

TECHNICAL EXHIBIT
APPLICATION FOR MODIFICATION
OF CONSTRUCTION PERMIT
BARRY TELECOMMUNICATIONS, INC.
RADIO STAION WXEL
WEST PALM BEACH, FLORIDA
CH 214C1 57 KW (MAX-DA) 285 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared on behalf of Barry Telecommunications, Inc. (herein "Applicant"), licensee of noncommercial, educational FM station WXEL. Station WXEL operates on channel 214C2 at West Palm Beach, Florida, and has been authorized to operate on channel 214C1 (BMPED-20020219ABB). The applicant requests modification of its construction permit for WXEL to specify a site approximately 3.3 kilometers (2.0 miles) east-northeast of the authorized site. The antenna height will be lower than that authorized and the effective radiated power will be increased to compensate for the lower antenna height. There will be no change in the proposed directional antenna pattern. It is proposed to side-mount the FM antenna on an existing tower (ASR No. 1220033), with continued operation on channel 214C1, but with maximum effective radiated power (ERP) of 57 kilowatts and antenna height above average terrain (HAAT) of 285 meters. The proposal is classified as a minor change.

The proposal would not be subject to environmental processing in accordance with 47 CFR 1.1306.

It is believed that the proposal conforms with all applicable rules and regulations of the Federal Communications Commission.

Transmitter Location

The transmitting facility will consist of a circularly polarized, directional FM antenna, side-mounted on the Scripps-Howard tower, which is located near the intersection of U.S. Hwy. 441 and Lantana Road in Palm Beach County, Florida. The location is uniquely described by the following geographic coordinates, which were taken from the tower antenna structure registration record, converted to NAD '27, and rounded to the nearest second:

26° 35' 20" North Latitude

80° 12' 44" West Longitude

The tower registration number is 1220033.

Allocation Considerations

It is believed that the proposed facility complies with the requirements of 47 CFR 73.509 with respect to all other NCE-FM stations and that the proposed facility complies with 47 CFR 73.207 with respect to all intermediate frequency (IF) related stations. Figure 1 is an allocation study with respect to pertinent proposed and authorized stations. Contained in Figure 1 are maps showing the protected and interfering contours along all azimuths for the applicant's facility and along the required azimuths for other pertinent FM stations. As can be seen, there is no prohibited overlap between the applicant's proposed, protected and interfering contours and the protected and interfering contours of the other

stations. No other FM stations of concern are sufficiently close to the proposed facility to warrant demonstration of the lack of prohibited contour overlap.

Coverage, Protected and Interfering Contours

The predicted coverage, protected and interfering contours were calculated in accordance with the provisions of 47 CFR 73.313. In accordance with the current FCC practice, no consideration was given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers from the proposed site along 36 radials, evenly spaced at 10-degree intervals, were determined using the N.G.D.C. 3-second terrain database. Similarly, the average terrain elevations for the other FM facilities, shown in the Allocation Study, were determined from their respective sites.

The antenna radiation center heights above average terrain in the individual radial directions and the corresponding effective radiated powers were used in conjunction with the F(50,50) and F(50,10) curves of 47 CFR 73.333 (Figures 1 and 1a) to determine distances to the coverage, protected and interfering contours.

Directional Antenna Pattern Envelope

The proposed directional antenna pattern envelope for WXEL remains unchanged from that authorized in BMPED-20020219ABB. For reference it is included as Figure 2 of this exhibit.

TV Channel 6 Protection

The Commission requires that noncommercial, educational FM facilities provide interference protection to affected TV channel 6 facilities as defined in 47 CFR 73.525(a). Channel 6 television station WTVJ, Miami, Florida is located 119 kilometers from the proposed WXEL site and therefore requires study. Figure 3 is a study demonstrating that the proposed WXEL facility meets the requirements of 47 CFR 73.525 with respect to WTVJ. As can be seen in Figure 3, the predicted interference area to WTVJ is outside of the WTVJ Grade A contour and outside of the ADI/DMA for the Miami market. The predicted interference area is totally within the City Grade Contour of channel 5, television station WPTV, West Palm Beach, Florida. Both station WTVJ and WPTV are affiliated with the NBC Television Network. The WXEL proposal therefore meets the requirements of 47 CFR 73.525.

