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RICHARD P. BOTTI II

AFFIRMATIVE DIRECT CASE
EXHIBITS

MM DOCKET NO. 93-155

Federal Communications Commission

Docket No. 93-155 Exhibit No. ONE

Presented by RICARD BOTT II

Dispostion { Identified ✓ / Received ✓ / Rejected

Reporter M.K. FLEISHMAN

Date 10/26/93

ANDREWS OFFICE PRODUCTS CAPITOL HEIGHTS, MD (K)

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

RECEIVED
JUL 16 1993
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In re Application of	) MM Docket 93-155
RICHARD BOTT II (Assignor)	) File No. BAPH-920917GO
and	)
WESTERN COMMUNICATIONS, INC. (Assignee)	)
For Assignment of Construction Permit of Station KCVI(FM), Blackfoot, Idaho	)

To: Roy J. Stewart, Chief, Mass Media Bureau

REQUEST FOR ADMISSION

Richard P. Bott, II, by his attorneys and pursuant to Section 1.246 of the Commission's Rules, hereby requests the admission by the Chief, Mass Media Bureau, of the truth of the following factual statement:

1. Bott had not prior to designation for hearing in the instant proceeding made the statement or representation to the Commission that throughout the six-year effort to obtain his permit he maintained a good faith intention to operate KCVI as a commercial facility with a religious format (see HDO ¶ 3) or that throughout the comparative proceeding, he always intended to operate with a commercial religious format. (see HDO ¶ 9)

It is requested, pursuant to Section 1.246(b), that a response, in the absence of which the requested admission will be deemed made, be served upon Bott's counsel no later than July 26, 1993.

Respectfully submitted,

RICHARD P. BOTT, II

By: _____
James P. Riley
Kathleen Victory
His Attorneys

Fletcher, Heald & Hildreth
11th Floor
1300 North 17th Street
Rosslyn, Virginia 22209
(703) 812-0400
July 16, 1993

CERTIFICATE OF SERVICE

I, Roberta Wadsworth, a secretary in the law offices of Fletcher, Heald & Hildreth, hereby certify that I have on this 16th day of July, 1993, had copies of the foregoing "REQUEST FOR ADMISSION" mailed by U.S. Mail first class, postage prepaid, to the following:

*Honorable Arthur I. Steinberg
Administratie Law Judge
Federal Communications Commission
2000 L Street, N.W.
Room 228
Washington, DC 20554

Norman Goldstein, Esquire
Paulette Lade, Esquire
Hearing Branch
Mass Media Bureau
Federal Communications Commission
2025 M Street, N.W. - Room 7212
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Napa, CA 94559
Counsel for Western Communications, Inc.

Roberta Wadsworth

* denotes hand delivery

RECEIVED
JUL 21 1993
FLETCHER, HEALD
& HILDRETH

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In re Application of	)	MM DOCKET NO. 93-155
	)	
RICHARD BOTT II (Assignor)	)	File No. BAPH-920917GO
	)	
and	)	
	)	
WESTERN COMMUNICATIONS, INC. (Assignee)	)	
	)	
For Assignment of Construction Permit of Station KCVI(FM), Blackfoot, Idaho	)	

To: Richard Bott II

MASS MEDIA BUREAU'S RESPONSE TO REQUEST FOR ADMISSION

Pursuant to 1.246(b)(2) of the Commission's Rules, the Mass Media Bureau hereby responds to the Request for Admission filed by Richard Bott II ("Bott") on July 16, 1993. The Bureau submits that portions of the request are improper in that they request the Bureau to admit to statements made or not made by Bott. Instead, the Bureau suggests and will admit to the truth of the following revised admission:

> The Bureau does not possess a copy of a written statement or transcript of an oral representation by Bott to the Commission in which Bott asserts that throughout the six-year effort to obtain his permit he maintained a good faith intention to operate KCVI as a commercial facility with a religious format or that

throughout the comparative proceeding, he always intended to operate with a commercial religious format.

Respectfully submitted,
Roy J. Stewart
Chief, Mass Media Bureau

Charles E. Dziedzic
Chief, Hearing Branch

Norman Goldstein

Y. Paulette Laden
Attorneys
Mass Media Bureau

Federal Communications Commission
2025 M Street N.W., Suite 7212
Washington, D.C. 20554
(202) 632-6402

July 20, 1993

CERTIFICATE OF SERVICE

Michelle C. Mebane, a secretary in the Hearing Branch Mass Media Bureau, certifies that she has, on this 20th day of July, 1993, sent by regular United States mail, U.S. Government frank, copies of the foregoing **"Mass Media Bureau's Response to Request for Admission"** to:

James P. Riley, Esq.
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Napa, California 94559

Administrative Law Judge Arthur I. Steinberg
Federal Communications Commission
2000 L Street, N.W., Suite 228
Washington, D.C. 20554

Michelle C. Mebane

Michelle C. Mebane

Federal Communications Commission

Docket No. 93-155 Exhibit No. TWO

Presented by RICHARD BOTT II

Disposition { Identified ✓ / Received RESERVED / Rejected

Reporter M.K. FLEISHMAN

Date 10/26/93

Federal Communications Commission

Docket No. 93-155 Exhibit No. TWO

Presented by

Disposition { Identified ✓ / Received ✓ / Rejected

Reporter

Date

ANDREWS OFFICE PRODUCTS CAPITOL HEIGHTS, MD (K)

Engineering Statement

KRSS FM Coverage Contours

prepared for

Richard P. Bott, II

This statement has been prepared on behalf of Richard P. Bott, II, permittee of Station KCVI, Blackfoot, Idaho, to demonstrate the expected coverage of KRSS, Chubbuck, Idaho. The 1.0 mV/m coverage of KRSS was predicted using the FCC method and an supplementary method that takes into account the surrounding mountainous terrain. There is a substantial difference in coverage predicted by the two methods.

Prediction Methods

It is ordinarily required that the coverage of an FM station be predicted using methods outlined in Section 73.313(c), however, Section 73.313(e) permits use of a supplemental showing concerning calculation of the contours by other means. In mountainous areas, such as the area surrounding Chubbuck, Idaho, it is well known that the FCC method of computing contours does not accurately predict the coverage of FM stations. In such circumstances, use of a propagation model that accounts for terrain variations is warranted.

Supplemental Method

For purposes of this study, the Irregular Terrain Model (ITM) developed by the National Telecommunications and Information Administration (NTIA) was employed. The ITM version employed is that available through the "COVERAGE" program provided by the NTIA time-shared computer service ("TASERVICE") in Boulder, Colorado. The "COVERAGE" program employs the ITM point-to-point model to generate predicted field strengths at 1 km increments along incremental bearings from a transmitter site. The ITM is based on the Longley-Rice propagation model, which uses methods described in National Bureau of Standards Technical Note 101.

Propagation predictions were made for distances starting at 1 kilometer from the KRSS site and ending at 120 kilometers from that site. The authorized KRSS antenna height above mean sea level was used. The 6.2 kilowatt effective radiated power of KRSS was employed, with antenna gain of 2.15 dB to adjust to the prediction method reference isotropic antenna. The prediction determined the field strength, in dBu, for a location variability of 50%, and a time availability of 50%, with prediction confidence of 80%. Horizontal polarization was employed. The standard ground conductivity of 0.005 S/m and dielectric of 15 were used for this prediction. The receiver height was specified at 9.1 meters (30 feet) above ground, with the ground elevation generated from USGS digitized terrain data. This choice of options matches as closely as possible the factors used in the FCC propagation method.

