These exposure limits are time averaged over any six minute period and vary depending upon the frequency involved:

Frequency Range (MHz)			Power Density (mW/cm^2)	
0.3	to	3	100	AM
3	to	30	$900/(Freq^2)$	
30	to	300	1.0	VHF TV & FM
300	**to**	**1,500**	**Freq/300**	**UHF TV**
1500	to	100,000	5.0	

(same as ANSI standard)

In the following formula:

$$D = \frac{SQRT(\ F^2 * [\ 0.4*VERP + AERP\ ]\ )}{1.667 * SQRT(PD) * 3.2808}$$

Where:

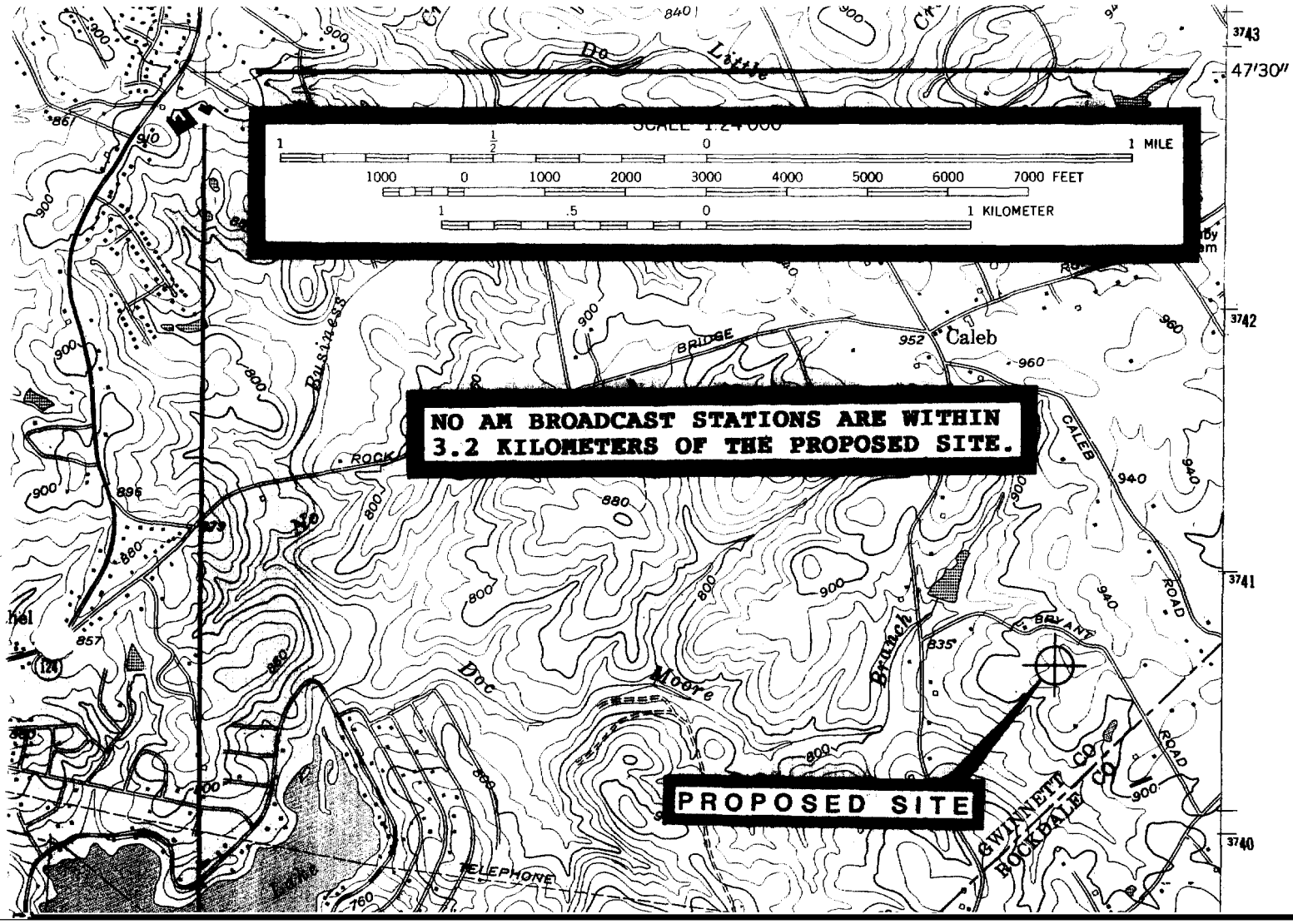
D = the closest distance in meters that a human should come to an operating antenna (to obtain feet multiply by 3.2808)
F = typical relative field factor in downward direction (F = 1 is worst case main lobe)
VERP = peak Visual ERP in watts (above a dipole)
VERP = Aural ERP in watts (above a dipole)
PD = highest Power Density in milli-watts/cm^2
SQRT = Square Root
Freq = Frequency in mega-cycles/sec. (mHz)

