

**MULLANEY ENGINEERING, INC.**

9049 SHADY GROVE COURT  
GAITHERSBURG, MD 20877

**ENGINEERING EXHIBIT EE-1:**

**MARIA E. JUAREZ  
RADIO STATION KDIL(AM)  
DILLON, MONTANA**

**MODIFICATION OF CONSTRUCTION PERMIT  
BNP-20050118AJQ**

**PROPOSED: 940 KHZ 0.26 KW DAY/NIGHT, DA-1  
TWIN FALLS, IDAHO**

**JUNE 2008**

**FCC FACILITY NUMBER  
161412**

**ENGINEERING EXHIBIT  
IN SUPPORT OF  
AN APPLICATION FOR MODIFICATION  
OF CONSTRUCTION PERMIT  
STANDARD BROADCAST STATION  
KDIL  
CLASS B AM STATION AT  
TWIN FALLS, IDAHO**

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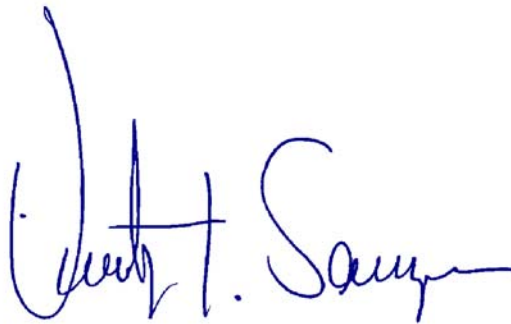
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## DECLARATION

I, Timothy Z. Sawyer, declare and that I have provided engineering services in the area of telecommunications since 1969. My qualifications are a matter of record with the Federal Communications Commission. I am a senior engineer with the firm of Mullaney Engineering, Inc., consulting radio telecommunications engineers with offices in Gaithersburg, Maryland.

The firm of Mullaney Engineering, Inc., has been retained by MARIA E. JUAREZ, to prepare the instant engineering exhibit in support of *an application for Modification of Construction Permit of Standard Broadcast Station KDIL at TWIN FALLS, IDAHO, FCC Facility ID Number: 161412.*

All facts contained herein are true of my own knowledge except those stated to be on information and belief, and as to those facts, I believe them to be true. I declare under the penalty of perjury that the foregoing is true and correct.



---

Timothy Z. Sawyer

Executed on the 10th day of June 2008

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**JUNE 2008**

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161412**

**NARRATIVE STATEMENT:**

**I. GENERAL:**

This engineering statement and the instant engineering exhibit of which it is part has been prepared on behalf of MARIA E. JUAREZ <sup>1</sup>, (hereinafter "MEJ").

By means of the instant application, MEJ proposes to MODIFY the construction permit of KDIL (BNP-20050118AJQ) to specify a new community of license, and new antenna site and antenna operating parameters.

The proposed station will operate on 940 kilohertz with a power of 0.26-kilowatts during all hours of operation (unlimited), employing a simple two-tower directional antenna system. The system is classified as a "DA-1" as it employs identical antenna operating parameters (electrical parameters) for day and night operation.

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<sup>1</sup> For the purposes of this engineering statement and associated engineering figures and FCC application, "Maria E. Juarez" and "Maria Elena Juarez" are one and the same.

The facilities will be built to comply with the *FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields* and the instant proposal is believed to be excluded from further environmental processing by the Commission.

A more detailed discussion of the environmental factors is included under the heading Environmental Considerations below.

Information requested by exhibits in response to questions on Section III-A of FCC Form 301 is incorporated in the following paragraphs, figures, and tables.

## II. ENGINEERING DISCUSSION:

### A. Transmitter/Antenna Location:

MEJ proposes to construct a new transmitter site, utilizing a two-tower directional antenna system. The towers are common to both antenna patterns (day and night) as are the antenna operating parameters.

The proposed towers are 59.44 meters in overall height above ground level and pass the FCC ASR Tower/Slope Test. Therefore, the FAA has not been notified of this proposal as no notification is required.

As the towers are less than 61 meters in overall height and no notification to the FAA is required, FCC tower registration is not required.

The result of the FCC tower slope to airport program is included herein as Figure 1. All towers pass the slope to airport criteria with regards to their proposed overall height above ground and the distance to “any protected public” airport or landing area.

**Site Map:**

A large-scale topographic map upon which the proposed site has been clearly marked is included herein as Figure 2.

**Proposed Antenna/Towers - Vertical Sketch of Antenna:**

MEJ proposes to utilize two guyed, uniform cross-section steel towers, of equal height and physical characteristics. A vertical sketch of the proposed towers is included herein as Figure 3.

**Folded Unipole System:**

The towers will employ a “folded unipole” feed system (shunt fed) of three symmetrical folds (drop wires), one on each tower leg of the triangular shaped tower.

**B. Site Plat, Site Photograph, and 1V/m Groundwave Contour:**

A site plat with the ground system details is provided as part of Figure 4. The applicant’s property site is of sufficient size to fully accommodate a Standard Broadcast antenna ground system consisting of 120-evenly spaced, buried ground radial wires, each 90 electrical degrees in length (at 940 kHz) about the base of each tower. Additionally, 120 radial wires 15.2 meters (50 feet) in length are interspersed with the main radial wires to reduce ground current losses near the base of each tower. A 2-inch wide transverse copper strap is used to terminate the radial wires where they overlap the radial wires from an adjacent tower. All towers (radiofrequency grounds) are connected by the use of a 4-inch wide copper strap between towers. The full description of the antenna ground system is included in Figure 4.

Two high-resolution satellite/aerial photographs are provided in Figure 4, an aerial photograph of the site (a general site plat) and an aerial photograph upon which the 1V/m daytime and nighttime groundwave blanketing contours have been drawn are included in Figure 4.

**Blanketing Contour:**

As indicated in Figure 4, the population within the blanketing contours (day and night) meets the requirements of §73.24(g) of the Commission's Rules.

**Discussion**

**Daytime and Nighttime:**

The daytime AND nighttime blanketing contours are identical in shape and size. The population within the blanketing contours is zero (0) persons.

As the population of the blanketing contour is less than 300 persons, the proposal meets the requirements of 47 C.F.R §73.24(g).

**C. Daytime Directional Antenna:**

Figure 5, contains the details of the proposed daytime directional antenna system as well as a map of the proposed service contours.

Figure 5 also contains a map upon which the predicted daytime service contours from the proposed facility as well as the proposed community of license have been drawn.



The community of license, Twin Falls, Idaho is well within the 5.0 mV/m groundwave contour from the proposed daytime facility as shown in Figure 5. Therefore, the daytime proposal is in full compliance with the Commission's Rules concerning service to its city/community of license.

**D. Daytime Allocation Study:**

The FCC Conductivity Map (M3), was used to establish the effective soil conductivity values for all stations over the azimuth span (direction) of concern in the absence of measured soil conductivity values.

**Measured Soil Conductivity Values:**

Measured field strength values to determine the soil conductivity *were used in this application* concerning the daytime operation of KSEI, 930 kHz, Pocatello, Idaho.

Field strength measurement data was collected during June 2008 by Mr. Efrain Ortega, under the direction of this office. The measurement data (tabulations) and the associated graphs are included in Figure 6.

Measurements were made from KSEI on radial azimuths of 235, 255 and 275 degrees True out to a distance of approximately 150 kilometers.

Where applicable, the equivalent distance method was used to establish the distances to the various signal level contours from other stations of concern or from this proposal.

The FCC's "Consolidated Data Base System" (CDBS) has been used to obtain operational information and antenna parameters of all stations considered in the allocation studies except for the proposed operation which is specified herein.

This proposal as shown in Figure 6, with the use of the measured soil conductivity values, demonstrates that prohibitive overlap of the proposed daytime contours to or from this proposal do not occur, therefore a grant of the proposal will not cause or receive prohibitive signal overlap with any station of concern during daytime hours and is in compliance with the Commission's Rules and any "International Treaty" currently in effect.

A grant of this proposal is in the public interest as it will allow the establishment of a new AM service to the community of license, and an additional aural broadcast service to the surrounding communities.

**E. Critical Hours Operation:**

The proposed operation on 940 kilohertz, a Clear Channel does not require a reduction in the proposed daytime power during the critical hour periods. No U.S. Class A stations are in operation on 940 kilohertz.

Figure 7 contains a critical hours study which shows that no reduction in operating power from the proposed daytime operation is required.

**F. Nighttime Study, Nighttime Directional Antenna Pattern Details, and Nighttime Service Area:**

A full nighttime allocation study, and the details of the proposed nighttime directional antenna pattern, as well as the predicted nighttime service area are provided in Figure 8.

The community of license, Twin Falls, Idaho, is well served by the predicted 9.0 mV/m 50-percent RSS nighttime limit signal (the “nighttime interference free contour”) from the proposed nighttime facility as shown on the map included in Figure 8. The proposal serves 100% of the population of the community and area. Therefore, the nighttime proposal is in full compliance with the Commission’s Rules concerning service to its community of license.

The nighttime proposal as demonstrated herein does not produce prohibitive interference to any other domestic facility of concern during nighttime hours.

A grant of the nighttime proposal is in full compliance with the Commission’s Rules concerning domestic stations.

**G. Environmental Considerations:**

The applicant believes its proposal will not significantly affect the environment for the following reasons:

1. No construction of physical facilities that might adversely impact the local environment will occur at the site. The applicant will comply fully with the provision of the National Programming Act, Section 106

notifications and review prior to any construction and local permitting requirements.

2. Operation of the proposed facility will not involve the exposure of workers or the general public to levels of radio frequency electromagnetic fields exceeding guidelines adopted by the Federal Communications Commission. (The current FCC guidelines are based upon criteria contained in the National Council of Radiation Protection and Measurements (NCRP) Report No.86 (1986) and ANSI/IEEE C95.1-1992.)