Analysis of Results

The program provides an output listing that shows the predicted field strength every kilometer along incremental radial bearings. For this study, radials were chosen every 10° of true azimuth, plus increments of 5° between 355° T and 45° T. In most cases, the 1 mV/m contour was easily determined as the point where the signal strength fell below 60 dBu. However, the studies showed some areas of limited terrain shadowing where the predicted signal strength fell below 1 mV/m. On those radials, where the areas of such shadowing were small, and the field strength rose again to values substantially above 60 dBu for a long distance beyond the shadowed area, the 1 mV/m contour was determined as the distance at which the bulk of the predicted signal strengths fell below 60 dBu. The 35 degree radial is an example. Along that radial, the predicted signal strength drops below 60 dBu for short distances between 22 and 24 kilometers; 27 and 28 kilometers, and at 31 kilometers, but continues above 60 dBu until 35 kilometers, where it drops generally below 60 dBu, and remains so (except for short excursions) for the remainder of the radial. Along the 35° radial, the 1 mV/m contour was established at 35 kilometers. A similar process was followed to determine the contour distance on each remaining radial. Table 1 shows the base data employed in this analysis.

Predicted Coverage

The coverage map of Figure 1 shows the 1 mV/m coverage of KRSS as predicted by the "standard" FCC method and the supplemental method described herein. It is believed that this coverage map satisfies the requirements of Section 73.313(e) of the FCC Rules. Detailed sample calculations have not been included as the method employed (the ITM) has generally been accepted by the Commission in the past for similar studies, the computer program employed is not equipped to provide such sample calculations, and the program run was made using U.S. Government provided computer facilities. The data underlying these maps is tabulated in Table 2.

There are two radials of particular concern: 20° T and 25° T. These radials are in the direction of Idaho Falls, Idaho. For these two radials, terrain profiles were prepared using USGS/DMA 3-arc second terrain data. Figures 2A and 2B present the terrain profiles for these two radials.

Population

For the FCC method contour, 1990 U.S. Census data shows 109,249 persons receive 1 mV/m or better coverage; for the ITM, 175,737 persons are covered.

Conclusion

In the case of KRSS, the FCC method does not accurately depict the 1 mV/m coverage which will be expected. The supplemental showing contained herein shows the actual coverage expected from the class C-2 facilities of KRSS.

The undersigned hereby states under penalty of perjury that this statement was prepared by him or under his direction, that he is a Registered Professional Engineer in the Commonwealth of Virginia, that his qualifications are a matter of record with the Federal Communications Commission, and that this statement is true and accurate to the best of his knowledge and belief.

William P. Suffa, P.E.
Virginia Registration 18300

August 16, 1993

Predicted Field Strengths at Distances (ITM)

(in dBu)

Distance (km)	Radial 0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1
2	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1
3	98.6	98.6	96.6	90.7	96.7	98.6	98.2	98.6	98.6	98.6	98.6
4	96.2	94.3	91.9	90.3	92.4	93.6	93.3	93.6	89.5	82.8	81.5
5	94.2	94.2	90.2	88	89.3	91.1	90.2	90.2	85.5	80.6	75.9
6	92.7	90.6	89.2	87	81.9	78.6	85.4	88	85.6	77.7	70.4
7	91.4	91.4	91.4	91.4	83.6	78.8	86.5	86.9	84.2	77.1	71.4
8	77	90.2	90.2	90.2	85.8	78.6	85.7	85.9	84	77.6	71.5
9	75.8	73.6	79.3	87.6	86.3	81.7	85	86.5	85.3	78.4	72
10	78.7	74.6	83.4	88.3	88.3	82.9	88.3	88.3	88.3	80.3	73.8
11	75.9	76.5	82.8	87.5	87.5	87.5	87.5	87.5	87.5	87.5	76.4
12	76.2	76.2	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	77.3
13	78.7	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	78.6
14	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.4	85.4
15	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.8	54.9
16	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	70.2
17	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
18	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	48.9	83.3	83.3
19	82.9	82.9	82.9	82.9	82.9	82.9	82.8	82.8	72.6	82.8	82.9
20	82.4	82.4	82.4	82.4	82.4	82.4	82.4	59.4	82.4	82.4	82.4
21	82	82	82	82	82	82	62.9	61.7	82	60.8	82
22	81.6	65.7	81.6	81.6	81.6	81.6	57.1	48.1	56.9	67.3	54.9
23	81.3	81.3	81.3	81.2	81.2	81.2	56.2	54.5	81.2	57.2	61.9
24	64.4	80.5	80.9	80.9	80.9	56.7	53.6	56.5	59.3	64.8	67.1
25	55	62.7	60	80.5	50.4	54.1	57.4	61.4	66.1	66.5	67.7
26	64	58.9	68.2	58.7	53.8	54.3	57.7	59.6	80.2	67.6	80.1
27	66	62.7	54.7	56	57.7	59.3	56.8	48.7	45.4	54.4	79.9
28	66.8	64.6	55.2	55.9	60.4	61.8	61.4	56.4	49.3	66.3	56.8
29	67.9	67	59.3	60.5	59.6	60.8	63	62.1	54.4	75.1	60.6
30	73.3	65.5	62.6	62.3	59.5	63.4	65	67.5	61.3	79	63.1
31	77.2	71.3	64.3	63.3	60.2	65.3	65.2	54.7	69.6	78.7	63.4
32	78.6	74.7	66.1	64.2	61.5	66.7	78.5	77.1	78.5	57.3	64.8
33	78.3	78.3	66.7	64.9	62.1	76	77.7	78.2	54.9	78.2	64.6
34	78.1	78.1	66.7	65.6	62	76	78	78	51	53.1	76
35	77.8	77.8	73.6	65.5	63.1	50.5	55.3	77.7	57.9	42.1	76.9
36	73.9	77.6	77.6	65.9	63.4	58.9	49.6	51	60.8	52.6	53
37	73.9	77.4	77.4	75.1	64	61.7	55.1	46.6	46.8	55	50
38	73.7	73.1	77.2	77.2	64.4	62.6	54.8	47.7	58.1	48.9	57
39	73.5	73.2	77	77	64.3	63.6	65.7	59.2	58.2	53.8	57.1
40	73.4	73.1	72.3	76.8	76.4	58.2	49.2	59	36.8	46.6	49.3
41	73.2	73	72.3	76.6	76.6	57.2	45.2	40.3	38	59.1	55.3
42	72.9	72.8	72.2	71.1	76.4	58.6	42.6	36.7	41.2	65.5	42.8
43	72.5	72.5	72	70.9	76.2	61.9	48.6	41.8	53.5	73.5	57.8
44	72.1	72.1	71.9	70.8	70.1	59.2	51.1	42.2	55.1	40.1	63.7
45	71.8	71.9	71.6	70.8	75.8	58.3	54.5	45.6	55.6	73	45.4

