

ATTACHMENT

COMMUNITY COVERAGE SUPPLEMENTAL SHOWING
USING AN ALTERNATIVE CONTOUR PREDICTION METHOD
STATION WRNX
AMHERST, MASSACHUSETTS
CH 265A 0.87 KW (DA-MAX) 262 M

Attached as Figure 2A is a map showing portions of the FCC predicted coverage contours. As indicated, the FCC predicted 70 dBu contour does not encompass 80% of the principal community of Amherst. However, using a terrain sensitive propagation model, the 70 dBu is predicted to encompass at 100% of Amherst.

Justification for Supplemental Showing

It is believed that a supplemental showing is warranted based on the FCC's guidelines for considering supplemental showings in the context of compliance with coverage of the community of license (Section 73.315). Specifically, a supplemental showing using an alternative contour prediction method is justified in this instance in accordance with Section 73.313(e) due to the "flat terrain" along radials towards Amherst. In this regard, it is noted that the F(50,50) curves presume average terrain with a terrain roughness (or Δh) of 50 meters, whereas based on the methods of Section 73.313, Δh was determined to be 11 meters along the 41° true azimuth through Amherst.¹ The FCC considers terrain to "depart widely" from the 50 meter Δh standard where the Δh value is 20 meters or less or 100 meters or greater.

Longley-Rice Coverage Analysis

The Longley-Rice propagation model² was used as more precise alternative to the Commission's standard prediction method to determine the location of WRNX's proposed 70 dBu

¹ The terrain roughness was determined using the NGDC 30-second terrain database.

² Rice, P.L., A.G. Longley, K.A. Norton, and A.P. Barsis, "Transmission Loss Predictions for Tropospheric Communication Circuits," Technical Note 101 (Issued May 7, 1965, Revised January 1, 1967) National Bureau of Standards, Boulder, Colorado.

See also Longley, A.G., and P.L. Rice, "Prediction of Tropospheric Radio transmission Loss Over Irregular Terrain: A Computer Method-1969," ESSA Technical Report ERL-ITS 67, Institute for Telecommunications Sciences, Boulder, Colorado, July 1968.

contour. The Amherst town limits are located across the arc of azimuths from 23° clockwise to 67° true from the proposed WRNX transmitter site. Therefore, for the Longley-Rice analysis terrain profiles were prepared for the following radials: 23°, 30°, 40°, 50°, 60° and 67° true. Figure 1A, Sheets 1 thru 6, depicts the 23°, 30°, 40°, 50°, 60° and 67° true terrain profiles, respectively. The terrain data was derived from the NGDC 30-second terrain database. Using these terrain elevations, calculations of the field strength were made at 0.1-km intervals along each radial using the Longley-Rice propagation model. The following parameters were employed in the calculations:

Model	Point-to-point irregular
Location Variability	50%
Time Variability	50%
Situation Variability	50%
Frequency	100.9 MHz
Polarization	Horizontal
Conductivity	0.005 S/m
Dielectric Constant	15.0
Transmitter Antenna Height AMSL	183 m
Transmitting Antenna	Directional
Maximum Effective Radiated Power	870 W
Receive Antenna Height	9.1 m
Clutter Factor	3 db

As indicated above, a 3 dB clutter factor was used to take into account field strength variations due to local clutter (e.g. trees, buildings).³ The results of the study are illustrated graphically on Figure 1A. The field strength data along each radial was analyzed to determine the "median" values using polynomial curve fitting (based on the method of least

³ Use of a 3 dB clutter factor appears "conservative" for the propagation paths considered here. For instance, a 2 dB clutter factor was used by the FCC to establish that KALF-FM at Red Bluff, California encompassed its main studio location - see Memorandum from William Daniel, Chief, Propagation Analysis Bureau, OET, to Dennis Williams, Chief, FM Branch, MMB, dated Oct. 6, 1992 concerning the supplemental showing of 3.16 mV/m contour of KALF-FM, Red Bluff, CA, File BLH-851125KH. In addition, Bullington indicated that the average loss from surrounding trees for horizontal polarization may be 2 to 3 dB (see Kenneth Bullington, "Radio Propagation at Frequencies Above 30 Megacycles, Proc IRE, October, 1947).

squares).⁴ The location of the "median" 70 dBu field strength level is indicated on each radial based on this analysis.

The 70 dBu contour based on the alternate terrain method (Longley-Rice) has been depicted on Figure 2A. Also shown are the legal boundaries of Amherst based on the 2000 Census, the proposed WRNX transmitter site and the protected 60 dBu contour based on the FCC's standard prediction method [F(50,50)]. It has been determined that the Longley-Rice 70 dBu encompasses 100% of the land area within the Amherst town limits.

Compliance with 70 dBu Contour 10% Extension Criteria

The following tabulates the distance to the 70 dBu contour along each radial based on the FCC's standard prediction method [F(50,50)] and the Longley-Rice alternate terrain method, the difference and percent change:

Radial	70 dBu Field Strength (km)		Difference	
	FCC F(50,50)	Longley-Rice	Km	Percent
23°T	17.8	28.0	10.2	+57.3
30°T	17.7	27.0	9.3	+52.5
40°T	16.9	27.0	10.0	+59.8
50°T	16.6	21.5	4.9	+29.5
60°T	16.4	20.5	4.1	+25.0
67°T	16.1	21.0	4.9	+30.4

The difference between the distances to the 70 dBu contours exceeds 10 percent.

The elevation and field strength data used to prepare the graphs and coverage map are attached as Figure 3A.

Sample Calculation

The following provides a sample Longley-Rice calculation along the 40° true radial.

⁴ The polynomial equation used for the analysis is shown on each graph as a dashed line along with the R-squared value, which helps determine the line of best fit.

Free Space Field (0.87 kW @ 12.2 km)	84.6 dBu
Additional estimated transmission loss	6.8 dB
Clutter Loss	3 dB
Net received field	74.8 dBu

Conclusion

As demonstrated above, use of a supplemental showing is warranted based on the FCC's guidelines for considering supplemental showings in the context of demonstrating compliance with coverage of the community of license (Section 73.315). In addition, the WRNX application complies with the community of license coverage requirements of Section 73.315 based on the supplemental showing.

