As the 114 dBu contours of the proposed WKRP-TV and authorized WPBY-TV facilities do not overlap, a lower potential for interference exists than would for operation of the two stations at fully-spaced sites with maximum facilities. Further, no overlap of the predicted WKRP-TV 116 dBu, and WPBY-TV 106 dBu contours exists. Even if WPBY where to increase its transmission facilities to the maximum permitted under the rules, no overlap of these contours would occur within the WKAS service area. Therefore, no loss of the protections afforded to receivers by the separation requirements will result from the operation of WKRP-TV at the proposed site.

Mitigation of Intermodulation Interference

As previously demonstrated, the proposed operation of WKRP-TV will provide protection from third-order spurious signal interference to nearby receivers tuned to Channel 25 at least equivalent to that afforded by the separation requirements. However, in the highly unlikely event that any objectionable interference is experienced in receivers tuned to Channel 25, there are several techniques which may be readily applied in order to alleviate the interference. The first technique, would be to provide assistance to affected viewers in order to ensure

that their receiving system is performing properly. In some cases a simple change in the orientation of the receiving antenna to provide the maximum Channel 25 signal strength may resolve the problem. Since any receivers which may potentially be affected will be located at the fringe of the WKAS Grade B service area, replacement of the existing outdoor aerial with a more directive antenna, as thus a better front-to-back ratio, may also serve to mitigate any received interference. Should simple adjustments in the receiving system prove insufficient, other remedies such as the installation of attenuators, frequency selective filters or traps in the receiving system could be applied in order to reduce the strength of the WKRP-TV signal at the input of the victim receiver.

Potential for Cross-Modulation Interference

In addition to protection against interference within receivers resulting from intermodulation, as described above, the fourth alternate channel taboo separation attempted to protect receivers from interference generated by the cross-modulation of signals on the fourth alternate channels. Figure #14 of LAB 74-01 provides relevant data concerning the potential for perceptible interference to receivers tuned to Channel 33 (channel n) from the Channel 29 (n-4) transmissions.

Based upon the undesired-to-desired signal strength data developed by the Commission, only receivers located within the immediate vicinity of the proposed WKRP-TV transmitter site could potentially be affected. Since the WKRP-TV signal strength in the immediate vicinity of the tower will be substantially reduced because of the vertical plane radiation pattern characteristics of the proposed antenna, and as the area within the immediate vicinity of the proposed WKRP-TV site is, for the most part, uninhabited, no wide-spread interference to the receivers tuned to Channel 29 caused by cross-modulation with the Channel 33 signal would be limited to those areas in the immediate vicinity of the WPBY-TV transmitter. Again, the WPBY-TV site is located in a remote, uninhabited area. Thus, no wide-spread interference to the reception of Channel 29 will result. In the unlikely event that any objectionable interference is experienced in nearby receivers, the interference may be eliminated by application of one or more of the mitigation measures discussed above.

Request for Waiver of Section 73.610

WKRP-TV hereby requests a waiver of the 31.4 kilometer UHF taboo separation requirement, contained in Section 73.610 of the Rules and Regulations, to station WPBY-TV. Applicant believes that, in this case, a waiver is justified by the following facts:

1) No fully-spaced, fully-developed site exists at which a sufficiently tall tower could be constructed in accordance with all of the applicable FCC, FAA and local zoning regulations.

2) Because the proposed site is in the immediate vicinity of two existing tall towers, construction of the WKRP-TV tower will not conflict with airspace or local land use regulations.

3) Construction of the WKRP-TV tower at the proposed site would result in a minimum impact on the surrounding environment and would not necessitate the development of a new mountain top site.

4) Operation of WKRP-TV at the site, with the antenna height proposed, will provide a line-of-sight path to the entire community of Charleston, which is difficult or responsible from most other locations.

5) Location of the WKRP-TV transmitter in one of the two areas in which the transmitters of all the operating stations in the Charleston/Huntington market are located would ensure that the public would receive the best possible service without extensive antenna reorientation.

6) Opeation of WKRP-TV with the facilities proposed, would present a lower potential for intermodulation interference to receivers tuned to Channel 25, than the full separation requirement provides to fully-spaced stations operating on the fourth adjacent channel with the maximum facilities permitted under Section 73.614.

7) No firm technical basis exists for the intermodulation separation distance of 20 miles between stations operating on fourth adjacent channels. Further, analysis based upon the FCC's own performance data of 47 receivers indicates that the intermodulation taboos should be relaxed or eliminated.

8) In the extremely unlikely event that perceptible interferece is experienced in nearby receivers, readily acceptable remedies may be applied in order to alleviate the problem.

ALLOCATION STUDY

Study Name : WKRP-TV Charleston, West Virginia
Channel : 29z
Coordinates : N 38 25 08.0 W 81 55 22.0
Separations : TV Zone 1 - Full Service

Call City	File	- number State	Chan Status	ERP HAAT	Latitude Longitude	Bear Zone	Dist Clear	Req'd (km)
			14z		40 4 3.0	29.0	210.33	119.9
WHEELING		WV	ALC		80 43 20.0	1	90.43	Comment
WBRATV	BLET	177	* 15+	631	37 11 56.0	130.5	206.62	95.7
ROANOKE		VA	LIC	2050	80 9 2.0	2	110.92	
WBRATV	BPET	890110KF	* 15+	3112	37 11 56.0	130.5	206.62	95.7
ROANOKE		VA	APP	2062	80 9 2.0	2	110.92	
WTAPTV	BLCT	1987	15-	236	39 20 59.0	16.5	107.88	95.7
PARKERSBURG		WV	LIC	620	81 33 56.0	1	12.18	CLOSE
WKPI	BLET	810616KI	* 22-	1320	37 17 6.0	202.9	136.55	95.7
PIKEVILLE		KY	LIC	1410	82 31 29.0	2	40.85	
WKAS	BLET	423	* 25-	162	38 27 43.0	274.7	61.06	31.4
ASHLAND		KY	LIC	500	82 37 12.0	2	29.66	
WTTE	BLCT	840614KE	28-	1916	40 9 33.5	336.3	211.60	87.7
COLUMBUS		OH	LIC	965	82 55 21.5	1	123.90	
			* 28-		36 35 49.0	186.6	203.53	87.7
BRISTOL		VA	ALC		82 11 4.0	2	115.83	
WKSOTV	BLET	830725KM	* 29+	584	37 10 .0	242.3	290.93	248.6
SOMERSET		KY	LIC	1460	84 49 28.0	2	42.33	
WVIRTV	BLCT	2206	29-	1290	37 59 .0	98.1	305.27	248.6
CHARLOTTESVILLE		VA	LIC	1200	78 28 54.0	1	56.67	
WKRP-TV	**BPCT**	**870121KN**	**29z**	**5000**	**38 23 15.0**	**94.4**	**43.77**	**248.6**
CHARLESTON		**WV**	**CP**	**1491**	**81 25 24.0**	**1**	**-204.83**	**SHORT c**
WUXA	**BMPCT**	**870515KQ**	**30z**	**1353**	**38 45 42.0**	**291.4**	**106.25**	**87.7**
PORTSMOUTH		**OH**	**CPM**	**778**	**83 3 41.0**	**1**	**18.55**	
			* 31+		37 40 27.0	200.7	88.32	31.4
WILLIAMSON		WV	ALC		82 16 38.0	1	56.92	
WPBYTV	BLET	247	* 33+	1037	38 29 42.0	289.4	25.70	31.4
HUNTINGTON		WV	LIC	1280	82 12 3.0	1	-5.70	SHORT
WPBYTV	BPET	881130KE	* 33+	1037	38 29 41.0	289.3	25.69	31.4
HUNTINGTON		WV	CP	1238	82 12 3.0	1	-5.71	SHORT

ALLOCATION STUDY

Study Name : WKRP-TV Charleston, West Virginia
Channel : 29z
Coordinates : N 38 25 8.0 W 81 55 22.0
Separations : TV Zone 1 - Full Service

