

TECHNICAL EXHIBIT
APPLICATION FOR FM CONSTRUCTION PERMIT
FM BOOSTER
RADIO STATION KUDD(FM)
BOUNTIFUL, UTAH
CH 300 5 KW (MAX-DA)

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Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for construction permit to modify the KUDD(FM) booster located at Magna, Utah.¹ This application seeks to modify the transmitter site location, directional antenna pattern, radiation center and community of assignment. Since the 60 dBu contours of the proposed and authorized booster facilities overlap, this application should be considered as a minor change. The primary station remains KUDD(FM) on Channel 300C at Roy, Utah.

The proposal would not be subject to environmental processing in accordance with Section 1.1306 of the Commission's Rules. An existing supporting structure with an FCC Tower Registration Number is proposed.

Proposed Transmitter Location

The directional transmitting antenna will be a circular polarized 3 bay $\frac{1}{2}$ -wavelength spaced Shively 6016 Master antenna side-mounted on an existing tower. Contained within the Appendix are the antenna manufacturer's specifications. Ultimately, several stations will be diplexed onto this antenna system.

The antenna will be mounted on a tower uniquely described by the following geographic coordinates:

40° 50' 05" North Latitude
111° 52' 03" West Longitude

A map showing the transmitter location is included herein as Figure 1. A sketch showing the proposed antenna and supporting structure is shown on Figure 2.

Coverage Contours

Figure 3 is a map showing the proposed booster station's 60 dBu (1.0 mV/m) coverage contour encompassed by the primary station's (KUDD(FM), Channel 300C, Roy) 60 dBu protected contour.²

Allocation Study

The proposed booster facility appears to satisfy the protection requirements toward first adjacent channel stations as required by Section 74.1204(i) of the Commission's Rules.

Radiofrequency Electromagnetic Field Exposure

The proposed booster facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed Shively 6016 3 bay ½-wavelength spaced antenna

¹ This amendment modifies FCC File Number: BNPFTB-20010913ABQ.

is located 19 meters above ground level. Since several stations will be diplexed on this antenna, a radiofrequency electromagnetic field exposure survey will be completed after the facility is authorized and constructed to ensure no personal are exposed in excess of the standard.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure.