WRNX 23 Degrees True

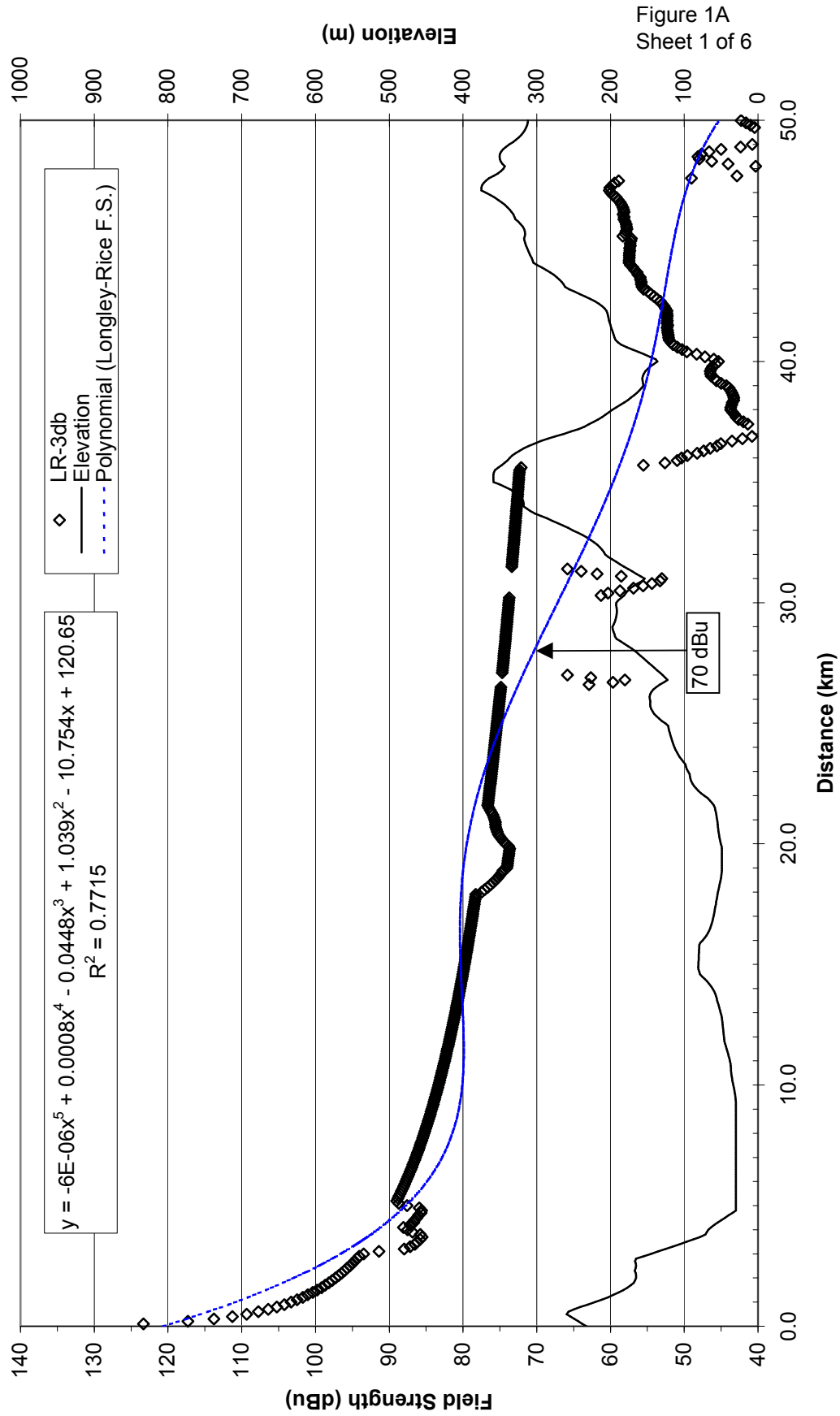


Figure 1A
Sheet 1 of 6

WRNX 30 Degrees True

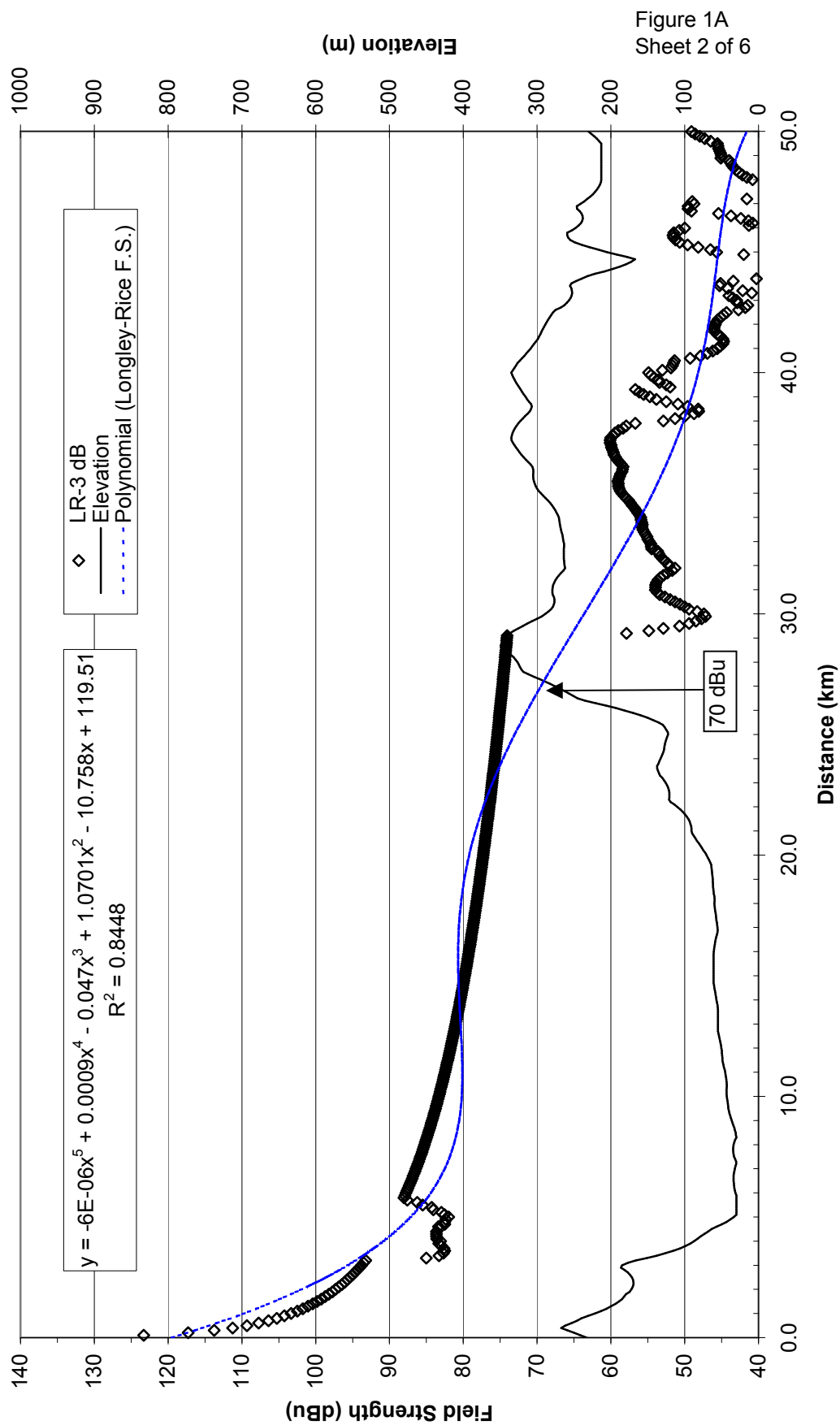


Figure 1A
Sheet 2 of 6

WRNX 40 Degrees True

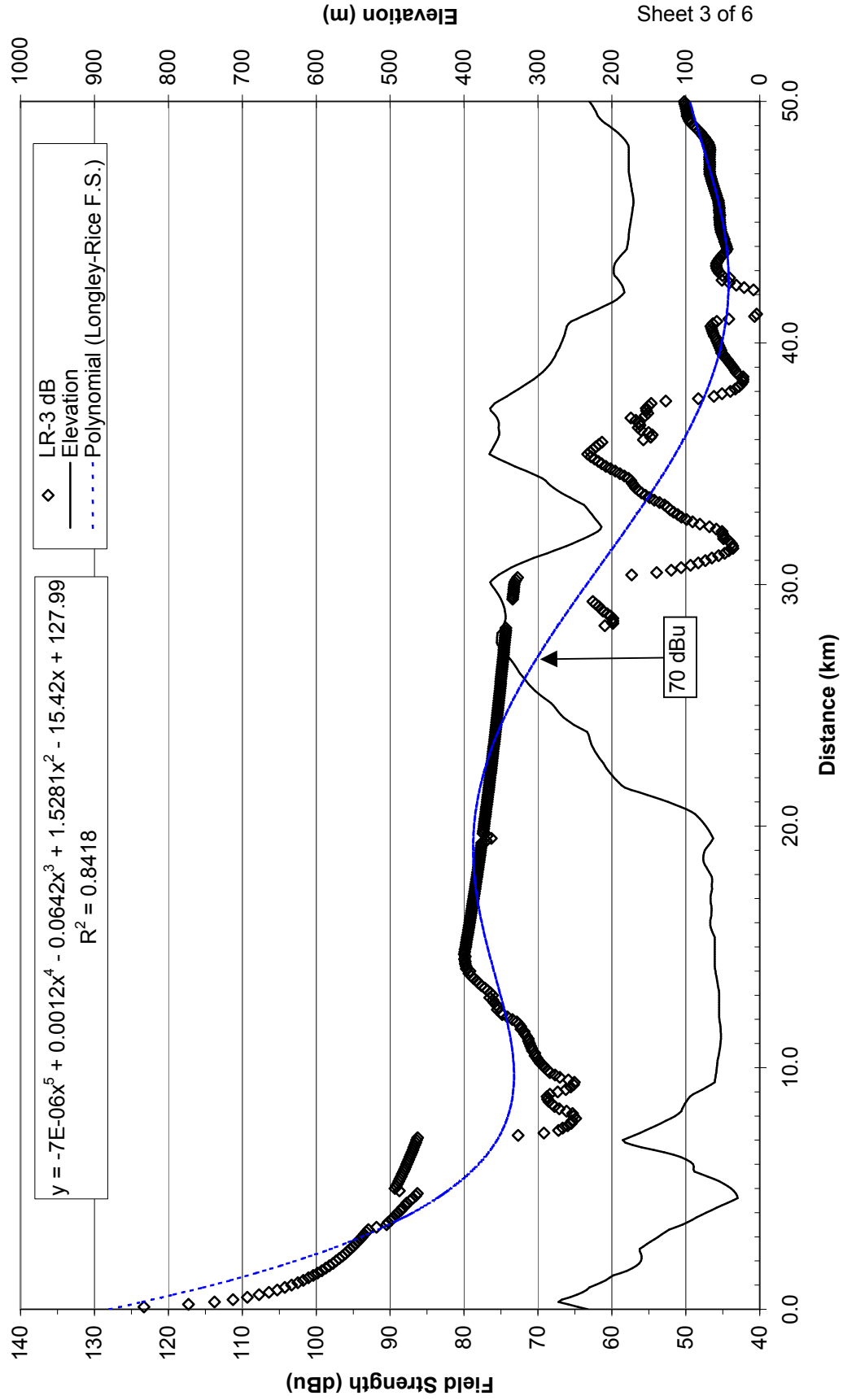


Figure 1A
Sheet 3 of 6

WRNX 50 Degrees True

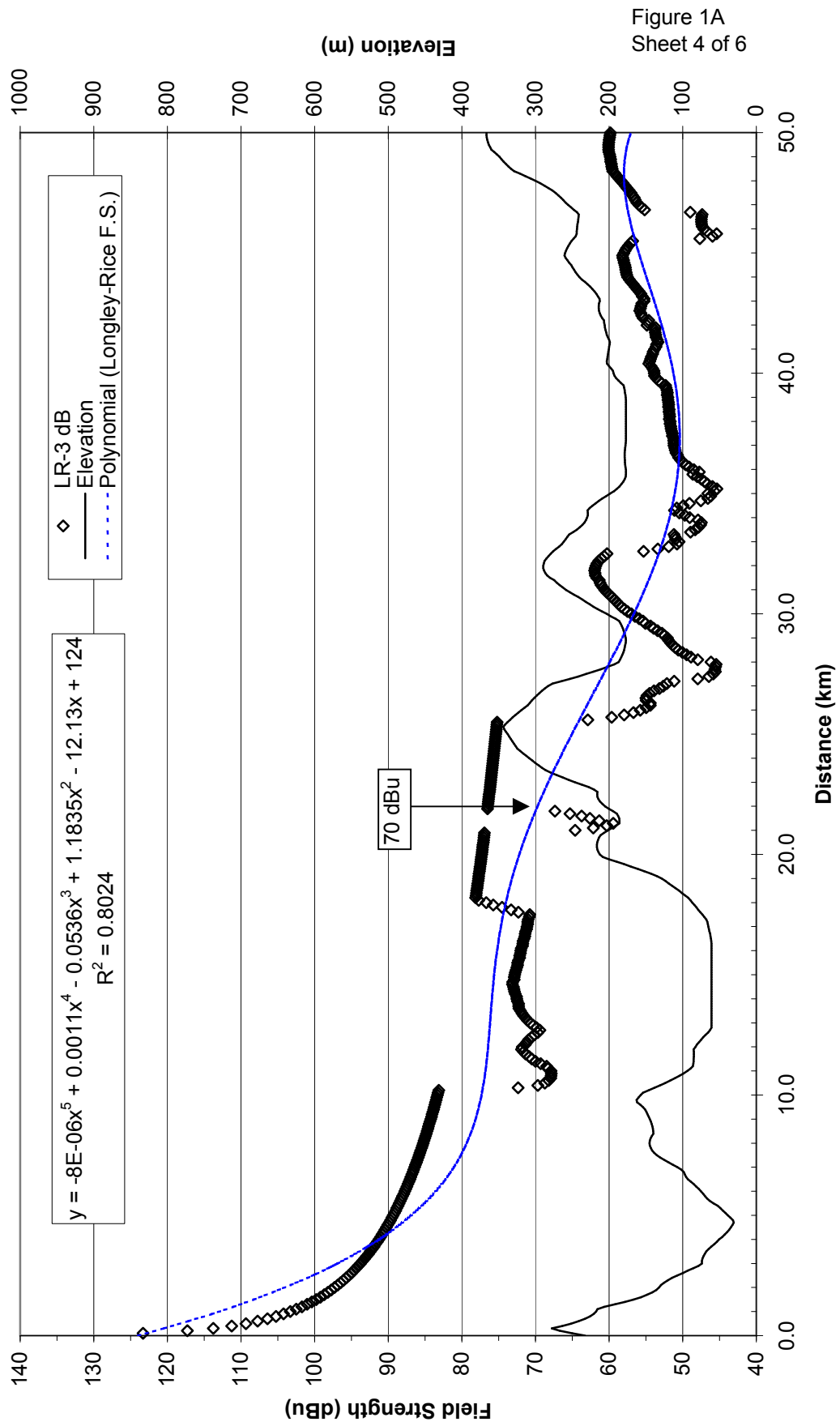


Figure 1A
Sheet 4 of 6

WRNX 60 Degrees True

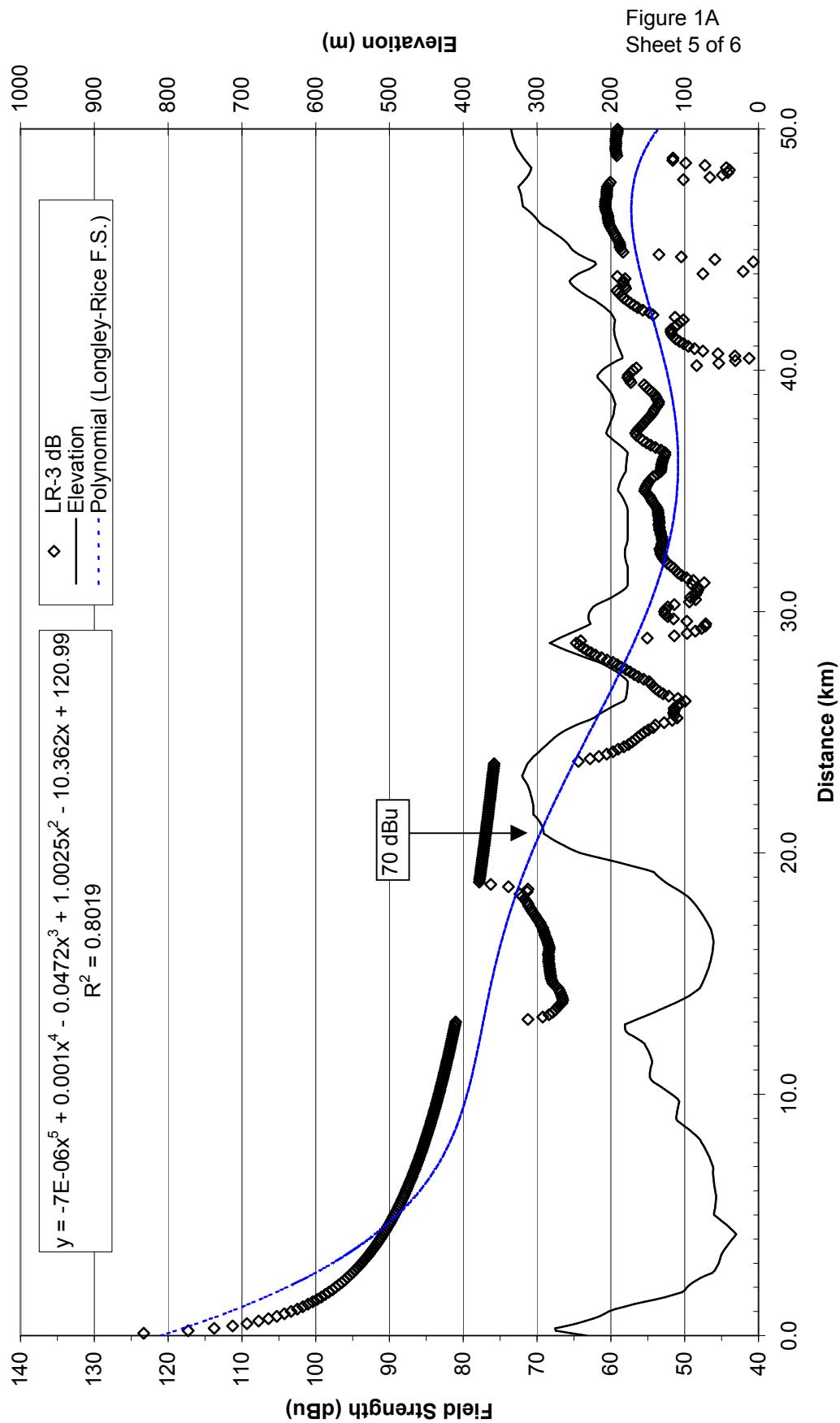


Figure 1A
Sheet 5 of 6

WRNX 67 Degrees True

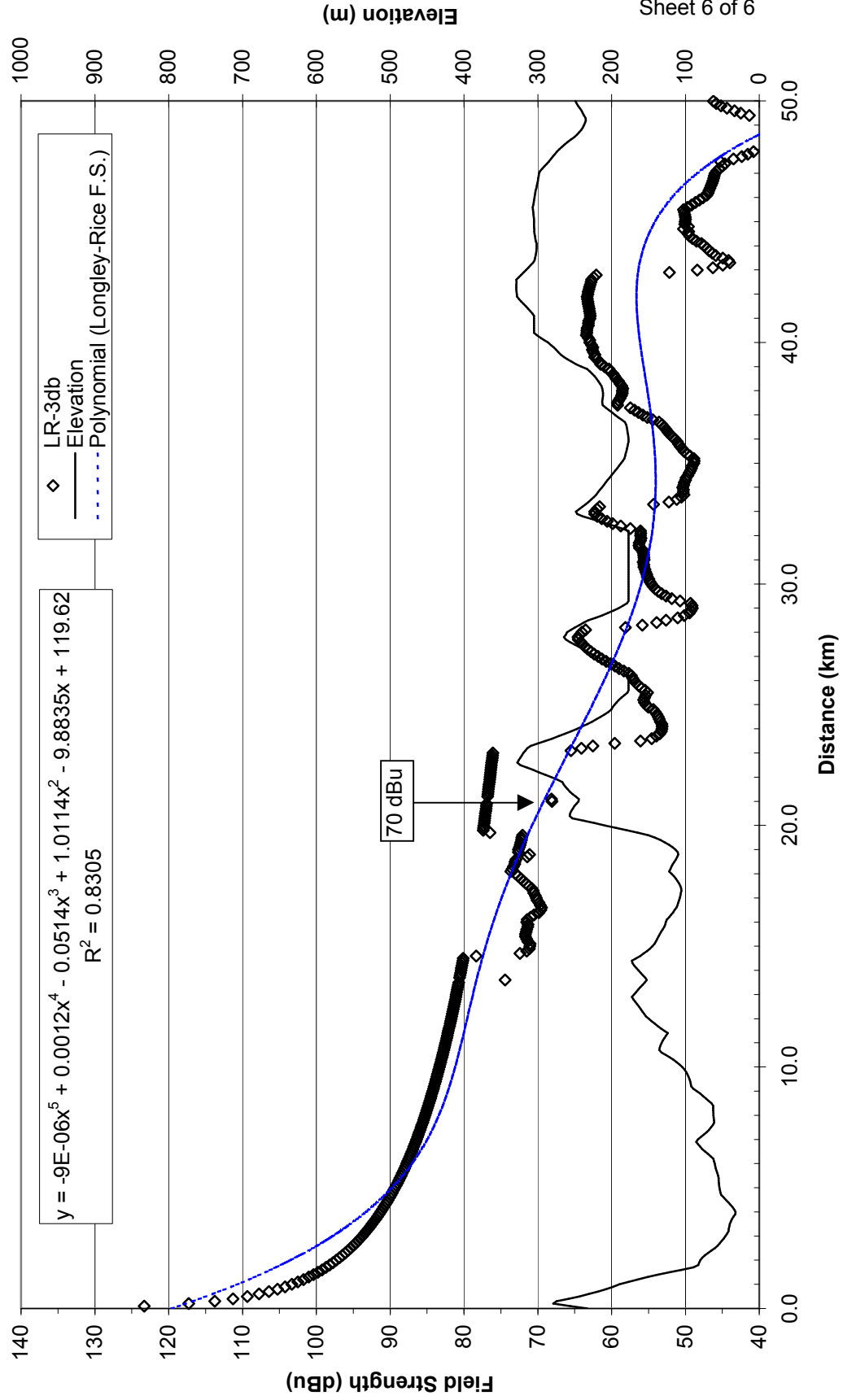
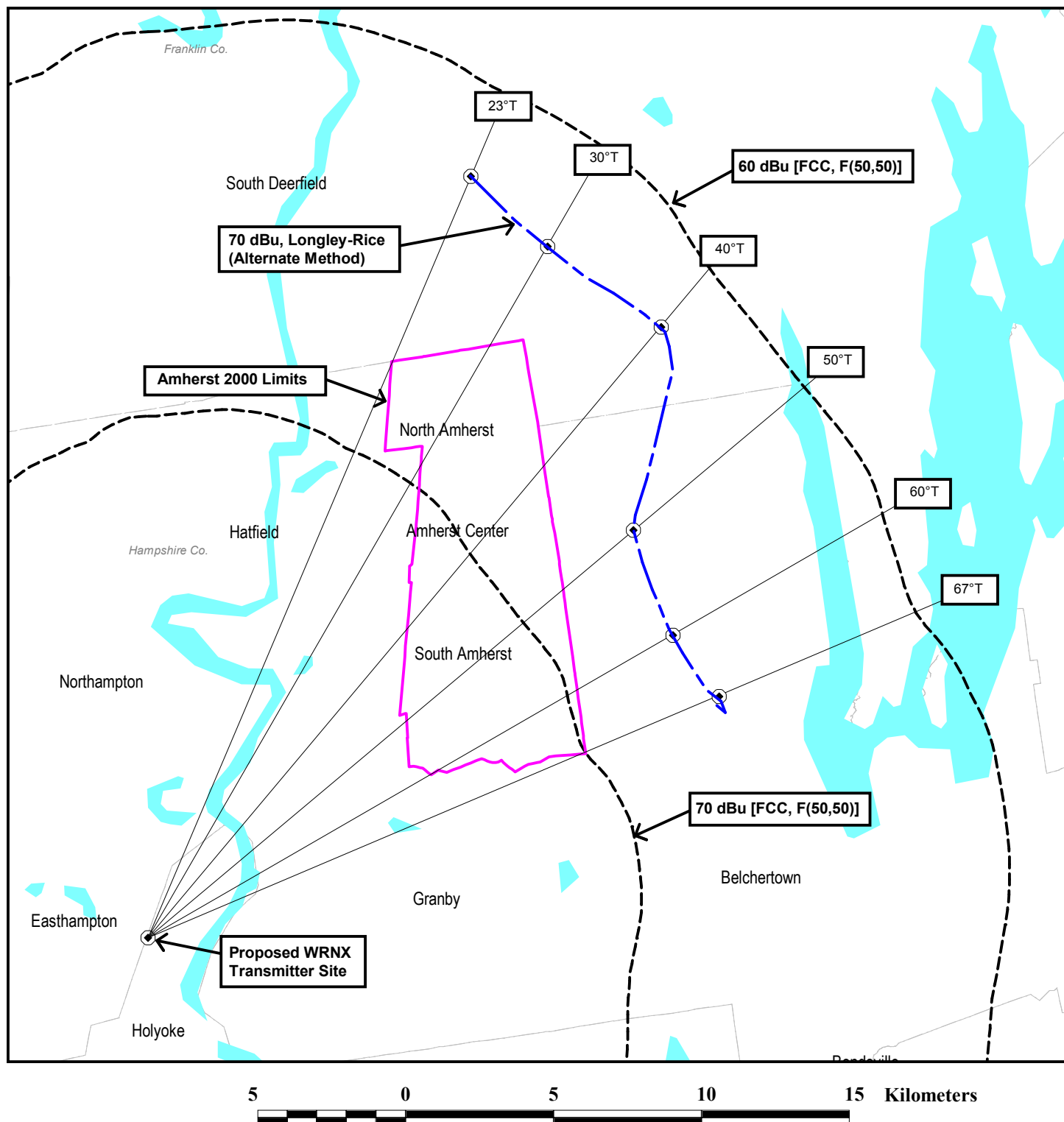


Figure 1A
Sheet 6 of 6

Figure 2A



**70 DBU - SUPPLEMENTAL SHOWING
STATION WRNX
AMHERST, MASSACHUSETTS
CH 265A 0.87 KW (MAX-DA) 262 M**

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3
Sheet 1 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	0.0	247	233	30	0.0	247	233	40	0.0	247	233
23	0.1	123	238	30	0.1	123	241	40	0.1	123	246
23	0.2	117	243	30	0.2	117	250	40	0.2	117	259
23	0.3	114	249	30	0.3	114	259	40	0.3	114	272
23	0.4	111	254	30	0.4	111	267	40	0.4	111	268
23	0.5	109	259	30	0.5	109	262	40	0.5	109	257
23	0.6	108	257	30	0.6	108	253	40	0.6	108	247
23	0.7	106	249	30	0.7	106	246	40	0.7	106	240
23	0.8	105	241	30	0.8	105	240	40	0.8	105	234
23	0.9	104	231	30	0.9	104	231	40	0.9	104	230
23	1.0	103	221	30	1.0	103	222	40	1.0	103	223
23	1.1	102	212	30	1.1	102	213	40	1.1	102	215
23	1.2	102	204	30	1.2	102	206	40	1.2	102	209
23	1.3	101	196	30	1.3	101	200	40	1.3	101	203
23	1.4	100	189	30	1.4	100	194	40	1.4	100	198
23	1.5	100	183	30	1.5	100	189	40	1.5	100	188
23	1.6	99	177	30	1.6	99	185	40	1.6	99	179
23	1.7	99	172	30	1.7	99	182	40	1.7	99	172
23	1.8	98	169	30	1.8	98	180	40	1.8	98	167
23	1.9	98	167	30	1.9	98	175	40	1.9	98	163
23	2.0	97	165	30	2.0	97	172	40	2.0	97	161
23	2.1	97	165	30	2.1	97	170	40	2.1	97	160
23	2.2	96	166	30	2.2	96	169	40	2.2	96	160
23	2.3	96	167	30	2.3	96	169	40	2.3	96	161
23	2.4	96	166	30	2.4	96	170	40	2.4	96	162
23	2.5	95	165	30	2.5	95	172	40	2.5	95	162
23	2.6	95	166	30	2.6	95	174	40	2.6	95	157
23	2.7	95	167	30	2.7	95	177	40	2.7	95	152
23	2.8	94	165	30	2.8	94	181	40	2.8	94	147
23	2.9	94	155	30	2.9	94	186	40	2.9	94	142