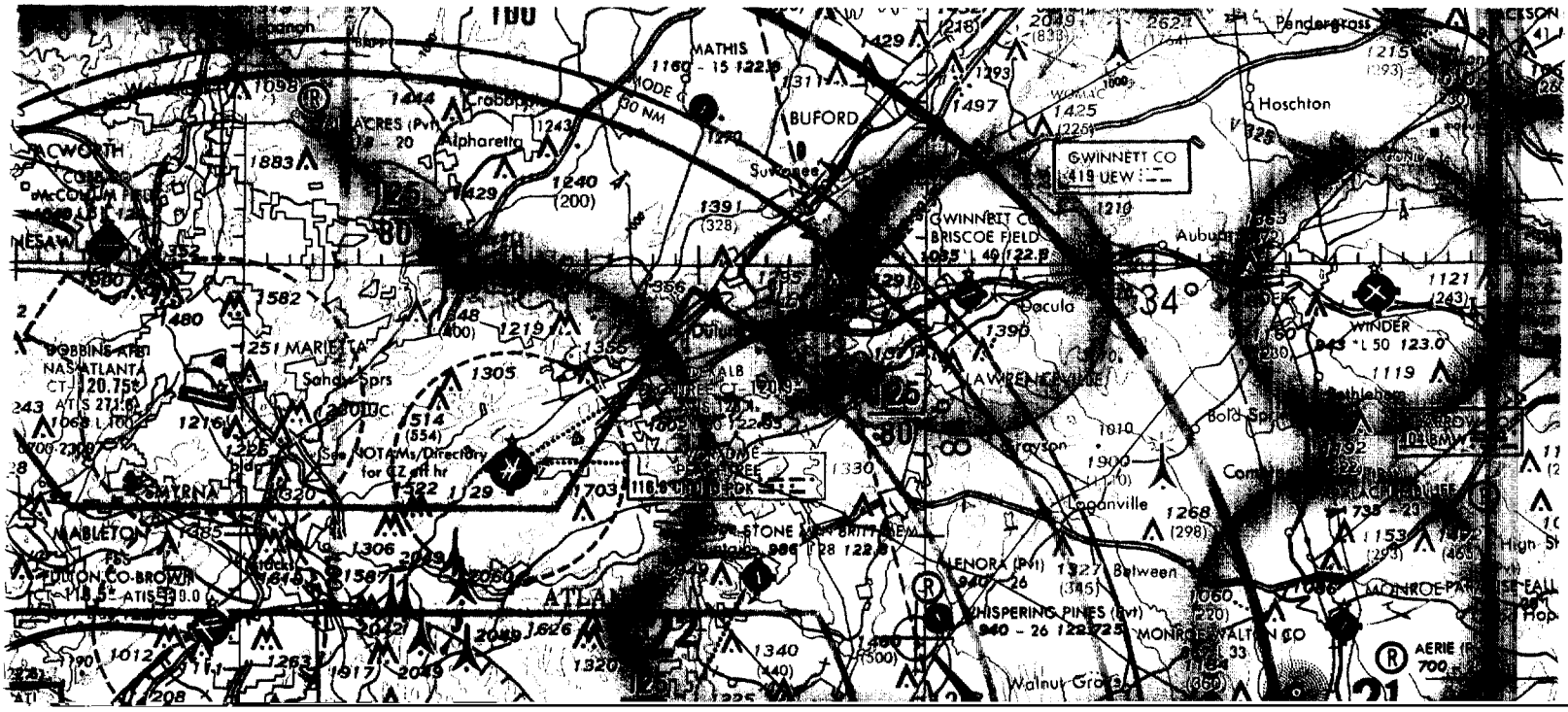
The vertical radiation pattern of the TV antenna specified in this application is very narrow and therefore the power density as seen by an observer on the ground near the base of the tower will be less than 10 percent of the total ERP or 500 KW.