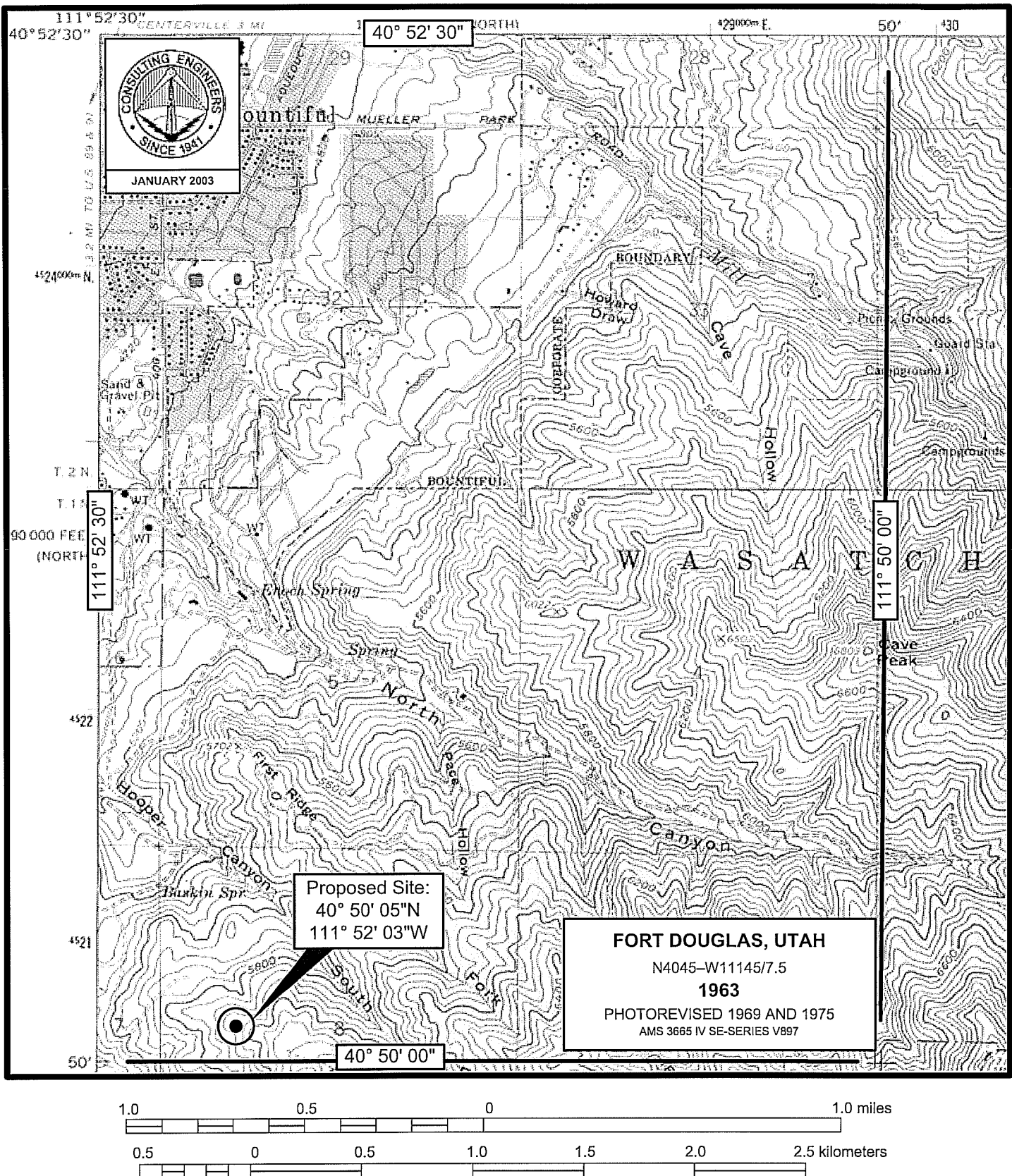
Charles A. Cooper

January 10, 2003

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
941.329.6000

² The KUDD(FM) license, BLH-20020911AAS, is used to define the primary station.

