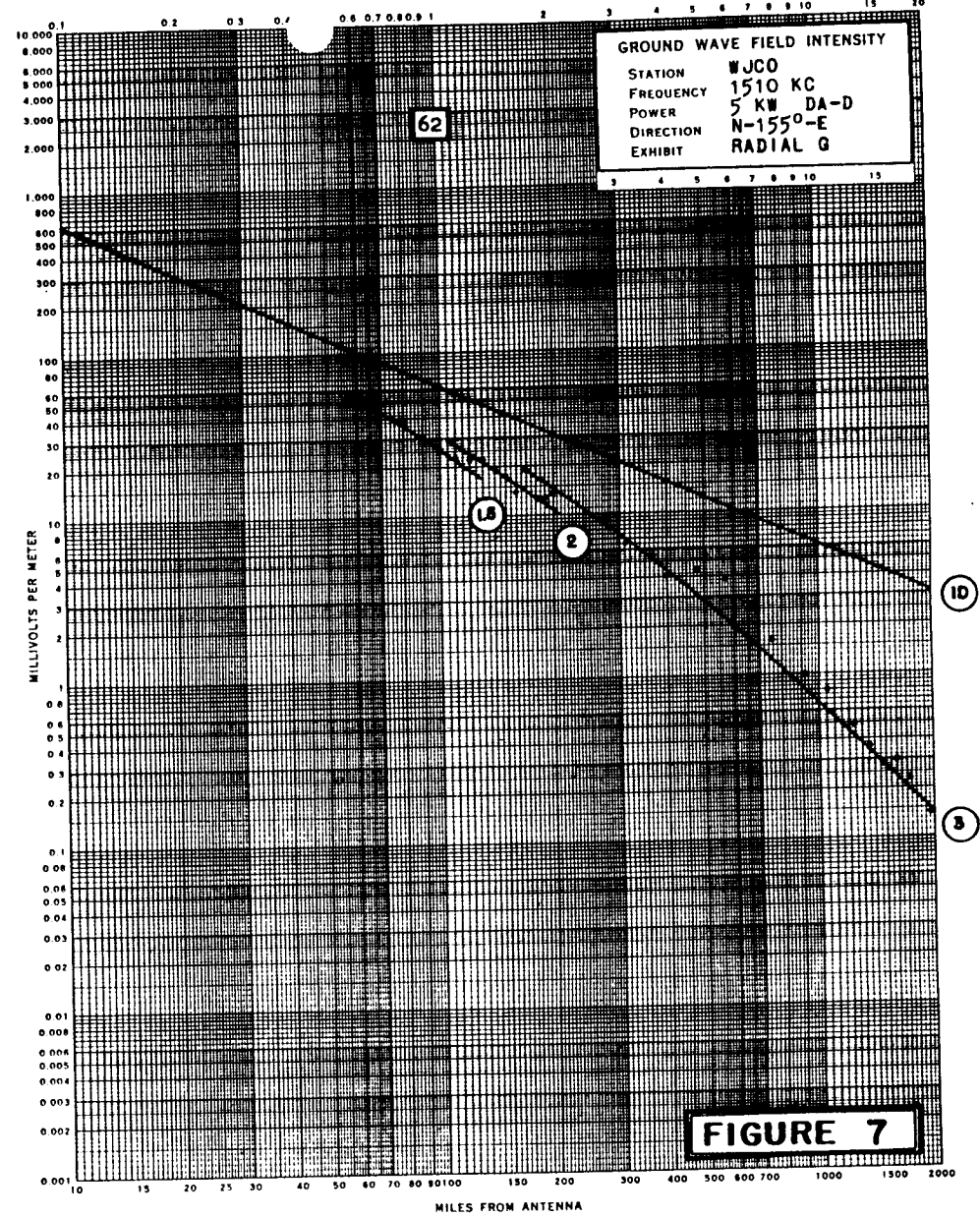