With regard to the last item, the towers are surrounded by individual gated fences. The fences are not less than 2 meters (6.56 feet) from any point on the tower or feed line. This is the “worst case” distance from Section 1 of Supplement A to OET Bulletin No. 65 (Edition 97-01) assuming: a 0.26 kW, 940 kHz, AM station with an antenna/tower approaching 0.25 wavelength in height. The fence gates will be kept locked and appropriate warning signs posted on each face of the fence.

Procedures will be adopted to protect workers requiring access to the tower inside the fenced area, including reduction of power or cessation of operation, to comply with the exposure guidelines. The applicant is predicted to be the sole user and owner of this site, however, should additional users be authorized at the site, the applicant/licensee will fully-cooperate and coordinate with all site users as required by the Commission’s rules.

**III. SUMMARY:**

MEJ proposes to MODIFY the construction permit of Standard Broadcast Station KDIL to specify new operating parameters and a change in community of license.

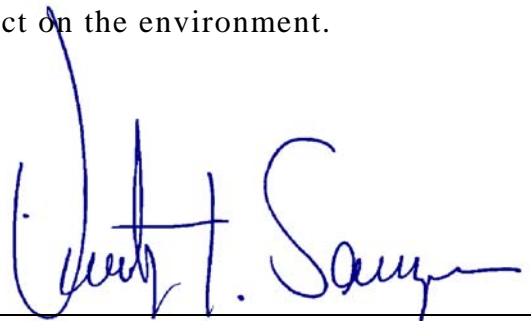
A separate statement and associated exhibits have been prepared to address the change in community of license (i.e., a Section 307 B analysis).

The station will operate on a frequency of 940-kilohertz, with a power of 0.26-kilowatts (260 watts) employing a simple two-tower directional antenna during all modes of operation.

Operation as proposed herein will not increase any existing overlap of normally prohibited contours, and will not cause any new prohibited contour overlap to any existing facilities or applications presently on-file or pending with the Commission.

It is believed that based on information presented herein, that the proposal will not have any significant impact on the environment.

10 June 2008



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Timothy Z. Sawyer

**MULLANEY ENGINEERING, INC.**  
9049 SHADY GROVE COURT  
GAITHERSBURG, MARYLAND 20877

TEL.: (301) 921-0115  
Engineer's Email: [tzsawyer@mullengr.com](mailto:tzsawyer@mullengr.com)

**FAA NOTIFICATION OR FCC TOWER REGISTRATION IS NOT REQUIRED**

**ALL TOWERS PASS SLOPE TEST**

**CENTER OF ARRAY LOCATION USED FOR DETERMINATION**

**DETERMINATION Results**

**PASS SLOPE(100:1)NO FAA REQ - 5802.0 Meters (19035.2 Feet)away & below slope by 85.0 Meters (278.87 Feet)**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	42-28-53.00N	114-30-12.00W	JOSLIN FIELD - MAGIC VALLEY RGNL	TWIN FALLS TWIN FALLS, ID	1250.8	2652.6999999999998

**PASS SLOPE(100:1)NO FAA REQ - 5436.0 Meters (17834.4 Feet)away & below slope by 82.0 Meters (269.029 Feet)**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	42-29-14.00N	114-29-37.00W	JOSLIN FIELD - MAGIC VALLEY RGNL	TWIN FALLS TWIN FALLS, ID	1250.8	2652.6999999999998

**Your Specifications**

**NAD83 Coordinates**

Latitude	42-31-56.0 north
Longitude	114-31-10.6 west

**Measurements (Meters)**

Overall Structure Height (AGL)	59.4
Support Structure Height (AGL)	59.4
Site Elevation (AMSL)	1164.3

**Structure Type**

TOWER - Free standing or Guyed Structure used for Communications Purposes

*Note: Tower/Air Slope test conducted on each tower - all pass slope test.*

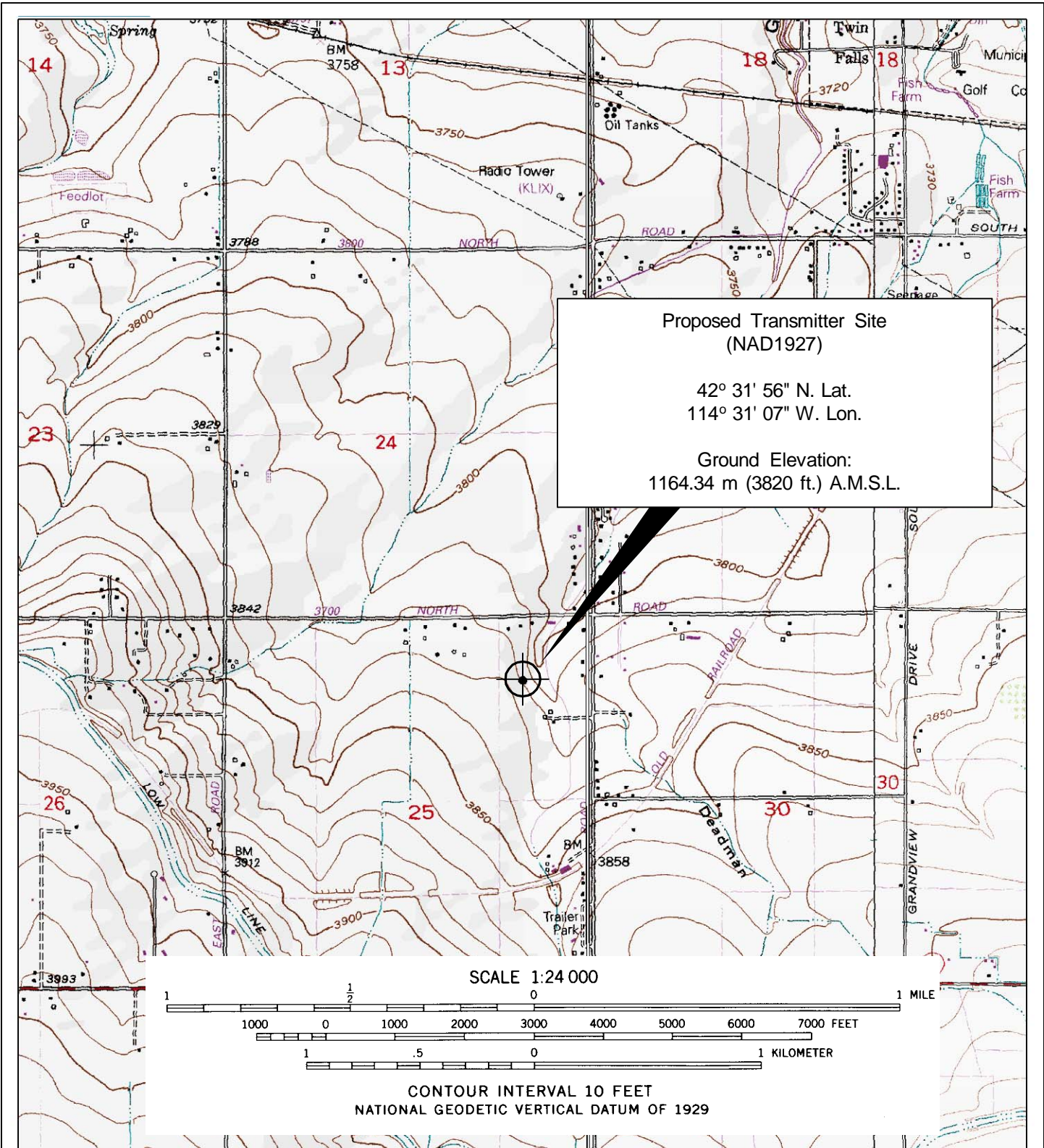


**FAA NOTIFICATION AND/OR FCC TOWER REGISTRATION NOT REQUIRED**

KDIL (AM) 940 KHZ  
TWIN FALLS, IDAHO

**FIGURE  
1**

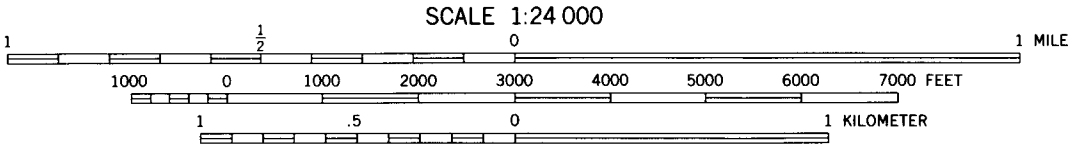
<b>GAITHERSBURG, MARYLAND U.S.A</b>	SIZE	FSCM NO	DWG NO	REV
	A	N/A	20080610MEJF1	NONE
<b>(c) 2008, ALL RIGHTS RESERVED</b>	SCALE	N/A	JUNE 2008	SHEET 1 OF 1



Proposed Transmitter Site  
(NAD1927)

42° 31' 56" N. Lat.  
114° 31' 07" W. Lon.

Ground Elevation:  
1164.34 m (3820 ft.) A.M.S.L.



CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929



**PROPOSED TRANSMITTER SITE  
TOPOGRAPHIC MAP OF SITE**

KDIL (AM) 940 KHZ  
TWIN FALLS, IDAHO

**FIGURE  
2**

GAITHERSBURG, MARYLAND U.S.A	SIZE	FSCM NO	DWG NO	REV
	A	N/A	20080610MEJF2	NONE
(c) 2008, ALL RIGHTS RESERVED	SCALE	N/A	JUNE 2008	SHEET 1 OF 1

**Note: NO TOWER LIGHTING/MARKING OR FCC TOWER REGISTRATION REQUIRED**

**ALL TOWERS ARE IDENTICAL IN HEIGHT**

TOWER 1 (SW)  
NAD 83 COORDINATES  
42-31-55.67 N  
114-31-11.36 W

TOWER 2 (NE)  
NAD 83 COORDINATES  
42-31-56.69 N  
114-31-09.83 W

AZ=40.0 DEG T.