Environmental Considerations

The proposed facility was evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields," Edition 97-01. Using the appropriate equation shown in the Bulletin and a "worst case" relative field factor of 0.2, the power density at the tower base, 2.0 meters above ground level, attributable to the proposed FM operation is predicted to be 0.0018 mW/cm², or 0.9 percent of the FCC standard for an uncontrolled environment. The "worst-case" field

factor of 0.2 was selected based on the antenna vertical radiation pattern included as Figure 4. As the proposed operation of WXEL produces a predicted power density of less than 5 percent for an uncontrolled environment and meets other requirements, the proposal is categorically excluded from environmental evaluation.

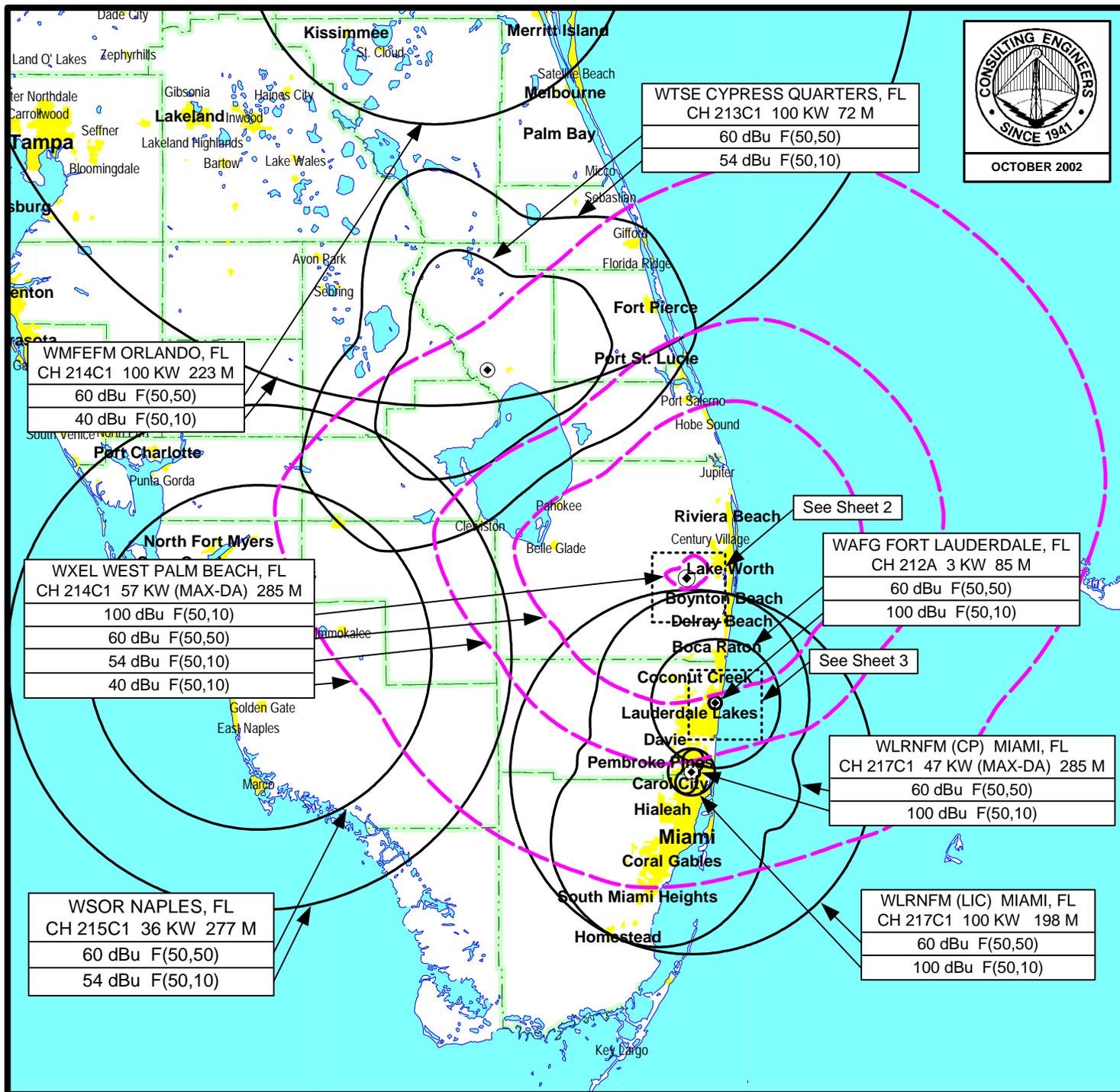
The tower owner verifies that a fence encloses the entire property at the tower site and that a second fence restricts access to the tower itself. Furthermore, the applicant verifies that in concert with other tower users, appropriate measures to protect workers or other authorized personnel granted access to the tower structure will be taken to assure that no exposure of radiofrequency radiation in excess of the FCC guidelines will occur. These measures include, but are not limited to, a reduction in, or shut down of station power, as necessary.

