

TECHNICAL EXHIBIT
MINOR MODIFICATION APPLICATION
STATION KBMY-DT (FACILITY ID 22121)
BISMARCK, NORTH DAKOTA
CH 16 1.6 KW (MAX-DA) 7 M

Technical Narrative

This Technical Exhibit was prepared on behalf of digital television broadcast station KBMY-DT at Bismarck, North Dakota. Station KBMY-DT is authorized for operation on channel 16 with a maximum directional antenna effective radiated power (ERP) of 1000 kW and an antenna height above average terrain (HAAT) of 275 meters (BMPCDT-20041029AIK).

The proposed facility will not result in any extension of the authorized noise-limited contour as shown in Figure 2. Therefore, the proposal meets the terms of the FCC Filing Freeze for digital television stations.¹

Proposed Facilities

This application proposes to employ a directional antenna and reduce the antenna HAAT. The site coordinates will be (NAD27): 46-48-23 N, 100-44-36 W. A directional antenna maximum ERP of 1.7 kW and antenna HAAT of 7 meters are proposed. The FCC antenna structure registration number upon which the transmitting antenna will be mounted is 1246080.

¹ See August 2004 Filing Freeze PN, DA 04-2446 (MB released Aug. 3, 2004).

Figure 2 is a map showing the predicted noise-limited (41 dBu) and city-grade (48 dBu) contours for the proposed operation, along with the noise-limited contour for the authorized KBMY-DT operation. The Bismarck city limits were derived from information contained in the 2000 U.S. Census for North Dakota. The proposal complies with the city coverage requirements of Section 73.625(a).

Allocation Considerations

Interference calculations have been made using the procedures outlined in the FCC's OET-69 bulletin, using a 2 kilometer grid spacing. The proposed KBMY-DT operation does not cause excessive (greater than 2%, up to 10% total) calculated interference to any analog or DTV assignment. Below is the list of stations considered in the OET-69 analysis.

Stations Potentially Affected by Proposed KBMY-DT						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
15	KMCY	MINOT ND	168.6	CP	BPCDT	-19991028AEA
15	KMCY-DT	MINOT ND	168.7	PLN	DTVPLN	-DTVP0178
15	KQSD-DT	LOWRY SD	159.0	PLN	DTVPLN	-DTVP0191
16	NEW	CROOKSTON MN	352.3	APP	BNPEDT	-20010323ABR
16	KCGE-DT	CROOKSTON MN	352.3	LIC	BLEDT	-20031024AAC
16	KDSD-TV	ABERDEEN SD	270.0	LIC	BLET	-19931130KH
16	KCLO-DT	RAPID CITY SD	338.7	PLN	DTVPLN	-DTVP0241
16	KCLO-TV	RAPID CITY SD	338.7	CP	BPCDT	-19991021AAT

From the above list of stations considered, no interference is actually predicted to any station from there herein proposed facility. Therefore, it is believed the proposal complies with the FCC's "de minimis" interference policy.

With respect to Class A TV station protection, the proposal has been evaluated according to the requirements of Section 73.613 of the FCC Rules. The analysis reveals no potential impact to any Class A station.

Canadian Allocation Analysis

As the proposal is located within the U.S./Canada border zone (400 km), a Canadian allocation study was conducted to confirm compliance with the Canadian Letter of Understanding (LOU). It is not expected that Canadian coordination is necessary since the predicted interfering contour for the proposed KBMY-DT operation (19.5 dBu, F(50,10) for Class VL) is completely within the currently authorized KBMY-DT interfering contour.

Radiofrequency Electromagnetic Field Exposure

The proposed KBMY-DT facilities were 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 antenna is located 27 meters above ground level with a maximum ERP of 1.6 kW. A downward relative field value of 0.25 was assumed for the antenna's downward radiation. The calculated power density at a point 2 meters (6 feet) above ground level is less than 0.005 mW/cm^2 . This is less than five percent of the FCC's recommended limit of 0.32 mW/cm^2 for channel 16 for an "uncontrolled" environment.

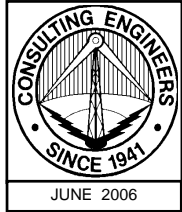
Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.