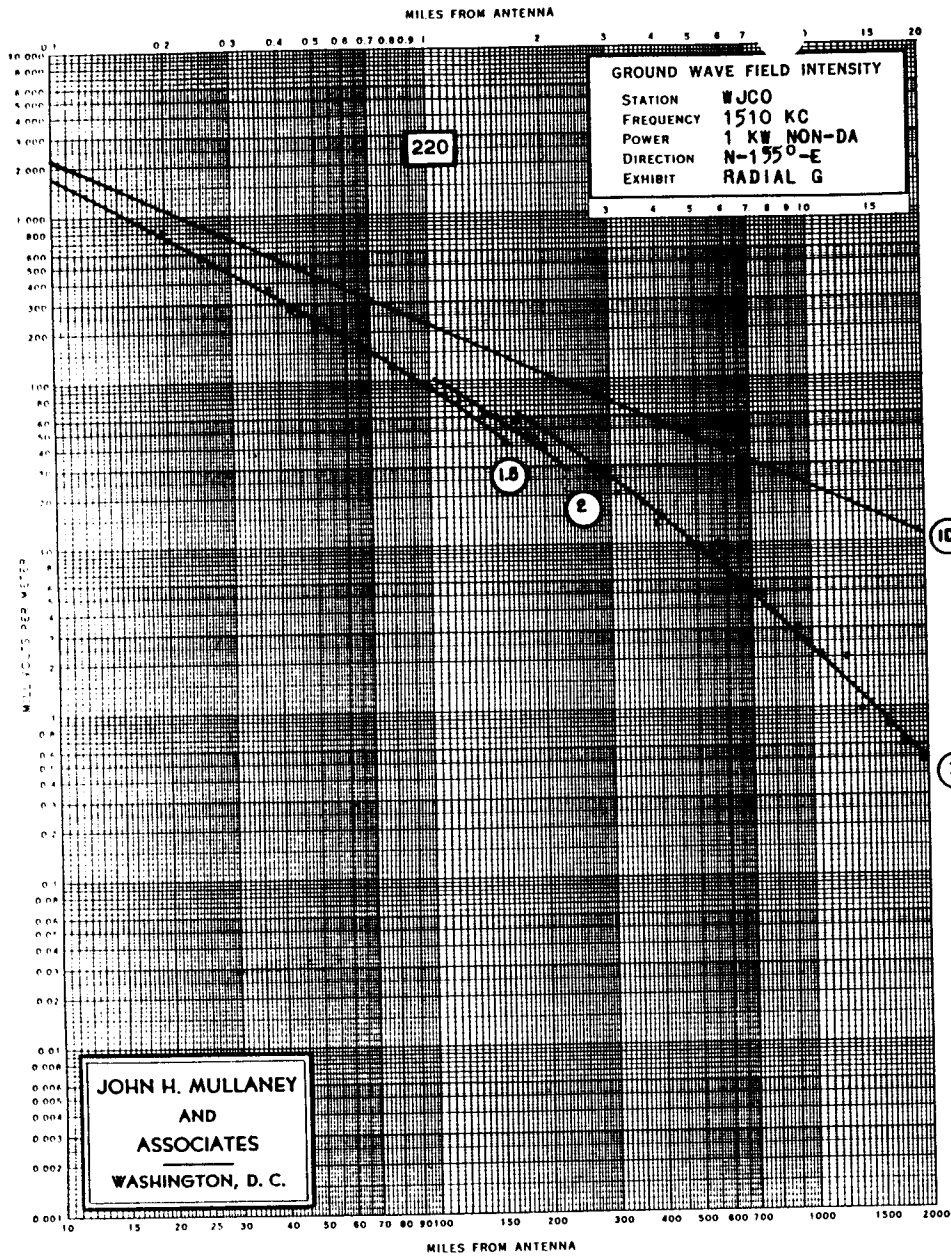