Call City	File - number State	Chan Status	ERP HAAT	Latitude Longitude	Bear Zone	Dist Clear	Req'd (km)
WTVQTV	BLCT 800619IX	36z	2240	38 2 3.0	259.6	220.58	95.7
LEXINGTON	KY	LIC	1000	84 23 39.0	2	124.88	
		* 43z		37 13 47.8	134.5	187.17	95.7
BLACKSBURG	VA	ALC		80 24 54.6	2	91.47	
		44-		36 50 42.0	215.6	213.92	119.9
HARLAN	KY	DEL		83 19 18.0	2	94.02	Comment
NEW	BPCT 870331LR	44-	1000	36 48 .0	215.9	220.82	119.9
HARLAN	KY	APP	1972	83 22 36.0	2	100.92	Comment
		44-		36 50 42.0	215.6	213.92	119.9
HARLAN	KY	ALC		83 19 18.0	2	94.02	
		44-		37 0 35.0	221.7	208.19	119.9
MOZELLE	KY	ADD		83 28 52.0	2	88.29	Comment
WOUCTV	BLET 338	* 44-	550	40 5 32.0	16.2	193.67	119.9
CAMBRIDGE	OH	LIC	1290	81 17 19.0	1	73.77	

End of Study

Calculation of Third-Order Intermodulation Products Which May Theoretically Be Formed by Combinations of the Channel 29z and 33+ Aural and Visual Carriers

Channel 29z : Fv = 561.25
Fa = 565.75

Channel 33+ : Fv = 585.26
Fa = 589.75

Theoretical Third-Order Product: Fx = 2a - b

Fx = 2Fv(29) - Fa(33) = 2(561.25) - 589.75 = 532.75 (Channel 24)

Fx = 2Fv(29) - Fv(33) = 2(561.25) - 589.26 = 537.24 (Channel 25)

Fx = 2Fa(29) - Fa(33) = 2(565.75) - 589.75 = 541.75 (Channel 25)

Fx = 2Fa(29) - Fv(33) = 2(565.75) - 585.26 = 546.24 (Channel 26)

Fx = 2Fv(33) - Fa(29) = 2(585.26) - 565.75 = 604.77 (Channel 36)

Fx = 2Fv(33) - Fv(29) = 2(585.26) - 561.25 = 609.27 (Channel 37)

Fx = 2Fa(33) - Fa(29) = 2(589.75) - 565.75 = 613.75 (Channel 37)

Fx = 2Fv(33) - Fv(29) = 2(589.75) - 561.25 = 618.25 (Channel 38)

STATIONS AND ASSIGNMENTS ON POTENTIALLY AFFECTED CHANNELS

Call Sign	Location	Status	Latitude	Longitude	Bearing (deg)	Distance (km)
			CHANNEL 24+			
	HILLSBORO, OH	ALC	39 12 11.8	83 36 39.5	301.33	170.54
NEW	HILLSBORO, OH	APP	39 09 58.0	83 36 25.0	300.18	168.20
			CHANNEL 25-			
WKAS	ASHLAND, KY	LIC	38 27 43.0	82 37 12.0	274.72	61.06
			CHANNEL 26+			
WTJC	SPRINGFIELD, OH	LIC	39 54 33.0	83 51 36.0	315.38	235.38
			CHANNEL 36z			
WTVQTV	LEXINGTON, KY	LIC	38 02 03.0	84 23 39.0	259.56	220.58
			CHANNEL 37			
			RESERVED FOR RADIO ASTRONOMY SERVICE			
			CHANNEL 38+			
WKMR	MOREHEAD, KY	LIC	38 10 38.0	83 24 18.0	258.72	132.41

TABULATION OF DISTANCES TO WKAS GRADE B CONTOUR

Station Call Sign : WKAS

Station Location : Ashland, KY

Channel : *25-

Status : LIC

FCC File Number : BLET-423

Antenna : Omnidirectional

Maximum Effective Radiated Power : 162 kW (Visual)

Antenna Radiation Center Height : 1200' (367 m) AMSL
500' (152 m) HAAT

Bearing Degrees True	AAT Feet	HAAT Feet	Antenna Gain dB	ERP dBk	ERP kW	Distances to Grade B mi.	Distances to Contour km.
0.0	703	497	0.00	22.10	162.0	29.5	47.5
45.0	774	426	0.00	22.10	162.0	28.4	45.7
90.0	747	453	0.00	22.10	162.0	28.8	46.3
135.0	642	558	0.00	22.10	162.0	30.4	48.9
180.0	702	498	0.00	22.10	162.0	29.5	47.5
225.0	732	468	0.00	22.10	162.0	29.1	46.8
270.0	694	506	0.00	22.10	162.0	29.7	47.8
315.0	566	634	0.00	22.10	162.0	31.4	50.5

NOTE : Average elevations of the terrain 3 to 16 km from the site computed utilizing linearly interpolated data contained in NGDC 30 second point elevation database (TPG-0050).

Exhibit V-C-1(g)

RUBIN, BEDNAREK & ASSOCIATES, INC.
CONSULTING TELECOMMUNICATIONS ENGINEERS
WASHINGTON, D.C.

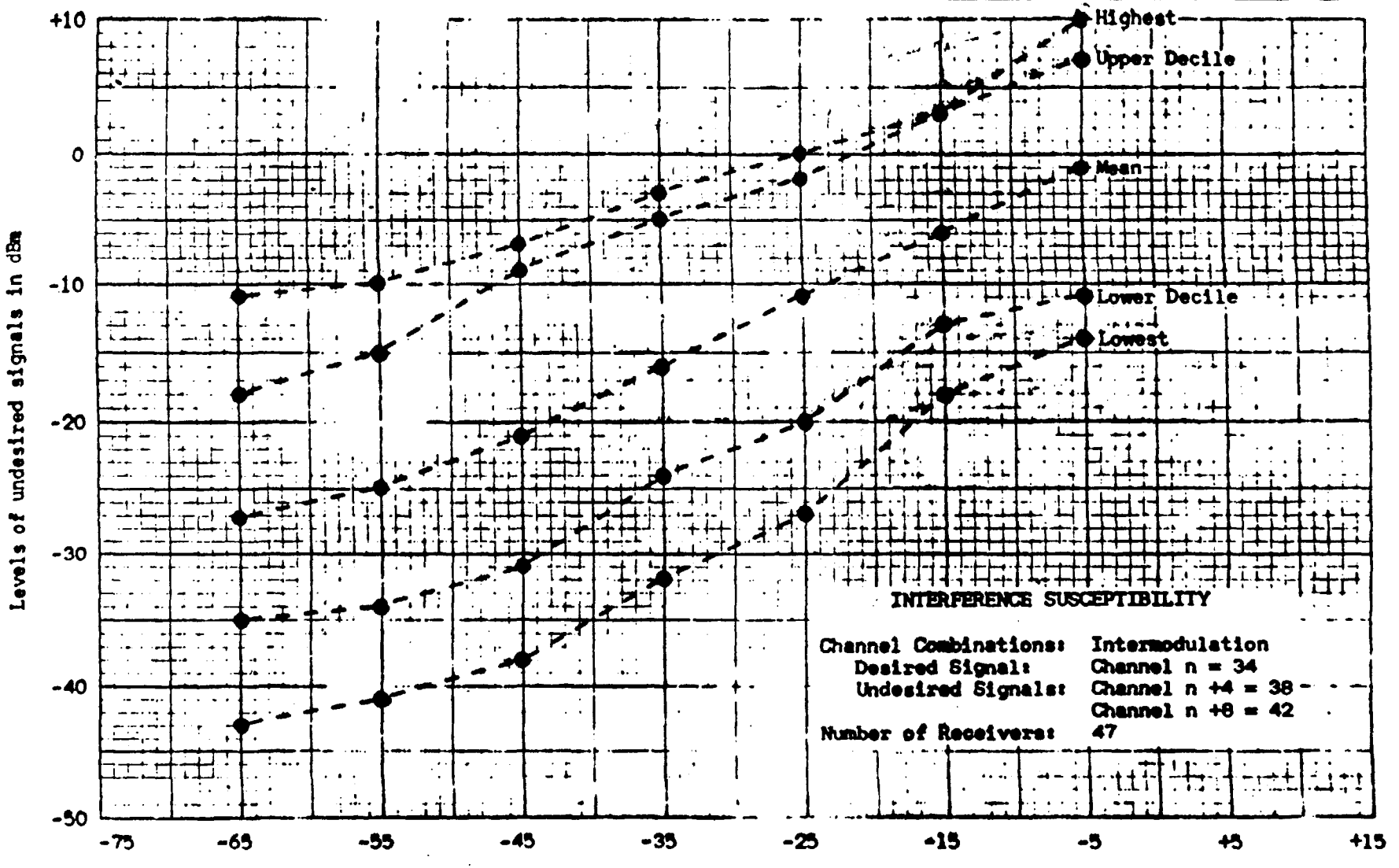


Figure #17

Relationship Between FCC Test Receiver Input Power Levels in dBm and Field Strength Levels in dBu