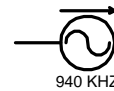
53.15 m

FOLDED UNIPOLE ANTENNA:  
GROUNDED STEEL TOWERS WITH THREE  
SYMMETRICAL DROP WIRES EACH.

TOWERS ARE IDENTICAL: 197 FEET IN  
OVERALL HEIGHT ABOVE GROUND (195 FEET  
OF TOWER STEEL + 2 FOOT CONCRETE  
PEDESTAL).

67.1 DEG @ 940 KHZ 59.44 m (197 ft) - SHUNT FED FOLDED UNIPOLE

OVERALL HEIGHT 59.44 m (197 ft)



NOT DRAWN TO SCALE

Ground Elevation: 1164.34 m (3820 ft)



**VERTICAL SKETCH OF ANTENNA**

KDIL (AM) 940 KHZ  
TWIN FALLS, IDAHO

**FIGURE  
3**

GAITHERSBURG, MARYLAND U.S.A

SIZE  
A

FSCM NO  
N/A

DWG NO  
20080610MEJF3

REV  
NONE

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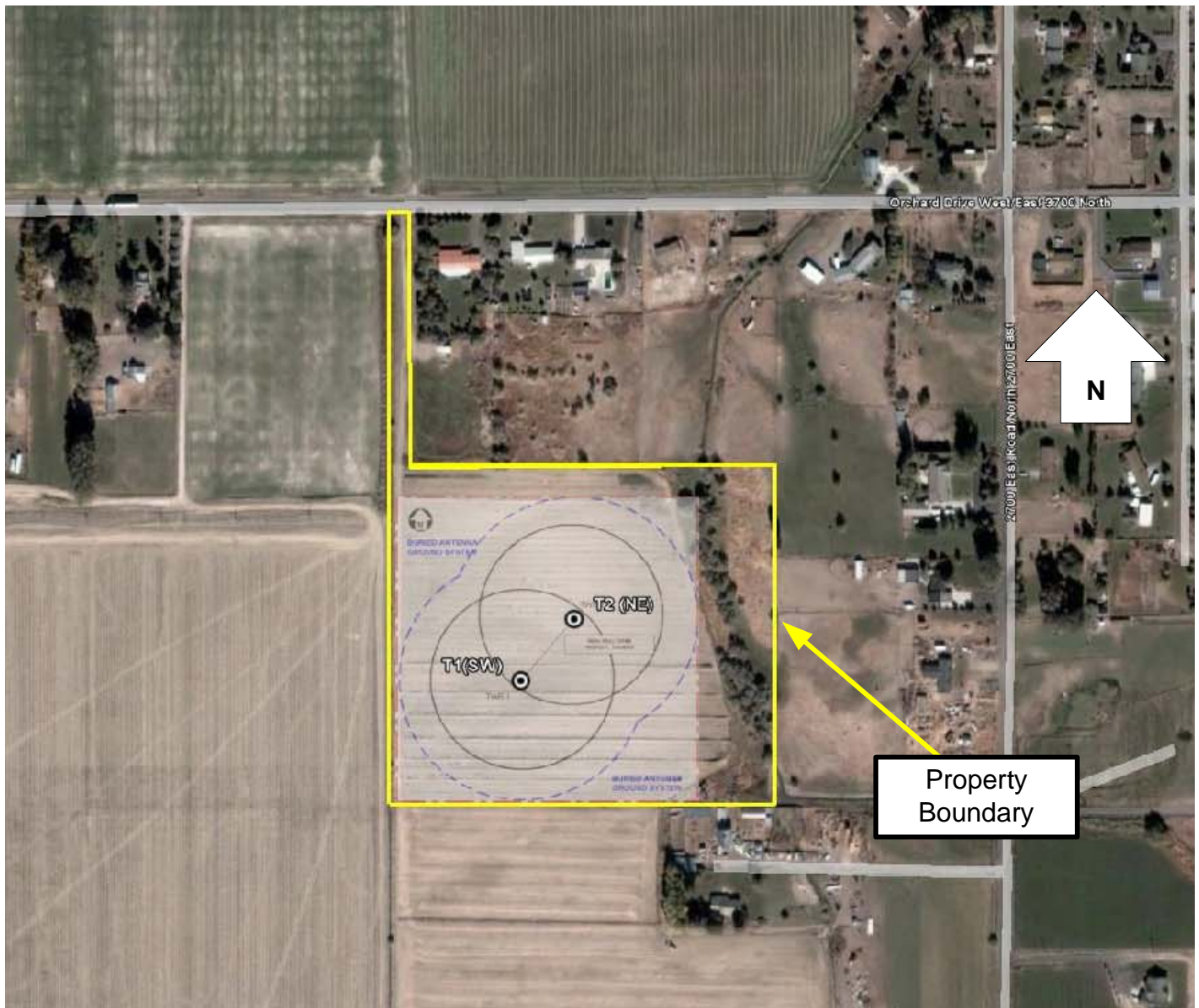
SCALE  
N/A


JUNE 2008

SHEET


1 OF 1

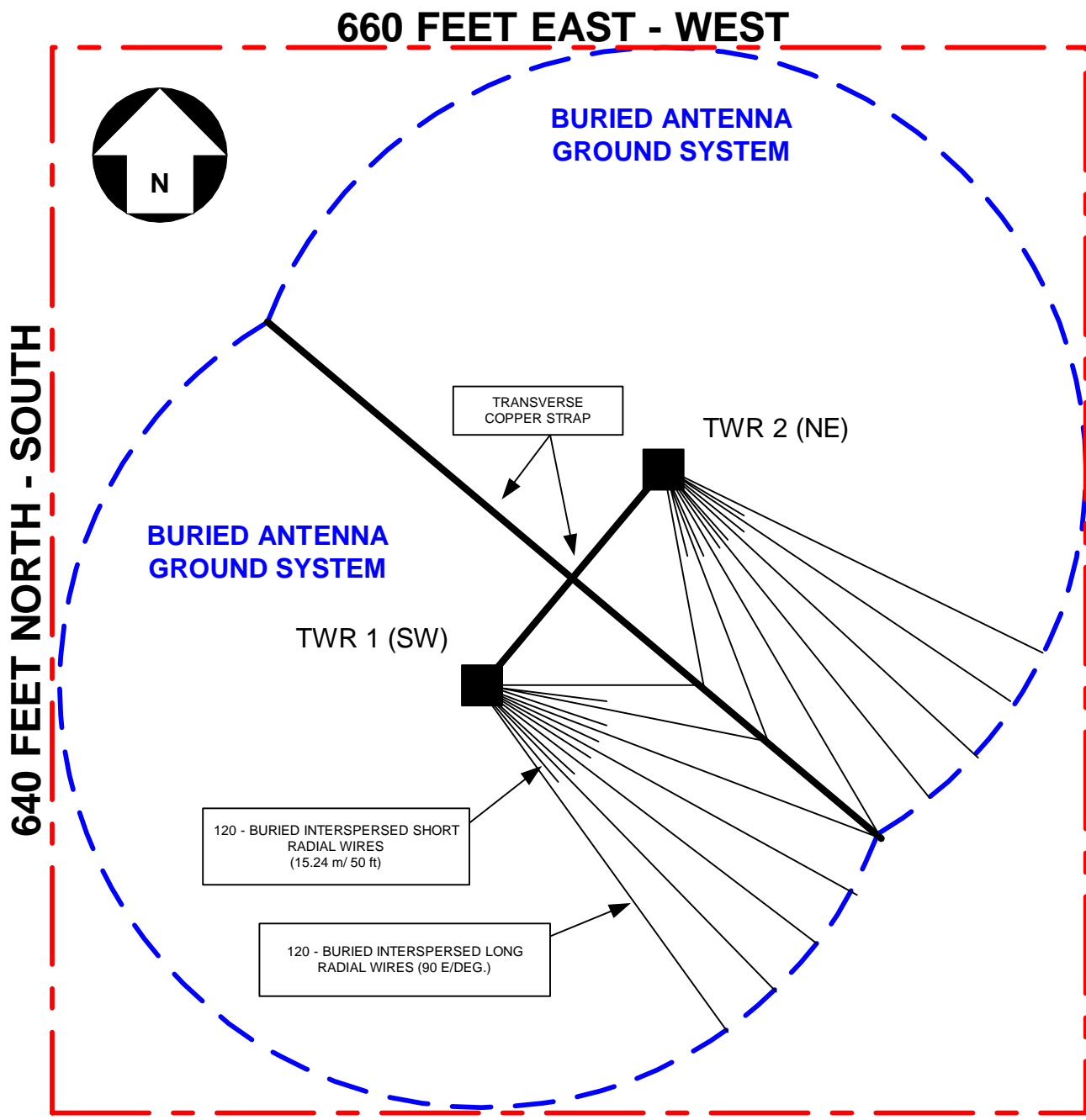




  
 1" = 110 m

GENERAL SITE PHOTOGRAPH WITH PROPERTY BOUNDARIES AND TOWER AND GROUND SYSTEM OVERLAY (OVERLAY IS REGISTERED TO PHOTO SCALE).

	<b>GENERAL SITE PHOTOGRAPH PROPOSED TRANSMITTER SITE</b>			
	KDIL (AM) 940 KHZ TWIN FALLS, IDAHO			<b>FIGURE 4</b>
<b>GAITHERSBURG, MARYLAND U.S.A</b>	SIZE A	FSCM NO N/A	DWG NO 20080610MEJF4	REV NONE
<b>(c) 2008, ALL RIGHTS RESERVED</b>	SCALE 1" = 110 m	JUNE 2008		SHEET



Antenna Ground System:  
 120 - evenly spaced buried bare copper #10 AWG radial wires about the base of each tower, each 79.73 meters in length (90.0 DEGREES IN LENGTH AT 940 KHZ), with copper strap between towers and transverse copper strap joining overlapping radial wires between towers. PLUS an additional 120 - interspersed buried radial wires each 15.24 m in length about the base of each tower.



