

910807EG

ORIGINAL

MAIL SECTION

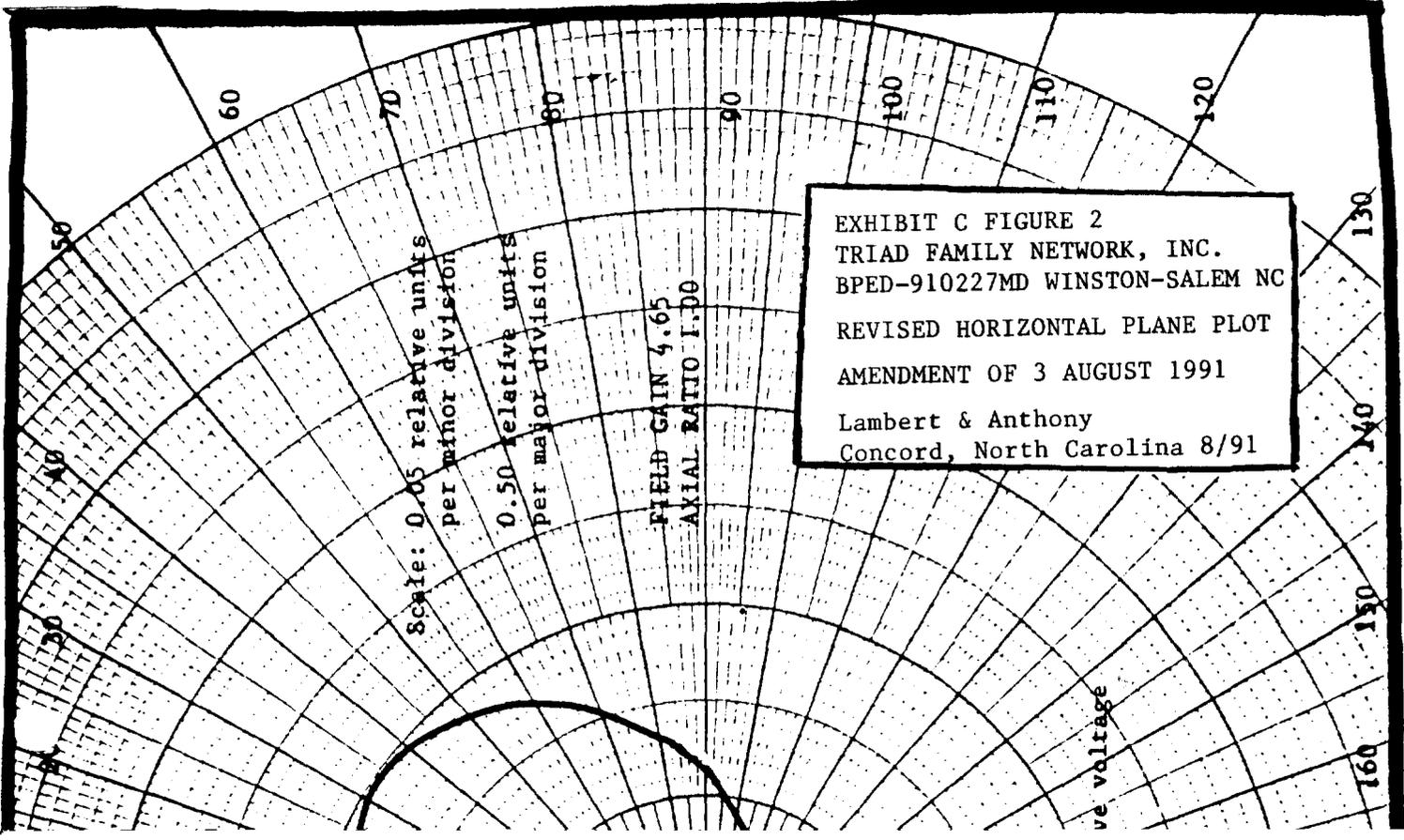
Before the

TRIAD FAMILY NETWORK, INC  
BPED-910227MD  
NEW, WINSTON SALEM, NC  
3 AUGUST 1991

EXHIBIT C  
TRIAD FAMILY NETWORK, INCORPORATED  
DIRECTIONAL ANTENNA TABULATED DATA

(FIGURE 1

Azumith	Relative field	Power in dBkW	Power in watts
0°	1.000	8.4	6 918
10°	0.988	8.3	6 760
20°	0.966	8.1	6 456
30°	1.000	8.4	6 918
40°	0.988	8.3	6 760
45°	0.955	8.0	6 309
50°	0.933	7.8	6 025
60°	0.861	7.1	5 128
70°	0.759	6.0	3 981
80°	0.653	4.7	2 951
90°	0.562	2.6	2 190 ** amend