Conversion of receiver input power levels expressed in dBm to power levels (P_{RCVR}) in watts :

$$P_{RCVR} = [10^{dbm/10}] \times 10^{-3} \text{ watts}$$

The standard receiving facilities assume a transmission line loss of 3 dB, corresponding to a 50 foot, 300 ohm twin-lead antenna lead-in line. The power at the output terminals of the antenna (P_{ANT}), is then :

$$P_{ANT} = 2\ [10^{dbm/10}] \times 10^{-3} \text{ watts}$$

Converting the power at the output terminals of the antenna to voltage (V_{ANT}) across the antenna resistance of 73.5 ohms :

$$V_{ANT} = [(73.5)(P_{ANT})]^{1/2} \text{ volts}$$

$$= [(147)(10^{dbm/10}) \times 10^{-3}]^{1/2} \text{ volts}$$

The standard receiving facilities assume a zero-dB-gain reference dipole antenna. The voltage across the terminals of a reference dipole is related to the field strength E(v/m) by:

$$V_{ANT} / E(v/m) = \lambda / 2\pi$$

The field strength, in volts per meter, is calculated as

$$E(v/m) = (2\pi/\lambda)\ V_{ANT}$$

$$= (2\pi/\lambda)\ [(147)(10^{dbm/10}) \times 10^{-3}]^{1/2} \text{ volts/meter}$$

For Channel 29, the undesired signal input P_{RCVR} = -27 dBm and λ= 0.53 meters, the field strength required to cause perceptible interference is calculated to be :

$$E(v/m) = (2\pi/0.53)\ [(147)(10^{-27/10}) \times 10^{-3}]^{1/2} \text{ volts/meter}$$

$$= 0.2 \text{ volts/meter}$$

$$= 106 \text{ dBu}$$

For Channel 33, the undesired signal input P_{RCVR} = -27 dBm and λ= 0.51 meters, the field strength required to cause perceptible interference is calculated to be :

$$E(v/m) = (2\pi/0.51)\ [(147)(10^{-27/10}) \times 10^{-3}]^{1/2} \text{ volts/meter}$$

$$= 0.2 \text{ volts/meter}$$

$$= 106 \text{ dBu}$$

TABULATION OF DISTANCES TO CONTOURS

Station Call Sign : WPBY-TV
Station Location : Huntington, WV
Channel : 33+
Status : CP
FCC File Number : BPET-881130KE
Antenna : RCA TFU-30JDAS
Coordinates : 38 29 41.0 N 82 12 03.0 W

Maximum Effective Radiated Power : 1073 kW (Visual)
Antenna Radiation Center Height : 1984' (605 m) AMSL
1238' (378 m) HAAT

Bearing Degrees True	AAT Feet	HAAT Feet	Ant Gain dB	ERP dBk	ERP kW	Distances to Contours F(50,50) / F(50,10) 106 dBu mi	106 dBu km	114 dBu mi	114 dBu km
0.0	695	1289	-9.00	21.16	130.7	4.8	7.7	2.5	4.0
10.0	636	1348	-9.90	20.26	106.2	4.6	7.4	2.3	3.7
20.0	715	1269	-10.17	19.99	99.7	4.4	7.1	2.2	3.5
30.0	707	1277	-9.76	20.40	109.5	4.5	7.2	2.3	3.7
40.0	721	1263	-7.96	22.20	165.9	5.1	8.2	2.7	4.3
45.0	744	1240	-6.94	23.22	210.0	5.5	8.9	3.0	4.8
50.0	755	1229	-6.02	24.14	259.2	5.8	9.3	3.2	5.1
60.0	787	1197	-4.51	25.65	367.1	6.3	10.1	3.6	5.8
70.0	800	1184	-3.35	26.81	479.5	6.8	10.9	4.0	6.4
80.0	832	1152	-2.62	27.54	567.9	7.0	11.3	4.1	6.6
90.0	820	1164	-2.10	28.06	639.0	7.3	11.7	4.3	6.9
100.0	783	1201	-1.57	28.59	723.0	7.7	12.4	4.5	7.2
110.0	790	1194	-1.21	28.95	784.9	7.8	12.6	4.6	7.4
120.0	774	1210	-0.72	29.43	877.7	8.1	13.0	4.8	7.7
130.0	717	1267	-0.35	29.80	955.7	8.5	13.7	5.0	8.0
135.0	709	1275	-0.22	29.94	985.8	8.6	13.8	5.0	8.0
140.0	690	1294	-0.09	30.07	1016.	8.8	14.2	5.1	8.2
150.0	711	1273	0.00	30.16	1037.	8.8	14.2	5.1	8.2
160.0	767	1217	0.00	30.16	1037.	8.6	13.8	5.0	8.0
170.0	777	1207	-0.13	30.03	1006.	8.5	13.7	5.0	8.0
180.0	736	1248	-0.45	29.71	935.9	8.4	13.5	4.9	7.9
190.0	699	1285	-0.77	29.39	868.2	8.4	13.5	4.9	7.9
200.0	665	1319	-1.11	29.05	803.0	8.3	13.4	4.8	7.7
210.0	652	1332	-1.41	28.75	749.2	8.1	13.0	4.7	7.6
220.0	676	1308	-1.72	28.43	697.3	7.9	12.7	4.6	7.4
225.0	704	1280	-1.86	28.30	676.2	7.8	12.6	4.5	7.2
230.0	704	1280	-1.99	28.17	655.4	7.7	12.4	4.5	7.2
240.0	760	1224	-2.33	27.83	606.9	7.4	12.0	4.3	6.9
250.0	654	1330	-2.97	27.18	522.7	7.3	11.7	4.2	6.8
260.0	722	1262	-4.29	25.86	385.9	6.6	10.6	3.8	6.1
270.0	760	1224	-6.02	24.14	259.2	5.8	9.3	3.2	5.1
280.0	727	1257	-8.18	21.98	157.7	5.0	8.0	2.7	4.3
290.0	747	1237	-10.46	19.70	93.3	4.3	6.9	2.2	3.5
300.0	746	1238	-11.37	18.79	75.6	4.0	6.4	2.0	3.2
310.0	776	1208	-10.90	19.25	84.2	4.1	6.6	2.1	3.4

TABULATION OF DISTANCES TO CONTOURS

Bearing Degrees True	AAT Feet	HAAT Feet	Ant Gain dB	ERP dBk	ERP kW	Distances to Contours F(50,50) / F(50,10) 106 dBu mi	106 dBu km	114 dBu mi	114 dBu km
315.0	799	1185	-10.31	19.84	96.5	4.3	6.9	2.2	3.5
320.0	783	1201	-9.76	20.40	109.5	4.5	7.2	2.3	3.7
330.0	758	1226	-8.64	21.52	142.0	4.8	7.7	2.6	4.2
340.0	749	1235	-7.96	22.20	165.9	5.1	8.2	2.7	4.3
350.0	732	1252	-8.29	21.87	153.7	5.0	8.0	2.7	4.3

NOTES: * - Antenna height data for eight standard radials on file.

Supplementary Radials :
Average elevations of the terrain 3 to 16 km from the site computed utilizing linearly interpolated data contained in NGDC 30 second point elevation database (TPG-0050).