23	3.0	93	145	30	3.0	94	185	40	3.0	94	137
23	3.1	91	135	30	3.1	93	177	40	3.1	93	133
23	3.2	88	125	30	3.2	93	166	40	3.2	93	128
23	3.3	87	116	30	3.3	85	151	40	3.3	93	123
23	3.4	87	106	30	3.4	83	138	40	3.4	92	114
23	3.5	86	97	30	3.5	83	126	40	3.5	90	104
23	3.6	86	88	30	3.6	82	115	40	3.6	90	98
23	3.7	86	79	30	3.7	83	106	40	3.7	90	92
23	3.8	86	71	30	3.8	83	99	40	3.8	90	85
23	3.9	87	69	30	3.9	83	92	40	3.9	89	79
23	4.0	87	67	30	4.0	83	87	40	4.0	89	72

Figure 3
Sheet 2 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	4.1	88	64	30	4.1	84	83	40	4.1	89	66
23	4.2	87	59	30	4.2	84	78	40	4.2	88	59
23	4.3	87	55	30	4.3	84	73	40	4.3	88	51
23	4.4	87	50	30	4.4	84	68	40	4.4	88	44
23	4.5	86	45	30	4.5	83	63	40	4.5	87	36
23	4.6	86	40	30	4.6	83	57	40	4.6	87	30
23	4.7	86	35	30	4.7	82	50	40	4.7	87	31
23	4.8	86	30	30	4.8	83	43	40	4.8	86	32
23	4.9	86	30	30	4.9	82	38	40	4.9	89	35
23	5.0	88	30	30	5.0	82	33	40	5.0	89	39
23	5.1	89	30	30	5.1	83	30	40	5.1	89	43
23	5.2	89	30	30	5.2	83	30	40	5.2	89	49
23	5.3	89	30	30	5.3	84	30	40	5.3	89	55
23	5.4	89	30	30	5.4	84	30	40	5.4	89	62
23	5.5	89	30	30	5.5	85	30	40	5.5	89	71
23	5.6	88	30	30	5.6	86	30	40	5.6	88	80
23	5.7	88	30	30	5.7	88	30	40	5.7	88	88
23	5.8	88	30	30	5.8	88	30	40	5.8	88	90
23	5.9	88	30	30	5.9	88	30	40	5.9	88	89
23	6.0	88	30	30	6.0	88	31	40	6.0	88	90
23	6.1	88	30	30	6.1	88	32	40	6.1	88	94
23	6.2	87	30	30	6.2	87	33	40	6.2	87	99
23	6.3	87	30	30	6.3	87	33	40	6.3	87	107
23	6.4	87	30	30	6.4	87	34	40	6.4	87	117
23	6.5	87	30	30	6.5	87	34	40	6.5	87	129
23	6.6	87	30	30	6.6	87	34	40	6.6	87	143
23	6.7	87	30	30	6.7	87	34	40	6.7	87	160
23	6.8	87	30	30	6.8	87	33	40	6.8	87	172
23	6.9	87	30	30	6.9	87	33	40	6.9	87	182
23	7.0	86	30	30	7.0	86	32	40	7.0	86	185
23	7.1	86	30	30	7.1	86	31	40	7.1	86	177
23	7.2	86	30	30	7.2	86	30	40	7.2	73	170
23	7.3	86	30	30	7.3	86	30	40	7.3	69	162
23	7.4	86	30	30	7.4	86	32	40	7.4	67	155
23	7.5	86	30	30	7.5	86	33	40	7.5	67	148
23	7.6	86	30	30	7.6	86	34	40	7.6	66	141
23	7.7	86	30	30	7.7	86	34	40	7.7	66	134
23	7.8	85	30	30	7.8	85	34	40	7.8	65	127
23	7.9	85	30	30	7.9	85	34	40	7.9	65	120
23	8.0	85	30	30	8.0	85	34	40	8.0	65	114
23	8.1	85	30	30	8.1	85	33	40	8.1	65	110