Table 1 - Page 2

Distance (km)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
46	71.6	71.7	71.4	70.9	69.5	63.1	56.1	51.1	59.1	32.5	71.1
47	71.5	71.6	71.1	70.5	69.2	66.3	56.6	51.5	58.2	43.2	41.6
48	71.4	71.3	70.9	70.2	69.1	69.8	59.8	54.4	42.9	57.9	53.7
49	71	71	70.8	69.9	68.7	71.3	59.7	57.7	63.8	74.2	69
50	70.7	70.7	70.5	69.6	68.6	71.9	64	58.9	72.5	74.8	70.5
51	70.6	70.6	70.3	70.9	68.4	72.1	70	63.2	31.9	74.6	70.9
52	70.4	70.5	69.8	68.9	68.1	66.2	70.1	71.1	29	74.5	74.5
53	70.3	70	69.6	70.2	67.9	65.9	70.3	70.8	51.6	27.7	23.2
54	70	69.6	69.2	69.9	67.6	65.6	69.8	41.3	27	54.2	38.2
55	69.9	69.1	68.8	69.6	67.1	65.2	69.4	47.7	54	56.3	39.7
56	69.7	69	70	69.4	68.7	66.4	69	52.5	73.5	23.5	43.1
57	69.6	68.8	68	67.5	68.4	64.7	31.6	31.2	32.6	46.3	42.2
58	69.4	68.8	69.2	68.6	66.5	64.2	33.2	34	36.6	36.6	44.4
59	69.4	68.6	67.3	68.4	67.9	65.5	42.2	52.3	60.2	31.5	46.9
60	69.1	68.2	66.9	66.5	67.3	65.2	39.2	56.1	36.1	31.4	47.8
61	68.8	67.8	68.2	67.8	67	65	44.3	55.5	42.4	34.7	48.1
62	68.3	67.4	67.9	67.4	67.1	65.1	44.9	13.8	38.7	37.3	47.8
63	67.9	67	66.2	65.7	66.5	64.8	48.4	46.9	27.2	36.2	50.2
64	67.4	66.7	67.6	67.2	65.9	64.5	49.1	41.9	23.7	36.3	53.5
65	67	66.3	67.4	66.7	66	64.6	48.3	56	28.1	38.9	56
66	66.5	66	67	66	65.5	64.5	49.8	55.3	32.5	24.7	5.4
67	66.1	65.7	66.6	65.8	65.3	64.4	51.2	58.5	26.6	28.1	25.1
68	65.8	65.3	66.7	65.8	64.9	64.1	48.9	36.9	33.1	41.9	28.1
69	66.2	64.9	66.6	66	64.7	63.6	48.2	34.2	31.4	18.9	21.8
70	66.1	64.4	66.4	65.6	64.2	63.4	48.5	38.7	34.2	44.2	44.5
71	66	63.9	67.1	65.4	63.7	63.3	48.9	36.5	24.9	45.4	45.7
72	65.8	63.6	66.5	65.3	63.7	63	49.2	40.2	37.3	45.8	47.3
73	65.4	63	65.8	64.9	64	62.6	46.8	35.9	41.9	45.3	44.3
74	65	62.8	65.4	64.1	63.5	62.6	48.8	37	42.8	45.7	43
75	64.5	62.7	65.1	64.1	63.2	62.3	50.4	30.4	7.1	32.3	17.7
76	63.6	62.3	64.7	63.3	63.2	61.8	53.4	32.4	35.5	10	31.3
77	39.9	61.7	64.4	62.9	62.9	61.9	53.5	33.3	40	35.3	22.5
78	44	62.3	64.1	62.4	62.6	61.6	55.7	33.4	4.4	43.3	39
79	43.5	61.7	63.6	62.1	62.4	61.1	61	34.4	40.7	4.4	49.9
80	43.3	59.6	63.1	61.4	62.1	60.9	62.3	40.9	40.3	28	2
81	47.4	58.9	46.7	60.9	61.7	60.7	32.6	16.8	39.9	22.8	8.2
82	48.4	58.2	40	60.5	61.4	60.5	28.1	42.1	42.8	45.6	10.9
83	48.3	48	37.3	59.3	61	60	30.6	42.7	44.5	44.8	13.5
84	47.9	48	40.4	46.4	60.6	59.6	31.3	41.1	-8.7	45.5	11.8
85	44.9	47.2	45.1	48.7	60.2	59.6	27.1	10.9	35.4	44.8	23
86	45	46.4	46.3	57.9	59.8	59.2	25.4	5.9	24.5	45	40.1
87	45.3	46	46.8	57.8	59.4	58.9	27.8	35.4	41.8	46.3	45.7
88	42	44.2	47	57.9	59	58.6	34.7	37.8	42.9	25.7	-9.4
89	40	43	46.9	57.4	58.5	58.2	37.6	37.2	44	2.1	15.1
90	39.8	42.8	44.5	57.2	58.1	57.9	38.3	38.9	43.9	6.4	-24.6
91	39.5	43.7	44.3	56.9	57.8	57.5	39.2	39.1	6.9	9.7	20.9
92	39	44	43.6	56.6	57.5	57.3	39.4	17.6	42.3	13.5	30.6
93	38.4	43.6	43.5	56	57.2	56.8	39.8	17.1	0.8	14.9	47.8
94	37.5	43.7	43.4	55.7	56.8	56.4	39.7	18.9	1.5	14	47.6

Table 1 - Page 3

Distance (km)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
95	34.7	43.9	43.4	55.3	56.4	56.1	39.2	18.2	10.5	15.4	-25.7
96	38.9	44	43.1	54.8	56	55.6	38.8	26	10	17.5	-17.3
97	40.4	44.3	43.2	54.6	55.6	55.1	40	36.7	12.3	19.1	-12.3
98	41.2	47.3	42.8	53.5	55.1	54.6	41.4	44.5	13.4	19.3	-7.2
99	40.8	47.7	42.4	53.2	54.7	54.2	45.3	49.2	11.2	22.9	-7.1
100	41.3	51.3	40.6	53.2	54.2	54	47	51	1.2	22	2.8