**PLAT OF SITE WITH ANTENNA GROUND SYSTEM DETAIL**

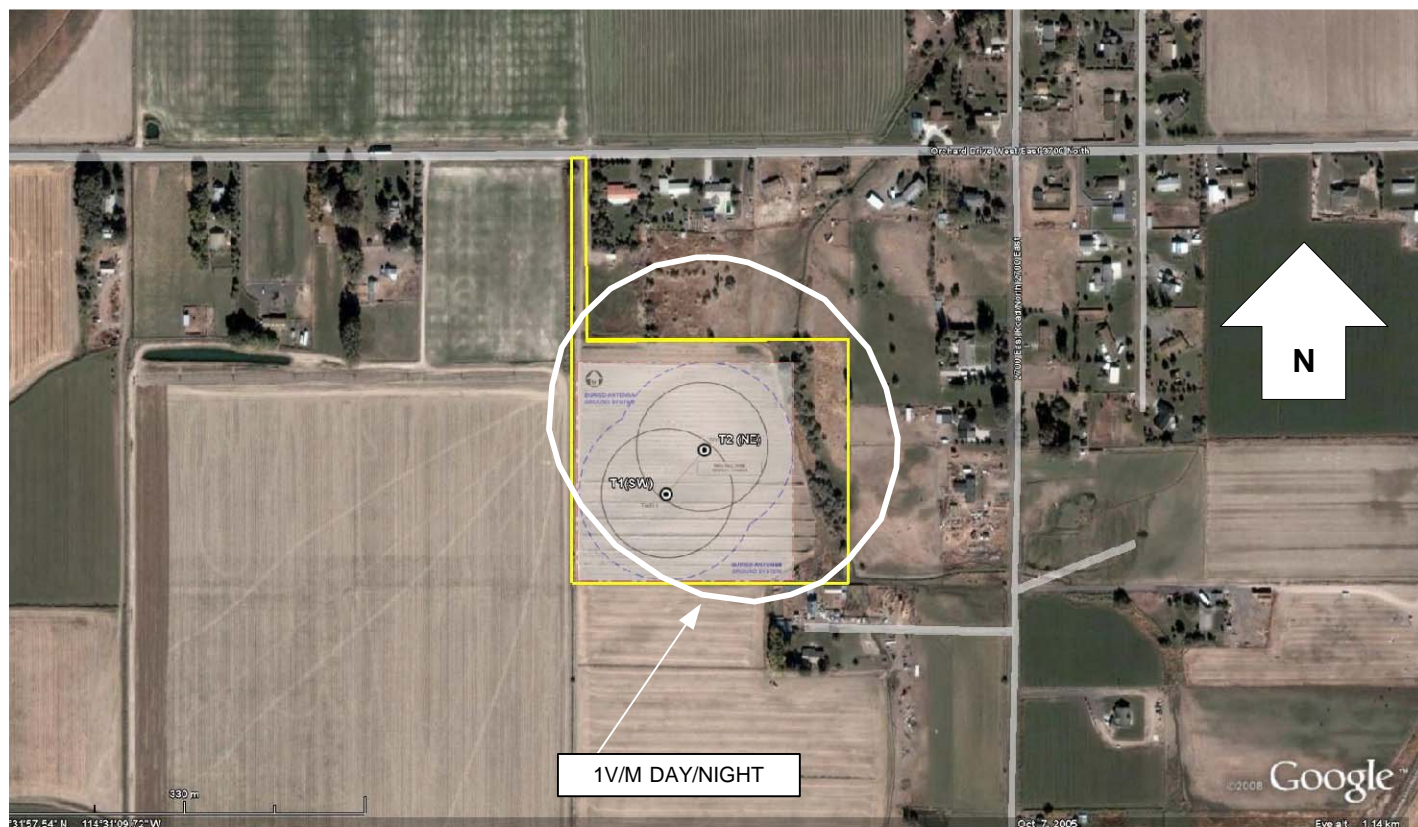
KDIL (AM) 940 KHZ  
 TWIN FALLS, IDAHO

**FIGURE 4**

GAITHERSBURG, MARYLAND U.S.A

SIZE	FSCM NO	DWG NO	REV
A	N/A	20080610MEJF4	NONE
SCALE	1" = 100 ft	JUNE 2008	SHEET


(c) 2008, ALL RIGHTS RESERVED



1 V/M BLANKETING CONTOUR = 0 PERSONS

THE PROPOSAL MEETS THE REQUIREMENTS OF 47 C.F.R. 73.24(g).

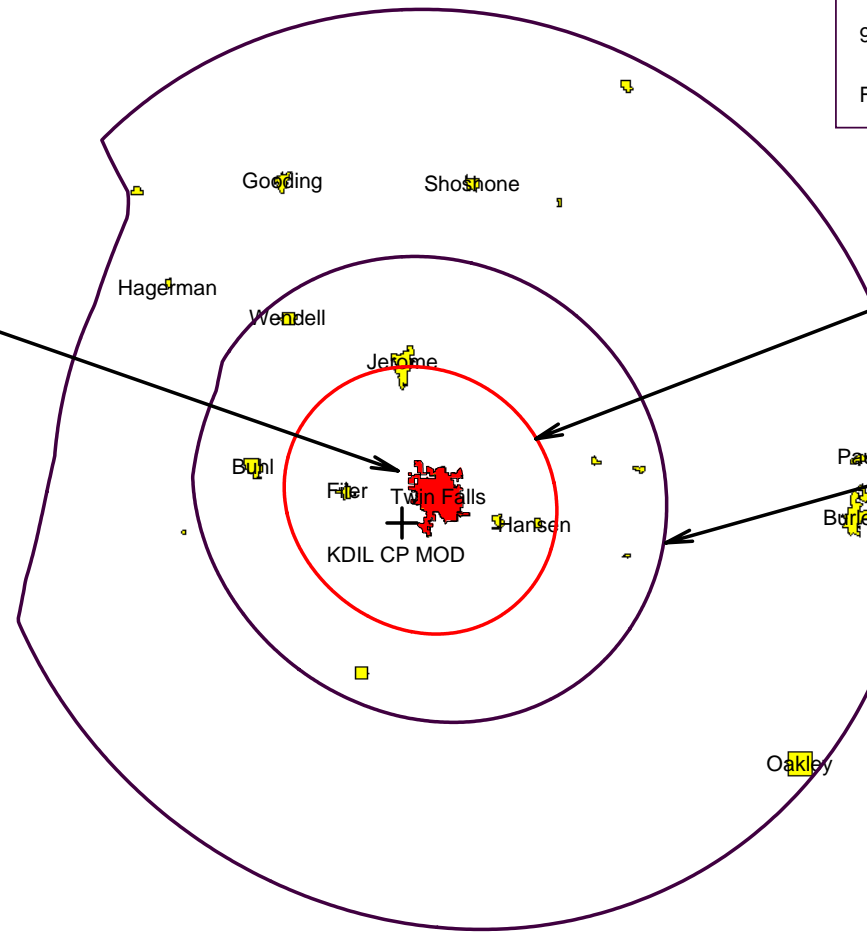
1" = 175 m

	<b>BLANKETING CONTOUR PROPOSED TRANSMITTER SITE</b>			
	KDIL (AM) 940 KHZ TWIN FALLS, IDAHO			<b>FIGURE 4</b>
<b>GAITHERSBURG, MARYLAND U.S.A</b>	SIZE A	FSCM NO N/A	DWG NO 20080610MEJF4	REV NONE
<b>(c) 2008, ALL RIGHTS RESERVED</b>	SCALE 1" = 175 m	JUNE 2008		SHEET

**KDIL CP MOD**  
**PROPOSED**  
 Freq: 940 kHz  
 Class: B  
 Latitude: 42-31-56 N  
 Longitude: 114-31-07 W  
 Power: 0.26 kW  
 RMS: 152.2 mV/m @1km  
 2-Towers DA-1

**PREDICTED DAYTIME SERVICE CONTOURS**  
 KDIL CP MOD  
 TWIN FALLS, IDAHO  
 940 KHZ, 0.26 KW UNLIMITED DA-1  
 FIGURE 5