Figure 3
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<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	8.2	85	30	30	8.2	85	32	40	8.2	66	106
23	8.3	85	30	30	8.3	85	30	40	8.3	67	105
23	8.4	85	30	30	8.4	85	31	40	8.4	68	103
23	8.5	85	30	30	8.5	85	31	40	8.5	68	102
23	8.6	85	30	30	8.6	85	32	40	8.6	69	99
23	8.7	85	30	30	8.7	85	33	40	8.7	69	97
23	8.8	84	30	30	8.8	84	34	40	8.8	69	94
23	8.9	84	30	30	8.9	84	35	40	8.9	68	90
23	9.0	84	30	30	9.0	84	36	40	9.0	67	84
23	9.1	84	30	30	9.1	84	37	40	9.1	66	78
23	9.2	84	30	30	9.2	84	38	40	9.2	66	72
23	9.3	84	30	30	9.3	84	39	40	9.3	65	66
23	9.4	84	30	30	9.4	84	40	40	9.4	65	61
23	9.5	84	31	30	9.5	84	41	40	9.5	66	60
23	9.6	84	31	30	9.6	84	41	40	9.6	67	60
23	9.7	84	32	30	9.7	84	42	40	9.7	68	59
23	9.8	83	32	30	9.8	83	42	40	9.8	68	59
23	9.9	83	33	30	9.9	83	42	40	9.9	69	58
23	10.0	83	34	30	10.0	83	43	40	10.0	69	58
23	10.1	83	34	30	10.1	83	43	40	10.1	69	58
23	10.2	83	35	30	10.2	83	43	40	10.2	70	57
23	10.3	83	35	30	10.3	83	43	40	10.3	70	57
23	10.4	83	36	30	10.4	83	43	40	10.4	70	56
23	10.5	83	36	30	10.5	83	43	40	10.5	70	56
23	10.6	83	37	30	10.6	83	43	40	10.6	70	55
23	10.7	83	37	30	10.7	83	44	40	10.7	71	54
23	10.8	83	37	30	10.8	83	44	40	10.8	71	54
23	10.9	83	37	30	10.9	83	45	40	10.9	71	53
23	11.0	82	38	30	11.0	82	45	40	11.0	71	53
23	11.1	82	39	30	11.1	82	46	40	11.1	71	53
23	11.2	82	40	30	11.2	82	47	40	11.2	71	53
23	11.3	82	41	30	11.3	82	48	40	11.3	72	53
23	11.4	82	42	30	11.4	82	48	40	11.4	72	53
23	11.5	82	43	30	11.5	82	49	40	11.5	72	53
23	11.6	82	43	30	11.6	82	49	40	11.6	72	53
23	11.7	82	44	30	11.7	82	49	40	11.7	72	53
23	11.8	82	45	30	11.8	82	49	40	11.8	73	54
23	11.9	82	46	30	11.9	82	50	40	11.9	73	54
23	12.0	82	46	30	12.0	82	50	40	12.0	73	55
23	12.1	82	47	30	12.1	82	51	40	12.1	74	55
23	12.2	82	47	30	12.2	82	51	40	12.2	75	55

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	12.3	82	47	30	12.3	82	52	40	12.3	75	55
23	12.4	81	48	30	12.4	81	53	40	12.4	76	55
23	12.5	81	48	30	12.5	81	54	40	12.5	75	55
23	12.6	81	48	30	12.6	81	54	40	12.6	76	55
23	12.7	81	49	30	12.7	81	55	40	12.7	76	55
23	12.8	81	49	30	12.8	81	55	40	12.8	76	55
23	12.9	81	50	30	12.9	81	55	40	12.9	77	55
23	13.0	81	51	30	13.0	81	55	40	13.0	76	55
23	13.1	81	52	30	13.1	81	55	40	13.1	76	55
23	13.2	81	52	30	13.2	81	55	40	13.2	77	55
23	13.3	81	53	30	13.3	81	55	40	13.3	77	56
23	13.4	81	54	30	13.4	81	55	40	13.4	78	57
23	13.5	81	55	30	13.5	81	55	40	13.5	78	57
23	13.6	81	56	30	13.6	81	55	40	13.6	78	58
23	13.7	81	57	30	13.7	81	55	40	13.7	79	58
23	13.8	81	58	30	13.8	81	56	40	13.8	79	59
23	13.9	80	59	30	13.9	80	56	40	13.9	79	59
23	14.0	80	62	30	14.0	80	57	40	14.0	79	60
23	14.1	80	64	30	14.1	80	58	40	14.1	80	61
23	14.2	80	66	30	14.2	80	58	40	14.2	80	61
23	14.3	80	69	30	14.3	80	59	40	14.3	80	61
23	14.4	80	72	30	14.4	80	59	40	14.4	80	61
23	14.5	80	76	30	14.5	80	60	40	14.5	80	61
23	14.6	80	78	30	14.6	80	60	40	14.6	80	61
23	14.7	80	80	30	14.7	80	61	40	14.7	80	61
23	14.8	80	81	30	14.8	80	61	40	14.8	80	61
23	14.9	80	81	30	14.9	80	61	40	14.9	80	61
23	15.0	80	81	30	15.0	80	61	40	15.0	80	61
23	15.1	80	81	30	15.1	80	61	40	15.1	80	61
23	15.2	80	81	30	15.2	80	61	40	15.2	80	61
23	15.3	80	80	30	15.3	80	61	40	15.3	80	61
23	15.4	80	80	30	15.4	80	61	40	15.4	80	61
23	15.5	80	80	30	15.5	80	61	40	15.5	80	62
23	15.6	79	80	30	15.6	79	61	40	15.6	79	64
23	15.7	79	80	30	15.7	79	61	40	15.7	79	65
23	15.8	79	80	30	15.8	79	61	40	15.8	79	66
23	15.9	79	78	30	15.9	79	61	40	15.9	79	67
23	16.0	79	75	30	16.0	79	61	40	16.0	79	67
23	16.1	79	72	30	16.1	79	60	40	16.1	79	67
23	16.2	79	70	30	16.2	79	60	40	16.2	79	66
23	16.3	79	68	30	16.3	79	59	40	16.3	79	65

Figure 3
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<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	16.4	79	66	30	16.4	79	59	40	16.4	79	65
23	16.5	79	65	30	16.5	79	58	40	16.5	79	65
23	16.6	79	64	30	16.6	79	57	40	16.6	79	65
23	16.7	79	63	30	16.7	79	56	40	16.7	79	66
23	16.8	79	62	30	16.8	79	56	40	16.8	79	66
23	16.9	79	61	30	16.9	79	55	40	16.9	79	67
23	17.0	79	60	30	17.0	79	56	40	17.0	79	67
23	17.1	79	60	30	17.1	79	56	40	17.1	79	66
23	17.2	79	59	30	17.2	79	57	40	17.2	79	66
23	17.3	79	58	30	17.3	79	57	40	17.3	79	65
23	17.4	79	58	30	17.4	79	57	40	17.4	79	65
23	17.5	78	57	30	17.5	78	58	40	17.5	78	65
23	17.6	78	57	30	17.6	78	58	40	17.6	78	65
23	17.7	78	56	30	17.7	78	59	40	17.7	78	65
23	17.8	78	55	30	17.8	78	59	40	17.8	78	64
23	17.9	78	55	30	17.9	78	60	40	17.9	78	65
23	18.0	77	54	30	18.0	78	60	40	18.0	78	67
23	18.1	77	54	30	18.1	78	60	40	18.1	78	68
23	18.2	77	53	30	18.2	78	59	40	18.2	78	70
23	18.3	76	52	30	18.3	78	60	40	18.3	78	72
23	18.4	76	51	30	18.4	78	60	40	18.4	78	74
23	18.5	76	51	30	18.5	78	61	40	18.5	78	76
23	18.6	75	50	30	18.6	78	61	40	18.6	78	76
23	18.7	75	50	30	18.7	78	62	40	18.7	78	77
23	18.8	75	49	30	18.8	78	62	40	18.8	78	76
23	18.9	75	49	30	18.9	78	62	40	18.9	78	75
23	19.0	74	49	30	19.0	78	62	40	19.0	78	74
23	19.1	74	49	30	19.1	78	62	40	19.1	78	72
23	19.2	74	49	30	19.2	78	63	40	19.2	78	69
23	19.3	74	49	30	19.3	78	63	40	19.3	78	67
23	19.4	74	49	30	19.4	78	63	40	19.4	77	65
23	19.5	74	49	30	19.5	78	64	40	19.5	76	63
23	19.6	74	49	30	19.6	77	64	40	19.6	77	65
23	19.7	74	49	30	19.7	77	65	40	19.7	77	66
23	19.8	74	49	30	19.8	77	67	40	19.8	77	68
23	19.9	74	49	30	19.9	77	69	40	19.9	77	70
23	20.0	74	50	30	20.0	77	70	40	20.0	77	73
23	20.1	74	51	30	20.1	77	72	40	20.1	77	75
23	20.2	75	52	30	20.2	77	75	40	20.2	77	78
23	20.3	75	52	30	20.3	77	77	40	20.3	77	81
23	20.4	75	53	30	20.4	77	79	40	20.4	77	84

Figure 3
Sheet 6 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	20.5	75	54	30	20.5	77	81	40	20.5	77	88
23	20.6	75	54	30	20.6	77	83	40	20.6	77	92
23	20.7	76	54	30	20.7	77	86	40	20.7	77	99
23	20.8	76	55	30	20.8	77	88	40	20.8	77	107
23	20.9	76	55	30	20.9	77	90	40	20.9	77	115
23	21.0	76	55	30	21.0	77	91	40	21.0	77	124
23	21.1	76	56	30	21.1	77	91	40	21.1	77	133
23	21.2	76	56	30	21.2	77	91	40	21.2	77	143
23	21.3	76	57	30	21.3	77	92	40	21.3	77	153
23	21.4	76	58	30	21.4	77	93	40	21.4	77	163
23	21.5	77	58	30	21.5	77	95	40	21.5	77	174
23	21.6	77	60	30	21.6	77	97	40	21.6	77	182
23	21.7	77	62	30	21.7	77	100	40	21.7	77	187
23	21.8	77	65	30	21.8	77	103	40	21.8	77	191
23	21.9	77	68	30	21.9	77	106	40	21.9	77	194
23	22.0	76	73	30	22.0	76	110	40	22.0	76	197
23	22.1	76	77	30	22.1	76	114	40	22.1	76	200
23	22.2	76	81	30	22.2	76	119	40	22.2	76	203
23	22.3	76	84	30	22.3	76	121	40	22.3	76	205
23	22.4	76	87	30	22.4	76	121	40	22.4	76	207
23	22.5	76	89	30	22.5	76	121	40	22.5	76	210
23	22.6	76	91	30	22.6	76	121	40	22.6	76	212
23	22.7	76	92	30	22.7	76	121	40	22.7	76	214
23	22.8	76	92	30	22.8	76	122	40	22.8	76	216
23	22.9	76	93	30	22.9	76	124	40	22.9	76	219
23	23.0	76	95	30	23.0	76	126	40	23.0	76	221
23	23.1	76	97	30	23.1	76	128	40	23.1	76	223
23	23.2	76	98	30	23.2	76	130	40	23.2	76	225
23	23.3	76	98	30	23.3	76	133	40	23.3	76	226
23	23.4	76	101	30	23.4	76	135	40	23.4	76	228
23	23.5	76	104	30	23.5	76	136	40	23.5	76	229
23	23.6	76	106	30	23.6	76	137	40	23.6	76	230
23	23.7	76	108	30	23.7	76	137	40	23.7	76	231
23	23.8	76	110	30	23.8	76	136	40	23.8	76	232
23	23.9	76	112	30	23.9	76	134	40	23.9	76	234
23	24.0	76	113	30	24.0	76	133	40	24.0	76	239
23	24.1	76	114	30	24.1	76	131	40	24.1	76	246
23	24.2	76	116	30	24.2	76	130	40	24.2	76	251
23	24.3	76	117	30	24.3	76	129	40	24.3	76	257
23	24.4	76	118	30	24.4	76	128	40	24.4	76	261
23	24.5	76	119	30	24.5	76	127	40	24.5	76	265

Figure 3
Sheet 7 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	24.6	76	120	30	24.6	76	127	40	24.6	76	269
23	24.7	75	120	30	24.7	75	126	40	24.7	75	272
23	24.8	75	121	30	24.8	75	125	40	24.8	75	274
23	24.9	75	122	30	24.9	75	124	40	24.9	75	277
23	25.0	75	126	30	25.0	75	123	40	25.0	75	279
23	25.1	75	130	30	25.1	75	123	40	25.1	75	282
23	25.2	75	134	30	25.2	75	125	40	25.2	75	287
23	25.3	75	138	30	25.3	75	127	40	25.3	75	292
23	25.4	75	141	30	25.4	75	130	40	25.4	75	296
23	25.5	75	143	30	25.5	75	135	40	25.5	75	300
23	25.6	75	145	30	25.6	75	142	40	25.6	75	304
23	25.7	75	146	30	25.7	75	151	40	25.7	75	307
23	25.8	75	146	30	25.8	75	160	40	25.8	75	310
23	25.9	75	146	30	25.9	75	170	40	25.9	75	313
23	26.0	75	147	30	26.0	75	181	40	26.0	75	316
23	26.1	75	147	30	26.1	75	193	40	26.1	75	318
23	26.2	75	146	30	26.2	75	206	40	26.2	75	321
23	26.3	75	145	30	26.3	75	220	40	26.3	75	324
23	26.4	75	142	30	26.4	75	235	40	26.4	75	326
23	26.5	75	138	30	26.5	75	245	40	26.5	75	328
23	26.6	63	133	30	26.6	75	251	40	26.6	75	330
23	26.7	60	128	30	26.7	75	257	40	26.7	75	332
23	26.8	58	123	30	26.8	75	263	40	26.8	75	335
23	26.9	63	126	30	26.9	75	269	40	26.9	75	337
23	27.0	66	129	30	27.0	75	276	40	27.0	75	340
23	27.1	75	133	30	27.1	75	282	40	27.1	75	343
23	27.2	75	137	30	27.2	75	289	40	27.2	75	346
23	27.3	75	140	30	27.3	75	297	40	27.3	75	349
23	27.4	75	144	30	27.4	75	304	40	27.4	75	351
23	27.5	75	148	30	27.5	75	312	40	27.5	75	354
23	27.6	75	152	30	27.6	75	319	40	27.6	75	356
23	27.7	74	155	30	27.7	74	321	40	27.7	74	356
23	27.8	74	159	30	27.8	74	323	40	27.8	74	355
23	27.9	74	163	30	27.9	74	325	40	27.9	74	355
23	28.0	74	167	30	28.0	74	327	40	28.0	74	355
23	28.1	74	171	30	28.1	74	329	40	28.1	74	352
23	28.2	74	176	30	28.2	74	332	40	28.2	74	349
23	28.3	74	181	30	28.3	74	335	40	28.3	61	347
23	28.4	74	186	30	28.4	74	339	40	28.4	60	345
23	28.5	74	192	30	28.5	74	343	40	28.5	60	344
23	28.6	74	194	30	28.6	74	348	40	28.6	60	344