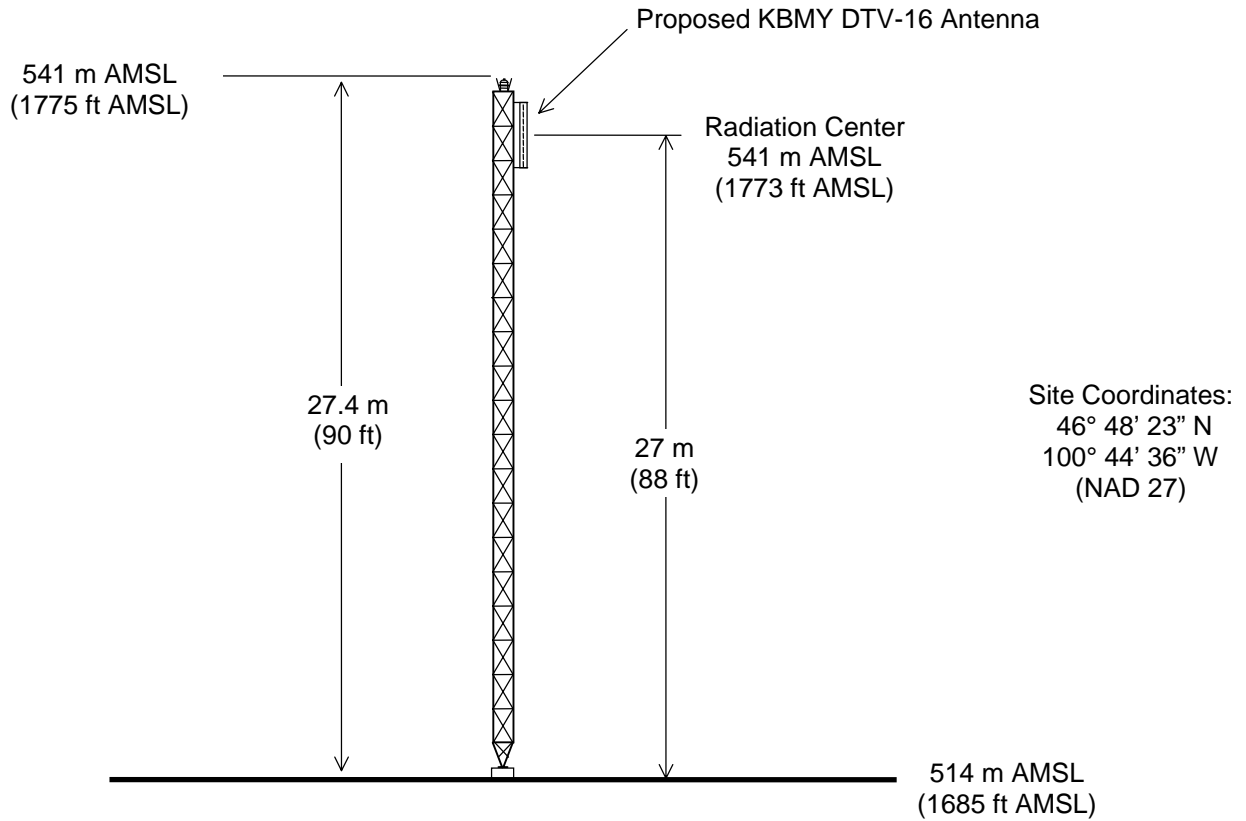
Charles A. Cooper

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000

June 14, 2006



Tower Reg. No. 1246080



Not to Scale

ANTENNA AND SUPPORTING STRUCTURE

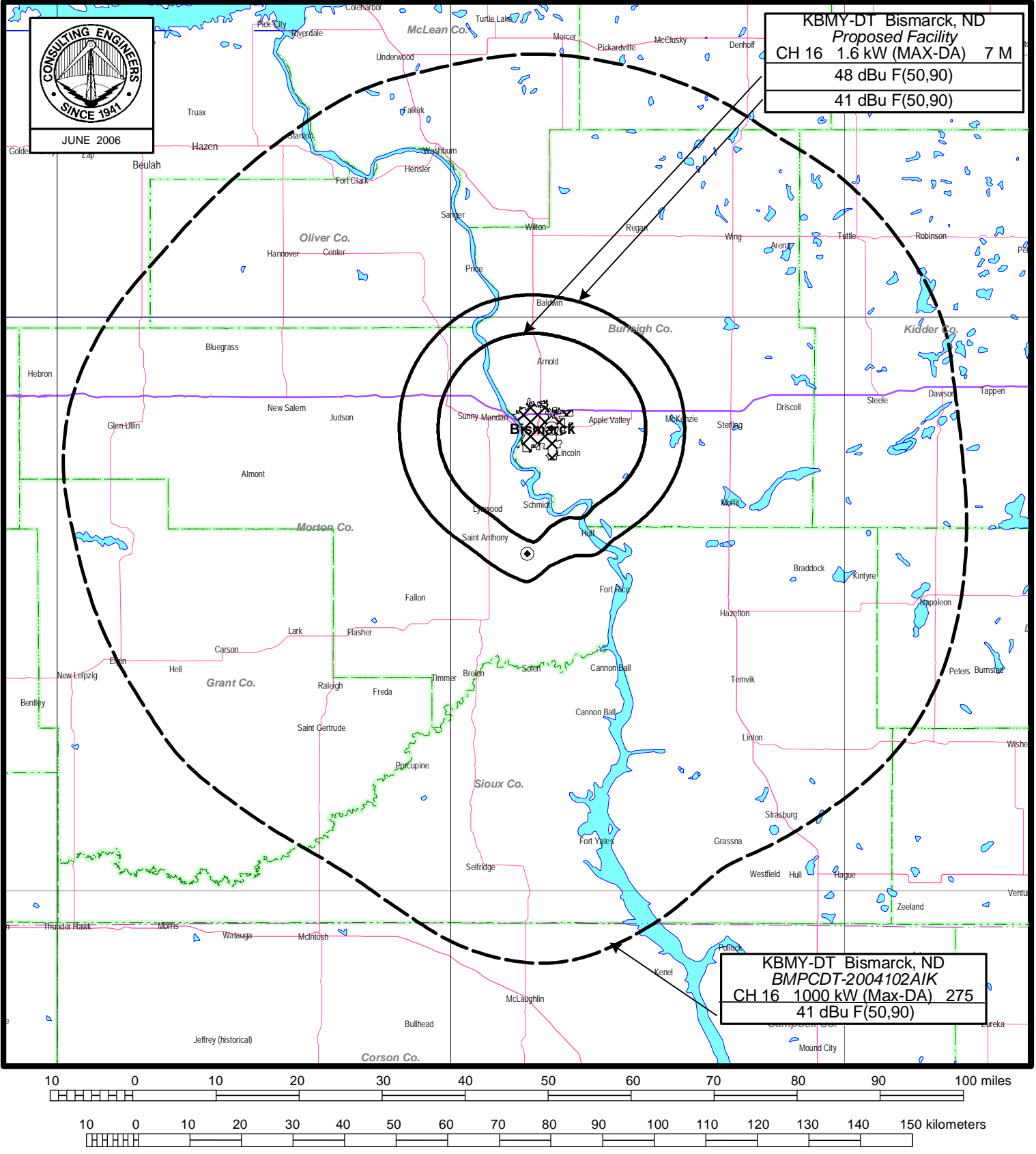
STATION KBMY-DT

BISMARK, NORTH DAKOTA