The application of the above equation (assuming maximum ERP), in our case, for a frequency of 764 to 770 MHz and a Power Density of 2.55 milli-watts results in a minimum distance of 181.2 meters (595 feet) from the antenna. Inasmuch as the lowest element on the proposed antenna will be approximately 328.3 meters (1077 feet) above ground level, it is self-evident that no hazard from radiation will exist to persons at ground level. With regard to people which need to climb the tower, the tower will be fenced and/or marked by appropriate warning signs to insure safety.

Workers employed to climb the tower or work in a potential over-exposure location will not be permitted to enter the work area until cleared by the station manager or other responsible person. Appropriate warning signs will be posted to insure safety. In addition, the applicant will establish and enforce work rules and safety procedures applicable in a potential over-exposure area. The rules will establish how close a worker can get to the antenna when it is operating at normal power and specify the power reduction required in order to make other locations safe. It is recognized that maintenance or installation work on or near the antenna will require the station to completely shutdown or switch temporarily to an auxiliary antenna or an auxiliary transmitter site. All employees, contract and other persons having access to areas of potential exposure will be required to sign a site management guide indicating they are aware of and will comply with

GLENDALE BROADCASTING COMPANY


SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
NO AM BROADCAST STATIONS ARE WITHIN 3.2 KILOMETERS OF THE PROPOSED SITE.
PROPOSED SITE
Caleb
BRIDGE
CALEB
ROAD
BRYANT
Doc
Moore
Branch
Little
Doc
Ck
Balsinger
ROCK
TELEPHONE
GWINNETT CO
ROCKDALE CO
3743
47'30"
3742
3741
3740


MATHIS
BUFORD
Alpharetta
Suwanee
GWINNETT CO
419 UEW
GWINNETT CO
BRISCOE FIELD
Hoschton
Auburn
Dacula
WINDER
MARIETTA
Sandy Sprs
DOBBINS AFB
NAS ATLANTA
SMYRNA
MABLETON
DULUTH CO-BROWN
See NOTAMs/Directory for CZ alt hr
Lawrenceville
Loganville
Between
WHISPERING PINES (Pvt)
MONROE-WALTON CO
Walnut Grove
AERIE
Pendergrass

IX
X
85°
XI
XII
84°
36°
I
II
83°
III

TV COVERAGE
****

GLENDALE BROADCASTING CO.