The proposal is categorically excluded from environmental processing, as it meets all of the criteria for such an exclusion in 47 CFR 1.1306.

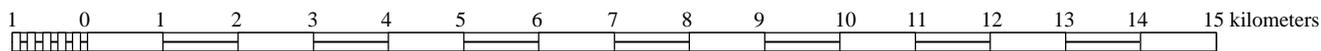
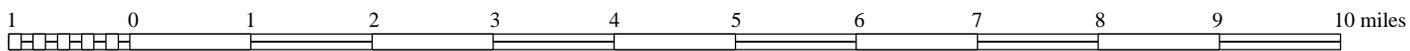
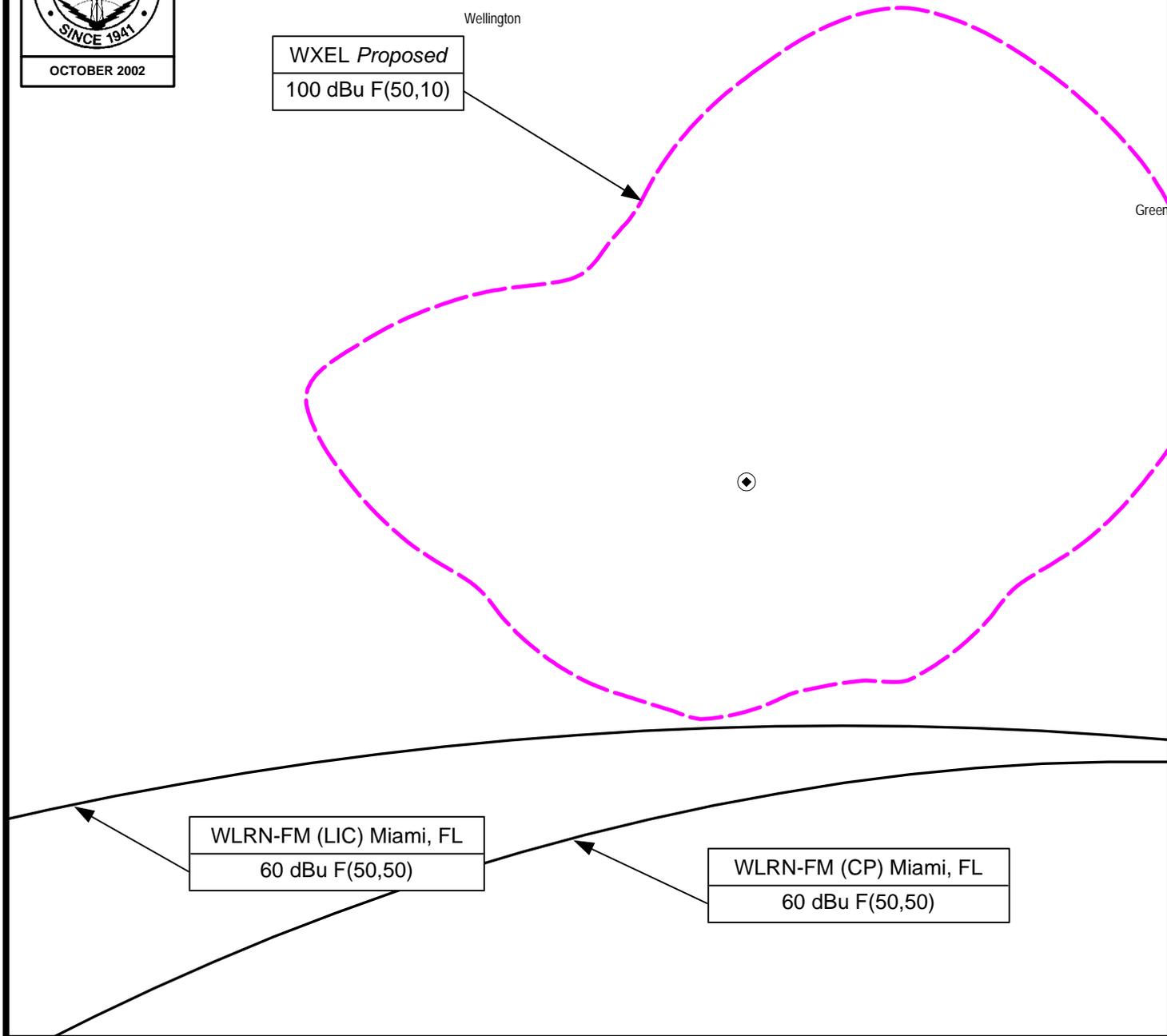
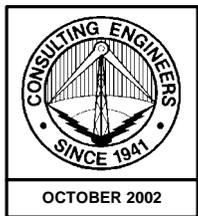