TABLE VIII

RADIAL MEASUREMENT DATA

RADIO STATION WJCO
JACKSON, MICHIGAN
1510 KC - 5 KW - DA-D

RADIAL H N₁₈₃⁰-E

<u>Point Number</u>	<u>Distance (miles)</u>	<u>Non-DA Field (mv/m)</u>	<u>DA-Day Field (mv/m)</u>
1	0.20	700	---
2	0.30	520	---
3	0.40	360	---
4	0.43	315	---
5	0.60	235	---
6	0.70	200	62
7	0.80	175	50
8	0.90	150	45
9	1.00	130	37.5
10	1.10	130	36
11	1.20	110	27
12	1.30	95	24
13	1.40	85	20
14	1.43	87	20
15	1.75	70	16
16	1.95	64	15
17(MP)	2.32	48	12
18	3.50	26	6.2
19	4.78	12.5	3.0
20	5.89	9.4	2.1
21	6.60	7.3	1.5
22	8.38	6.0	1.1
23	10.5	3.2	0.6
24	11.9	2.6	0.47
25	13.9	1.5	0.31
26	16.0	1.35	0.31
27	18.0	0.9	0.18
28	20.0	0.63	0.14
29			

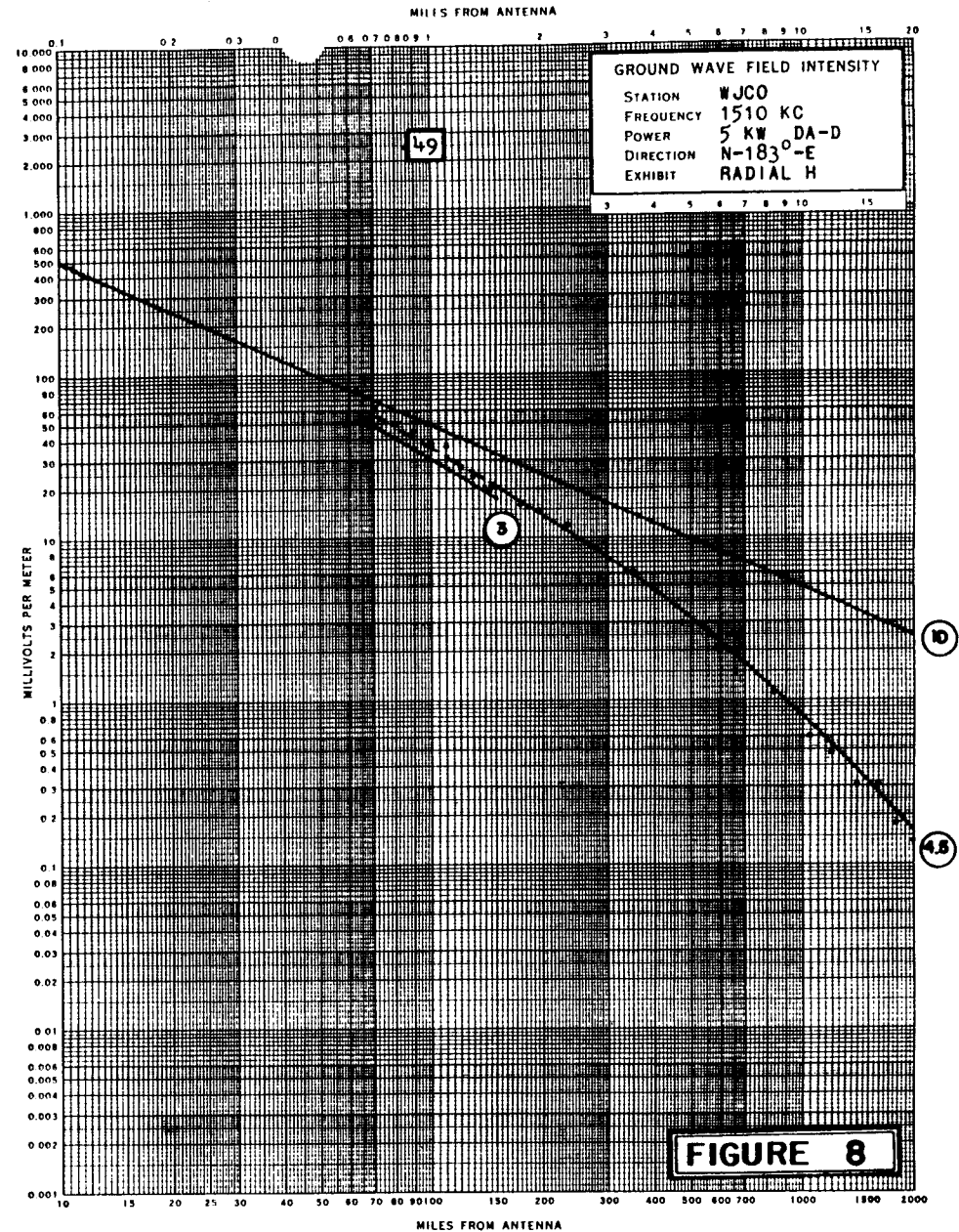
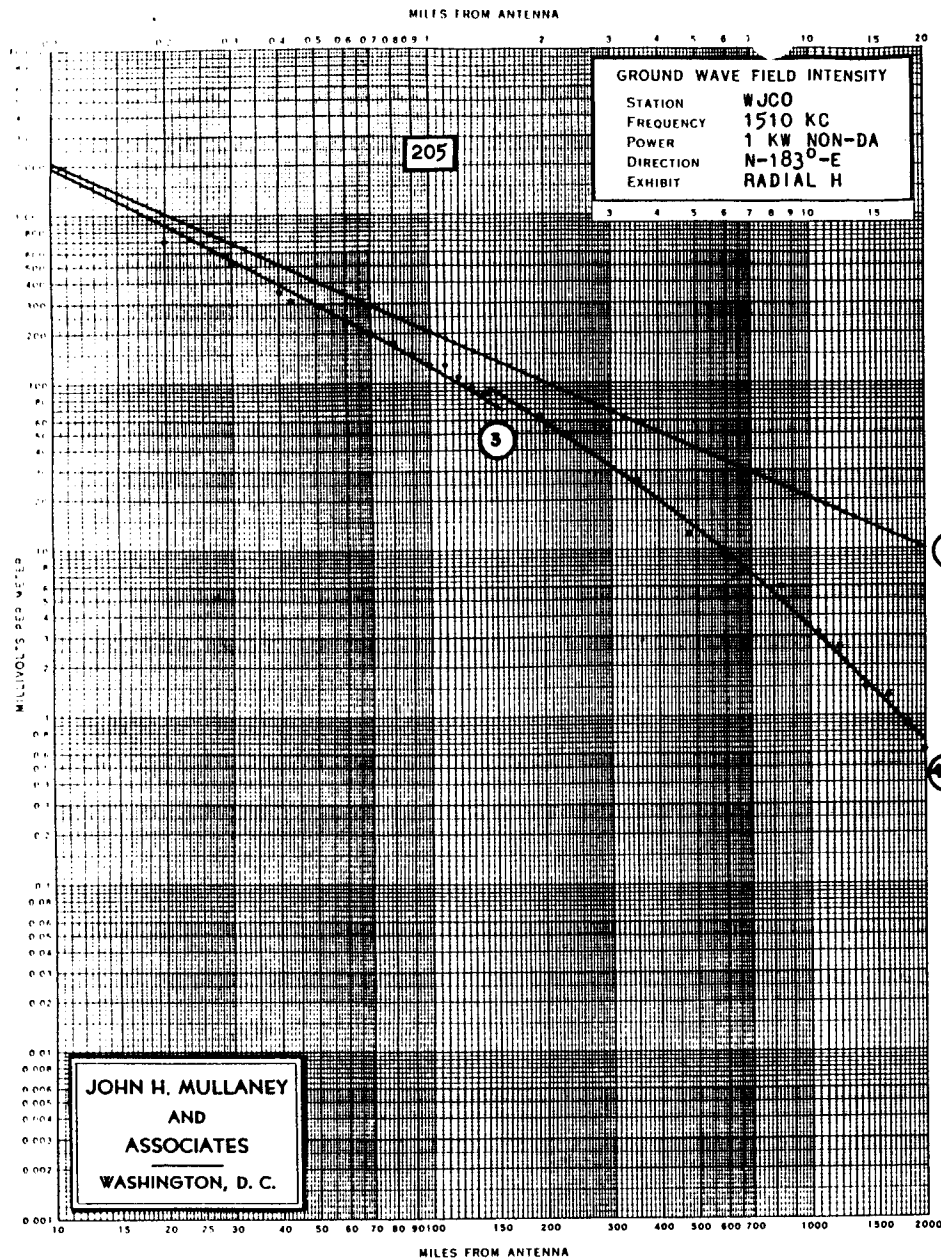
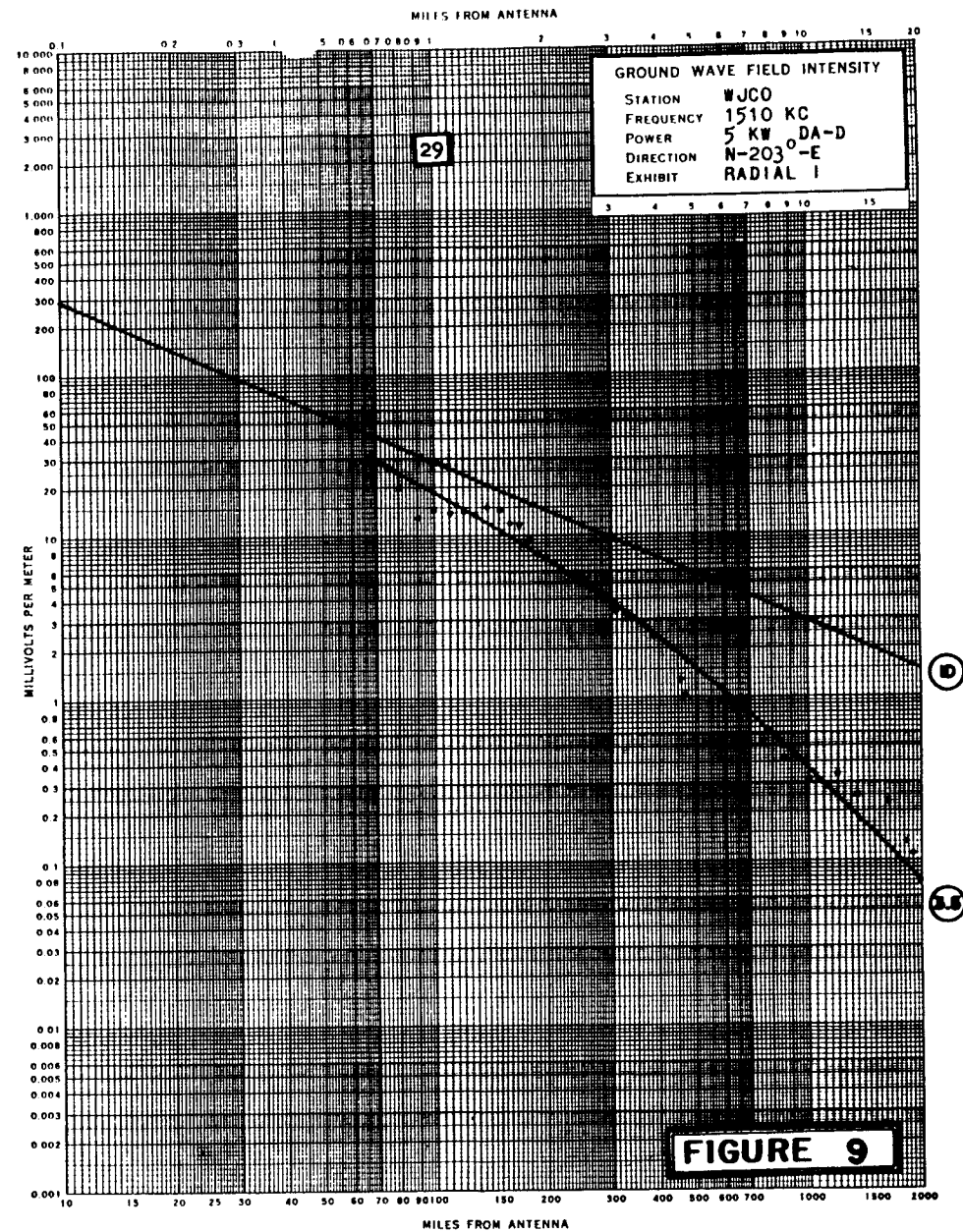
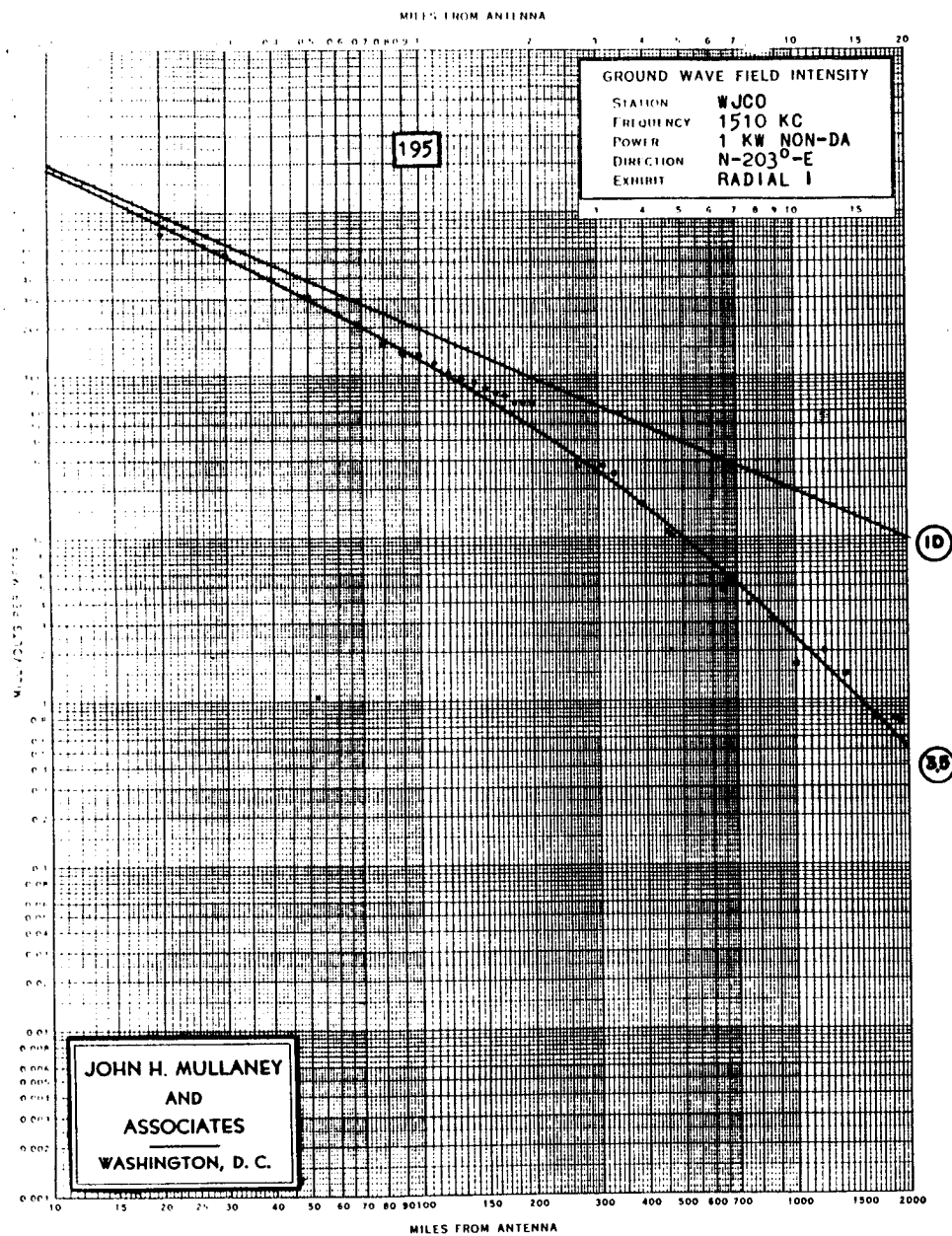