CHANNEL NO. 63 FREQUENCY 764. - 770. MHZ

CENTER OF RADIATION 616.9 METERS AMSL
COORDINATES: 33-46-17 / 84-00-25
MAXIMUM ERP 5000. KW-DA

	BEARING DEGREES		3-16 KM AVERAGE	C.R. HAAT	E.R.P. (KW)	DISTANCE TO CONTOURS (KM) 80.0	74.0	64.0
	0.	*	303.9	313.0	4232.000	55.0	64.2	82.6
	10.		289.2	327.7	3916.125	55.4	64.7	83.4
	20.		291.3	325.6	3570.125	54.7	63.9	82.4
	30.		294.3	322.6	3280.500	53.9	63.1	81.3
	40.		287.1	329.8	2850.125	53.4	62.6	80.6
	45.	*	282.8	334.1	2628.125	53.1	62.4	80.3
	50.		280.7	336.2	2380.500	52.6	61.8	79.7
	60.		275.2	341.7	1860.500	51.3	60.5	78.1
	70.		267.0	349.9	1326.125	49.6	58.7	75.8
	80.		263.9	353.0	840.500	46.7	55.8	72.3
CITY	90.	*	259.2	357.7	512.000	43.6	52.8	68.7
	100.		248.7	368.2	392.000	42.3	51.5	67.3
	110.		237.5	379.4	480.500	44.1	53.4	69.7
	120.		232.0	384.9	666.125	46.5	55.8	72.7
	130.		230.2	386.7	840.500	48.1	57.6	74.8
	135.	*	226.6	390.3	903.125	48.8	58.3	75.8
	140.		233.3	383.6	924.500	48.6	58.1	75.5
	150.		233.7	383.2	840.500	48.0	57.3	74.5
	160.		230.2	386.7	648.000	46.3	55.7	72.6
	170.		243.7	373.2	465.125	43.6	52.8	69.0