Figure 1

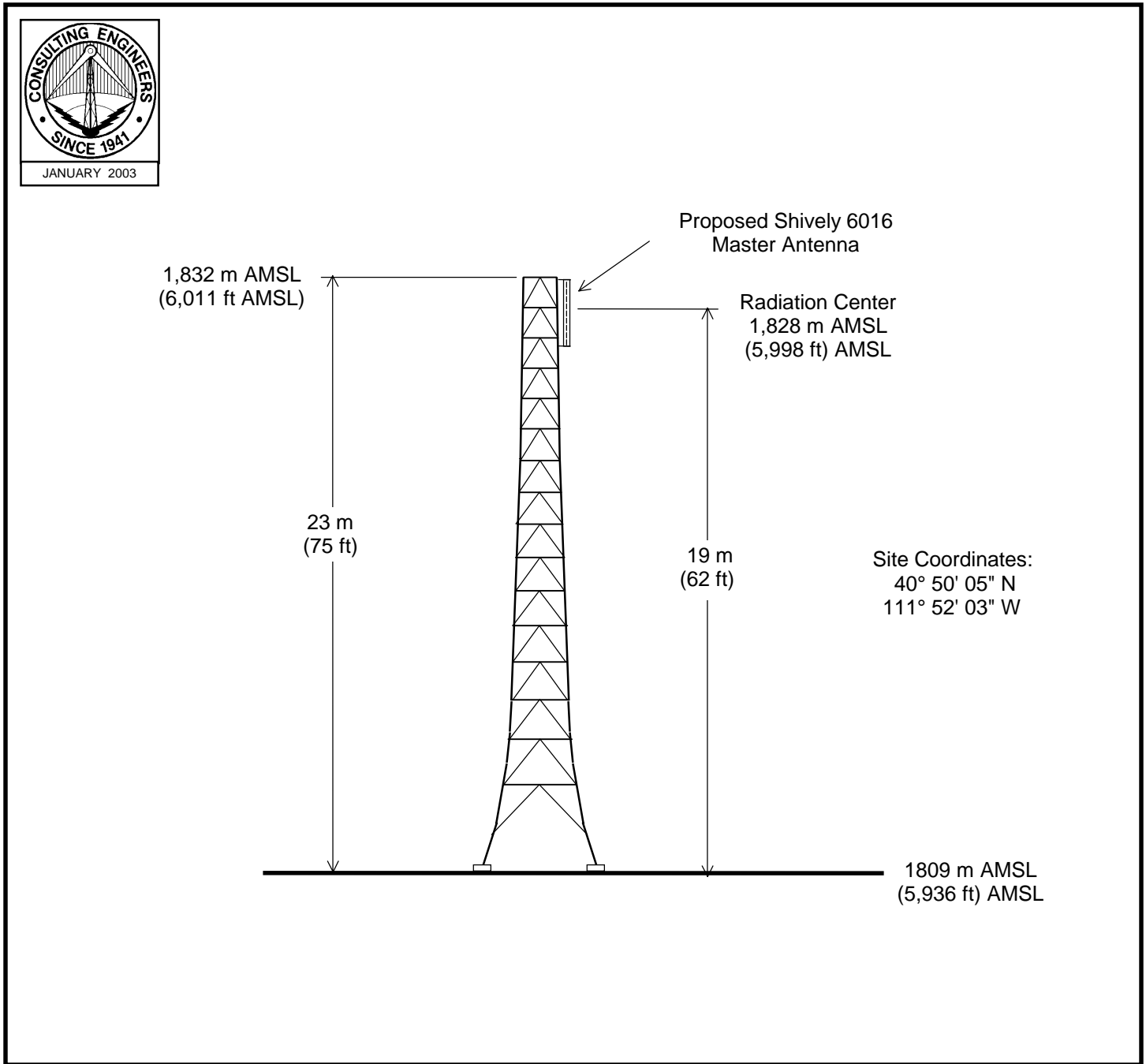


PROPOSED TRANSMITTER SITE

FM BOOSTER STATION KUDD(FM)
BOUNTIFUL, UTAH
CH 300 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



ANTENNA AND SUPPORTING STRUCTURE

FM BOOSTER STATION KUDD(FM)
BOUNTIFUL, UTAH
CH 300 5.0 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



FCC PREDICTED COVERAGE CONTOURS

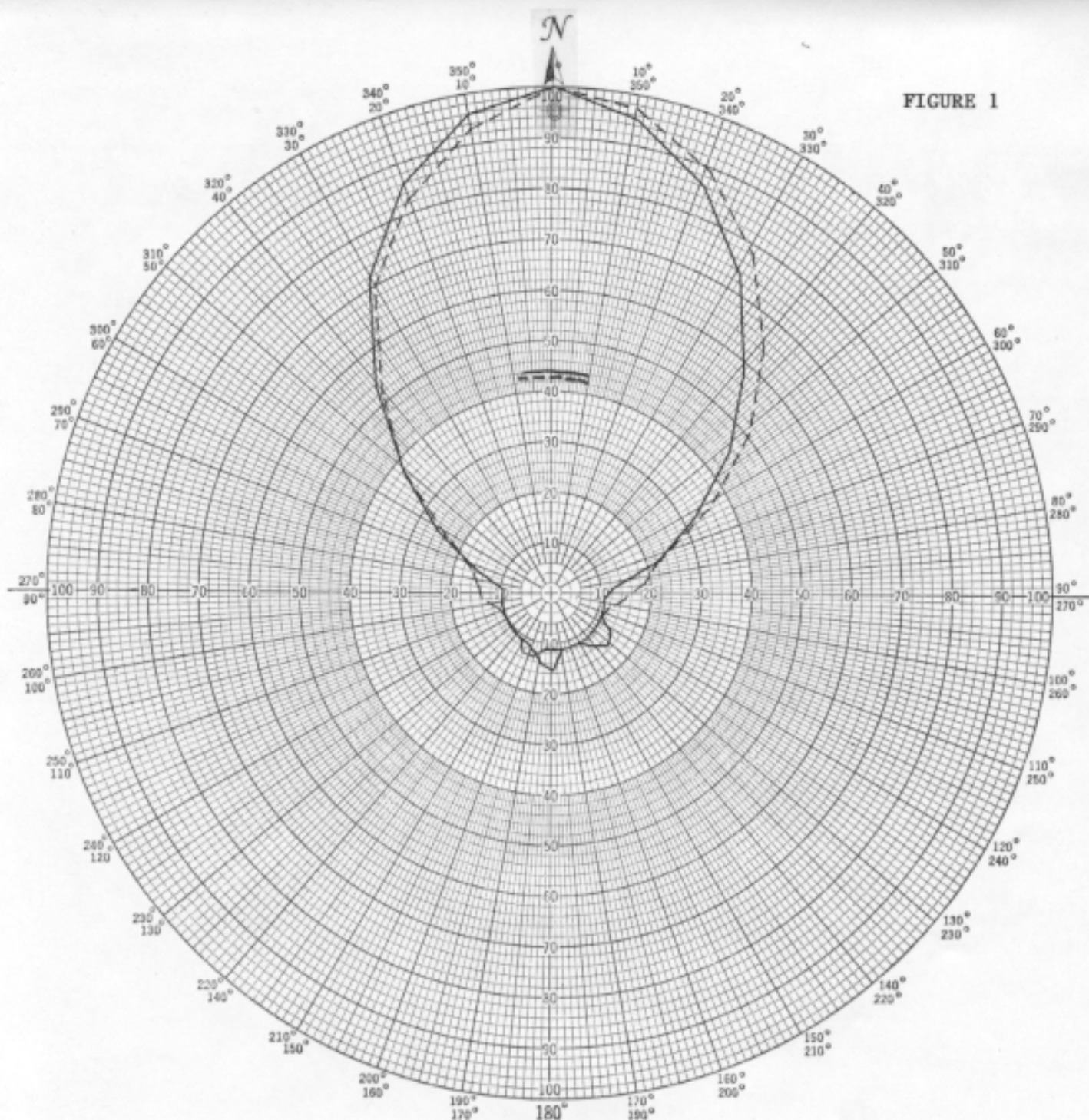
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APPENDIX