Figure 3
Sheet 8 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	28.7	74	195	30	28.7	74	349	40	28.7	60	344
23	28.8	74	196	30	28.8	74	347	40	28.8	61	344
23	28.9	74	197	30	28.9	74	345	40	28.9	61	345
23	29.0	74	197	30	29.0	74	343	40	29.0	61	345
23	29.1	74	196	30	29.1	74	342	40	29.1	62	346
23	29.2	74	194	30	29.2	58	337	40	29.2	62	347
23	29.3	74	193	30	29.3	55	331	40	29.3	63	349
23	29.4	74	192	30	29.4	53	326	40	29.4	73	350
23	29.5	74	192	30	29.5	51	319	40	29.5	73	352
23	29.6	74	192	30	29.6	49	313	40	29.6	73	354
23	29.7	74	192	30	29.7	48	307	40	29.7	73	356
23	29.8	74	192	30	29.8	48	300	40	29.8	73	358
23	29.9	74	192	30	29.9	47	294	40	29.9	73	361
23	30.0	74	192	30	30.0	47	289	40	30.0	73	363
23	30.1	74	190	30	30.1	48	284	40	30.1	73	365
23	30.2	74	186	30	30.2	49	281	40	30.2	73	362
23	30.3	61	182	30	30.3	50	279	40	30.3	73	358
23	30.4	60	180	30	30.4	51	277	40	30.4	57	353
23	30.5	59	177	30	30.5	51	277	40	30.5	54	348
23	30.6	57	173	30	30.6	52	277	40	30.6	52	343
23	30.7	56	168	30	30.7	53	277	40	30.7	51	336
23	30.8	54	163	30	30.8	53	279	40	30.8	49	330
23	30.9	53	157	30	30.9	54	279	40	30.9	48	322
23	31.0	53	154	30	31.0	54	279	40	31.0	47	314
23	31.1	59	159	30	31.1	54	279	40	31.1	46	306
23	31.2	62	165	30	31.2	54	278	40	31.2	46	297
23	31.3	64	171	30	31.3	54	277	40	31.3	45	288
23	31.4	66	176	30	31.4	54	275	40	31.4	44	278
23	31.5	73	182	30	31.5	53	273	40	31.5	44	270
23	31.6	73	187	30	31.6	53	271	40	31.6	44	261
23	31.7	73	193	30	31.7	52	268	40	31.7	44	253
23	31.8	73	198	30	31.8	52	264	40	31.8	44	246
23	31.9	73	203	30	31.9	51	262	40	31.9	45	239
23	32.0	73	207	30	32.0	52	263	40	32.0	45	232
23	32.1	73	209	30	32.1	52	263	40	32.1	45	225
23	32.2	73	211	30	32.2	53	263	40	32.2	45	219
23	32.3	73	214	30	32.3	53	264	40	32.3	46	216
23	32.4	73	218	30	32.4	53	264	40	32.4	47	214
23	32.5	73	222	30	32.5	54	264	40	32.5	48	216
23	32.6	73	227	30	32.6	54	264	40	32.6	49	219
23	32.7	73	232	30	32.7	54	264	40	32.7	50	222

Figure 3
Sheet 9 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	32.8	73	238	30	32.8	55	264	40	32.8	51	224
23	32.9	73	244	30	32.9	55	263	40	32.9	51	227
23	33.0	73	251	30	33.0	55	264	40	33.0	52	230
23	33.1	73	257	30	33.1	55	265	40	33.1	52	232
23	33.2	73	264	30	33.2	55	265	40	33.2	52	235
23	33.3	73	271	30	33.3	55	266	40	33.3	53	238
23	33.4	73	279	30	33.4	55	267	40	33.4	54	244
23	33.5	73	286	30	33.5	56	268	40	33.5	54	250
23	33.6	73	294	30	33.6	56	268	40	33.6	55	256
23	33.7	73	302	30	33.7	56	269	40	33.7	55	263
23	33.8	73	309	30	33.8	56	270	40	33.8	56	269
23	33.9	73	313	30	33.9	56	270	40	33.9	56	274
23	34.0	73	318	30	34.0	56	271	40	34.0	57	279
23	34.1	73	318	30	34.1	56	272	40	34.1	57	283
23	34.2	73	318	30	34.2	56	274	40	34.2	57	286
23	34.3	73	320	30	34.3	57	275	40	34.3	57	289
23	34.4	73	322	30	34.4	57	277	40	34.4	58	294
23	34.5	73	326	30	34.5	57	280	40	34.5	58	301
23	34.6	73	331	30	34.6	57	282	40	34.6	59	308
23	34.7	73	336	30	34.7	58	285	40	34.7	60	316
23	34.8	73	343	30	34.8	58	288	40	34.8	60	324
23	34.9	72	350	30	34.9	58	292	40	34.9	61	332
23	35.0	72	358	30	35.0	59	295	40	35.0	61	339
23	35.1	72	359	30	35.1	59	298	40	35.1	62	346
23	35.2	72	359	30	35.2	59	300	40	35.2	62	353
23	35.3	72	359	30	35.3	59	302	40	35.3	63	359
23	35.4	72	358	30	35.4	59	303	40	35.4	63	366
23	35.5	72	357	30	35.5	59	304	40	35.5	63	364
23	35.6	72	352	30	35.6	59	305	40	35.6	63	362
23	35.7	56	348	30	35.7	59	305	40	35.7	62	360
23	35.8	53	344	30	35.8	59	305	40	35.8	62	358
23	35.9	51	340	30	35.9	58	305	40	35.9	61	357
23	36.0	50	337	30	36.0	58	305	40	36.0	56	355
23	36.1	50	333	30	36.1	58	306	40	36.1	55	354
23	36.2	48	329	30	36.2	59	309	40	36.2	55	353
23	36.3	47	324	30	36.3	59	312	40	36.3	55	352
23	36.4	46	318	30	36.4	59	315	40	36.4	56	353
23	36.5	46	311	30	36.5	59	318	40	36.5	56	353
23	36.6	45	303	30	36.6	60	321	40	36.6	56	353
23	36.7	44	295	30	36.7	60	324	40	36.7	56	353
23	36.8	42	285	30	36.8	60	326	40	36.8	57	354

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	36.9	41	275	30	36.9	60	329	40	36.9	57	355
23	37.0	40	264	30	37.0	60	331	40	37.0	55	357
23	37.1	39	253	30	37.1	60	333	40	37.1	55	360
23	37.2	38	243	30	37.2	60	335	40	37.2	55	364
23	37.3	40	236	30	37.3	60	335	40	37.3	55	365
23	37.4	41	229	30	37.4	60	334	40	37.4	55	362
23	37.5	42	223	30	37.5	59	333	40	37.5	55	359
23	37.6	43	217	30	37.6	59	332	40	37.6	53	353
23	37.7	43	211	30	37.7	58	330	40	37.7	48	348
23	37.8	43	206	30	37.8	58	328	40	37.8	46	342
23	37.9	43	202	30	37.9	57	325	40	37.9	45	337
23	38.0	44	198	30	38.0	53	323	40	38.0	44	331
23	38.1	44	192	30	38.1	51	320	40	38.1	43	326
23	38.2	44	187	30	38.2	50	316	40	38.2	43	321
23	38.3	43	182	30	38.3	49	313	40	38.3	43	316
23	38.4	43	177	30	38.4	48	310	40	38.4	42	311
23	38.5	43	172	30	38.5	48	308	40	38.5	42	306
23	38.6	43	168	30	38.6	50	307	40	38.6	42	301
23	38.7	44	164	30	38.7	51	308	40	38.7	43	297
23	38.8	44	161	30	38.8	53	311	40	38.8	43	294
23	38.9	44	158	30	38.9	54	313	40	38.9	43	291
23	39.0	44	155	30	39.0	55	316	40	39.0	44	287
23	39.1	45	156	30	39.1	56	318	40	39.1	44	285
23	39.2	46	157	30	39.2	56	320	40	39.2	44	282
23	39.3	46	157	30	39.3	57	322	40	39.3	44	280
23	39.4	46	156	30	39.4	52	324	40	39.4	45	278
23	39.5	46	155	30	39.5	53	327	40	39.5	45	276
23	39.6	46	153	30	39.6	53	329	40	39.6	45	275
23	39.7	46	150	30	39.7	54	330	40	39.7	45	273
23	39.8	46	146	30	39.8	54	332	40	39.8	45	271
23	39.9	46	141	30	39.9	55	334	40	39.9	46	270
23	40.0	45	136	30	40.0	55	335	40	40.0	46	268
23	40.1	46	139	30	40.1	53	333	40	40.1	46	267
23	40.2	47	147	30	40.2	52	331	40	40.2	46	266
23	40.3	48	154	30	40.3	52	329	40	40.3	46	265
23	40.4	50	162	30	40.4	52	326	40	40.4	46	264
23	40.5	50	170	30	40.5	51	324	40	40.5	46	263
23	40.6	51	178	30	40.6	49	320	40	40.6	47	262
23	40.7	52	186	30	40.7	48	317	40	40.7	47	261
23	40.8	52	190	30	40.8	47	315	40	40.8	46	258
23	40.9	52	193	30	40.9	46	312	40	40.9	46	255

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	41.0	52	195	30	41.0	46	309	40	41.0	44	248
23	41.1	52	196	30	41.1	45	306	40	41.1	41	240
23	41.2	52	197	30	41.2	45	304	40	41.2	40	233
23	41.3	52	198	30	41.3	45	301	40	41.3	39	226
23	41.4	52	199	30	41.4	45	299	40	41.4	38	219
23	41.5	52	200	30	41.5	45	297	40	41.5	37	213
23	41.6	52	201	30	41.6	46	296	40	41.6	37	206
23	41.7	52	202	30	41.7	46	294	40	41.7	36	199
23	41.8	52	203	30	41.8	46	292	40	41.8	37	194
23	41.9	52	203	30	41.9	46	291	40	41.9	38	189
23	42.0	52	204	30	42.0	46	289	40	42.0	39	186
23	42.1	52	205	30	42.1	46	287	40	42.1	39	183
23	42.2	53	208	30	42.2	45	285	40	42.2	41	184
23	42.3	53	212	30	42.3	45	283	40	42.3	42	185
23	42.4	53	216	30	42.4	45	281	40	42.4	43	187
23	42.5	53	221	30	42.5	44	278	40	42.5	44	188
23	42.6	54	228	30	42.6	43	275	40	42.6	45	191
23	42.7	54	234	30	42.7	42	268	40	42.7	44	193
23	42.8	55	241	30	42.8	41	263	40	42.8	45	196
23	42.9	55	249	30	42.9	43	259	40	42.9	45	197
23	43.0	55	256	30	43.0	43	257	40	43.0	46	198
23	43.1	56	262	30	43.1	43	255	40	43.1	46	198
23	43.2	56	264	30	43.2	44	253	40	43.2	46	197
23	43.3	56	266	30	43.3	41	253	40	43.3	46	196
23	43.4	56	269	30	43.4	42	253	40	43.4	46	194
23	43.5	56	273	30	43.5	44	254	40	43.5	45	191
23	43.6	56	277	30	43.6	45	255	40	43.6	45	188
23	43.7	56	282	30	43.7	45	253	40	43.7	45	186
23	43.8	57	287	30	43.8	43	247	40	43.8	45	183
23	43.9	57	293	30	43.9	40	240	40	43.9	44	180
23	44.0	57	300	30	44.0	37	232	40	44.0	45	179
23	44.1	57	304	30	44.1	34	222	40	44.1	45	179
23	44.2	57	305	30	44.2	31	209	40	44.2	45	178
23	44.3	57	307	30	44.3	29	197	40	44.3	45	178
23	44.4	57	309	30	44.4	29	187	40	44.4	45	177
23	44.5	57	310	30	44.5	30	179	40	44.5	45	177
23	44.6	57	312	30	44.6	31	172	40	44.6	45	177
23	44.7	57	313	30	44.7	32	167	40	44.7	45	176
23	44.8	57	314	30	44.8	38	178	40	44.8	45	176
23	44.9	57	316	30	44.9	42	192	40	44.9	45	175
23	45.0	57	317	30	45.0	46	205	40	45.0	45	175