Distance (km)	60.0	70.0	80.0	90.0	100.0	110.0	120.0	130.0	135.0	140.0	150.0
1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1
2	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1
3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
4	87	86.2	95.3	95.5	96	96.1	96.1	96.1	96.1	96.1	96.2
5	73.1	69.1	77.4	83	91.9	94.2	94.2	84.5	88.2	94.2	94.2
6	69.1	66.7	75.1	77.2	84.4	81.5	75.4	85.7	87.2	86.3	92.7
7	70.1	66.9	72.1	78.7	83.1	71	70.6	81.4	82.3	86.4	91.4
8	70.1	70.9	70.4	79.6	83.3	69	65.9	69	77.9	81	90.2
9	71.5	67.7	72.3	81.5	84.6	67.7	63.7	75.3	75.5	81.4	89.2
10	73.1	70.9	77.6	88.3	88.3	74.9	67.8	77.1	79.1	80.4	72.6
11	76.4	73.9	80.4	87.5	87.5	78.3	69.2	64.8	77.6	81.5	80
12	78.2	76.6	86.7	86.7	86.7	86.8	71.9	72.7	75	86.7	75.6
13	86.1	86.1	86.1	86	86	86.1	73.8	86.1	86.1	72.6	73.4
14	85.4	85.4	85.4	85.4	85.4	65.8	73.5	53.6	85.5	66.5	63.2
15	84.8	84.8	84.8	84.8	84.8	84.8	76.1	65.5	53.7	64.2	54.1
16	48.1	84.2	49	84.3	43.9	50.8	57.1	73	67.7	61.5	56.9
17	47.6	28.5	54	83.7	57.5	39.8	83.8	83.8	73.4	70.1	58.3
18	49	34	60.8	41.9	49.5	63.4	83.3	83.3	83.3	73.6	60.5
19	52.5	37.6	46.3	43.9	41.7	45.2	82.8	82.9	82.9	82.9	61.8
20	56.4	43.8	50	36.9	47.3	51.8	44.3	82.4	82.4	82.5	62.7
21	57.3	42.9	46.5	41.4	44.8	54.3	57.2	81.9	82	82	64.1
22	57.7	43.5	44	40.8	44.3	56.6	62.9	81.5	81.6	81.6	66.5
23	57.9	47.7	42.1	42	42.6	42.6	64.2	35.5	81.2	81.2	68.6
24	62.7	40.6	31.1	41.2	46.5	57.7	80.9	36.2	80.8	80.8	69.5
25	63.9	43.6	33.9	35.9	51.8	41.4	60.2	35.8	23.1	80.5	68.9
26	50.7	37.5	43.9	37.1	51.1	55.4	62.4	32.9	27.6	32.9	71
27	54.2	39	37.4	36.9	32.2	48.5	38.2	38.9	47.8	45.3	79.5
28	56.6	38.2	30.4	36.6	36.3	43.9	55.7	41.4	32.4	40.8	79.4
29	56.9	35.4	34.1	36.5	36.9	40.8	38.2	41	20.9	55	78.4
30	44.6	37.1	38.7	38	38.2	41.4	41.7	40.2	33.7	78.9	77.9
31	52	35.4	43	40	38	45.3	35.7	44.1	34.1	32.7	78.1
32	53.5	36.3	45.9	44.4	38.5	40.2	39.6	43.1	36.1	40.8	47.9
33	54.3	43.9	48.6	43.4	39.6	45.1	42.2	41.1	37.5	38.7	77.3
34	63.2	49	48.2	46.1	39.4	43.8	43.4	39.1	34	34.3	34.9
35	41.5	48.3	48.6	37.8	41.1	45.7	46	26.5	22.1	35.1	50.3
36	48.7	49.3	25.1	33.2	42.9	45.4	44.4	35.7	28.6	40.9	58.7
37	47.1	47.8	32.2	32.2	43.9	48.5	45.3	42.2	29.2	37.3	44.3
38	48.2	30.7	30.6	43	43.2	48.4	44.3	49.1	29.3	32.6	29.4
39	53.6	38.9	44.9	34.4	44.7	48.2	46.6	49.9	33.9	36.6	45.6
40	50.2	42.3	34	45	46.2	50.1	48.2	35.1	35.5	32.2	54.2
41	42.9	45.9	35.1	46.9	46.5	50.2	46.8	53.8	34.7	34.3	64.6
42	44.7	47	43.7	23.4	50.1	50.5	47.1	22.6	37.8	34.3	74.2
43	48.5	46.9	27.6	25.3	50.8	50.5	47.2	37.8	39.5	36.1	73.9
44	55.2	46.4	25.5	29.2	50	50.1	47	25.3	40	39.4	74.9
45	30.9	49.3	31.2	30.1	49.4	50	47	23.9	39.1	43.4	75.7
46	47.8	35.4	26.2	29.1	50.7	50.3	45.9	37.4	26.3	43.1	75.5
47	61.1	32	37.7	31.4	49	50.4	46.1	7	28.6	45.6	31.4
48	61.6	35.1	36.3	32.8	48.4	51.8	46.3	17.3	36.5	46.9	74.4
49	60.8	44.5	38.6	31.1	48.2	53.9	46.3	22.3	38.8	48.8	74.9
50	62.4	45.7	22.5	31.1	47.2	53.8	46.1	33.4	39.4	47.9	51.1

Table 1 - Page 5

Distance (km)	60.0	70.0	80.0	90.0	100.0	110.0	120.0	130.0	135.0	140.0	150.0
51	71.9	47.5	26.3	32	16.5	52.6	45.5	40.1	41	29.4	29.8
52	70.8	46.3	31.5	36.1	26.8	52.9	45.5	12.7	45.3	46.3	37.1
53	22.1	26.5	29.7	39.1	31.5	52.9	46	17.2	14	46.3	41.8
54	38.2	28.6	27.9	38.2	28.5	51.9	45.8	22	8.2	45.3	74.1
55	40.2	27.9	28.8	29	29	50.7	45.7	26	6.6	28.6	53.7
56	39.7	27.1	33.8	24.2	33.2	24	45	26.6	24.2	44.5	18.8
57	42.7	23.4	36.2	21.8	26.1	30.4	45.4	27.3	12.3	27.9	28.6
58	44.3	30.7	35.5	24.9	19.3	31.8	45.3	27.8	24.9	21.6	36.6
59	48.7	20	36.9	27.7	27.3	31.9	45.1	31.7	11.3	32.4	33.3
60	52	27.2	40.5	28.5	26.4	31.5	33.7	30.6	14.7	14.7	51.7
61	56.5	27.2	43.9	28.5	25.7	26.3	49.6	29.5	15.1	21.6	16.2
62	67.7	22.5	-7.7	28.5	27.8	21.6	49.6	31.3	14.6	28.7	21.4
63	23.9	27	6	28.7	25.1	24.9	25.5	31.1	13.3	22.7	37.5
64	7.8	39	11.4	27	25.4	26.9	48.6	31.5	15.1	19.3	56
65	31.5	8.3	18.7	26.7	23.3	28.7	47.9	31.1	19.1	21.3	16.5
66	36.4	9.9	19.1	22.9	22.4	27.5	13.5	30.9	21.8	22.7	11.8
67	36.8	16.2	13.2	22.5	25.2	41.8	15.2	30.1	22.7	24.6	26.8
68	39.2	18.1	16.4	22.1	25.8	11.2	20.6	29.9	24.2	26.6	29.5
69	40.7	21.3	18.4	31.7	22.8	26.1	25.5	29.7	23.1	29.2	28.9
70	24.7	24.2	12.7	35.3	20.5	38.9	32	29.5	20.8	29.8	29.1
71	32.9	18.8	8.1	13.1	9.9	43.9	34.2	28	20.1	16.9	28.2
72	29.8	13.8	8.2	18.5	24.6	45.6	32.4	27.8	21.6	27.1	30.7
73	40.9	14.1	7.7	20.5	37.7	48.7	31.1	28.1	21.3	27.9	32
74	45.2	9.8	8	33.2	38.2	-18.5	41	29.2	20.7	20.1	22.5
75	48.7	9.2	8.5	36.3	-6.6	2.7	39.5	43.2	18.1	25	27.5
76	48.1	8.3	8.3	38.9	8.1	47.6	10.8	42.6	21	21	29.5
77	47.5	7.9	8.6	41.3	10.7	48.2	42.9	44.2	27.4	23.1	35
78	24.8	7	8	6.8	11.8	47.8	6.7	45.5	29.4	23.1	40.7
79	47	12.4	8	38.7	18.8	-13.3	8.4	11	27.5	25.1	20.3
80	52.9	27.3	8.4	6.9	5	-15.5	18.3	45.1	35.7	24.9	-1.8
81	55.6	37.1	16.6	2.6	8.9	9.2	14.7	45.9	37.6	25.5	8.7
82	-7.9	39.6	19.7	5.1	20.4	4.2	13.1	46.9	36.4	26.7	13.8
83	-9.2	-19.1	26.2	0.5	17.6	1.1	16	-2	-4.3	29.8	16.9
84	7.1	-14.7	36.5	0.7	30.8	6.8	22.2	45.6	38.9	31.7	16.5
85	24.1	-9.3	9.3	6.7	39	25.5	24.7	3.1	42.1	35	30.4
86	26.3	-4.4	38	19.6	38.4	2.2	25.9	12.4	40.4	40	29.2
87	41.5	4.7	37.8	22.4	-18.5	-11	31.7	-1.1	-24.8	40	28.9
88	42.4	6.1	10.5	-0.2	-14.3	-5.7	28.9	-10.8	-11.9	40.2	32.1
89	45.5	17.4	37.2	17.6	3.7	0.1	26.2	1.8	-4.9	40.4	11.2
90	40.1	17.3	37.7	20.7	1.6	2.6	6.5	-18	19.9	40.1	18.6
91	29.7	6.3	36.8	35.6	-12.7	14.7	18.7	-12.5	38.2	41.5	25.3
92	15.4	-20.7	-24.1	37.6	3.3	18.7	34.5	-10.3	37.8	-27.4	-9.4
93	33	6.1	-21.5	37.7	10.7	22.2	-0.1	-8.4	-19.9	40.5	8.5
94	35.7	36.8	-21.6	-20.9	34.9	-14.8	10.6	-5.3	-22.7	42.8	17.2
95	35.2	40.3	-7.8	-6.9	34.5	1.9	12.9	-2.6	-7.8	42.1	31.2
96	35.6	-28	14.9	-10.7	39.1	10.4	30.2	-3.1	-9.3	41.7	32.9
97	-7.7	-22.2	10	-3.5	-10.2	44	40	-4.5	-11.2	41	33.1
98	-3.6	-37.1	-25.6	2	-23	-21.7	2	-3.2	-5.6	42.8	33.6
99	-24.8	-4.3	-26	-13.9	-11.4	-16.1	44.2	10	0.1	-6.3	2.9
100	-10.1	-8.6	-23.8	-21.8	-13.5	28.5	48.6	2.7	-4.1	-10.4	34.1