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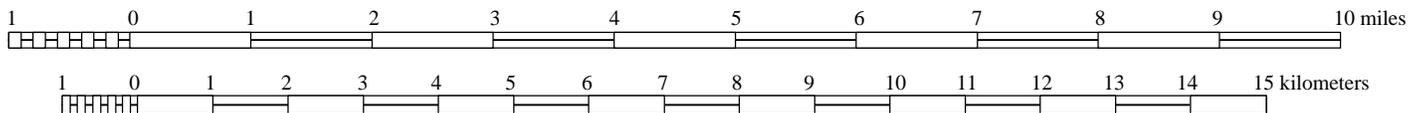
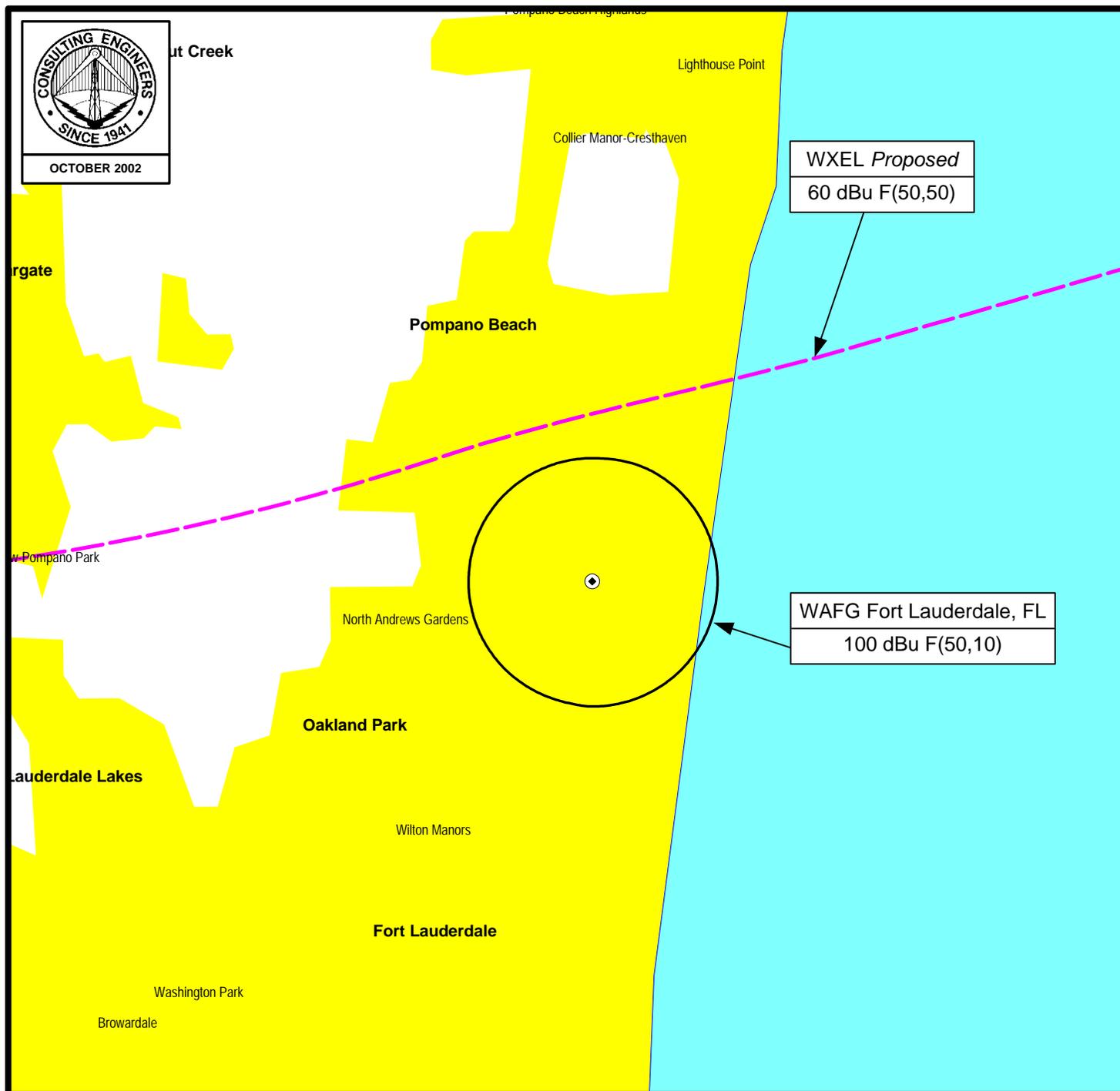
ALLOCATION STUDY
FM STATION WXEL
WEST PALM BEACH, FLORIDA