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	45.1	57	317	30	45.1	47	217	40	45.1	45	174
23	45.2	58	316	30	45.2	48	229	40	45.2	45	174
23	45.3	58	316	30	45.3	50	239	40	45.3	45	173
23	45.4	58	316	30	45.4	51	249	40	45.4	45	173
23	45.5	58	317	30	45.5	51	255	40	45.5	45	172
23	45.6	58	319	30	45.6	52	258	40	45.6	45	172
23	45.7	58	322	30	45.7	52	259	40	45.7	46	171
23	45.8	58	325	30	45.8	51	259	40	45.8	46	171
23	45.9	58	329	30	45.9	51	253	40	45.9	46	171
23	46.0	58	330	30	46.0	50	248	40	46.0	46	171
23	46.1	58	332	30	46.1	41	244	40	46.1	46	172
23	46.2	58	334	30	46.2	41	241	40	46.2	46	172
23	46.3	58	337	30	46.3	41	239	40	46.3	46	173
23	46.4	58	340	30	46.4	42	238	40	46.4	46	173
23	46.5	59	343	30	46.5	44	238	40	46.5	46	174
23	46.6	59	348	30	46.6	45	240	40	46.6	46	175
23	46.7	59	352	30	46.7	49	242	40	46.7	46	175
23	46.8	59	357	30	46.8	50	246	40	46.8	47	176
23	46.9	60	363	30	46.9	50	246	40	46.9	47	176
23	47.0	60	369	30	47.0	49	241	40	47.0	47	177
23	47.1	60	375	30	47.1	49	236	40	47.1	47	177
23	47.2	60	375	30	47.2	42	232	40	47.2	47	177
23	47.3	60	374	30	47.3	40	228	40	47.3	47	177
23	47.4	59	372	30	47.4	39	225	40	47.4	47	177
23	47.5	59	369	30	47.5	38	221	40	47.5	47	177
23	47.6	49	365	30	47.6	39	219	40	47.6	47	177
23	47.7	43	359	30	47.7	39	217	40	47.7	47	177
23	47.8	39	353	30	47.8	39	215	40	47.8	47	177
23	47.9	38	348	30	47.9	40	213	40	47.9	47	177
23	48.0	39	345	30	48.0	41	213	40	48.0	47	177
23	48.1	40	343	30	48.1	42	213	40	48.1	47	177
23	48.2	44	347	30	48.2	42	213	40	48.2	47	178
23	48.3	46	349	30	48.3	43	213	40	48.3	47	180
23	48.4	48	350	30	48.4	43	213	40	48.4	47	182
23	48.5	48	351	30	48.5	43	213	40	48.5	47	185
23	48.6	48	350	30	48.6	44	213	40	48.6	48	188
23	48.7	47	348	30	48.7	44	213	40	48.7	48	191
23	48.8	45	346	30	48.8	44	213	40	48.8	48	195
23	48.9	42	342	30	48.9	45	213	40	48.9	49	200
23	49.0	41	337	30	49.0	45	213	40	49.0	49	204
23	49.1	40	332	30	49.1	45	213	40	49.1	49	209

Figure 3
Sheet 13 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
23	49.2	39	328	40	49.2	45	213
23	49.3	39	324	40	49.3	45	213
23	49.4	38	321	40	49.4	45	213
23	49.5	39	318	40	49.5	46	213
23	49.6	39	316	40	49.6	46	216
23	49.7	40	314	40	49.7	47	219
23	49.8	41	313	40	49.8	48	223
23	49.9	42	312	40	49.9	49	226
23	50.0	42	312	40	50.0	49	230

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	0.0	247	233	67	0.0	247	233
50	0.1	123	250	67	0.1	123	256
50	0.2	117	267	67	0.2	117	279
50	0.3	114	278	67	0.3	114	275
50	0.4	111	264	67	0.4	111	259
50	0.5	109	252	67	0.5	109	244
50	0.6	108	241	67	0.6	108	231
50	0.7	106	233	67	0.7	106	218
50	0.8	105	226	67	0.8	105	208
50	0.9	104	221	67	0.9	104	198
50	1.0	103	218	67	1.0	103	189
50	1.1	102	216	67	1.1	102	178
50	1.2	102	207	67	1.2	102	165
50	1.3	101	192	67	1.3	101	151
50	1.4	100	178	67	1.4	100	137
50	1.5	100	167	67	1.5	100	122
50	1.6	99	157	67	1.6	99	106
50	1.7	99	148	67	1.7	99	89
50	1.8	98	141	67	1.8	98	83
50	1.9	98	136	67	1.9	98	82
50	2.0	97	132	67	2.0	97	80
50	2.1	97	129	67	2.1	97	77
50	2.2	96	126	67	2.2	96	74
50	2.3	96	121	67	2.3	96	70
50	2.4	96	114	67	2.4	96	65
50	2.5	95	107	67	2.5	95	60
50	2.6	95	100	67	2.6	95	57
50	2.7	95	93	67	2.7	95	54
50	2.8	94	86	67	2.8	94	51
50	2.9	94	78	67	2.9	94	48

Figure 3
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<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	3.1	93	74	60	3.1	93	53	67	3.1	93	44
50	3.2	93	73	60	3.2	93	52	67	3.2	93	42
50	3.3	93	72	60	3.3	93	51	67	3.3	93	41
50	3.4	93	70	60	3.4	93	50	67	3.4	93	41
50	3.5	92	68	60	3.5	92	48	67	3.5	92	40
50	3.6	92	65	60	3.6	92	45	67	3.6	92	39
50	3.7	92	61	60	3.7	92	43	67	3.7	92	37
50	3.8	92	57	60	3.8	92	41	67	3.8	92	35
50	3.9	91	54	60	3.9	91	38	67	3.9	91	33
50	4.0	91	51	60	4.0	91	36	67	4.0	91	32
50	4.1	91	47	60	4.1	91	33	67	4.1	91	34
50	4.2	91	43	60	4.2	91	30	67	4.2	91	36
50	4.3	91	40	60	4.3	91	33	67	4.3	91	39
50	4.4	90	37	60	4.4	90	37	67	4.4	90	42
50	4.5	90	34	60	4.5	90	40	67	4.5	90	45
50	4.6	90	32	60	4.6	90	44	67	4.6	90	48
50	4.7	90	31	60	4.7	90	48	67	4.7	90	52
50	4.8	90	32	60	4.8	90	52	67	4.8	90	53
50	4.9	90	35	60	4.9	90	56	67	4.9	90	53
50	5.0	89	39	60	5.0	89	60	67	5.0	89	54
50	5.1	89	42	60	5.1	89	60	67	5.1	89	54
50	5.2	89	45	60	5.2	89	60	67	5.2	89	55
50	5.3	89	49	60	5.3	89	59	67	5.3	89	55
50	5.4	89	52	60	5.4	89	58	67	5.4	89	55
50	5.5	89	58	60	5.5	89	58	67	5.5	89	56
50	5.6	88	63	60	5.6	88	58	67	5.6	88	57
50	5.7	88	67	60	5.7	88	57	67	5.7	88	58
50	5.8	88	70	60	5.8	88	57	67	5.8	88	59
50	5.9	88	72	60	5.9	88	58	67	5.9	88	60
50	6.0	88	75	60	6.0	88	59	67	6.0	88	60
50	6.1	88	78	60	6.1	88	59	67	6.1	88	61
50	6.2	87	82	60	6.2	87	60	67	6.2	87	62
50	6.3	87	85	60	6.3	87	60	67	6.3	87	66
50	6.4	87	89	60	6.4	87	61	67	6.4	87	70
50	6.5	87	93	60	6.5	87	61	67	6.5	87	73
50	6.6	87	96	60	6.6	87	61	67	6.6	87	77
50	6.7	87	97	60	6.7	87	62	67	6.7	87	80
50	6.8	87	99	60	6.8	87	62	67	6.8	87	83
50	6.9	87	102	60	6.9	87	61	67	6.9	87	85
50	7.0	86	107	60	7.0	86	61	67	7.0	86	83
50	7.1	86	113	60	7.1	86	63	67	7.1	86	79

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	7.2	86	119	60	7.2	86	64	67	7.2	86	75
50	7.3	86	125	60	7.3	86	65	67	7.3	86	71
50	7.4	86	131	60	7.4	86	67	67	7.4	86	68
50	7.5	86	135	60	7.5	86	68	67	7.5	86	65
50	7.6	86	139	60	7.6	86	70	67	7.6	86	63
50	7.7	86	141	60	7.7	86	71	67	7.7	86	61
50	7.8	85	143	60	7.8	85	73	67	7.8	85	61
50	7.9	85	145	60	7.9	85	75	67	7.9	85	62
50	8.0	85	145	60	8.0	85	77	67	8.0	85	62
50	8.1	85	145	60	8.1	85	79	67	8.1	85	62
50	8.2	85	144	60	8.2	85	82	67	8.2	85	62
50	8.3	85	142	60	8.3	85	85	67	8.3	85	62
50	8.4	85	140	60	8.4	85	89	67	8.4	85	62
50	8.5	85	140	60	8.5	85	93	67	8.5	85	65
50	8.6	85	141	60	8.6	85	97	67	8.6	85	69
50	8.7	85	141	60	8.7	85	101	67	8.7	85	72
50	8.8	84	142	60	8.8	84	106	67	8.8	84	76
50	8.9	84	143	60	8.9	84	110	67	8.9	84	80
50	9.0	84	145	60	9.0	84	112	67	9.0	84	85
50	9.1	84	146	60	9.1	84	111	67	9.1	84	89
50	9.2	84	148	60	9.2	84	111	67	9.2	84	92
50	9.3	84	149	60	9.3	84	110	67	9.3	84	93
50	9.4	84	151	60	9.4	84	110	67	9.4	84	94
50	9.5	84	154	60	9.5	84	109	67	9.5	84	95
50	9.6	84	158	60	9.6	84	108	67	9.6	84	96
50	9.7	84	162	60	9.7	84	107	67	9.7	84	98
50	9.8	83	163	60	9.8	83	109	67	9.8	83	99
50	9.9	83	160	60	9.9	83	113	67	9.9	83	101
50	10.0	83	157	60	10.0	83	118	67	10.0	83	104
50	10.1	83	154	60	10.1	83	122	67	10.1	83	108
50	10.2	83	146	60	10.2	83	127	67	10.2	83	112
50	10.3	72	138	60	10.3	83	132	67	10.3	83	116
50	10.4	70	131	60	10.4	83	137	67	10.4	83	121
50	10.5	69	124	60	10.5	83	142	67	10.5	83	126
50	10.6	68	117	60	10.6	83	145	67	10.6	83	132
50	10.7	68	111	60	10.7	83	147	67	10.7	83	135
50	10.8	68	105	60	10.8	83	147	67	10.8	83	135
50	10.9	68	99	60	10.9	83	147	67	10.9	83	134
50	11.0	68	94	60	11.0	82	147	67	11.0	82	132
50	11.1	68	90	60	11.1	82	146	67	11.1	82	131
50	11.2	68	86	60	11.2	82	145	67	11.2	82	128

Figure 3
Sheet 16 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	11.3	69	86	60	11.3	82	144	67	11.3	82	126
50	11.4	70	85	60	11.4	82	144	67	11.4	82	124
50	11.5	71	85	60	11.5	82	145	67	11.5	82	129
50	11.6	71	85	60	11.6	82	147	67	11.6	82	133
50	11.7	71	85	60	11.7	82	148	67	11.7	82	138
50	11.8	72	85	60	11.8	82	149	67	11.8	82	142
50	11.9	72	85	60	11.9	82	151	67	11.9	82	146
50	12.0	72	83	60	12.0	82	153	67	12.0	82	150
50	12.1	71	80	60	12.1	82	155	67	12.1	82	153
50	12.2	71	78	60	12.2	82	159	67	12.2	82	156
50	12.3	71	75	60	12.3	82	164	67	12.3	82	158
50	12.4	71	72	60	12.4	81	169	67	12.4	81	161
50	12.5	70	69	60	12.5	81	176	67	12.5	81	163
50	12.6	70	65	60	12.6	81	179	67	12.6	81	165
50	12.7	69	63	60	12.7	81	181	67	12.7	81	168
50	12.8	70	61	60	12.8	81	181	67	12.8	81	170
50	12.9	70	61	60	12.9	81	181	67	12.9	81	172
50	13.0	71	61	60	13.0	81	173	67	13.0	81	170
50	13.1	71	61	60	13.1	71	165	67	13.1	81	167
50	13.2	71	61	60	13.2	69	157	67	13.2	81	164
50	13.3	72	61	60	13.3	68	149	67	13.3	81	161
50	13.4	72	61	60	13.4	68	141	67	13.4	81	158
50	13.5	72	61	60	13.5	68	134	67	13.5	81	155
50	13.6	72	61	60	13.6	67	127	67	13.6	74	152
50	13.7	72	61	60	13.7	67	119	67	13.7	81	155
50	13.8	72	61	60	13.8	67	112	67	13.8	81	158
50	13.9	72	61	60	13.9	67	105	67	13.9	80	161
50	14.0	73	61	60	14.0	67	99	67	14.0	80	164
50	14.1	73	61	60	14.1	67	93	67	14.1	80	166
50	14.2	73	61	60	14.2	67	88	67	14.2	80	169
50	14.3	73	61	60	14.3	67	83	67	14.3	80	172
50	14.4	73	61	60	14.4	67	80	67	14.4	80	173
50	14.5	73	61	60	14.5	68	78	67	14.5	80	167
50	14.6	73	61	60	14.6	68	76	67	14.6	78	161
50	14.7	73	61	60	14.7	68	75	67	14.7	72	156
50	14.8	73	61	60	14.8	68	73	67	14.8	72	152
50	14.9	73	61	60	14.9	68	72	67	14.9	71	148
50	15.0	73	61	60	15.0	68	71	67	15.0	71	145
50	15.1	73	61	60	15.1	68	69	67	15.1	71	142
50	15.2	73	61	60	15.2	68	68	67	15.2	71	140
50	15.3	73	61	60	15.3	68	67	67	15.3	72	138