Distance (km)	160.0	170.0	180.0	190.0	200.0	210.0	220.0	225.0	230.0	240.0	250.0
1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1
2	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1
3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
4	96.1	96.1	96.1	96.1	96.1	96.2	96.2	96.2	96.2	96.2	95.9
5	94.2	94.2	94.2	82.8	94.2	94.2	94.2	94.2	94.2	93.5	88.6
6	92.7	92.7	79.2	83	92.7	92.7	92.7	92.7	92.7	89	88.5
7	91.4	89.5	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.4	87
8	86.1	71.4	90.2	90.2	71.8	76.3	90.2	90.2	90.2	90.2	90.2
9	88.5	66	65.6	59.8	69.1	78	89.2	89.2	85.7	89.2	89.2
10	71.1	69.2	73.7	60.3	65.7	77	87.7	87.3	88.3	88.3	88.3
11	71	66.3	71.4	52.6	62.2	81.2	87.5	87.5	87.5	87.5	87.5
12	69	75.9	74.7	51.4	64.3	83.3	86.7	86.7	86.7	86.7	86.7
13	68.3	56.6	53.5	52.4	68.2	86.1	86	86	86	86	86
14	59.2	59.3	56.5	56.5	72.9	85.4	85.4	85.4	85.4	85.4	85.4
15	61.7	67.7	72	61.8	74.5	84.8	84.8	84.8	84.8	84.8	84.8
16	65.6	74.7	84.3	63.3	77	84.3	84.2	84.2	84.2	84.3	53.5
17	83.8	83.8	83.8	64.5	83.8	83.8	83.7	83.7	83.7	83.7	56.7
18	61.7	83.3	83.3	52.5	83.3	83.3	48.2	83.2	49.5	59.2	57.8
19	73.8	55.6	82.8	58.8	82.8	82.8	54	82.8	57.8	57.4	61.2
20	66.6	82.4	42.3	59.3	82.4	51.6	61.8	53.9	67.5	63.1	64
21	65.6	54.5	46.2	61.2	82	65.9	51.4	51.9	55.2	60.2	64.5
22	81.7	33.9	66.2	64.9	47.3	63.8	65.7	49.5	57	58.3	63.4
23	62.4	54.1	47.6	64.6	81.2	81.2	48	45.2	47.1	61.1	64
24	81	63.8	62	63	80.8	80.8	42	42.5	47.4	61.2	63.1
25	52.2	80.5	80.5	64.9	80.5	45.8	39.1	43.3	50.6	60.3	62.5
26	55.3	36.1	80.1	67.7	80.2	48.6	44.7	47.4	50.7	61.3	64.1
27	61.2	54.6	79.8	39.2	47.2	47	44.7	46.2	48.9	62.5	66
28	65.2	61.7	45.9	45.5	53.3	48.3	51.9	44.6	48.7	65.2	67.4
29	78	45.2	33.2	50.5	51.8	51.8	33.3	45.8	50.3	66.6	67.1
30	79.2	40	32.9	54.6	49	42.6	41.8	45.8	55.1	79.1	68.5
31	78.9	51.2	37.5	60.2	47.7	49	42.2	48.7	55.5	78.8	78.8
32	78.6	53.9	38.4	48.5	51.8	52.1	42.5	48.7	57.5	78.5	78.5
33	78.4	51.4	41.3	53.9	54	56.1	47.8	50	59.2	78.2	78.3
34	78.1	49.3	37.6	54.7	53.6	48.1	48.9	50	59.3	55.3	78
35	77.9	45.9	37.9	39.1	55.3	53.1	38	51.6	60	77.7	75.9
36	75.4	45.2	35.9	42.5	56.2	43.4	47.4	51	60.5	46.1	77.6
37	75	44.7	36	44.7	56.1	46.5	48.9	52.2	62.2	53.8	75
38	74.3	44.3	34.3	49.7	56.1	43.1	51.2	51.2	61.7	64	77.2
39	73.9	49	36.8	57.8	55.6	44.9	50.7	51.3	61.6	76.2	76.5
40	73.6	51.3	34.7	61.1	54.1	47.4	51.2	51.6	62.4	56.1	75.7
41	73.2	51.5	35.4	59	53.9	46.8	51.7	52.7	54.2	74.5	71.8
42	72.7	51.6	33.6	61.1	54.2	50.1	51.2	53.4	62.2	43.1	71.7
43	72.4	52.6	36.5	55.3	54.5	51.4	52.8	52.8	63.5	50.4	76.2
44	70.9	52.2	37.8	53.6	54.1	51.5	54.1	55.3	75.1	54.6	71.2
45	70.7	52.6	39	40.1	52.5	52.1	60.6	55.8	75.6	62.3	61.9
46	70.7	52	39.5	31.4	53.4	55	75.4	55.4	32.5	60.5	54.5
47	70.6	51.3	42.6	40.8	54	57.7	7.2	55.5	62.4	45.6	61
48	70.3	53.1	44.9	34.9	54.3	57	24.7	58.1	40.5	47	71.4
49	70.1	54.3	28.7	40	54.3	56.9	24.6	59	24.6	51.8	68.7
50	69.7	53.2	43	41.6	54.3	60.1	26.8	17.7	31.8	56	68.1