**COMMUNITY OF LICENSE**  
 TWIN FALLS, IDAHO



**5.0 MV/M GW**

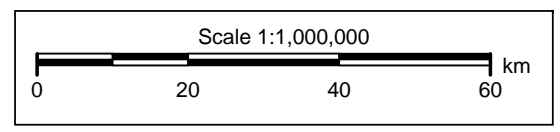
**2.0 MV/M GW**

**0.5 MV/M GW**



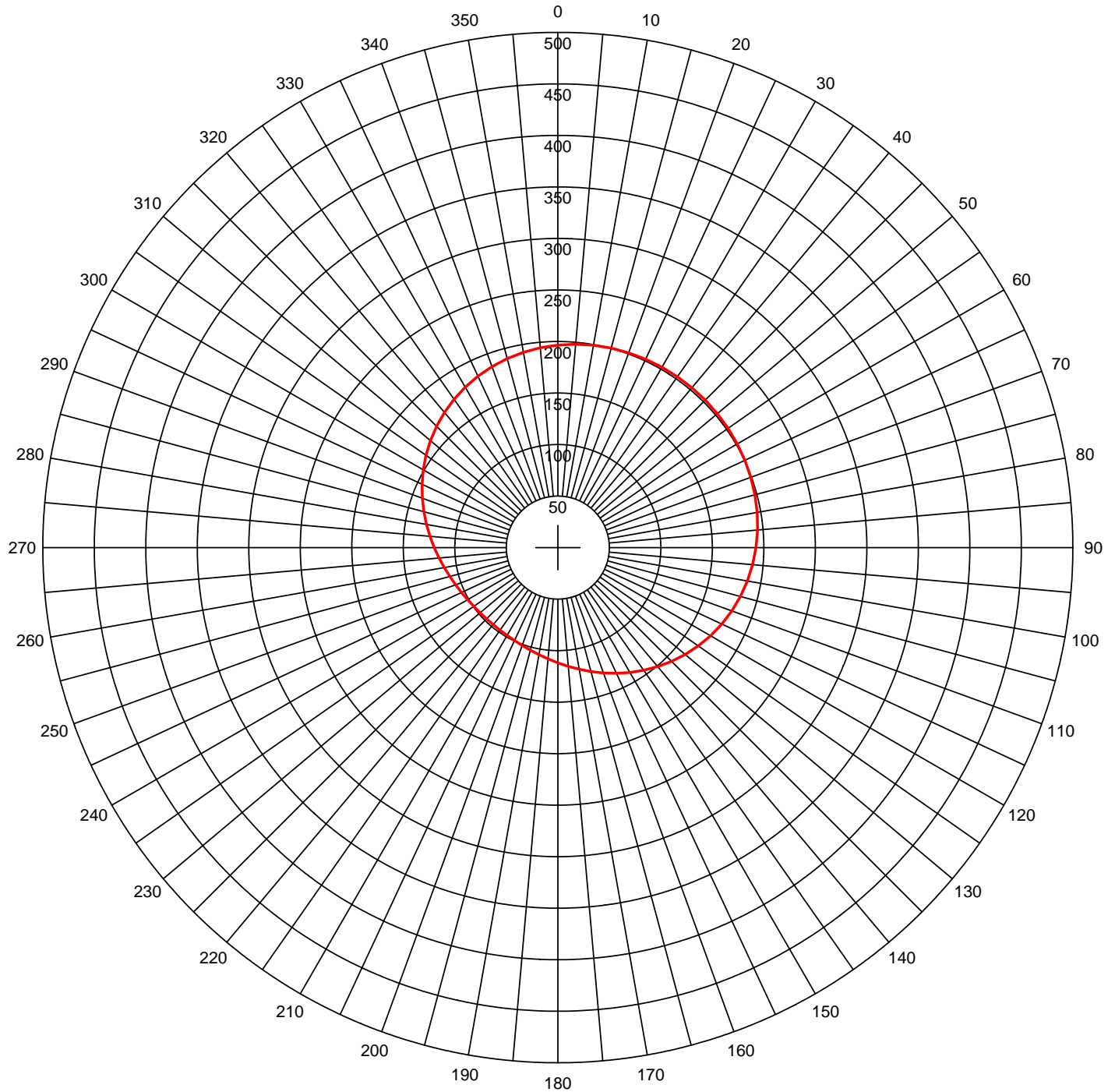
**Population Database: 2000 US Census (SF1)**

Contour: GW 5.0 mV/m	Total Population: 58,534
Contour: GW 2.0 mV/m	Total Population: 84,453
Contour: GW 0.5 mV/m	Total Population: 125,838 Coverage Area: 11,200 sq. km



# Daytime Directional Pattern

# Figure 5



Theo RMS: 152.2 mV/m@1km  
 Std RMS: 160.2 mV/m@1km  
 Q: 10.0 mV/m@1km

Standard Horizontal Plane Pattern

— Pattern (mV/m @ 1km)  
 — Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m@1km  
 @ 0.26 kW

FIGURE 5 DAYTIME DIRECTIONAL ANTENNA PATTERN RADIATION TABULATION  
AM Radiation Report

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

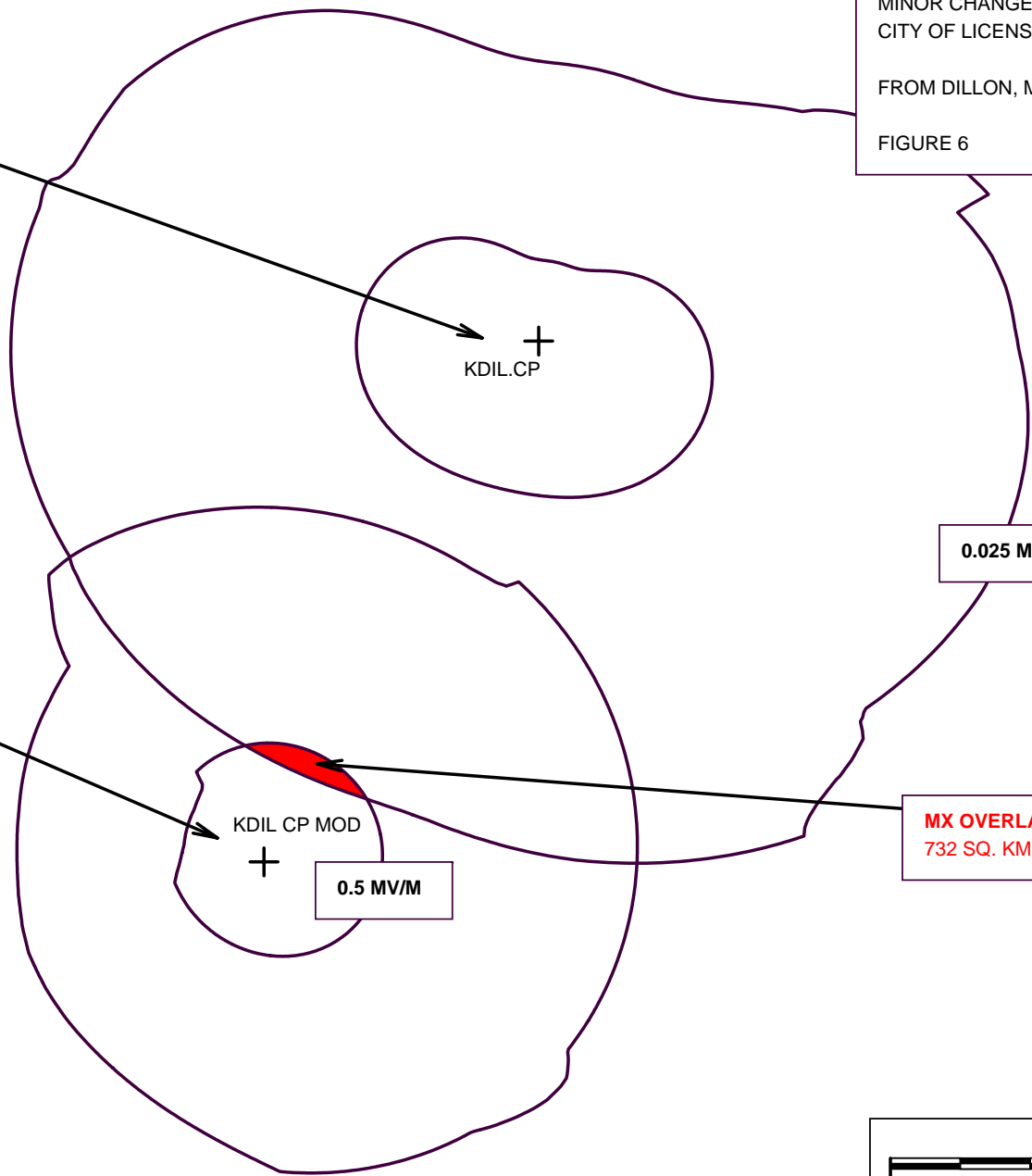
-----  
 Standard Horizontal Plane Pattern

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	196.54	120.0	171.21	240.0	101.11
5.0	198.10	125.0	166.45	245.0	103.10
10.0	199.37	130.0	161.42	250.0	105.56
15.0	200.39	135.0	156.19	255.0	108.49
20.0	201.17	140.0	150.82	260.0	111.88
25.0	201.75	145.0	145.38	265.0	115.71
30.0	202.15	150.0	139.96	270.0	119.95
35.0	202.38	155.0	134.63	275.0	124.56
40.0	202.46	160.0	129.47	280.0	129.47
45.0	202.38	165.0	124.56	285.0	134.63
50.0	202.15	170.0	119.95	290.0	139.96
55.0	201.75	175.0	115.71	295.0	145.38
60.0	201.17	180.0	111.88	300.0	150.82
65.0	200.39	185.0	108.49	305.0	156.19
70.0	199.37	190.0	105.56	310.0	161.42
75.0	198.10	195.0	103.10	315.0	166.45
80.0	196.54	200.0	101.11	320.0	171.21
85.0	194.66	205.0	99.58	325.0	175.67
90.0	192.44	210.0	98.50	330.0	179.78
95.0	189.85	215.0	97.86	335.0	183.52
100.0	186.88	220.0	97.64	340.0	186.88
105.0	183.52	225.0	97.86	345.0	189.85
110.0	179.78	230.0	98.50	350.0	192.44
115.0	175.67	235.0	99.58	355.0	194.66

**KDIL.CP**  
PRESENT  
Freq: 940 kHz  
Class: B  
Latitude: 45-13-26 N  
Longitude: 112-35-58 W  
Power: 10 kW  
RMS: 932.73 mV/m @1km

**KDIL CP MOD**  
PROPOSED  
Freq: 940 kHz  
Class: B  
Latitude: 42-31-56 N  
Longitude: 114-31-07 W  
Power: 0.26 kW  
RMS: 152.2 mV/m @1km

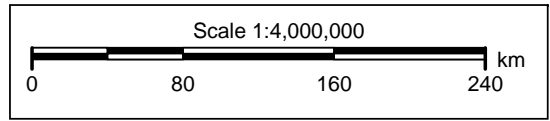
**PRESENT AND PROPOSED CONTOUR OVERLAP**  
MINOR CHANGE RULE  
CITY OF LICENSE CHANGE  
FROM DILLON, MONTANA TO TWIN FALLS, IDAHO  
FIGURE 6