TABULATION OF DISTANCES TO CONTOURS

Station Call Sign : WKRP-TV (Proposed)
Station Location : Charleston, WV
Channel : 29z
Antenna : Dielectric TFU-28DAS
Coordinates :
Maximum Effective Radiated Power : 4505 (Visual)
Antenna Radiation Center Height : 2492' (760 m) AMSL
1724' (525 m) HAAT

Bearing Degrees True	AAT Feet	HAAT Feet	Ant Gain dB	ERP dBk	ERP kW	Distances to Contours F(50,50) / F(50,10) 116 dBu mi	116 dBu km	114 dBu mi	114 dBu km
0.0	744	1748	-10.66	25.87	386.8	3.5	5.6	4.2	6.8
10.0	748	1744	-10.60	25.93	392.1	3.5	5.6	4.2	6.8
20.0	782	1710	-10.75	25.79	378.9	3.5	5.6	4.1	6.6
30.0	750	1742	-11.40	25.13	326.0	3.3	5.3	3.9	6.3
40.0	748	1744	-12.62	23.92	246.7	2.9	4.7	3.5	5.6
45.0	734	1758	-13.07	23.46	222.0	2.8	4.5	3.4	5.5
50.0	723	1769	-13.56	22.98	198.7	2.7	4.3	3.2	5.1
60.0	711	1781	-11.87	24.67	293.0	3.2	5.1	3.8	6.1
70.0	689	1803	-7.85	28.69	739.0	4.5	7.2	5.3	8.5
80.0	727	1765	-4.61	31.92	1558.	5.8	9.3	6.7	10.8
90.0	771	1721	-2.27	34.27	2671.	6.8	10.9	7.9	12.7
100.0	808	1684	-0.92	35.62	3649.	7.4	11.9	8.6	13.8
110.0	635	1857	-0.24	36.30	4265.	8.1	13.0	9.4	15.1
119.0	751	1741*	0.00	36.54	4505.	8.1	13.0	9.3	15.0
120.0	764	1728	-0.01	36.53	4496.	8.0	12.9	9.3	15.0
130.0	781	1711	-0.59	35.94	3930.	7.7	12.4	8.8	14.2
135.0	738	1754	-1.51	35.02	3179.	7.2	11.6	8.4	13.5
140.0	724	1768	-2.55	33.99	2507.	6.7	10.8	7.8	12.6
150.0	770	1722	-7.23	29.31	852.5	4.6	7.4	5.4	8.7
160.0	809	1683	-11.12	25.42	348.2	3.3	5.3	4.0	6.4
170.0	870	1622	-8.40	28.13	650.6	4.1	6.6	4.8	7.7
180.0	851	1641	-4.97	31.56	1433.	5.4	8.7	6.3	10.1
190.0	905	1587	-3.88	32.66	1845.	5.8	9.3	6.7	10.8
200.0	869	1623	-4.88	31.65	1464.	5.4	8.7	6.3	10.1
210.0	831	1661	-8.27	28.27	671.3	4.2	6.8	4.9	7.9
220.0	836	1656	-11.06	25.48	353.2	3.3	5.3	4.0	6.4
225.0	820	1672	-8.64	27.90	616.8	4.1	6.6	4.8	7.7
230.0	824	1668	-6.74	29.79	953.3	4.8	7.7	5.6	9.0
240.0	845	1647	-2.58	33.96	2487.	6.5	10.5	7.5	12.1
250.0	847	1645	-0.72	35.81	3813.	7.4	11.9	8.6	13.8
260.0	772	1720	-0.03	36.50	4469.	8.0	12.9	9.2	14.8
263.0	758	1734*	0.00	36.54	4505.	8.0	12.9	9.3	15.0
270.0	725	1767	-0.20	36.34	4300.	8.0	12.9	9.2	14.8

TABULATION OF DISTANCES TO CONTOURS

Bearing Degrees True	AAT Feet	HAAT Feet	Ant Gain dB	ERP dBk	ERP kW	Distances to Contours F(50,50) / F(50,10) 116 dBu mi	116 dBu km	114 dBu mi	114 dBu km
280.0	801	1691	-1.05	35.49	3537.	7.4	11.9	8.5	13.7
290.0	775	1717	-2.38	34.15	2602.	6.7	10.8	7.8	12.6
300.0	747	1745	-4.58	31.95	1568.	5.7	9.2	6.7	10.8
310.0	756	1736	-7.64	28.90	775.9	4.5	7.2	5.3	8.5
315.0	762	1730	-9.27	27.27	533.1	3.9	6.3	4.6	7.4
320.0	753	1739	-11.28	25.26	335.8	3.3	5.3	3.9	6.3
330.0	753	1739	-13.31	23.23	210.2	2.7	4.3	3.3	5.3
340.0	741	1751	-12.22	24.32	270.4	3.0	4.8	3.7	6.0
350.0	722	1770	-10.96	25.57	360.8	3.4	5.5	4.1	6.6

NOTES: Average elevations of the terrain 3 to 16 km from the site computed utilizing linearly interpolated data contained in NGDC 30 second point elevation database (TPG-0050).

* - Denotes interpolated antenna height data.

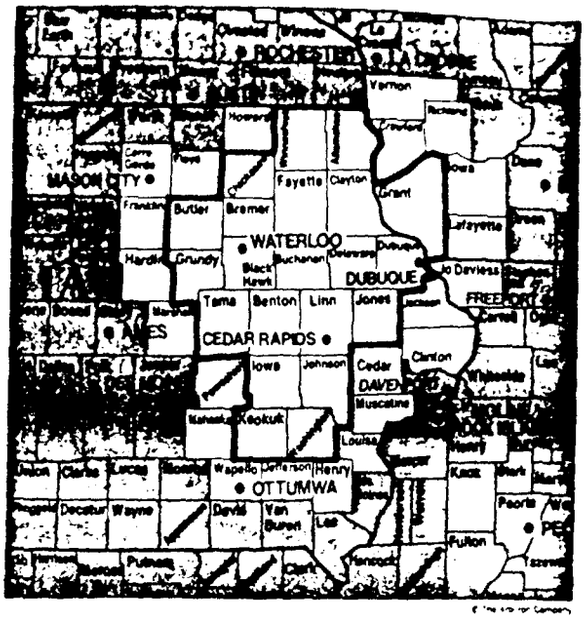
ATTACHMENT 3

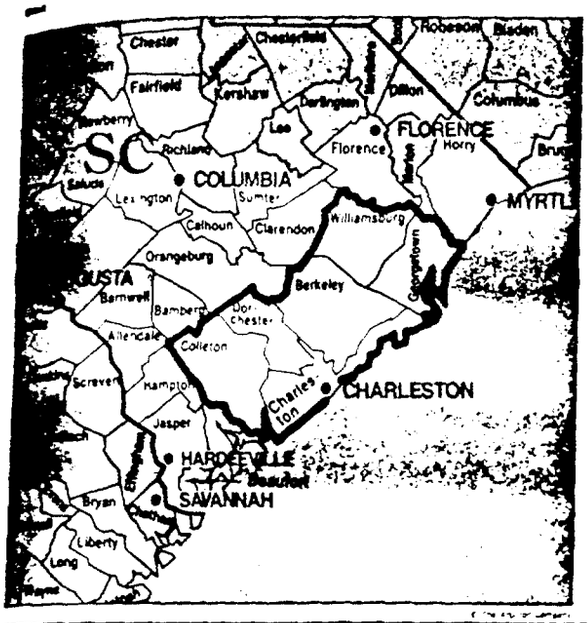
Cedar Rapids-Waterloo-Dubuque, Iowa (82)

ADI TV Households 308,500

Cedar Rapids-Iowa City, Iowa ch 12 ETV
Waterloo-Cedar Rapids, Iowa ch 28 IND
Dubuque, Iowa ch 40 ABC
Cedar Rapids, Iowa ch 48 IND

	State	TV Households
	IA	5,300
	IA	8,800
	IA	46,900
	IA	8,500
	IA	7,900
	IA	6,700
	IA	5,200
	IA	8,100
	IA	6,600
	IA	[illegible]
	IA	8,900
	IA	5,300
	IA	5,900
Johnson	IA	34,300
Jones	IA	7,200
Keokuk	IA	4,600
Linn	IA	68,200
Tama	IA	6,700
Washington	IA	7,600
Winneshiek	IA	[illegible]
Grant	IA	[illegible]





Charleston, S.C. (106)

ADI TV Households 224,100

WCBD-TV Charleston, S.C. ch 2 ABC
WCIV Charleston, S.C. ch 4 NBC
WCSC-TV Charleston, S.C. ch 5 CBS
***WITV** Charleston, S.C. ch 7 ETV
WTAT-TV Charleston, S.C. ch 24 Fox
WCTP Charleston, S.C. ch 36 IND

ADI Counties	State	TV Households
Berkeley	SC	44,800
Charleston	SC	106,600
Colleton	SC	12,900
Dorchester	SC	26,600
Georgetown	SC	17,900
Williamsburg	SC	12,900

Charleston-Huntington, W. Va. (50)