Figure 3
Sheet 17 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	15.4	72	61	60	15.4	68	66	67	15.4	72	137
50	15.5	72	61	60	15.5	68	65	67	15.5	72	135
50	15.6	72	61	60	15.6	68	64	67	15.6	72	133
50	15.7	72	61	60	15.7	68	64	67	15.7	71	131
50	15.8	72	61	60	15.8	69	63	67	15.8	71	129
50	15.9	72	61	60	15.9	68	62	67	15.9	71	127
50	16.0	72	61	60	16.0	68	62	67	16.0	71	127
50	16.1	72	61	60	16.1	68	61	67	16.1	71	125
50	16.2	72	61	60	16.2	68	61	67	16.2	71	122
50	16.3	72	61	60	16.3	69	61	67	16.3	71	119
50	16.4	72	61	60	16.4	69	61	67	16.4	70	117
50	16.5	72	62	60	16.5	69	62	67	16.5	70	114
50	16.6	71	62	60	16.6	69	63	67	16.6	69	112
50	16.7	71	63	60	16.7	69	63	67	16.7	70	111
50	16.8	71	64	60	16.8	69	64	67	16.8	70	110
50	16.9	71	64	60	16.9	69	66	67	16.9	70	109
50	17.0	71	65	60	17.0	69	67	67	17.0	70	108
50	17.1	71	66	60	17.1	70	69	67	17.1	70	107
50	17.2	71	67	60	17.2	70	71	67	17.2	71	106
50	17.3	71	68	60	17.3	70	73	67	17.3	71	105
50	17.4	71	71	60	17.4	70	75	67	17.4	71	106
50	17.5	71	73	60	17.5	70	77	67	17.5	71	107
50	17.6	72	76	60	17.6	71	79	67	17.6	72	109
50	17.7	73	79	60	17.7	71	82	67	17.7	72	111
50	17.8	75	81	60	17.8	71	84	67	17.8	72	113
50	17.9	76	84	60	17.9	71	87	67	17.9	73	116
50	18.0	77	87	60	18.0	71	89	67	18.0	73	119
50	18.1	78	90	60	18.1	72	92	67	18.1	74	122
50	18.2	78	93	60	18.2	72	96	67	18.2	73	120
50	18.3	78	97	60	18.3	72	101	67	18.3	73	119
50	18.4	78	101	60	18.4	71	105	67	18.4	73	117
50	18.5	78	105	60	18.5	71	111	67	18.5	73	115
50	18.6	78	110	60	18.6	74	117	67	18.6	73	113
50	18.7	78	114	60	18.7	76	122	67	18.7	71	111
50	18.8	78	119	60	18.8	78	127	67	18.8	71	110
50	18.9	78	124	60	18.9	78	131	67	18.9	73	110
50	19.0	78	128	60	19.0	78	135	67	19.0	73	114
50	19.1	78	135	60	19.1	78	138	67	19.1	72	117
50	19.2	78	143	60	19.2	78	142	67	19.2	72	122
50	19.3	78	152	60	19.3	78	151	67	19.3	72	128
50	19.4	78	161	60	19.4	78	163	67	19.4	72	134

Figure 3
Sheet 18 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	19.5	78	170	60	19.5	78	176	67	19.5	72	141
50	19.6	77	180	60	19.6	77	189	67	19.6	72	150
50	19.7	77	190	60	19.7	77	202	67	19.7	76	165
50	19.8	77	200	60	19.8	77	215	67	19.8	77	179
50	19.9	77	209	60	19.9	77	229	67	19.9	77	194
50	20.0	77	213	60	20.0	77	242	67	20.0	77	208
50	20.1	77	215	60	20.1	77	250	67	20.1	77	223
50	20.2	77	216	60	20.2	77	257	67	20.2	77	238
50	20.3	77	217	60	20.3	77	263	67	20.3	77	253
50	20.4	77	217	60	20.4	77	269	67	20.4	77	257
50	20.5	77	216	60	20.5	77	275	67	20.5	77	256
50	20.6	77	215	60	20.6	77	281	67	20.6	77	255
50	20.7	77	214	60	20.7	77	286	67	20.7	77	253
50	20.8	77	212	60	20.8	77	291	67	20.8	77	250
50	20.9	77	207	60	20.9	77	291	67	20.9	77	248
50	21.0	65	201	60	21.0	77	292	67	21.0	68	245
50	21.1	62	196	60	21.1	77	293	67	21.1	68	244
50	21.2	60	191	60	21.2	77	295	67	21.2	77	249
50	21.3	59	186	60	21.3	77	297	67	21.3	77	253
50	21.4	61	186	60	21.4	77	299	67	21.4	77	256
50	21.5	63	186	60	21.5	77	302	67	21.5	77	260
50	21.6	64	188	60	21.6	77	305	67	21.6	77	262
50	21.7	65	189	60	21.7	77	305	67	21.7	77	265
50	21.8	67	195	60	21.8	77	305	67	21.8	77	267
50	21.9	77	201	60	21.9	77	305	67	21.9	77	274
50	22.0	76	205	60	22.0	76	306	67	22.0	76	282
50	22.1	76	209	60	22.1	76	306	67	22.1	76	290
50	22.2	76	212	60	22.2	76	307	67	22.2	76	298
50	22.3	76	214	60	22.3	76	308	67	22.3	76	306
50	22.4	76	216	60	22.4	76	309	67	22.4	76	315
50	22.5	76	216	60	22.5	76	309	67	22.5	76	323
50	22.6	76	216	60	22.6	76	310	67	22.6	76	328
50	22.7	76	220	60	22.7	76	311	67	22.7	76	326
50	22.8	76	228	60	22.8	76	313	67	22.8	76	324
50	22.9	76	237	60	22.9	76	315	67	22.9	76	322
50	23.0	76	246	60	23.0	76	317	67	23.0	76	319
50	23.1	76	255	60	23.1	76	319	67	23.1	66	317
50	23.2	76	263	60	23.2	76	320	67	23.2	64	314
50	23.3	76	271	60	23.3	76	319	67	23.3	63	310
50	23.4	76	279	60	23.4	76	317	67	23.4	60	300
50	23.5	76	286	60	23.5	76	316	67	23.5	56	290

Figure 3
Sheet 19 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	23.6	76	291	60	23.6	76	314	67	23.6	55	280
50	23.7	76	296	60	23.7	76	313	67	23.7	54	271
50	23.8	76	300	60	23.8	64	310	67	23.8	53	263
50	23.9	76	304	60	23.9	63	308	67	23.9	53	255
50	24.0	76	308	60	24.0	62	305	67	24.0	53	247
50	24.1	76	312	60	24.1	61	301	67	24.1	53	240
50	24.2	76	316	60	24.2	60	297	67	24.2	53	233
50	24.3	76	321	60	24.3	59	294	67	24.3	53	226
50	24.4	76	325	60	24.4	58	290	67	24.4	54	220
50	24.5	76	327	60	24.5	58	287	67	24.5	54	215
50	24.6	76	329	60	24.6	57	283	67	24.6	54	209
50	24.7	75	331	60	24.7	57	279	67	24.7	54	204
50	24.8	75	333	60	24.8	56	276	67	24.8	54	200
50	24.9	75	336	60	24.9	56	271	67	24.9	55	198
50	25.0	75	338	60	25.0	55	266	67	25.0	55	196
50	25.1	75	340	60	25.1	55	261	67	25.1	56	193
50	25.2	75	342	60	25.2	54	254	67	25.2	56	190
50	25.3	75	344	60	25.3	54	247	67	25.3	56	187
50	25.4	75	341	60	25.4	53	239	67	25.4	55	183
50	25.5	75	338	60	25.5	52	230	67	25.5	55	178
50	25.6	63	334	60	25.6	51	223	67	25.6	55	177
50	25.7	60	331	60	25.7	51	218	67	25.7	56	177
50	25.8	58	327	60	25.8	52	213	67	25.8	56	177
50	25.9	57	323	60	25.9	51	208	67	25.9	57	177
50	26.0	56	319	60	26.0	51	202	67	26.0	57	177
50	26.1	55	315	60	26.1	51	196	67	26.1	57	177
50	26.2	54	310	60	26.2	51	190	67	26.2	57	177
50	26.3	54	308	60	26.3	50	183	67	26.3	58	178
50	26.4	55	305	60	26.4	51	180	67	26.4	58	184
50	26.5	55	302	60	26.5	52	179	67	26.5	59	189
50	26.6	55	298	60	26.6	53	179	67	26.6	60	195
50	26.7	55	295	60	26.7	53	178	67	26.7	60	201
50	26.8	54	291	60	26.8	54	178	67	26.8	61	207
50	26.9	53	287	60	26.9	54	177	67	26.9	61	214
50	27.0	53	283	60	27.0	55	177	67	27.0	62	221
50	27.1	52	277	60	27.1	55	177	67	27.1	62	227
50	27.2	51	265	60	27.2	56	180	67	27.2	63	233
50	27.3	48	253	60	27.3	56	184	67	27.3	63	239
50	27.4	46	242	60	27.4	57	188	67	27.4	64	245
50	27.5	46	231	60	27.5	57	192	67	27.5	64	250
50	27.6	46	221	60	27.6	58	197	67	27.6	64	256

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	27.7	46	211	60	27.7	59	203	67	27.7	65	262
50	27.8	46	202	60	27.8	59	209	67	27.8	65	265
50	27.9	45	193	60	27.9	60	216	67	27.9	64	262
50	28.0	46	187	60	28.0	61	225	67	28.0	64	260
50	28.1	48	185	60	28.1	61	234	67	28.1	64	255
50	28.2	49	183	60	28.2	62	243	67	28.2	58	250
50	28.3	49	182	60	28.3	63	252	67	28.3	56	244
50	28.4	50	181	60	28.4	63	260	67	28.4	54	238
50	28.5	51	179	60	28.5	64	268	67	28.5	53	231
50	28.6	51	179	60	28.6	64	276	67	28.6	51	222
50	28.7	51	178	60	28.7	65	283	67	28.7	50	213
50	28.8	52	177	60	28.8	64	276	67	28.8	49	205
50	28.9	52	177	60	28.9	55	270	67	28.9	49	197
50	29.0	52	178	60	29.0	51	263	67	29.0	49	191
50	29.1	52	178	60	29.1	50	256	67	29.1	49	185
50	29.2	53	179	60	29.2	49	248	67	29.2	49	179
50	29.3	53	180	60	29.3	48	241	67	29.3	51	177
50	29.4	54	181	60	29.4	47	233	67	29.4	52	177
50	29.5	54	183	60	29.5	47	228	67	29.5	53	177
50	29.6	55	184	60	29.6	50	229	67	29.6	53	177
50	29.7	55	186	60	29.7	52	230	67	29.7	54	177
50	29.8	56	191	60	29.8	52	230	67	29.8	54	177
50	29.9	56	198	60	29.9	53	230	67	29.9	54	177
50	30.0	57	203	60	30.0	53	229	67	30.0	55	177
50	30.1	57	210	60	30.1	53	227	67	30.1	55	177
50	30.2	58	215	60	30.2	52	224	67	30.2	55	177
50	30.3	58	221	60	30.3	51	219	67	30.3	55	177
50	30.4	59	226	60	30.4	49	212	67	30.4	55	177
50	30.5	59	232	60	30.5	49	205	67	30.5	55	177
50	30.6	59	236	60	30.6	49	199	67	30.6	55	177
50	30.7	60	242	60	30.7	49	193	67	30.7	56	177
50	30.8	60	248	60	30.8	48	188	67	30.8	56	177
50	30.9	60	253	60	30.9	48	183	67	30.9	56	177
50	31.0	61	258	60	31.0	48	179	67	31.0	56	177
50	31.1	61	263	60	31.1	49	177	67	31.1	56	177
50	31.2	61	267	60	31.2	47	177	67	31.2	56	177
50	31.3	61	271	60	31.3	49	177	67	31.3	56	177
50	31.4	61	275	60	31.4	50	177	67	31.4	56	177
50	31.5	62	280	60	31.5	50	177	67	31.5	56	177
50	31.6	62	284	60	31.6	51	177	67	31.6	56	177
50	31.7	62	287	60	31.7	51	177	67	31.7	56	177