	180.	*	248.0	368.9	406.125	42.5	51.8	67.6
	190.		247.5	369.4	561.125	44.7	53.9	70.2
	200.		255.6	361.3	924.500	47.6	56.8	73.7
	210.		252.7	364.2	1431.125	50.7	60.0	77.7
	220.		255.7	361.2	1984.500	52.8	62.1	80.5
	225.	*	257.9	359.0	2244.500	53.4	62.8	81.3
	230.		260.3	356.6	2520.500	54.1	63.4	82.2
	240.		251.2	365.7	2926.125	55.5	65.0	84.5
	250.		259.3	357.6	3321.125	56.0	65.5	85.0
	260.		262.8	354.1	3655.125	56.5	65.8	85.5
	270.	*	261.0	355.9	3960.500	57.1	66.6	86.4
	280.		263.9	353.0	4186.125	57.3	66.8	86.7
	290.		260.4	356.5	4560.125	58.1	67.8	87.9
	300.		270.9	346.0	4802.000	57.8	67.3	87.4
	310.		270.2	346.7	4950.125	58.1	67.6	87.7
	315.	*	265.2	351.7	4970.045	58.4	67.9	88.4
	320.		267.8	349.1	5000.000	58.3	67.9	88.0
	330.		267.9	349.0	4950.125	58.3	67.8	88.0
	340.		282.5	334.4	4802.000	57.1	66.6	86.1
	350.		292.1	324.8	4560.125	56.3	65.5	84.6
AVERAGE (8)		*	263.1	353.8 Meters				
			AREA IN SQUARE KILOMETERS			8429.	11733.	19705.

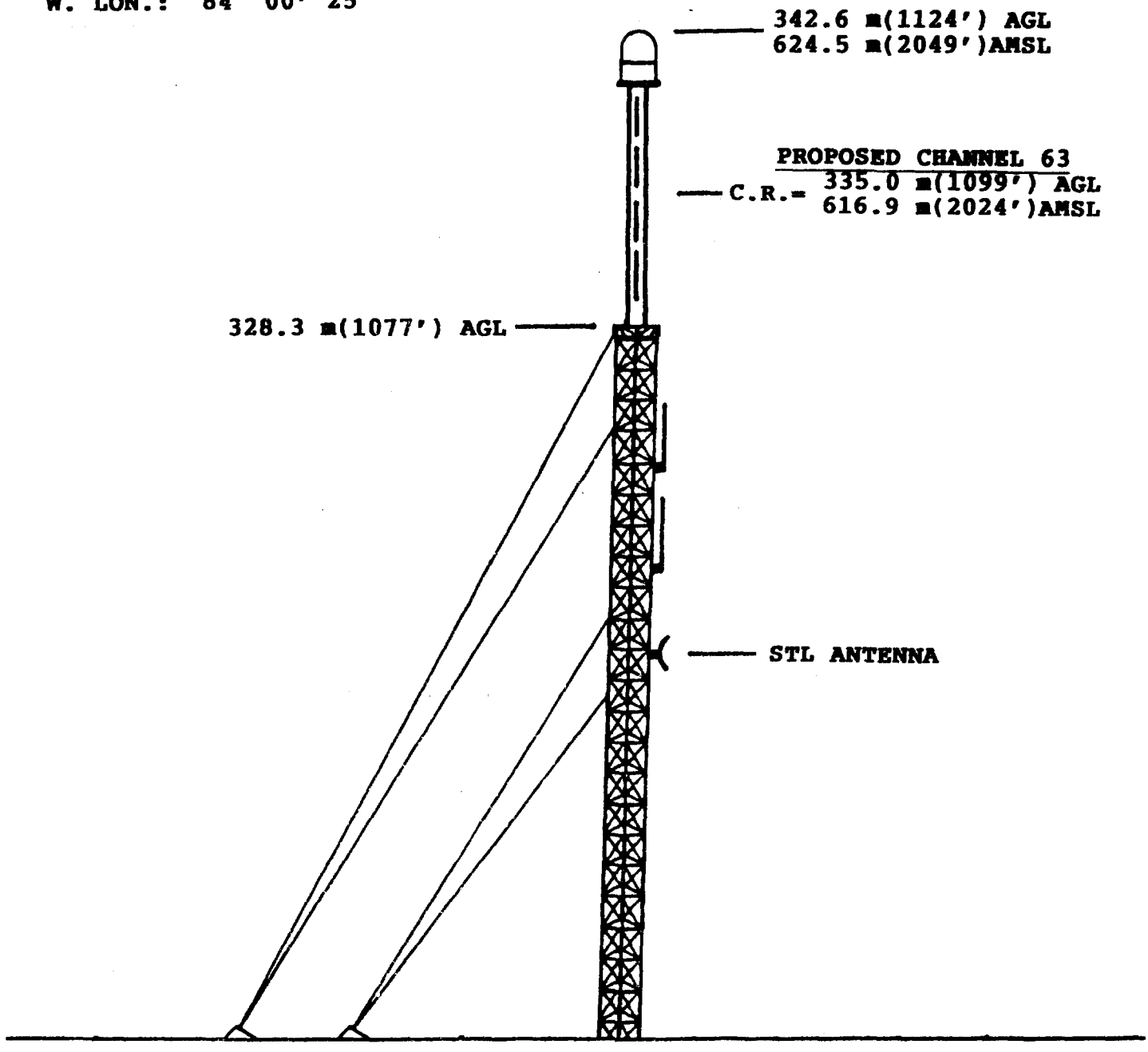
PROPOSED CONTOURS
(Metric Units)
GLENDALE BROADCASTING COMPANY
MONROE, GEORGIA
Ch. 63 5000 KW-DA 354m HAAT