CH 214C1 57 KW (MAX-DA) 285 M
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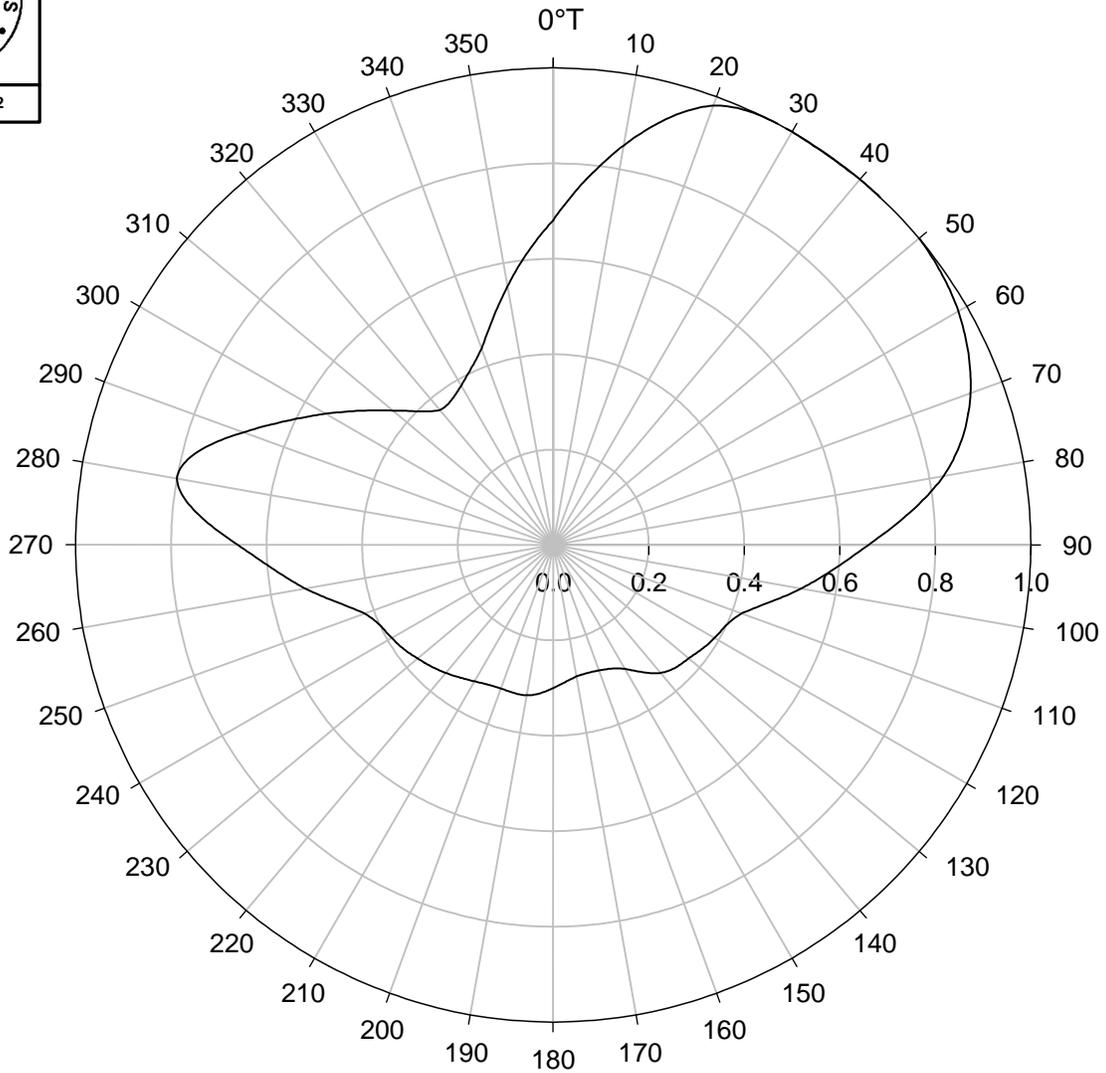
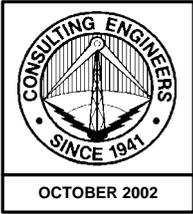
ALLOCATION STUDY