Figure 3
Sheet 21 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	31.9	62	289	60	31.9	52	178	67	31.9	56	177
50	32.0	62	289	60	32.0	52	179	67	32.0	56	177
50	32.1	62	289	60	32.1	53	180	67	32.1	56	177
50	32.2	61	288	60	32.2	53	180	67	32.2	56	177
50	32.3	61	285	60	32.3	53	181	67	32.3	57	186
50	32.4	61	282	60	32.4	53	181	67	32.4	59	196
50	32.5	60	279	60	32.5	53	181	67	32.5	60	207
50	32.6	55	276	60	32.6	53	181	67	32.6	61	217
50	32.7	53	272	60	32.7	53	180	67	32.7	61	228
50	32.8	52	268	60	32.8	53	179	67	32.8	62	239
50	32.9	51	264	60	32.9	53	178	67	32.9	62	247
50	33.0	51	261	60	33.0	53	177	67	33.0	62	248
50	33.1	51	259	60	33.1	53	177	67	33.1	62	244
50	33.2	51	257	60	33.2	53	177	67	33.2	62	240
50	33.3	51	254	60	33.3	53	177	67	33.3	54	235
50	33.4	49	249	60	33.4	53	177	67	33.4	52	231
50	33.5	48	244	60	33.5	53	177	67	33.5	51	228
50	33.6	48	240	60	33.6	54	177	67	33.6	51	224
50	33.7	48	236	60	33.7	53	177	67	33.7	50	221
50	33.8	47	233	60	33.8	53	177	67	33.8	50	218
50	33.9	48	231	60	33.9	54	177	67	33.9	50	216
50	34.0	49	230	60	34.0	54	177	67	34.0	50	213
50	34.1	50	229	60	34.1	54	177	67	34.1	50	211
50	34.2	50	229	60	34.2	54	177	67	34.2	50	208
50	34.3	51	229	60	34.3	54	178	67	34.3	50	206
50	34.4	51	226	60	34.4	54	179	67	34.4	50	203
50	34.5	50	222	60	34.5	54	180	67	34.5	50	200
50	34.6	49	218	60	34.6	54	182	67	34.6	49	198
50	34.7	48	214	60	34.7	55	184	67	34.7	49	195
50	34.8	47	209	60	34.8	55	185	67	34.8	49	192
50	34.9	46	204	60	34.9	55	188	67	34.9	49	190
50	35.0	47	199	60	35.0	55	190	67	35.0	49	187
50	35.1	46	193	60	35.1	55	190	67	35.1	49	185
50	35.2	45	189	60	35.2	55	189	67	35.2	49	183
50	35.3	46	186	60	35.3	55	188	67	35.3	49	182
50	35.4	47	183	60	35.4	55	187	67	35.4	50	181
50	35.5	47	181	60	35.5	55	186	67	35.5	50	180
50	35.6	47	179	60	35.6	54	184	67	35.6	50	179
50	35.7	48	178	60	35.7	54	182	67	35.7	51	178
50	35.8	49	177	60	35.8	53	180	67	35.8	51	178
50	35.9	48	177	60	35.9	53	180	67	35.9	51	177

Figure 3
Sheet 22 of 25

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	36.0	48	177	60	36.0	53	180	67	36.0	51	177
50	36.1	49	178	60	36.1	53	179	67	36.1	52	178
50	36.2	50	178	60	36.2	53	179	67	36.2	52	178
50	36.3	50	178	60	36.3	53	179	67	36.3	52	178
50	36.4	50	179	60	36.4	53	178	67	36.4	53	179
50	36.5	51	179	60	36.5	53	178	67	36.5	53	180
50	36.6	51	179	60	36.6	53	178	67	36.6	53	180
50	36.7	51	179	60	36.7	53	181	67	36.7	54	182
50	36.8	51	179	60	36.8	54	184	67	36.8	54	186
50	36.9	51	178	60	36.9	55	188	67	36.9	55	191
50	37.0	51	178	60	37.0	55	192	67	37.0	56	195
50	37.1	51	177	60	37.1	56	196	67	37.1	56	199
50	37.2	51	177	60	37.2	56	200	67	37.2	57	204
50	37.3	51	177	60	37.3	57	204	67	37.3	57	208
50	37.4	51	177	60	37.4	57	207	67	37.4	59	212
50	37.5	51	177	60	37.5	56	205	67	37.5	59	213
50	37.6	52	177	60	37.6	56	204	67	37.6	59	213
50	37.7	52	177	60	37.7	56	203	67	37.7	59	212
50	37.8	52	177	60	37.8	56	201	67	37.8	59	212
50	37.9	52	177	60	37.9	55	200	67	37.9	59	212
50	38.0	52	177	60	38.0	55	199	67	38.0	59	212
50	38.1	52	177	60	38.1	55	197	67	38.1	58	213
50	38.2	52	177	60	38.2	54	196	67	38.2	59	214
50	38.3	52	177	60	38.3	54	196	67	38.3	59	216
50	38.4	52	177	60	38.4	54	195	67	38.4	59	218
50	38.5	52	177	60	38.5	54	195	67	38.5	59	220
50	38.6	52	177	60	38.6	54	194	67	38.6	60	223
50	38.7	52	177	60	38.7	54	195	67	38.7	60	226
50	38.8	52	177	60	38.8	54	196	67	38.8	60	229
50	38.9	52	177	60	38.9	54	197	67	38.9	60	233
50	39.0	52	178	60	39.0	54	199	67	39.0	61	241
50	39.1	52	178	60	39.1	54	201	67	39.1	61	248
50	39.2	52	178	60	39.2	55	203	67	39.2	62	254
50	39.3	52	179	60	39.3	55	206	67	39.3	62	260
50	39.4	52	180	60	39.4	55	209	67	39.4	62	265
50	39.5	52	180	60	39.5	57	212	67	39.5	62	269
50	39.6	53	184	60	39.6	57	215	67	39.6	62	272
50	39.7	53	187	60	39.7	58	218	67	39.7	63	275
50	39.8	54	190	60	39.8	58	218	67	39.8	63	278
50	39.9	54	193	60	39.9	57	215	67	39.9	63	282
50	40.0	54	194	60	40.0	57	212	67	40.0	63	286

<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	40.1	54	195	60	40.1	57	208	67	40.1	63	291
50	40.2	54	197	60	40.2	48	203	67	40.2	63	296
50	40.3	54	200	60	40.3	45	198	67	40.3	63	301
50	40.4	55	203	60	40.4	43	192	67	40.4	63	305
50	40.5	54	203	60	40.5	41	185	67	40.5	63	305
50	40.6	54	203	60	40.6	43	185	67	40.6	63	305
50	40.7	54	202	60	40.7	46	186	67	40.7	63	305
50	40.8	54	202	60	40.8	48	188	67	40.8	63	305
50	40.9	54	201	60	40.9	49	189	67	40.9	63	305
50	41.0	54	200	60	41.0	50	190	67	41.0	63	305
50	41.1	54	200	60	41.1	50	191	67	41.1	63	305
50	41.2	54	199	60	41.2	51	192	67	41.2	63	307
50	41.3	53	199	60	41.3	51	193	67	41.3	63	310
50	41.4	53	200	60	41.4	52	194	67	41.4	63	313
50	41.5	54	202	60	41.5	52	195	67	41.5	63	316
50	41.6	54	203	60	41.6	52	195	67	41.6	63	319
50	41.7	54	204	60	41.7	52	196	67	41.7	63	322
50	41.8	54	205	60	41.8	51	196	67	41.8	63	326
50	41.9	54	205	60	41.9	51	195	67	41.9	63	328
50	42.0	55	206	60	42.0	51	195	67	42.0	63	328
50	42.1	55	207	60	42.1	50	194	67	42.1	63	329
50	42.2	55	207	60	42.2	51	197	67	42.2	63	329
50	42.3	55	209	60	42.3	54	198	67	42.3	63	329
50	42.4	56	211	60	42.4	55	200	67	42.4	63	329
50	42.5	56	213	60	42.5	56	204	67	42.5	63	329
50	42.6	56	214	60	42.6	56	208	67	42.6	63	329
50	42.7	56	214	60	42.7	57	213	67	42.7	62	326
50	42.8	56	214	60	42.8	57	217	67	42.8	62	323
50	42.9	56	214	60	42.9	58	222	67	42.9	52	319
50	43.0	55	213	60	43.0	58	228	67	43.0	48	316
50	43.1	55	213	60	43.1	59	233	67	43.1	46	313
50	43.2	56	215	60	43.2	59	238	67	43.2	45	310
50	43.3	56	217	60	43.3	59	243	67	43.3	44	306
50	43.4	56	220	60	43.4	58	247	67	43.4	44	304
50	43.5	56	223	60	43.5	58	251	67	43.5	45	304
50	43.6	56	226	60	43.6	58	254	67	43.6	46	303
50	43.7	57	229	60	43.7	58	256	67	43.7	46	302
50	43.8	57	233	60	43.8	58	253	67	43.8	47	302
50	43.9	57	237	60	43.9	59	249	67	43.9	47	302
50	44.0	57	241	60	44.0	48	244	67	44.0	47	302
50	44.1	58	243	60	44.1	42	238	67	44.1	48	302

Figure 3
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<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	44.2	58	245	60	44.2	39	230	67	44.2	49	303
50	44.3	58	248	60	44.3	37	224	67	44.3	49	303
50	44.4	58	249	60	44.4	38	220	67	44.4	49	304
50	44.5	58	252	60	44.5	41	222	67	44.5	50	304
50	44.6	58	254	60	44.6	46	230	67	44.6	50	305
50	44.7	58	257	60	44.7	50	237	67	44.7	50	305
50	44.8	58	259	60	44.8	54	243	67	44.8	50	305
50	44.9	58	261	60	44.9	58	248	67	44.9	50	305
50	45.0	58	260	60	45.0	59	252	67	45.0	50	305
50	45.1	58	259	60	45.1	59	255	67	45.1	50	305
50	45.2	58	257	60	45.2	59	257	67	45.2	50	306
50	45.3	57	255	60	45.3	59	260	67	45.3	50	306
50	45.4	57	253	60	45.4	59	264	67	45.4	50	306
50	45.5	57	251	60	45.5	59	268	67	45.5	50	307
50	45.6	48	248	60	45.6	59	272	67	45.6	50	307
50	45.7	46	245	60	45.7	60	277	67	45.7	49	306
50	45.8	45	244	60	45.8	60	282	67	45.8	49	306
50	45.9	47	244	60	45.9	60	287	67	45.9	48	305
50	46.0	47	244	60	46.0	60	292	67	46.0	48	305
50	46.1	47	243	60	46.1	60	296	67	46.1	47	304
50	46.2	47	243	60	46.2	60	299	67	46.2	47	303
50	46.3	47	242	60	46.3	60	301	67	46.3	47	303
50	46.4	47	242	60	46.4	60	304	67	46.4	47	302
50	46.5	47	242	60	46.5	61	307	67	46.5	47	301
50	46.6	47	241	60	46.6	61	311	67	46.6	46	301
50	46.7	49	244	60	46.7	61	315	67	46.7	46	300
50	46.8	55	248	60	46.8	61	319	67	46.8	46	299
50	46.9	56	252	60	46.9	61	320	67	46.9	46	299
50	47.0	56	256	60	47.0	61	320	67	47.0	46	298
50	47.1	56	259	60	47.1	61	321	67	47.1	46	297
50	47.2	56	262	60	47.2	61	321	67	47.2	45	294
50	47.3	57	266	60	47.3	61	322	67	47.3	45	291
50	47.4	57	269	60	47.4	61	323	67	47.4	45	288
50	47.5	57	272	60	47.5	61	324	67	47.5	45	285
50	47.6	57	277	60	47.6	60	325	67	47.6	43	282
50	47.7	58	282	60	47.7	60	323	67	47.7	42	280
50	47.8	58	288	60	47.8	60	320	67	47.8	42	277
50	47.9	58	294	60	47.9	50	317	67	47.9	41	274
50	48.0	58	300	60	48.0	47	314	67	48.0	40	271
50	48.1	59	307	60	48.1	45	312	67	48.1	39	267
50	48.2	59	314	60	48.2	44	310	67	48.2	38	264

Figure 3
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<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Distance</u>	<u>LR (3 dB Clutter)</u>	<u>Elevation</u>
50	48.3	59	321	60	48.3	44	309	67	48.3	38	260
50	48.4	59	329	60	48.4	44	308	67	48.4	37	255
50	48.5	60	333	60	48.5	47	311	67	48.5	36	251
50	48.6	60	337	60	48.6	50	313	67	48.6	36	247
50	48.7	60	340	60	48.7	52	316	67	48.7	36	244
50	48.8	60	343	60	48.8	52	318	67	48.8	35	241
50	48.9	60	346	60	48.9	59	321	67	48.9	36	239
50	49.0	60	349	60	49.0	59	323	67	49.0	37	237
50	49.1	60	352	60	49.1	59	325	67	49.1	38	236
50	49.2	60	356	60	49.2	59	327	67	49.2	39	235
50	49.3	60	360	60	49.3	59	329	67	49.3	40	235
50	49.4	60	362	60	49.4	59	330	67	49.4	41	237
50	49.5	60	363	60	49.5	59	331	67	49.5	43	239
50	49.6	60	364	60	49.6	59	332	67	49.6	43	241
50	49.7	60	365	60	49.7	59	333	67	49.7	44	243
50	49.8	60	366	60	49.8	59	334	67	49.8	45	245
50	49.9	60	366	60	49.9	59	335	67	49.9	46	247
50	50.0	60	367	60	50.0	59	335	67	50.0	46	249