MULLANEY ENGINEERING, INC.
GAITHERSBURG, MARYLAND
FIGURE 2-A
FEBRUARY 1992

PAINTING AND LIGHTING: IN ACCORDANCE WITH F.A.A. SPECIFICATIONS.

NOT DRAWN TO SCALE

N. LAT.: 33° 46' 17"
W. LON.: 84° 00' 25"



281.9m (925') AMSL

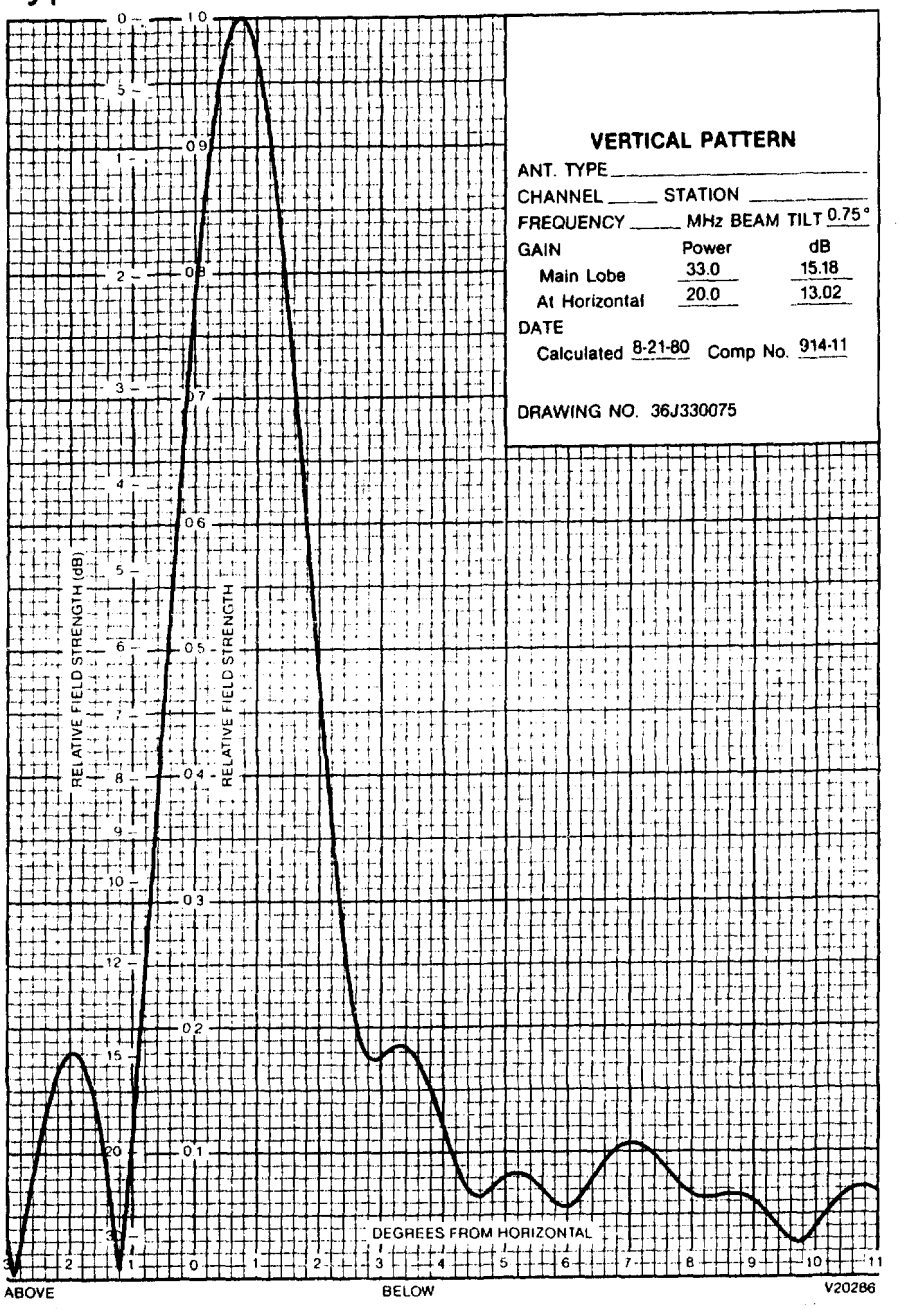
FEBRUARY 1992

MULLANEY ENGINEERING, INC.
GAITHERSBURG, MARYLAND

FIGURE 3
VERTICAL TOWER SKETCH

GLENDALE BROADCASTING COMPANY
MONROE, GEORGIA
Ch. 63 5000 KW-DA 354m HAAT

Type 36J330075



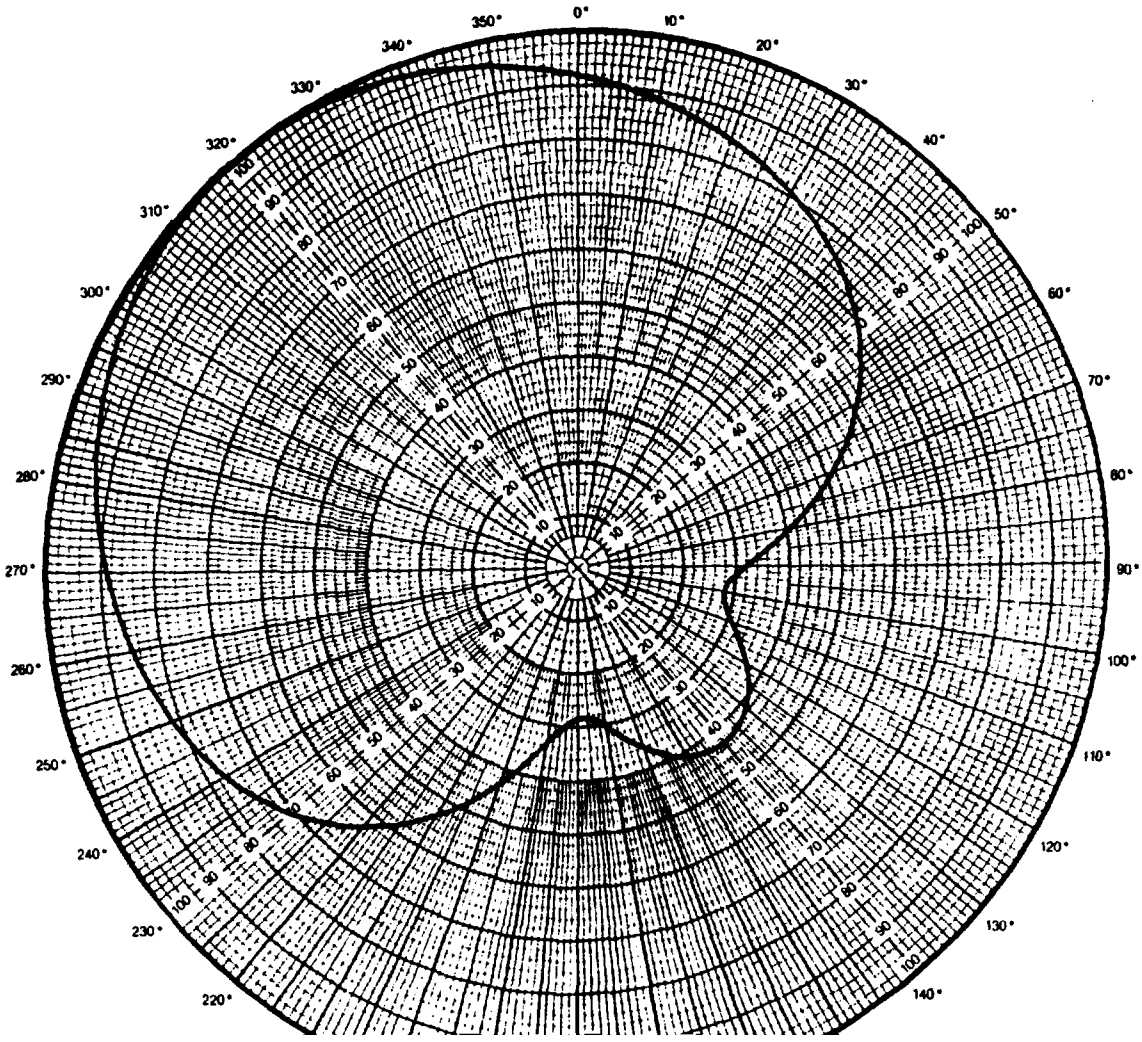
FEBRUARY 1992

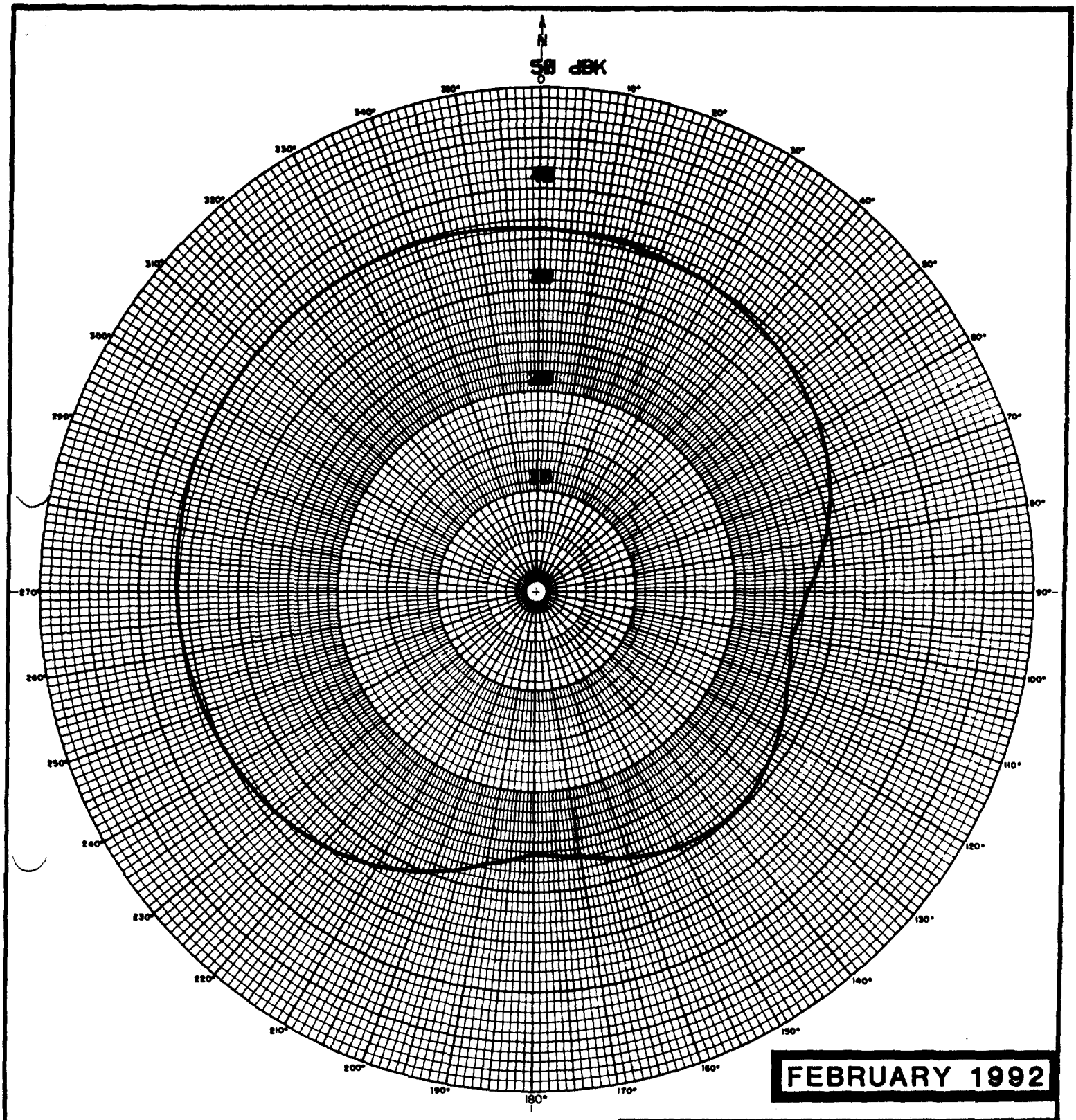
MULLANEY ENGINEERING, INC.
GAITHERSBURG, MARYLAND

FIGURE 4
ELEVATION RADIATION PATTERN

GLENDALE BROADCASTING COMPANY
MONROE, GEORGIA
Ch. 63 5000 KW-DA 354m HAAT

Type S200


0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
100°
110°
120°
130°
140°
220°
230°
240°
250°
260°
270°
280°
290°
300°
310°
320°
330°
340°
350°



FEBRUARY 1992