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PROPOSED DIRECTIONAL ANTENNA PATTERN ENVELOPE

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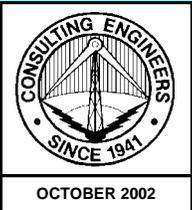
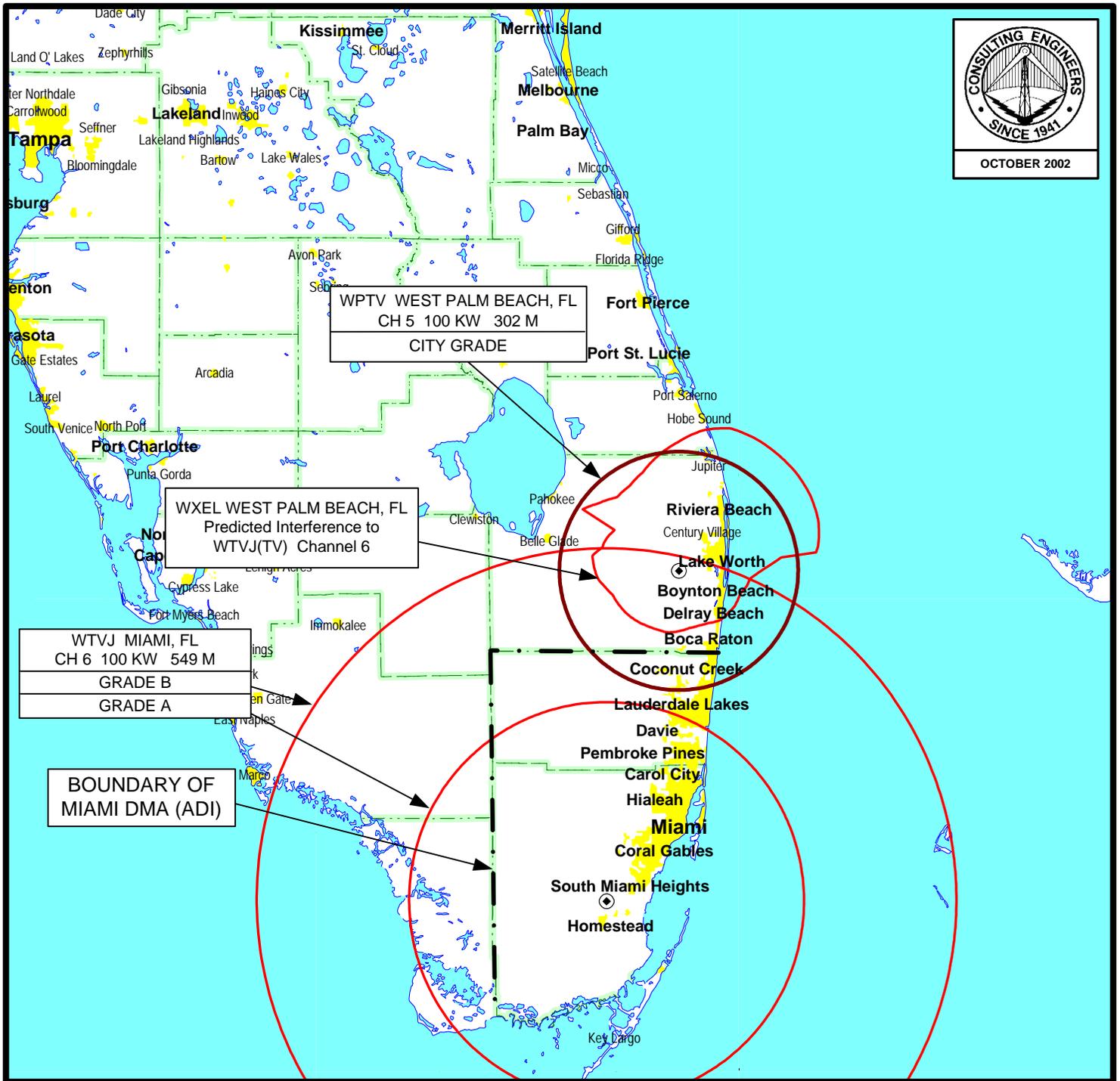
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**TABULATION OF PROPOSED DIRECTIONAL
ANTENNA PATTERN ENVELOPE**

Azimuth Deg. T	Rel. Field	ERP kW	Azimuth Deg. T	Rel. Field	ERP kW
0	0.680	26.36	180	0.300	5.13
10	0.850	41.18	190	0.320	5.84
20	0.980	54.74	200	0.320	5.84
30	1.000	57.00	210	0.330	6.21
40	1.000	57.00	220	0.350	6.98
50	1.000	57.00	230	0.370	7.80
60	0.980	54.74	240	0.390	8.67
70	0.930	49.30	250	0.420	10.05
80	0.830	39.27	260	0.527	15.83
90	0.660	24.83	270	0.660	24.83
100	0.527	15.83	280	0.800	36.48
110	0.420	10.05	290	0.690	27.14
120	0.390	8.67	300	0.550	17.24
130	0.370	7.80	310	0.438	10.94
140	0.350	6.98	320	0.369	7.76
150	0.300	5.13	330	0.385	8.45
160	0.280	4.47	340	0.438	10.94
170	0.280	4.47	350	0.550	17.24