TABLE IX
RADIAL MEASUREMENT DATA

RADIO STATION WJCO
JACKSON, MICHIGAN
1510KC - 5KW - DA-D

RADIAL I N-203°-E

<u>Point Number</u>	<u>Distance (miles)</u>	<u>Non-DA Field (mv/m)</u>	<u>DA Day Field (mv/m)</u>
1	0.20	740	---
2	0.30	560	---
3	0.40	400	---
4	0.50	310	---
5	0.60	245	---
6	0.68	210	32
7	0.80	160	20
8	0.90	135	13
9	1.00	135	14.5
10	1.10	120	14
11	1.20	105	14
12	1.30	96	13.5
13	1.40	90	15
14	1.50	83	14.5
15	1.60	78	12
16	1.70	75	11.5
17	1.80	68	9.4
18	1.90	68	7.7
19	2.00	68	7.2
20	2.60	27.5	4.9
21	3.10	28	3.5
22 (mp)	3.30	25	3.2
23	3.90	16.5	2.4
24	4.55	11	1.3
25	4.70	10	1.05
26	6.40	4.8	0.86
27	7.50	3.9	0.54
28	8.60	3.2	0.42
29	10.1	1.7	0.32
30	11.9	2.0	0.34
31	13.5	1.5	0.25
32	16.3	0.82	0.23
33	18.4	0.78	0.13
34	19.0	0.74	0.11



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TABLE X

RADIAL MEASUREMENT DATA

RADIO STATION WJCO
JACKSON, MICHIGAN
1510KC - 5KW - DA-D

RADIAL J N-243⁰-E

<u>Distance</u> <u>(miles)</u>	<u>Non-DA</u> <u>Field (mv/m)</u>	<u>DA Day</u> <u>Field (mv/m)</u>
0.20	890	---
0.30	600	---
0.40	430	---
0.50	365	---
0.60	265	---
0.69	200	40
0.80	200	29
0.90	165	17.5
1.00	150	17
1.63	86	19
1.70	86	14
1.80	76	10
1.90	68	6.8
2.00	63	4.5
2.95	40	6.5
3.60	29.5	5.9
3.90	25	5.6
4.25	21.5	3.9
5.10	12.5	2.5
5.85	13.5	3.35
6.15	10.5	2.15
6.95	8.9	1.7
8.15	5.2	1.0
10.2	3.25	0.59
11.8	1.4	0.37
13.7	1.15	0.33
15.9	1.05	0.23
17.6	0.9	0.2
19.4	0.6	0.13