0.025 MV/M

0.5 MV/M

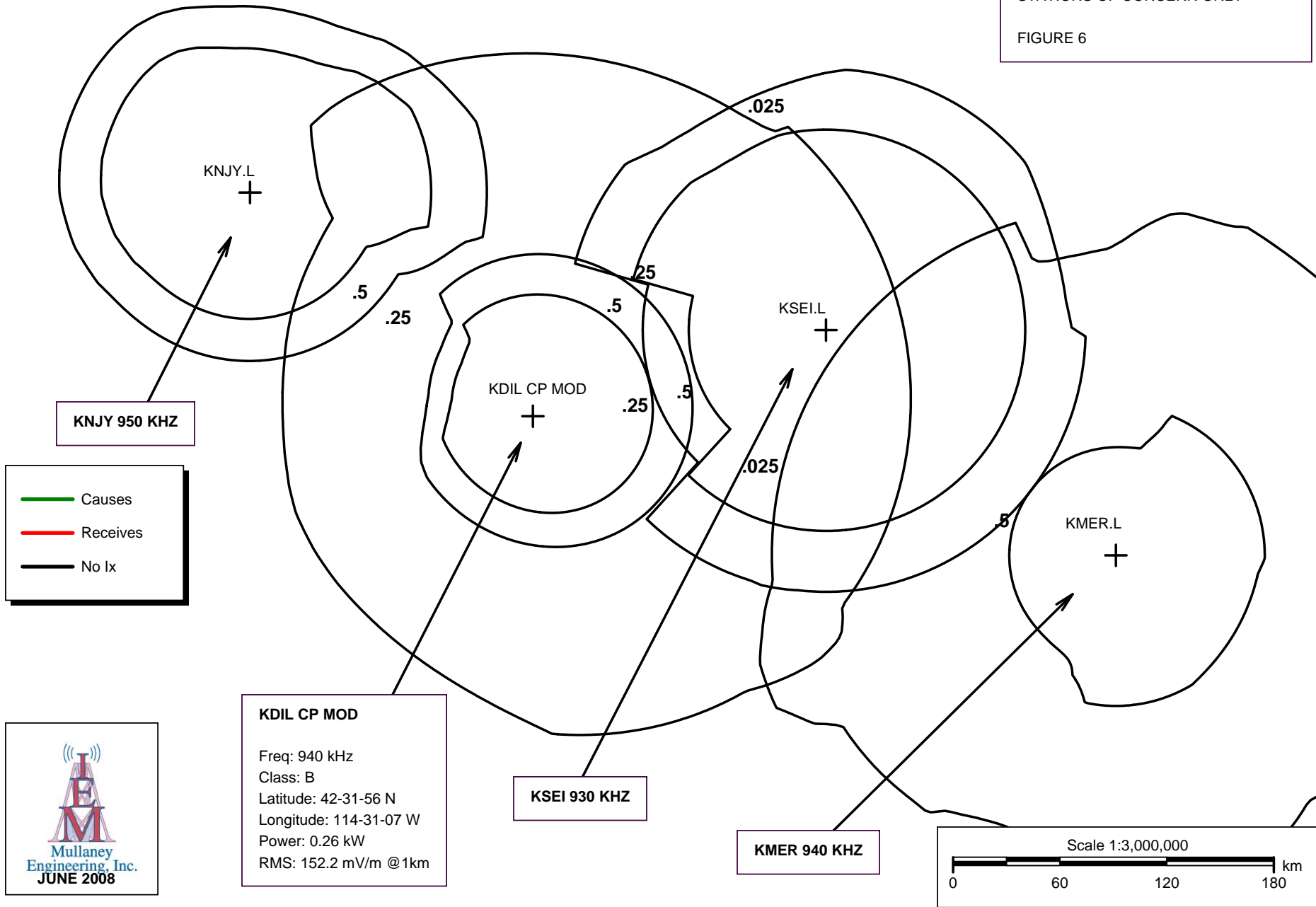
**MX OVERLAP AREA**  
732 SQ. KM



**940 KHZ DAYTIME ALLOCATION MAP**

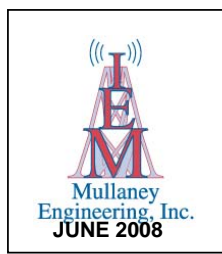
CO AND ADJACENT CHANNELS  
STATIONS OF CONCERN ONLY

FIGURE 6



KNJY 950 KHZ

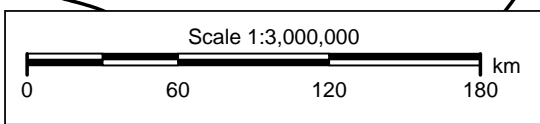
— Causes  
— Receives  
— No Ix



**KDIL CP MOD**  
Freq: 940 kHz  
Class: B  
Latitude: 42-31-56 N  
Longitude: 114-31-07 W  
Power: 0.26 kW  
RMS: 152.2 mV/m @1km

KSEI 930 KHZ

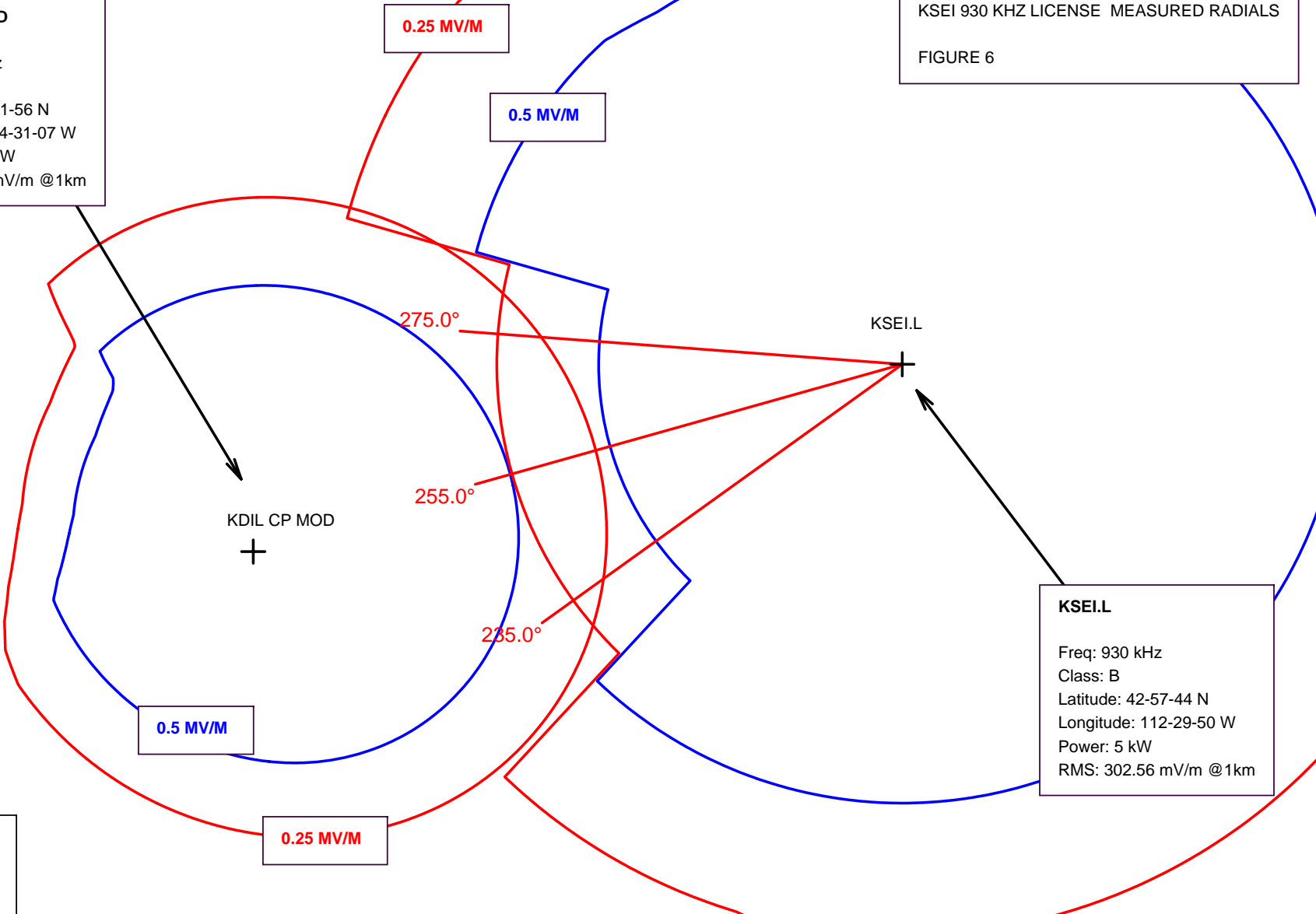
KMER 940 KHZ



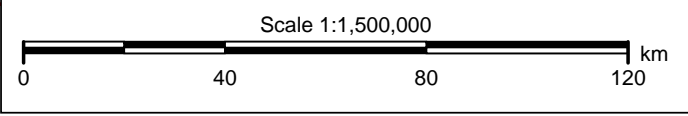


**KDIL CP MOD**  
 PROPOSED  
 Freq: 940 kHz  
 Class: B  
 Latitude: 42-31-56 N  
 Longitude: 114-31-07 W  
 Power: 0.26 kW  
 RMS: 152.2 mV/m @1km

**1ST ADJACENT CHANNEL**  
 KDIL 940 KHZ PROPOSED  
 KSEI 930 KHZ LICENSE MEASURED RADIALS  
 FIGURE 6



**MEASURED SOIL CONDUCTIVITIES USED ON MEASURED RADIALS**  
 ALL OTHERS FCC M3 MAP VALUES



**KSEI.L**  
 Freq: 930 kHz  
 Class: B  
 Latitude: 42-57-44 N  
 Longitude: 112-29-50 W  
 Power: 5 kW  
 RMS: 302.56 mV/m @1km

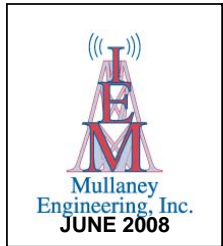


FIGURE 7

Critical Hours Radiation Report

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

Interpolation factors for 940 kHz:

K(500) = 0.120  
 K(1000) = 0.880  
 K(1600) = 0.000

-----  
 Call: CINW.O  
 Freq: 940 kHz  
 MONTREAL, QC, CA  
 Hours: D  
 Lat: 45-23-34 N  
 Lng: 073-41-55 W  
 Power: 50.0 kW  
 Theo RMS: 1980.00 mV/m @ 1km @ 50.0 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	0.500	-48.0	141.0	10.0	97.0	0	0	0.0	0.0	0.0	0.0
2	1.000	0.0	0.0	0.0	97.0	0	0	0.0	0.0	0.0	0.0

Permissible radiation calculated using US/CA agreement formula.