CH 16 1.6 KW (MAX-DA) 7 M

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

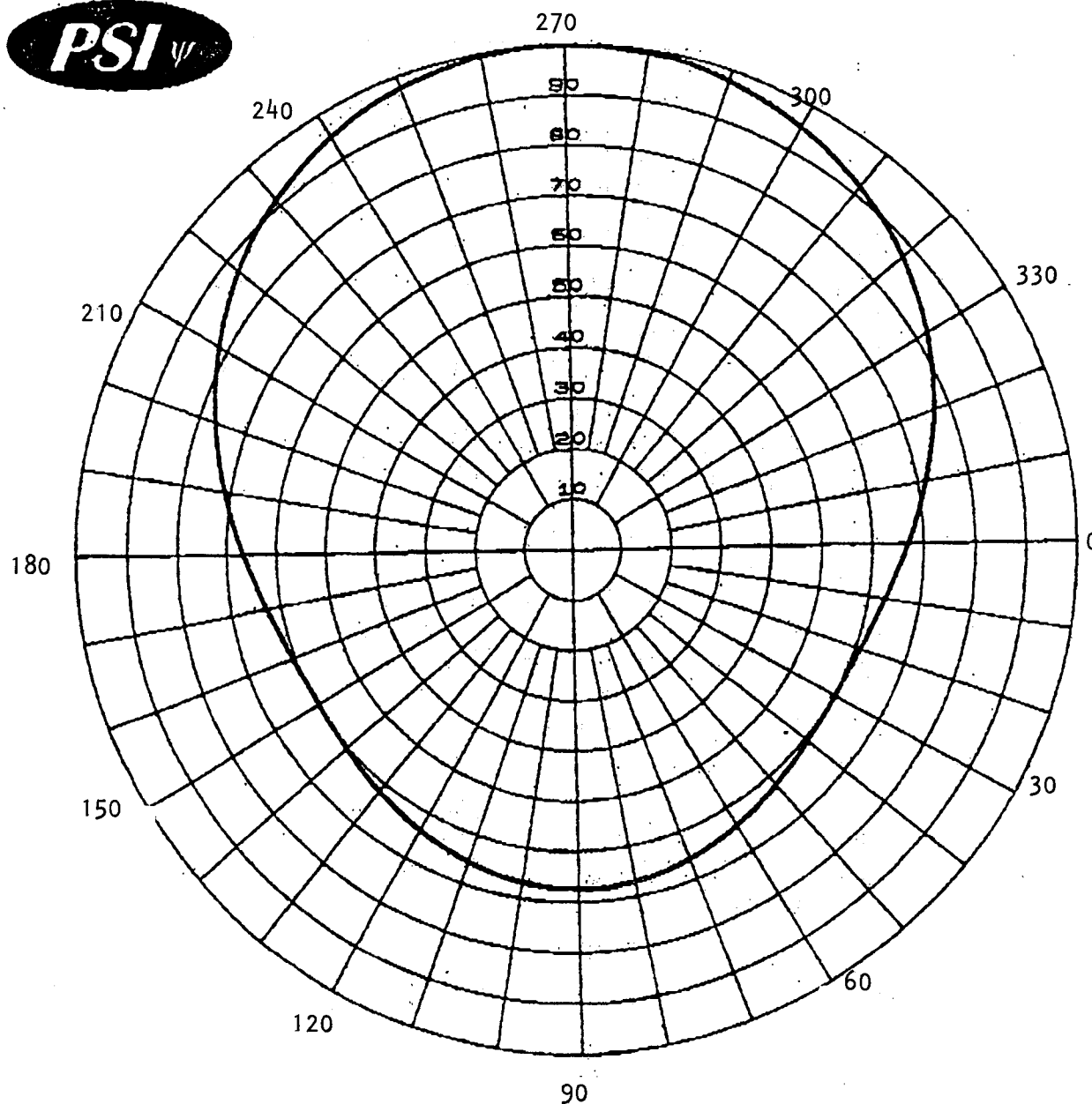
Figure 2



PREDICTED COVERAGE CONTOURS
DIGITAL TELEVISION STATION KBMY-DT
BISMARCK, NORTH DAKOTA
CH 16 1.6 KW (MAX-DA) 7 M
du Treil, Lundin & Rackley, Inc Sarasota, Florida

APPENDIX

MANUFACTURER'S DIRECTIONAL ANTENNA SPECIFICATIONS



Calculated Relative Field
Azimuth Plane Pattern
Low Power UHF Slot
Antenna Type: PSILP
Pattern Type:
Directivity: 1.70 (2.314 dB)
Date: 7/1/97
Rev. 0

PROPAGATION SYSTEMS, INC.
PO BOX 113
EBENSBURG, PA. 15931

KBMV-DT
low power

Figure 3
Sheet 2 of 2