Distance (km)	160.0	170.0	180.0	190.0	200.0	210.0	220.0	225.0	230.0	240.0	250.0
51	69.4	53.9	43.8	38	54.6	59.3	32.3	27.1	34.9	54	68
52	68.9	54.2	44.4	37.4	55	32.3	30.5	21.2	37	49.1	68.2
53	68.3	54.4	43.7	42.1	55.4	25.8	32.3	23.3	36.5	51.9	68.4
54	67.9	54.4	25.9	46.2	55.6	46.8	32.9	24.9	38.3	48.4	69.6
55	67.3	53.4	42.2	45.9	55.3	52.3	22.9	28.8	36.2	55.1	67.8
56	67	53.9	41.5	26.4	54.8	57.1	18.3	32.8	39	53.2	69.2
57	66.4	53	42.2	18.3	55.2	57.2	26.8	33.8	37.8	52.7	69.1
58	66	52.5	42.2	26.1	55.5	61.4	26.6	33	37.9	55.2	70.3
59	65.8	53	43.2	31.4	55	22.5	27.6	30.7	39.8	55.6	69.7
60	65.9	52.3	42.8	33.2	55.1	73.3	29	31.1	41.5	53.9	68.5
61	65.5	53.4	43.7	35.2	55.3	73.1	29.8	33	43.2	56.2	70.1
62	27.1	54.3	47.6	36	55.4	8.3	29.8	35	45	55	38.9
63	45.6	55.8	48.6	48.9	55.2	32	29.4	37.2	45.4	40.3	51.3
64	64.6	57.6	47.6	14.5	55.3	7.4	31	41.2	45.5	46.7	56.2
65	66.1	57.2	-2.2	21.6	54.4	23	34.2	39.3	46.4	49.8	57.2
66	66.9	25	21.8	37	44	14	35.4	37.6	47.9	53.2	57.2
67	66.7	35	-6.4	21.4	52.9	21.4	36.4	38.3	49.4	55.5	64.8
68	67.5	21.5	3.3	47.3	54.4	26.7	36.3	39.5	50.5	42.9	64
69	26.8	20.9	7.8	49.9	32.7	32.2	37	39.5	34.5	46.5	63.6
70	24.9	28.1	4.6	20	54.3	34.2	37.6	40.3	50.3	53.4	62.9
71	37.9	31.1	7.8	21.6	53.7	35.7	38.8	44.5	49.7	54	61.9
72	27.3	33.6	9.1	28.2	52.9	13.6	39.2	47.1	50.4	53.5	62.8
73	35.6	34.8	10.6	28.8	52.6	34.1	38.2	48	54.4	53.5	61.3
74	39.9	35.8	11.5	46.1	52.7	36.6	39.7	53.7	25.4	53.3	50.8
75	43.2	39	12.3	50.6	54.6	12.8	42.5	15.8	7.7	53.4	59.2
76	45.5	42	10.9	9.5	32.4	7.3	45.4	1.1	19.5	53.3	58
77	30.4	20.4	15.6	49.3	26.4	19.3	45.4	15.2	22.1	55.2	56.5
78	24.8	24.5	16.3	18.8	53.4	25.4	-7.4	27.8	33.5	31	56.5
79	32.7	29.8	17	-5.5	40.1	25	3.3	39.7	38.2	40.5	56.2
80	36.8	36.7	16.9	-8.2	5	26.8	6.3	16.1	10.7	40.6	56.2
81	33.3	41.7	16.9	47.9	6.9	27.3	14.2	10.2	7.5	41.2	55.8
82	36.2	47.6	17	-13.2	8.3	31.4	13.7	12.8	14.8	41.8	55.3
83	39.6	53	17	-15.1	16.5	33.9	22.6	10.4	22.3	42.2	54.5
84	40	53	15.7	-2.9	18	36.3	22.9	25.7	32.8	42	53.4
85	37.8	52.5	15.9	-4.2	20.1	42.5	7.6	31.7	35.5	41	48.4
86	39.6	52.1	16.1	-0.6	26.7	42.4	-4.6	-5.7	6.6	41.8	48.2
87	39.1	53.1	16.2	7.7	34.2	-0.1	20.4	6.6	15.8	43.3	50.2
88	37.7	52.6	16.6	15.8	46.8	12.6	19.3	23.1	8.8	51.3	53.4
89	35.7	53.4	17.6	21.2	19.9	20.2	27.7	-3.9	15.6	51.4	54.6
90	32.5	53.9	17.6	2.4	28.6	-7.8	26.9	1.8	15	51.4	55.3
91	32.3	20.6	20.4	18.3	30.9	8.8	2.2	3	17.3	51.2	55.2
92	32.9	32	21.9	21.1	-9.8	-0.2	-2.4	7.1	19.3	51.1	55.3
93	33.6	52.8	27.2	21.6	7.5	10.7	-3.3	7.3	20.8	50.9	55.8
94	34.4	5.4	28.8	1.2	8.1	14.5	7	11.3	21.5	50.8	56.5
95	34.5	53.1	33.6	2.1	8.7	17.7	8.3	13.7	20.4	50.7	56.6
96	34.3	-2.6	34.9	7.4	1.5	14.6	6.5	15	21.2	50.6	57
97	35.1	11.4	-21.1	13.9	14.8	15	9.1	15.6	22.1	50.6	56.6
98	34.7	37.8	-1.2	12.7	17.4	15.4	12	15.6	22.2	50.3	56.3
99	35.1	2.2	0.6	24.8	22.1	14	18.6	14.9	22.5	49.8	55.6
100	35.3	-12.4	2.9	2.2	24.5	14.3	20.3	16	22.3	49.5	55.1

Distance (km)	260.0	270.0	280.0	290.0	300.0	310.0	315.0	320.0	330.0	340.0	350.0	355
1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1
2	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1
3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
4	96.2	96.2	95.8	92.1	96.2	96.2	95.7	95.9	95.9	96.2	96.2	96.2
5	93.6	94.2	92.2	90.8	93.2	94.2	94.2	94.2	93.2	94.2	94.2	94.2
6	90.9	92.7	92.4	88.9	91.1	87.8	85.1	83.3	92.7	92.7	92.7	92.7
7	91.4	91.4	91.4	91.4	91.4	88.5	85.8	87.4	91.4	91.4	72.6	72.6
8	90.2	90.2	90.2	90.2	90.2	89.5	86	86.6	80.7	75.3	75	72.2
9	89.2	89.2	89.2	89.2	89.2	89.2	89.2	85.3	84.6	82.8	66.3	73.3
10	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	84.2	77.6	73.6	68.9
11	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	77	67.3	71.6
12	86.8	86.7	86.7	86.7	86.7	86.8	86.8	86.8	86.8	78.6	70.8	70.5
13	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	73.7	73.2
14	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.5	85.5	85.5	74.8	74.7
15	84.8	84.9	84.8	84.9	84.9	84.9	84.9	84.9	84.9	84.9	75.9	75.8
16	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	76.1	75.6
17	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	76.3	75.8
18	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
19	82.9	82.8	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9
20	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.5	82.4
21	82	82	82	82	82	82	82	82	82	82	82	82
22	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.7	81.6
23	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
24	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	64.2
25	80.5	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.5	80.6	79.9	80.6
26	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	79.4	80.3
27	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	64.3	79.9	78.8	80
28	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.4	79.6	78.6	79.7
29	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.1	78.1	79.4
30	79.1	79.1	79	79	79	79	79	79	78.9	78.7	77.9	79.1
31	78.6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.5	78.5	77.4	76.5
32	78.1	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.1	78	77.1	76.4
33	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	77.8	77.6	76.8	76.1
34	78	78	78	78	78	78	78	78	77.4	77.2	76.5	75.8
35	77.6	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77	76.8	76.2	75.5
36	77.6	77.6	77.5	77.5	77.5	77.5	77.5	77.4	76.6	76.5	75.9	75.2
37	77	77.3	77.3	77.3	77.3	77.3	77.3	77	76.2	76.1	75.6	74.9
38	76.8	77.1	77.1	77.1	77.1	77.1	77.1	76.8	75.8	75.6	75.2	74.6
39	76.7	76.9	76.9	76.9	76.9	76.9	76.8	76.5	75.4	75.1	74.9	74.4
40	76.4	56	76.7	76.7	76.7	76.7	76.4	76.3	75	74.8	74.5	74.1
41	75.8	63.2	76.5	76.5	76.5	76.5	76.5	76.2	74.7	74.5	74.1	73.7
42	75.7	66	76.3	76.3	76.3	76.3	76.3	76	74.4	74.1	73.8	73.4
43	76.1	76.1	76.1	76.1	76.1	76.1	76.1	75.8	74.1	73.8	73.4	73.1
44	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.4	73.7	73.4	73.1	72.7
45	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	73.4	73.1	72.7	72.3
46	75.6	75.5	75.5	75.5	75.5	75.5	75.5	75.5	73	72.8	72.9	72.2
47	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	73.1	72.5	72.6	72.1
48	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	73.3	72.2	72.7	71.8
49	75.1	75	75	75	75	75	75	75	73.2	72.1	72.7	71.6
50	74.9	74.8	74.9	74.9	74.9	74.9	74.9	74.9	73.1	72.3	72.3	71.5