ADI TV Households 511,900

WSAZ-TV Huntington, W. Va. ch 3 NBC
WCHS-TV Charleston, W. Va. ch 8 ABC
WVAH-TV Charleston, W. Va. ch 11, Fox
WOWK-TV Huntington, W. Va. ch 13 CBS
***WOUB-TV** Athens, Ohio ch 20 ETV
***WKPI** Pikeville, Ky. ch 22 ETV
***WKAS** Ashland, Ky. ch 29 ETV
WKRP-TV Charleston, W. Va. ch 24 IND
WUXA [illegible]
***WPBY-TV** [illegible]
***WPBO-TV** [illegible]
WHPI [illegible]
WTSF [illegible]

	State	TV Households
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
[illegible]	KY	[illegible]
Lawrence	KY	[illegible]
Lewis	KY	4,900
Magoffin	KY	4,900
Martin	KY	4,300
Morgan	KY	4,000
Pike	KY	28,200
Athens	OH	19,700
Gallia	OH	10,900
Jackson	OH	11,100
Lawrence	OH	23,400
[illegible]	OH	[illegible]
[illegible]	OH	[illegible]
[illegible]	OH	[illegible]

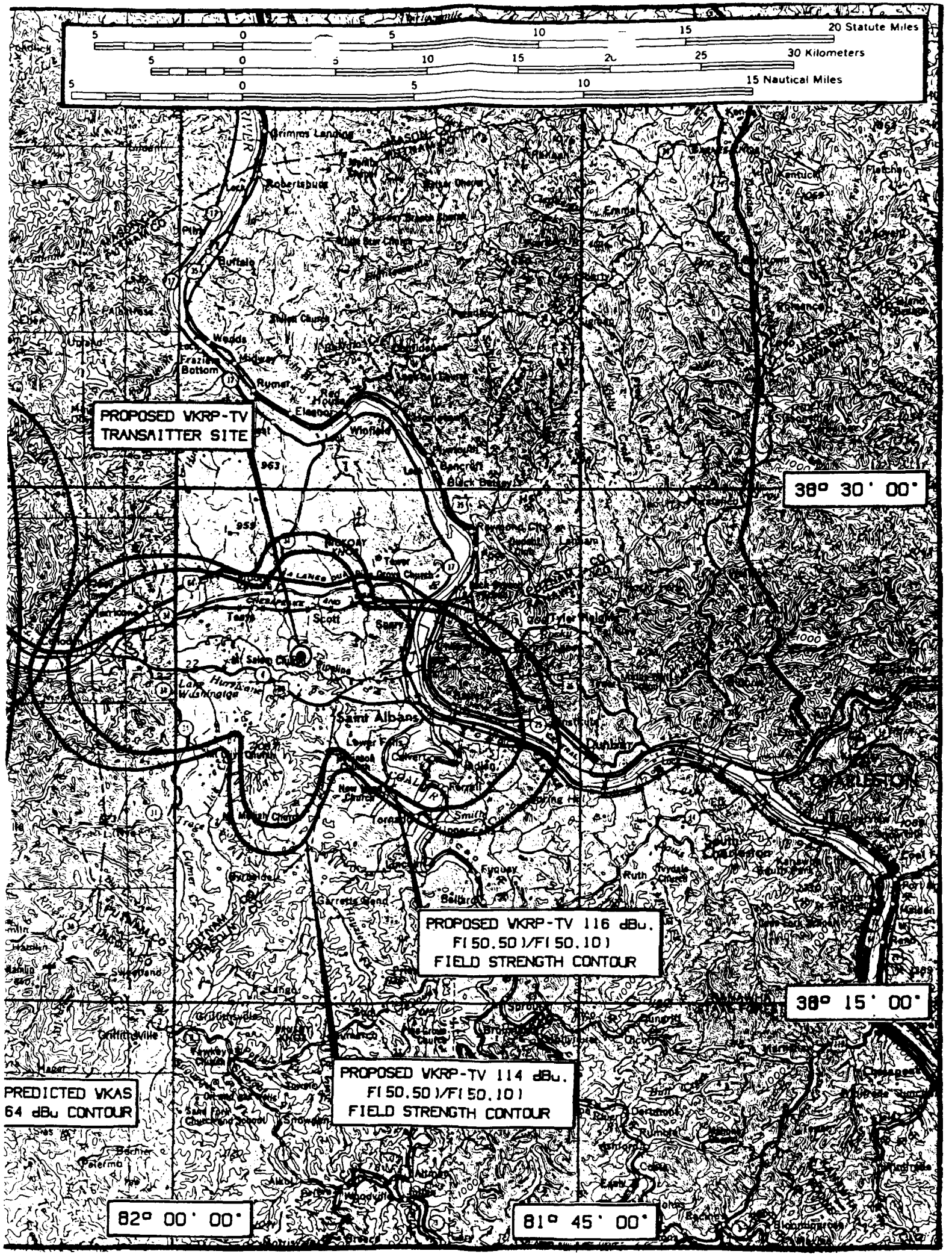
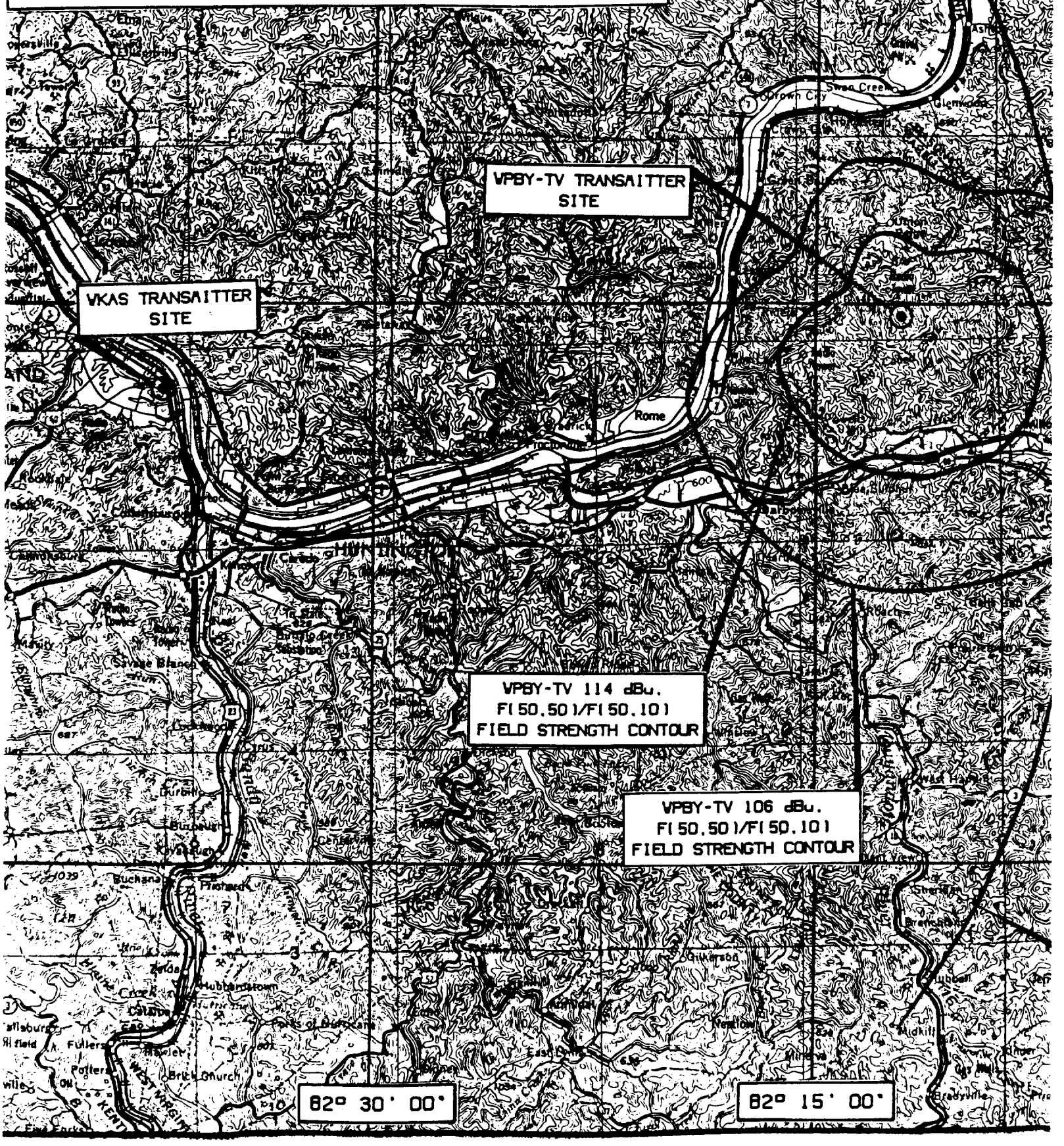