MULLANEY ENGINEERING, INC.
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FIGURE 4-B
HORIZONTAL PATTERN PLOT
(dBK)
GLENDALE BROADCASTING COMPANY
MONROE, GEORGIA
Ch. 63 5000 KW-DA 354m HAAT

GLENDALE BROADCASTING CO.

BEARING DEGREES	RELATIVE FIELD	HORIZONTAL DBK	HORIZONTAL KW
0.0	0.920	36.27	4232.000
10.0	0.885	35.93	3916.125
20.0	0.845	35.53	3570.125
30.0	0.810	35.16	3280.500
40.0	0.755	34.55	2850.125
45.0	0.725	34.20	2628.125
50.0	0.690	33.77	2380.500
60.0	0.610	32.70	1860.500
70.0	0.515	31.23	1326.125
80.0	0.410	29.25	840.500
90.0	0.320	27.09+	512.000
100.0	0.280	25.93	392.000
110.0	0.310	26.82	480.500
120.0	0.365	28.24	666.125
130.0	0.410	29.25	840.500
135.0	0.425	29.56	903.125
140.0	0.430	29.66	924.500
150.0	0.410	29.25	840.500
160.0	0.360	28.12	648.000
170.0	0.305	26.68	465.125
180.0	0.285	26.09	406.125
190.0	0.335	27.49	561.125
200.0	0.430	29.66+	924.500
210.0	0.535	31.56	1431.125