MANUFACTURER DIRECTIONAL ANTENNA SPECIFICATIONS

FIGURE 1



Shively Labs

PROJECT NAME MULTI-STATION BOUNTIFUL, UT
 PROJECT NUMBER D00457 DATE 01/22/03
 MODEL (☒) FULL SCALE () FREQUENCY MULTI
 POLARIZATION HORT ——— VERT ———
 CURVE PLOTTED IN: VOLTAGE (☒) POWER () DB ()
 OBSERVER RAS

ANTENNA TYPE 6014-1/1
 PATTERN TYPE HORIZONTAL AZIMUTH
 REMARKS:

Figure 1A

TABULATION OF HORIZONTAL POLARIZATION
D00457 Shively Labs Model 6014-1/1

DEGREE	RELATIVE FIELD	DEGREE	RELATIVE FIELD
0	1.000	180	0.14
10	0.950	190	0.130
20	0.860	200	0.110
30	0.730	210	0.100
40	0.580	220	0.100
45	0.530	225	0.100
50	0.450	230	0.100
60	0.320	240	0.100
70	0.220	250	0.100
80	0.120	260	0.100
90	0.100	270	0.100
100	0.100	280	0.100
110	0.100	290	0.160
120	0.130	300	0.260
130	0.140	310	0.380
135	0.135	315	0.450
140	0.120	320	0.540
150	0.100	330	0.720
160	0.100	340	0.860
170	0.100	350	0.960

Figure 1B

TABULATION OF VERTICAL POLARIZATION
D00457 Shively Labs Model 6014-1/1

DEGREE	RELATIVE FIELD	DEGREE	RELATIVE FIELD
0	1.000	180	0.100
10	0.970	190	0.100
20	0.890	200	0.120
30	0.780	210	0.120
40	0.640	220	0.100
45	0.585	225	0.100
50	0.500	230	0.100
60	0.350	240	0.100
70	0.220	250	0.100
80	0.180	260	0.110
90	0.140	270	0.140
100	0.110	280	0.150
110	0.100	290	0.170
120	0.100	300	0.240
130	0.100	310	0.380
135	0.100	315	0.445
140	0.100	320	0.215
150	0.100	330	0.700
160	0.100	340	0.830
170	0.100	350	0.930