Figure 3



TV CHANNEL 6 STUDY
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JCPD-3/3 (9), Channel 214 (90.7 MHz)
COMPUTED ELEVATION PATTERN

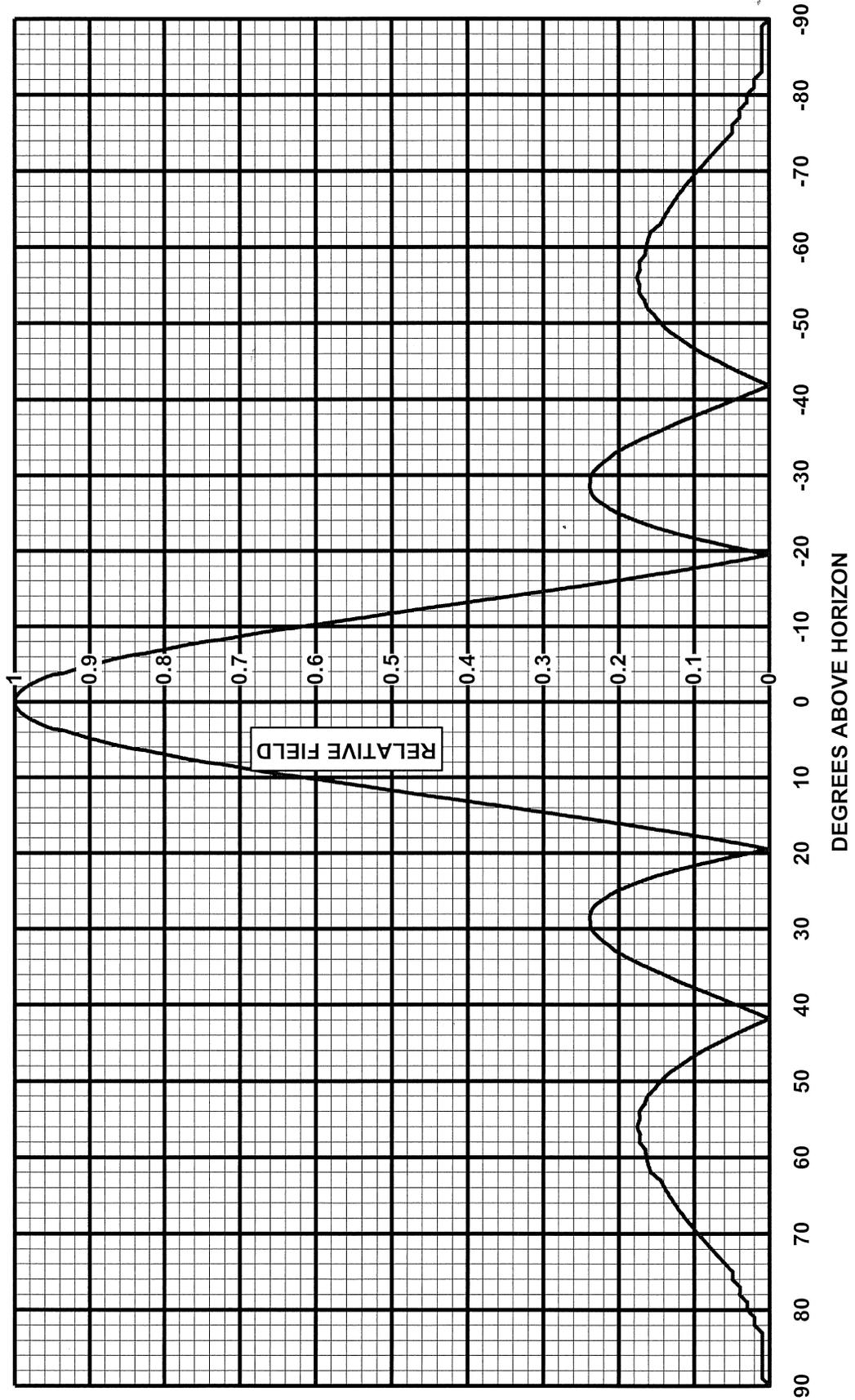


Figure 4