220.0	0.630	32.98	1984.500
225.0	0.670	33.51	2244.500
230.0	0.710	34.01	2520.500
240.0	0.765	34.66	2926.125
250.0	0.815	35.21	3321.125
260.0	0.855	35.63	3655.125
270.0	0.890	35.98	3960.500
280.0	0.915	36.22	4186.125
290.0	0.955	36.59	4560.125
300.0	0.980	36.81	4802.000
310.0	0.995	36.95	4950.125
315.0	0.997	36.96	4970.045
320.0	1.000	36.99	5000.000
330.0	0.995	36.95	4950.125
340.0	0.980	36.81	4802.000
350.0	0.955	36.59	4560.125

+ DENOTES: ROLL OFF EXCEEDS 2 DB PER 10 DEGREES OF AZIMUTH OVER ANGLE OF PROTECTION.

HORIZONTAL PATTERN TABULATION

GLENDALE BROADCASTING COMPANY
MONROE, GEORGIA
Ch. 63 5000 KW-DA 354m HAAT

MULLANEY ENGINEERING, INC.
GAITHERSBURG, MARYLAND

FIGURE 4-C

FEBRUARY 1992

February 19, 1992

TV Spacing Study

TITLE: GLENDALE BROADCASTING - MONROE, GA.
Channel 63 Zone II
Database: FCC 12/20/91

Latitude: 33-46-17
Longitude: 84-00-25
Safety zone: 100 km