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km) / (mi)	Max Vert Angle (deg)	Max Rad Below Ang (mV/m@1km)	Permiss Radiation (mV/m@1km)	Margin (mV/m@1km)
281.47	70.00	2996.3 / 1861.8	0.0	199.37	2406.6	2207.3

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km) / (mi)	K(500) Value (mV/m@1km)	K(1000) Value (mV/m@1km)	Permiss Radiation (mV/m@1km)
281.47	70.00	2996.3 / 1861.8	0.00	0.00	2406.6

FIGURE 8

Night Allocation Protection Report

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.2 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct St City	Azi (deg)	Ang Low (deg)	Ang High (deg)	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
KWRU.L (0)	US CA FRESNO	215.22	9.32	16.19	68.60	1.345	98.02	96.94	1.08
KWRU.L (5)	US CA FRESNO	214.71	9.28	16.14	68.30	1.339	98.02	96.98	1.04
KWRU.L (10)	US CA FRESNO	214.01	9.09	15.85	66.79	1.330	99.55	97.09	2.47
KWRU.L (15)	US CA FRESNO	213.70	9.03	15.77	66.39	1.333	100.40	97.14	3.27
KWRU.L (20)	US CA FRESNO	213.48	9.01	15.74	66.23	1.336	100.85	97.16	3.69
KWRU.L (25)	US CA FRESNO	213.28	8.99	15.71	66.06	1.338	101.28	97.18	4.10
KWRU.L (30)	US CA FRESNO	213.10	8.97	15.68	65.94	1.340	101.62	97.20	4.42
KWRU.L (35)	US CA FRESNO	212.94	8.96	15.67	65.85	1.342	101.91	97.22	4.69
KWRU.L (40)	US CA FRESNO	212.77	8.96	15.66	65.81	1.344	102.09	97.24	4.85
KWRU.L (45)	US CA FRESNO	212.61	8.95	15.65	65.75	1.345	102.32	97.28	5.04
KWRU.L (50)	US CA FRESNO	212.46	8.94	15.63	65.64	1.347	102.59	97.30	5.30
KWRU.L (55)	US CA FRESNO	212.30	8.93	15.61	65.58	1.349	102.85	97.32	5.53
KWRU.L (60)	US CA FRESNO	212.11	8.93	15.61	65.58	1.351	103.00	97.34	5.65
KWRU.L (65)	US CA FRESNO	211.90	8.92	15.61	65.57	1.353	103.15	97.37	5.78
KWRU.L (70)	US CA FRESNO	211.70	8.92	15.60	65.50	1.355	103.41	97.40	6.01
KWRU.L (75)	US CA FRESNO	211.51	8.90	15.57	65.37	1.357	103.78	97.43	6.35
KWRU.L (80)	US CA FRESNO	211.33	8.87	15.53	65.18	1.359	104.23	97.45	6.78
KWRU.L (85)	US CA FRESNO	211.20	8.84	15.49	64.94	1.361	104.77	97.49	7.28
KWRU.L (90)	US CA FRESNO	211.10	8.80	15.43	64.65	1.362	105.32	97.50	7.81
KWRU.L (95)	US CA FRESNO	211.04	8.76	15.37	64.33	1.363	105.93	97.51	8.41
KWRU.L (100)	US CA FRESNO	211.04	8.72	15.31	64.00	1.363	106.53	97.53	8.99
KWRU.L (105)	US CA FRESNO	211.08	8.68	15.24	63.66	1.364	107.11	97.52	9.59

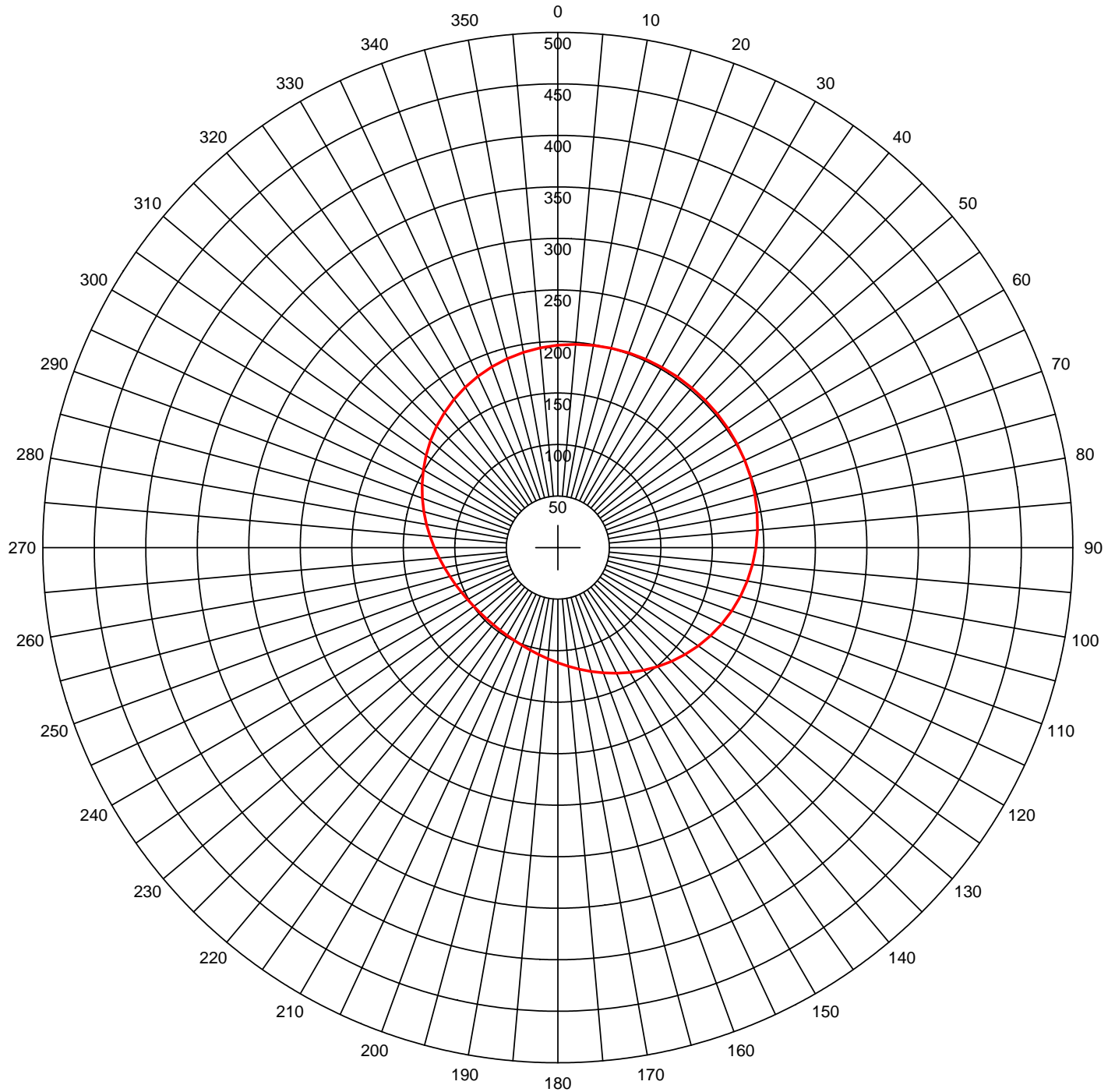
Call Letters	Ct	St	City	Azi (deg)	Ang Low (deg)	Ang High (deg)	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
. . .											
KWRU.L (285)	US	CA	FRESNO	219.50	8.14	14.45	59.38	1.262	106.27	96.96	9.31
KWRU.L (290)	US	CA	FRESNO	219.74	8.25	14.61	60.19	1.260	104.69	96.92	7.77
KWRU.L (295)	US	CA	FRESNO	219.95	8.37	14.78	61.06	1.271	104.04	96.91	7.14
KWRU.L (300)	US	CA	FRESNO	220.16	8.49	14.96	61.97	1.286	103.78	96.89	6.89
KWRU.L (305)	US	CA	FRESNO	220.29	8.61	15.15	62.94	1.302	103.46	96.87	6.58
KWRU.L (310)	US	CA	FRESNO	220.77	8.75	15.35	63.98	1.322	103.34	96.86	6.48
KWRU.L (315)	US	CA	FRESNO	221.06	8.90	15.58	65.16	1.343	103.04	96.83	6.21
KWRU.L (320)	US	CA	FRESNO	221.07	9.06	15.81	66.39	1.361	102.53	96.79	5.74
KWRU.L (325)	US	CA	FRESNO	220.68	9.20	16.02	67.51	1.375	101.80	96.77	5.03
KWRU.L (330)	US	CA	FRESNO	219.25	9.24	16.07	67.85	1.367	100.72	96.77	3.95
KWRU.L (335)	US	CA	FRESNO	218.45	9.29	16.16	68.32	1.367	100.03	96.77	3.26
KWRU.L (340)	US	CA	FRESNO	217.74	9.34	16.22	68.68	1.366	99.45	96.79	2.66
KWRU.L (345)	US	CA	FRESNO	217.03	9.35	16.25	68.83	1.362	98.96	96.80	2.16
KWRU.L (350)	US	CA	FRESNO	216.37	9.35	16.25	68.87	1.358	98.57	96.84	1.73
KWRU.L (355)	US	CA	FRESNO	215.77	9.34	16.23	68.78	1.352	98.26	96.90	1.36
CJIB.P/A	CA	BC	VERNON	339.00	9.42	9.42	70.67	2.601	183.98	182.80	1.18
50% = 5.201, 25% = 5.851; KWRU.L=4.32 CJGX.O/A=2.89 KPSZ.L=2.21 CINW.O/A=1.52											
KWRU.L	US	CA	FRESNO	213.10	8.57	15.09	62.82	1.344	106.94	97.27	9.67
50% = 4.529, 25% = 5.374; XEQ.O/A=4.53 KPSZ.L=2.14 KHJ.L=1.95											
KSEI.L	US	ID	POCATELLO	73.16	39.56	53.89	324.48	1.104	170.16	141.04	29.13
50% = 3.739, 25% = 4.433; KHJ.L=2.84 WKY.L=2.43 KBAI.L=1.26 KOGA.L=1.25 CJCA.O/A=1.15 KXLY.L=1.10											
XEQ.O/A (0)	MX	DF	IZTAPALAPA	137.03	0.00	0.00	7.22	0.791	547.93s	153.96	393.97
XEQ.O/A (5)	MX	DF	IZTAPALAPA	135.98	0.00	0.00	6.80	0.811	596.93s	155.08	441.85
XEQ.O/A (10)	MX	DF	IZTAPALAPA	134.89	0.00	0.00	6.50	0.818	629.24s	156.24	473.00
XEQ.O/A (15)	MX	DF	IZTAPALAPA	133.74	0.00	0.00	6.18	0.812	657.52s	157.47	500.05
XEQ.O/A (20)	MX	DF	IZTAPALAPA	139.08	0.00	0.00	4.75	1.090	1148.75s	151.76	996.99
. . .											
XEQ.O/A (270)	MX	DF	IZTAPALAPA	157.97	0.00	0.00	4.47	0.946	1057.82s	131.49	926.32
XEQ.O/A (275)	MX	DF	IZTAPALAPA	158.46	0.00	0.00	4.75	0.912	960.77s	130.99	829.77