20 Statute Miles
30 Kilometers
15 Nautical Miles
PROPOSED WKRP-TV
TRANSMITTER SITE
38° 30' 00"
PROPOSED WKRP-TV 116 dBu.
F(50,50)/F(50,10)
FIELD STRENGTH CONTOUR
38° 15' 00"
PROPOSED WKRP-TV 114 dBu.
F(50,50)/F(50,10)
FIELD STRENGTH CONTOUR
PREDICTED WKAS
64 dBu CONTOUR
82° 00' 00"
81° 45' 00"
Saint Albans
Dunbar
Scott
Buffalo
Winfield
Eleanor
Hurricane
Lake Washington
Grimms Landing
Robertsburg
Frazier Bottom
Rymer
Red House
Buck Bailey
Tyler
Ruth
Ivydale
Fyquay
Smith
Torrey
Garrets Bend
Griffithsville
Sandy Fork
Snowden
Paterno
Bacher
Woodville
Alum
Peters
Sprouse
Brownstown
Derbyshire
Cobb
Eleanor
Emma
Kentucky
Fletcher
Roseance
Stonewall
Upton
Wedds
Midway
Pilot
Lock
Lake
Tower
Cross Church
Salem Church
Mt Olivet Church
Mt Carmel Church
New Church
Calvary Church
Mt Zion Church
Sandy Fork Church and School
Bethel Church
Hopkins Chapel
Pleasant Hill Church
Spring Hill
Lower Falls
Calvert
Rural
Torrey
Buffalo Creek
Hurricane Creek
Mud River
Trace Fork
Clover Creek
Coal River
Kanawha River
Ohio River
Mason Co
Putnam Co
Lincoln Co
Boone Co
Kanawha Co
Cabell Co
Wayne Co
Jackson Co
Roane Co
Clay Co
Gallia Co
Meigs Co
Lawrence Co
Mason Co
Pleasant Co
Wood Co
Ritchie Co
Tyler Co
Doddridge Co
Harrison Co
Lewis Co
Upshur Co
Braxton Co
Nicholas Co
Fayette Co
Raleigh Co
Mingo Co
Logan Co
Boone Co
Wyoming Co
Mercer Co
Summers Co
Monroe Co
Greenbrier Co
Pocahontas Co
Randolph Co
Barbour Co
Taylor Co
Marion Co
Monongalia Co
Preston Co
Tucker Co
Pendleton Co
Hardy Co
Grant Co
Mineral Co
Morgan Co
Berkeley Co
Jefferson Co
Hampshire Co
Pleasants Co
Wirt Co
Roane Co
Jackson Co
Mason Co
Putnam Co
Kanawha Co
Cabell Co
Wayne Co
Lincoln Co
Boone Co
Logan Co
Mingo Co
Wyoming Co
Mercer Co
Summers Co
Monroe Co
Greenbrier Co
Pocahontas Co
Nicholas Co
Fayette Co
Raleigh Co
Braxton Co
Upshur Co
Lewis Co
Harrison Co
Doddridge Co
Tyler Co
Pleasants Co
Wirt Co
Ritchie Co
Wood Co
Marion Co
Monongalia Co
Preston Co
Tucker Co
Pendleton Co
Hardy Co
Grant Co
Mineral Co
Morgan Co
Berkeley Co
Jefferson Co
Hampshire Co

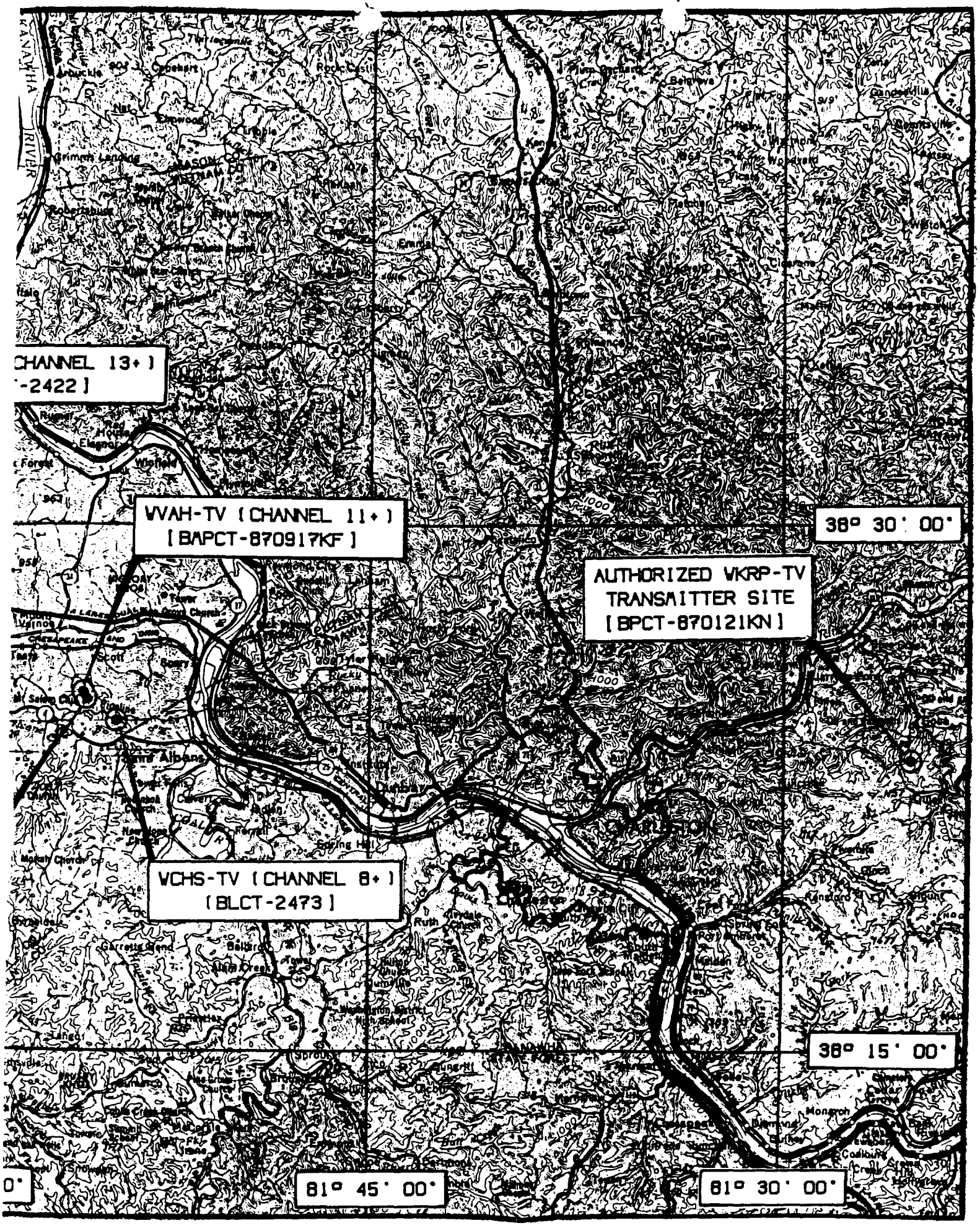
EXHIBIT V-C-1(1)