Scale: 0.05 relative units  
per minor division

0.50 relative units  
per major division

FIELD GAIN 4.65  
AXIAL RATIO 1.30

EXHIBIT C FIGURE 2  
TRIAD FAMILY NETWORK, INC.  
BPED-910227MD WINSTON-SALEM NC  
REVISED HORIZONTAL PLANE PLOT  
AMENDMENT OF 3 AUGUST 1991  
Lambert & Anthony  
Concord, North Carolina 8/91

ve voltage

EXHIBIT H

TRIAD FAMILY NETWORK, INCORPORATED  
NEW FM, WINSTON-SALEM, NORTH CAROLINA

The following is the required statement with respect to Subpart I, Chapter 1, Title 47 C.F.R. ("The National Environmental Policy Act of 1969"), and the required blanketing interference and radiofrequency biohazard statement.

I. ENVIRONMENTAL IMPACT

The proposed operation of Triad Family Network, Incorporated is categorically excluded from environmental processing under 47CFR 1.1306 of the Commission's Rules and Regulations. Triad Family Network intends to use an existing tower owned by WBFJ, and is thus exempt under note 1 of 1.1306. As shown below, there will be no radiofrequency biohazard and thus, a detailed discussion of exemption (re note 1 of 1.1306) is not required.

II. BLANKETING INTERFERENCE

The proposed operation will produce in excess of 115 dBuV for a distance of 1.03 kilometers from the transmitter site. This was computed using the method in 47CFR 73.318(a) which is  $(\text{sqrt})(6.92 \text{ kw}) * 0.394$ . Although a directional antenna is to be employed (such that the blanketing zone would differ along differing azimuths) Triad Family Network, Incorporated will take whatever measures are required under 73.318(b) to satisfy complaints of blanketing interference. [1] Note that (see Exhibit E, the site map) the area where the blanketing interference would occur is basically railroad stockyards, warehouses, and other industrial buildings. Thus, no noxious blanketing interference is expected to be caused to the listening public.

III. RADIOFREQUENCY BIOHAZARD

47CFR 1.1307(b) requires the demonstration of the absence of a radiofrequency biohazard from any proposed facility to be excluded from environmental processing. The proposed facility of Triad Family Network, Incorporated meets these requirements. The method used to calculate the distance to the  $1.0 \text{ mw/cm}^2$  field level is that as published in ANSI C95.1-1982. This formula is as follows:

$$1.0 \text{ mw/cm}^2 = (0.64)(1.64)(\text{total ERP, watts})(1000 \text{ mW/W}) / \pi * D^2$$

Rearranging this formula we obtain for the critical distance:

$$\text{Biohazard distance} = \frac{(1049.6)(13,840 \text{ w H\&V})}{3.14159 \text{ cm} **2} \quad ** 0.5$$

(in cm)

[1] For a circular radius of 1.03 km irrespective of the proposed directional antenna.

EXHIBIT H

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III. BIOHAZARD CALCULATION (continued)

(The \*\* 0.5 part means take the square root of the entire fraction indicated). Working through this we find the critical distance to be 2,150 cm (21.5 meters) from the lowest bay of the transmitting antenna.

Referring to Exhibit B, the tower plan sketch, the radiation center is 38 meters above ground level, and the lowest bay of this antenna is 5 meters below that. This would place the biohazard at (38-5-21.5 m) or 11.5 meters above ground level, i.e. approximately 30 feet.

Thus, the biohazard does not reach areas which can be contacted by employees or the general public. The tower base is fenced and locked and warning signs will be posted wherever necessary or desirable.

In conclusion, this application satisfies the requirements of ANSI C95.1 with respect to the radiofrequency biohazard.