Distance (km)	260.0	270.0	280.0	290.0	300.0	310.0	315.0	320.0	330.0	340.0	350.0	355
51	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	72	71.8	71.2
52	74.6	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.6	72.2	71.8	71
53	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	72.2	71.7	70.8
54	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.1	71.9	71.8	70.8
55	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	71.6	71.7	70.7
56	74	74	73.9	73.9	73.9	73.9	73.9	74	73.7	72.9	71.3	70.6
57	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.4	72.8	70.9	70.6
58	73.7	73.7	73.6	73.6	73.6	73.6	73.7	73.7	73.3	71	70.7	70.3
59	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	72.9	70.9	70.6	69.9
60	73	73.4	73.4	73.4	73.4	73.4	73.4	73.4	72.8	70.9	70.4	69.8
61	72.6	72.9	73.2	73.2	73.2	73.2	73.3	73.3	72.8	70.8	70.3	69.6
62	71.9	72.7	73.1	73.1	73.1	73.1	73.1	73.1	72.6	70.7	70.1	69.4
63	71.2	72.1	73	73	73	73	73	73	72.5	70.9	69.8	69.2
64	71.1	71.5	72.9	72.8	72.9	72.9	72.9	72.8	72	71.1	69.3	69
65	70.4	71.8	72.7	72.7	72.7	72.7	72.7	72.2	71.2	71.2	68.9	68.8
66	69.8	72	72.6	72.6	72.6	72.6	72.5	71.6	71.1	71.4	68.4	68
67	69.1	72.5	72.5	72.5	72.5	72.5	72.2	71	71.5	71.3	67.9	67.5
68	68.9	72.4	52.2	72.4	72	72.4	71.8	70.3	71.4	71.4	67.4	67.1
69	68.9	71.9	48.9	71.7	71.3	72.2	71	71.7	70.7	70.4	66.8	66.7
70	68.6	70.7	54.2	52.1	70.7	70.5	70.4	72.2	69.5	49.7	66.3	66.4
71	68.2	70.2	53.3	51.9	69.9	48.2	69.9	70.5	68.8	45.1	65.7	65.9
72	67.8	69.3	45.9	53	69.2	48.9	68.7	37.8	68.1	43.3	65.3	65.5
73	67.1	69	50.6	49.2	68.4	47.5	68.4	42.5	50.8	41.9	64.8	65
74	66.6	68.1	43.9	51	67.6	51.5	68.8	46.9	49.6	39.9	64.1	64.5
75	65.8	67.1	49.2	49.3	66.8	50.9	71.6	49.2	49.7	46.5	63.7	64
76	65.3	51.3	50.5	49.5	65.6	38.5	71.4	50.2	48.9	47.8	63.3	63.4
77	64.2	47.7	47.9	44.3	50.8	47.2	71.3	51.2	50.3	47.8	62.7	62.8
78	62.9	45.7	43.2	49.3	50	44.8	21	52.7	52	47.4	64.2	62.3
79	61.4	44.8	48	49.2	52.2	43	13.6	52.5	52.1	46.8	63.5	61.7
80	59.7	53.4	50.3	47.9	59.2	43.7	28.7	50.9	44.9	45.7	48.6	61.2
81	48.7	33.9	51.1	48.6	58.8	45.6	32.7	50.6	45.4	44.2	47.7	60.5
82	57.2	41.6	51.2	49.4	58	43.9	35.7	51.4	48.9	44.6	48.8	62.7
83	47.3	43.7	51.2	48.9	57.2	49.8	37.1	50.9	51.2	44	44.9	62
84	44	44.5	51.2	51.2	57.1	51	37.8	50.1	52.5	43.6	43.3	35.6
85	42.3	44.6	49.5	53.7	55.8	51.9	38.6	48.9	49	44.8	41.6	36.8
86	42.1	44.4	49.9	53	55.7	51.8	38.9	46.6	45.4	45.5	40.5	35.9
87	44.9	44.3	50.3	52.9	54.8	52.9	37.4	47.1	47.2	45.9	38.8	36
88	45.4	45	49.9	52.3	59.6	53.6	40.1	44.2	47.6	41.9	40	38.8
89	46.9	41.8	49.6	51.5	61.6	54.4	40.1	44	46.9	37.1	37.1	41.3
90	47.2	38.1	48.1	50.9	37.6	55.1	39.9	50.7	46.5	38.4	36.1	43.4
91	46.9	37.5	46.5	50.4	40	55.1	39.7	49.6	46.4	40.5	37.3	42.9
92	44.8	37.2	45.5	49.1	44	55.2	40.6	48.4	46.8	37.9	38.7	44.1
93	46.1	38.1	44.3	48.5	47.9	54	40.9	48.9	47.3	38.7	40.4	40.8
94	46.1	38.3	41.8	48.7	48.5	40.3	40.5	51.3	47.6	40.5	41.2	38.7
95	44.5	36.3	38.5	49.1	49.2	40.5	39.2	56.9	47.2	41.8	41.5	34.1
96	44.3	38.3	37.8	48.6	48.2	42.5	40	57	46.8	42.1	42	34.9
97	42.2	40.6	35.2	47.7	55.4	42.6	38.8	57.3	46.5	42.3	40.8	33.1
98	43.8	41.3	36.5	47.2	56.1	46.5	37.5	57.6	47.4	42.1	42.9	35.5
99	43	43.3	39	47.8	55.1	47.3	36.2	57.9	47	41.6	43.3	37.5
100	38.4	44.3	40	48.3	54.5	46.1	37.5	59.5	47.2	41.3	43.4	39.4

Table 2

Distances To Contours

Radial (°T)	FCC Method (km)	ITM (km)
0	55.9	76.0
5	56.1	79.0
10	56.4	80.0
15	56.4	82.0
20	56.1	85.0
25	55.9	83.0
30	55.9	56.0
35	55.3	35.0
40	53.7	36.0
45	52.2	33.0
50	50.8	36.0
60	44.9	15.0
70	35.6	16.0
80	33.8	15.0
90	26.9	17.0
100	29.8	15.0
110	36.5	15.0
120	43.9	26.0
130	47.1	22.0
135	47.3	24.0
140	48.4	25.0
150	46.5	33.0
160	48.8	68.0
170	50.8	28.0
180	46.5	27.0
190	50.2	26.0
200	54.5	26.0
210	56.1	24.0
220	54.8	22.0
225	56.2	19.0
230	57.2	17.0
240	59.6	39.0
250	59.3	61.0
260	62.5	79.0
270	63.2	75.0
280	63.2	67.0
290	63.0	69.0
300	62.6	76.0
310	61.9	70.0
315	61.8	77.0
320	61.5	71.0
330	60.6	72.0
340	58.4	69.0
350	56.0	79.0
355	56.1	83.0