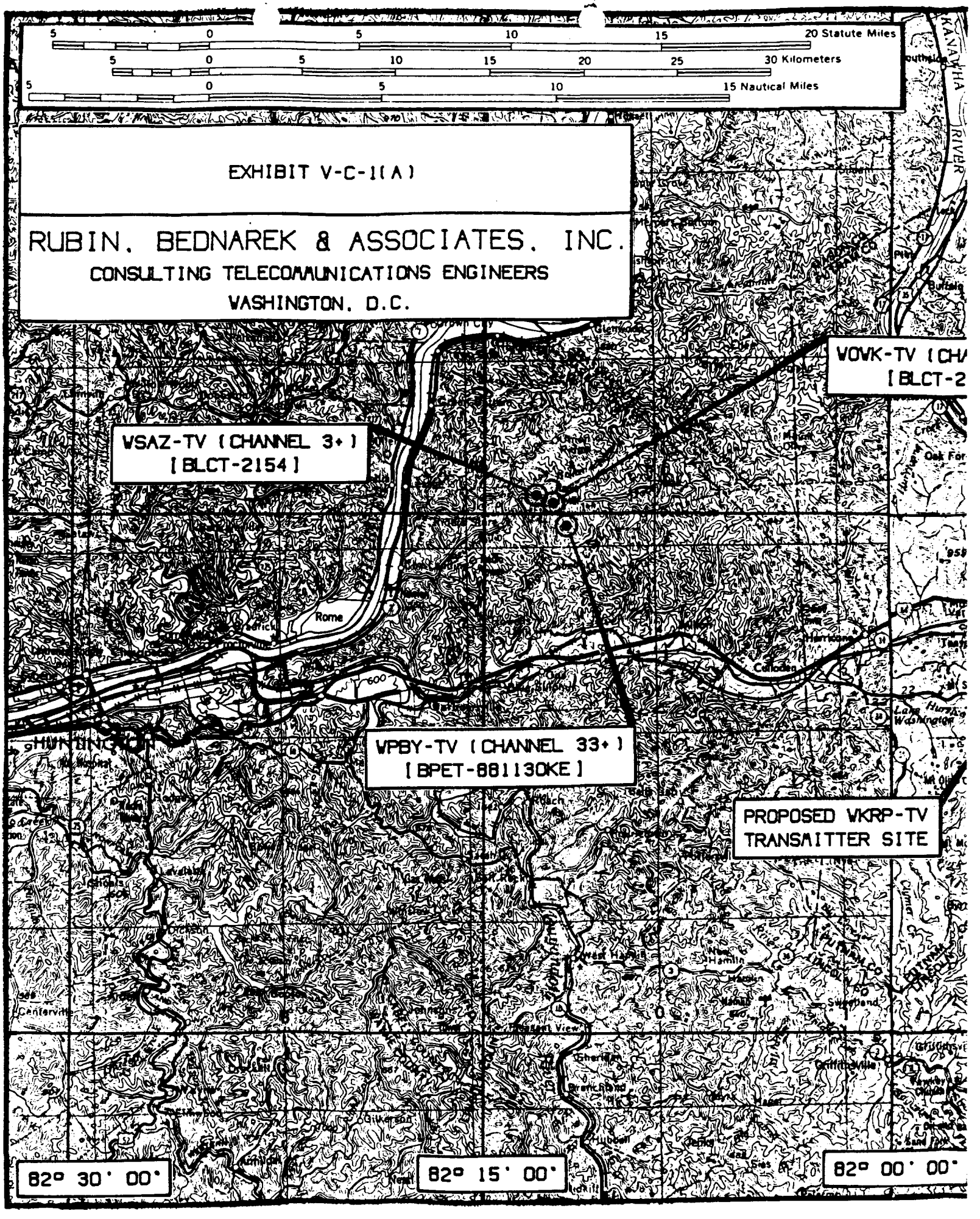
RUBIN, BEDNAREK & ASSOCIATES, INC.

CONSULTING TELECOMMUNICATIONS ENGINEERS

WASHINGTON, D.C.




CHANNEL 13+)
-2422)
WVAH-TV (CHANNEL 11+)
(BAPCT-870917KF)
38° 30' 00"
AUTHORIZED WKRP-TV
TRANSMITTER SITE
(BPCT-870121KN)
WCHS-TV (CHANNEL 8+)
(BLCT-2473)
38° 15' 00"
81° 45' 00"
81° 30' 00"



5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometers
5 0 5 10 15 Nautical Miles
EXHIBIT V-C-1(A)
RUBIN, BEDNAREK & ASSOCIATES, INC.
CONSULTING TELECOMMUNICATIONS ENGINEERS
WASHINGTON, D.C.
WOWK-TV (CHA
[BLCT-2
WSAZ-TV (CHANNEL 3+)
[BLCT-2154]
Rome
WPBY-TV (CHANNEL 33+)
[BPET-881130KE]
PROPOSED WKRP-TV
TRANSMITTER SITE
82° 30' 00"
82° 15' 00"
82° 00' 00"

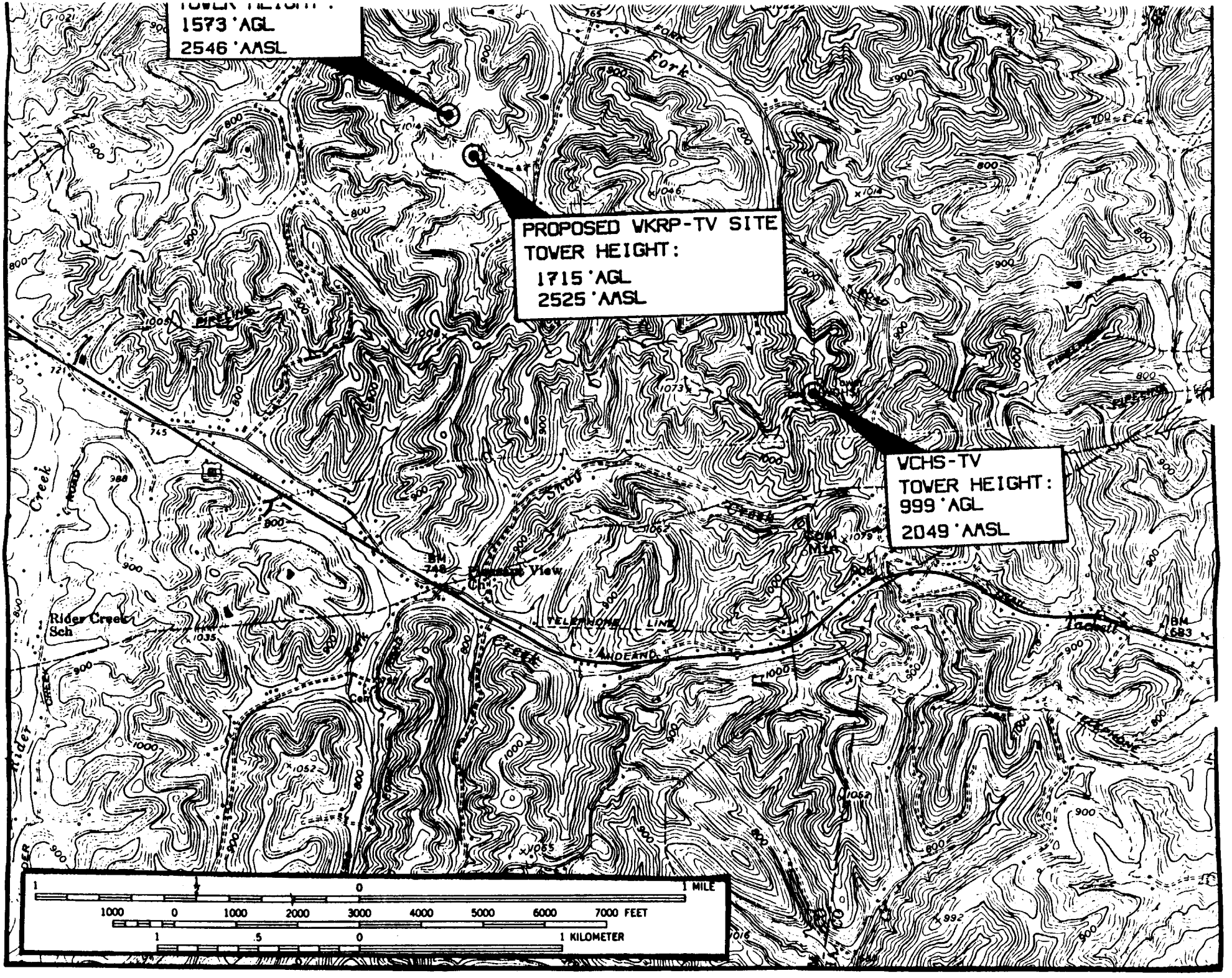
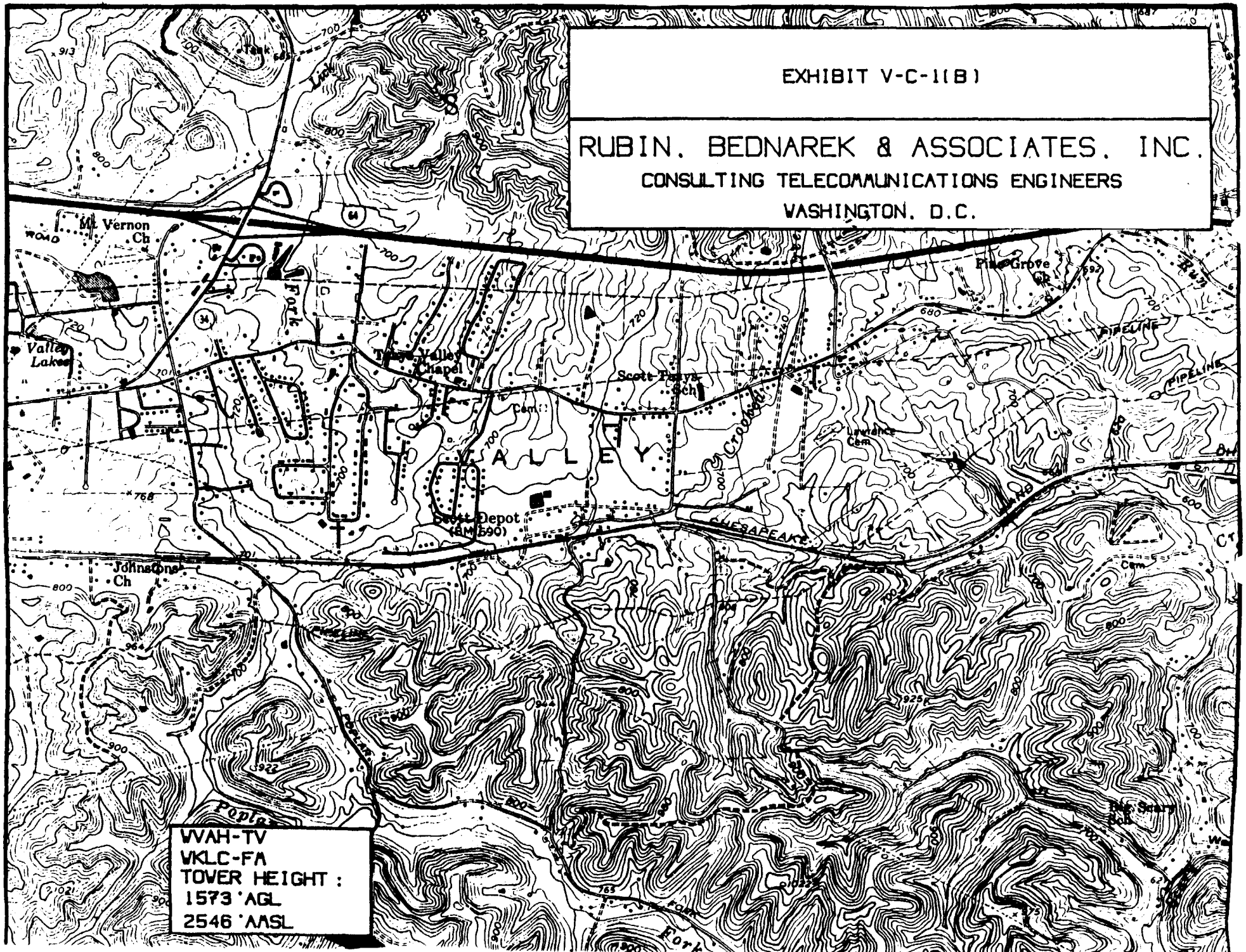
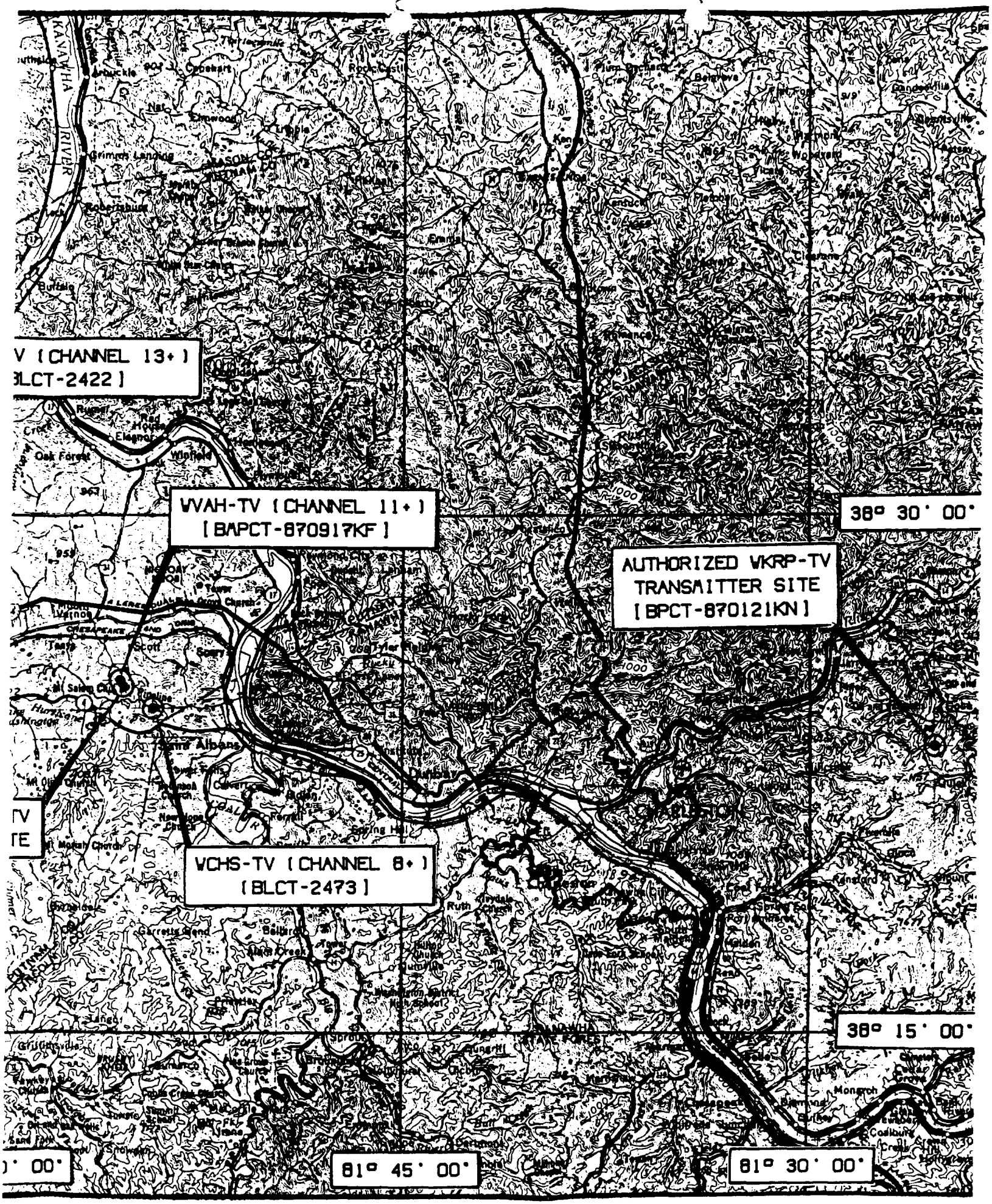

TOWER HEIGHT:
1573 'AGL
2546 'AMSL
PROPOSED WKRP-TV SITE
TOWER HEIGHT:
1715 'AGL
2525 'AMSL
WCHS-TV
TOWER HEIGHT:
999 'AGL
2049 'AMSL
Rider Creek Sch
Pleasant View Ch
TELEPHONE LINE
ANDEAND
Tackett
BM 683
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

EXHIBIT V-C-1(B)

RUBIN, BEDNAREK & ASSOCIATES, INC.
CONSULTING TELECOMMUNICATIONS ENGINEERS
WASHINGTON, D.C.



WVAH-TV
WKLC-FA
TOWER HEIGHT :
1573 'AGL
2546 'AMSL


V (CHANNEL 13+)
BLCT-2422)
WVAH-TV (CHANNEL 11+)
(BAPCT-870917KF)
38° 30' 00"
AUTHORIZED WKRP-TV
TRANSMITTER SITE
(BPCT-870121KN)
VCHS-TV (CHANNEL 8+)
(BLCT-2473)
38° 15' 00"
81° 45' 00"
81° 30' 00"