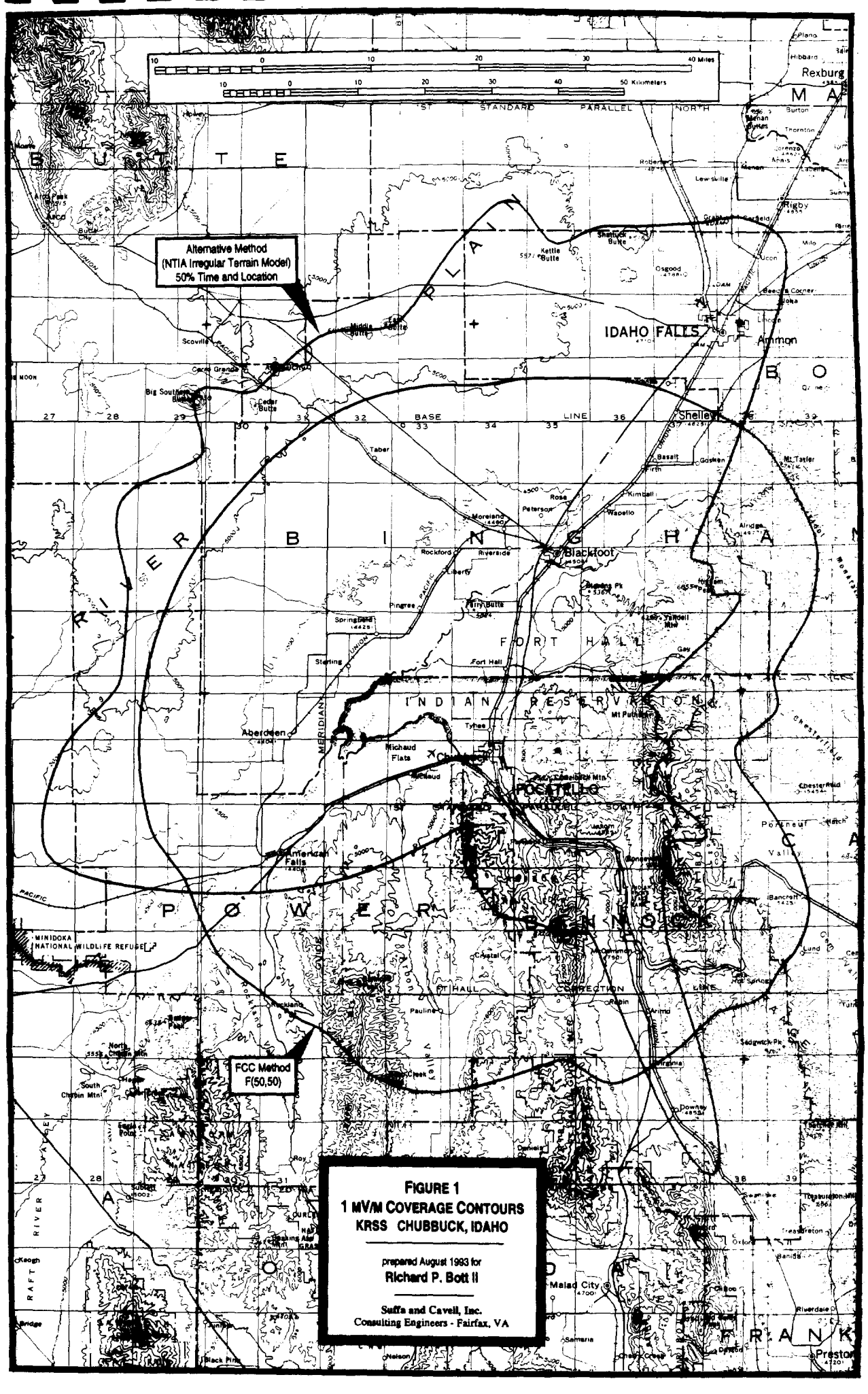
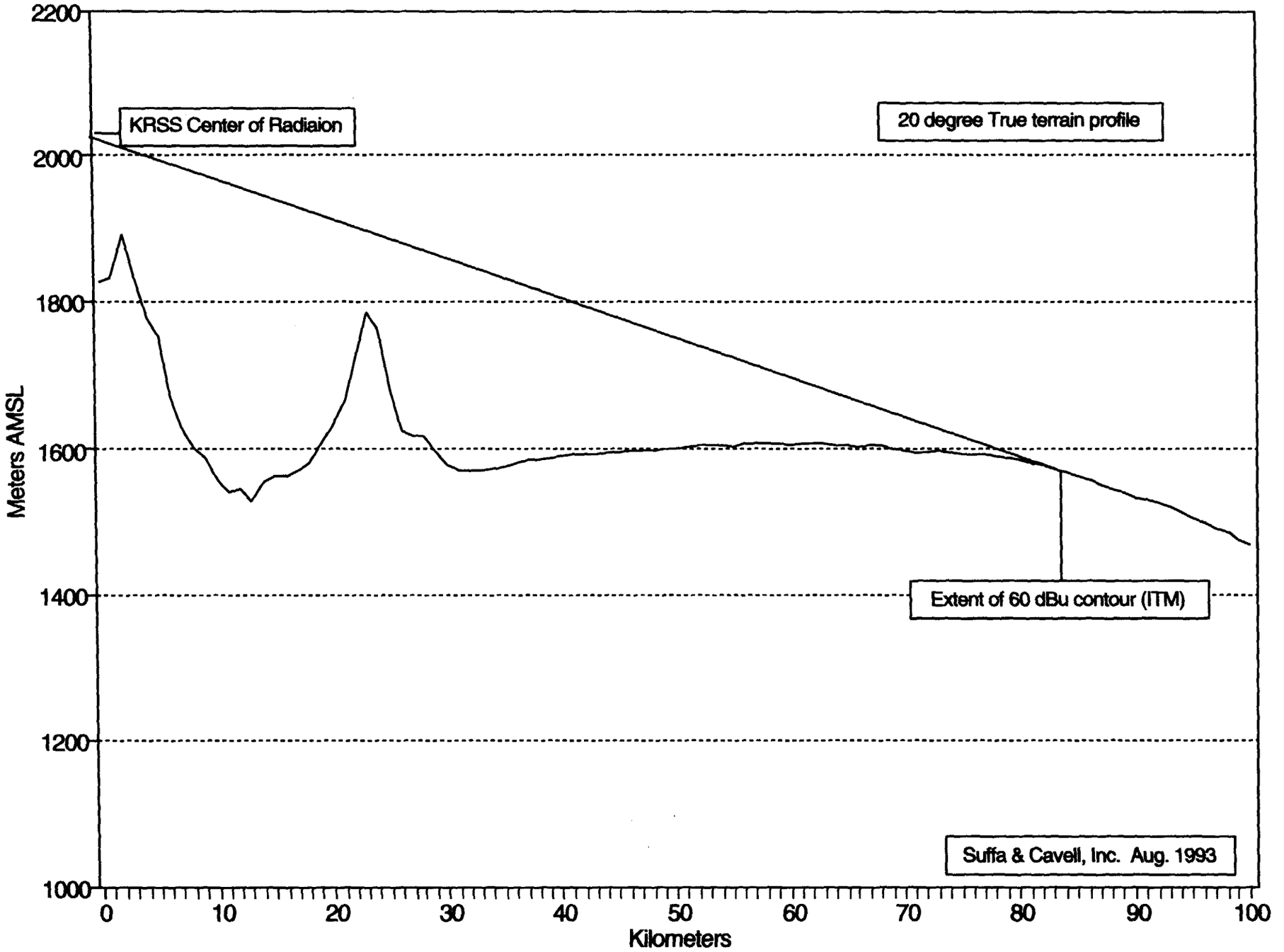


FIGURE 1
1 mV/M COVERAGE CONTOURS
KRSS CHUBBUCK, IDAHO

prepared August 1993 for
Richard P. Bott II

Suffa and Cavell, Inc.
Consulting Engineers - Fairfax, VA


KRSS Center of Radiaion
20 degree True terrain profile
Extent of 60 dBu contour (ITM)
Suffa & Cavell, Inc. Aug. 1993
Meters AMSL
2200
2000
1800
1600
1400
1200
1000
0
10
20
30
40
50
60
70
80
90
100
Kilometers