Call Letters	Ct	St	City	Azi (deg)	Ang Low (deg)	Ang High (deg)	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
XEQ.O/A (280)	MX	DF	IZTAPALAPA	158.90	0.00	0.00	5.08	0.871	857.91s	130.54	727.37
XEQ.O/A (285)	MX	DF	IZTAPALAPA	159.55	0.00	0.00	5.56	0.805	723.80s	129.88	593.92
XEQ.O/A (290)	MX	DF	IZTAPALAPA	160.38	0.00	0.00	6.29	0.731	581.26s	129.04	452.21
XEQ.O/A (295)	MX	DF	IZTAPALAPA	164.55	0.00	0.00	7.94	0.500	314.96S	124.94	190.02
XEQ.O/A (300)	MX	DF	IZTAPALAPA	162.99	0.35	0.35	8.75	0.500	285.57S	126.45	159.12
XEQ.O/A (305)	MX	DF	IZTAPALAPA	161.15	0.68	0.68	9.61	0.500	260.19S	128.26	131.93
XEQ.O/A (310)	MX	DF	IZTAPALAPA	159.03	0.98	0.98	10.47	0.500	238.88S	130.39	108.49
XEQ.O/A (315)	MX	DF	IZTAPALAPA	156.64	1.24	1.24	11.39	0.500	219.41S	132.84	86.57
XEQ.O/A (320)	MX	DF	IZTAPALAPA	154.01	1.46	1.46	12.23	0.500	204.46S	135.57	68.89
XEQ.O/A (325)	MX	DF	IZTAPALAPA	151.20	1.61	1.61	12.85	0.500	203.36E	138.56	64.79
XEQ.O/A (330)	MX	DF	IZTAPALAPA	148.25	1.71	1.71	13.23	0.500	208.12E	141.73	66.39
XEQ.O/A (335)	MX	DF	IZTAPALAPA	145.25	1.73	1.73	13.32	0.500	213.20E	144.99	68.21
XEQ.O/A (340)	MX	DF	IZTAPALAPA	142.26	1.68	1.68	13.12	0.500	218.44E	148.24	70.20
XEQ.O/A (345)	MX	DF	IZTAPALAPA	139.36	1.56	1.56	12.65	0.500	223.65E	151.39	72.26
XEQ.O/A (350)	MX	DF	IZTAPALAPA	136.61	1.38	1.38	11.94	0.500	228.65E	154.35	74.29
XEQ.O/A (355)	MX	DF	IZTAPALAPA	136.29	0.52	0.52	9.19	0.627	340.96s	154.75	186.21
. . .											
CINW.O/A (0)	CA	QC	MONTREAL	51.01	0.00	0.00	3.02	0.500	827.23S	202.01	625.22
CINW.O/A (5)	CA	QC	MONTREAL	51.42	0.00	0.00	2.85	0.500	877.77S	201.98	675.79
CINW.O/A (10)	CA	QC	MONTREAL	51.86	0.00	0.00	2.68	0.500	933.35S	201.95	731.40
CINW.O/A (15)	CA	QC	MONTREAL	52.32	0.00	0.00	2.53	0.500	988.47S	201.91	786.56
CINW.O/A (20)	CA	QC	MONTREAL	52.83	0.00	0.00	2.40	0.500	1042.20S	201.87	840.33
CINW.O/A (25)	CA	QC	MONTREAL	53.37	0.00	0.00	2.27	0.500	1100.99S	201.83	899.16
CINW.O/A (30)	CA	QC	MONTREAL	53.96	0.00	0.00	2.15	0.500	1160.87S	201.78	959.09
. . .											
CINW.O/A (235)	CA	QC	MONTREAL	74.74	0.00	0.00	3.55	0.728	1026.21s	198.10	828.11
CINW.O/A (240)	CA	QC	MONTREAL	78.67	0.00	0.00	4.30	0.558	648.07s	196.91	451.16
CINW.O/A (245)	CA	QC	MONTREAL	80.37	0.00	0.00	5.01	0.500	499.44S	196.34	303.10
CINW.O/A (250)	CA	QC	MONTREAL	78.65	0.00	0.00	5.08	0.582	572.42s	196.92	375.51
CINW.O/A (255)	CA	QC	MONTREAL	76.77	0.00	0.00	5.04	0.689	683.47s	197.51	485.96
CINW.O/A (260)	CA	QC	MONTREAL	75.33	0.00	0.00	5.08	0.772	759.56s	197.94	561.62
CINW.O/A (265)	CA	QC	MONTREAL	74.01	0.00	0.00	5.17	0.839	811.07s	198.30	612.77
CINW.O/A (270)	CA	QC	MONTREAL	72.69	0.00	0.00	5.26	0.897	853.12s	198.65	654.47
CINW.O/A (275)	CA	QC	MONTREAL	71.42	0.00	0.00	5.56	0.900	809.87s	198.97	610.91
CINW.O/A (280)	CA	QC	MONTREAL	69.90	0.00	0.00	6.12	0.853	697.51s	199.32	498.19
CINW.O/A (285)	CA	QC	MONTREAL	67.98	0.00	0.00	6.55	0.809	617.82s	199.74	418.08

Call Letters	Ct	St	City	Azi (deg)	Ang Low (deg)	Ang High (deg)	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
CINW.O/A (290)	CA	QC	MONTREAL	64.73	0.06	0.06	8.10	0.604	373.10s	200.36	172.74
CINW.O/A (295)	CA	QC	MONTREAL	61.08	0.42	0.42	8.94	0.500	279.76S	200.94	78.82
CINW.O/A (300)	CA	QC	MONTREAL	58.51	0.21	0.21	8.42	0.500	296.78S	201.29	95.49
CINW.O/A (305)	CA	QC	MONTREAL	56.26	0.00	0.00	7.78	0.500	321.37S	201.55	119.81
CINW.O/A (310)	CA	QC	MONTREAL	54.36	0.00	0.00	7.05	0.500	354.45S	201.74	152.71
CINW.O/A (315)	CA	QC	MONTREAL	52.86	0.00	0.00	6.52	0.500	383.40S	201.87	181.53
CINW.O/A (320)	CA	QC	MONTREAL	51.71	0.00	0.00	5.87	0.500	425.82S	201.96	223.86
CINW.O/A (325)	CA	QC	MONTREAL	50.90	0.00	0.00	5.27	0.500	474.01S	202.02	271.99
CINW.O/A (330)	CA	QC	MONTREAL	50.37	0.00	0.00	4.79	0.500	521.60S	202.05	319.55
CINW.O/A (335)	CA	QC	MONTREAL	50.06	0.00	0.00	4.38	0.500	570.64S	202.07	368.56
CINW.O/A (340)	CA	QC	MONTREAL	49.95	0.00	0.00	4.02	0.500	621.82S	202.08	419.74
CINW.O/A (345)	CA	QC	MONTREAL	50.08	0.00	0.00	3.71	0.500	673.57S	202.07	471.50
CINW.O/A (350)	CA	QC	MONTREAL	50.33	0.00	0.00	3.46	0.500	723.34S	202.06	521.29
CINW.O/A (355)	CA	QC	MONTREAL	50.65	0.00	0.00	3.23	0.500	774.63S	202.03	572.59
CJGX.O/A	CA	SK	YORKTON	39.51	5.17	5.17	36.17	2.353	325.30	201.27	124.03
50% = 5.075, 25% = 5.252; CINW.O/A=4.50 WFAW.L=2.35 KPSZ.L=1.35											
XEWV.O/O	MX	BN	MEXICALI	185.19	7.34	7.34	54.09	3.691	341.26	107.66	233.60
50% = 7.525, 25% = 7.525; KWRU.L=5.29 KGMS.L=3.87 XEQ.O/A=3.69											
KGMS.L	US	AZ	TUCSON	163.83	4.22	8.68	33.50	2.502	373.47	125.31	248.16
50% = 9.534, 25% = 10.01; XEQ.O/A=9.53 XENVA2.P/A=3.05											

# Nighttime Directional Pattern

# Figure 8



Theo RMS: 152.2 mV/m@1km  
 Std RMS: 160.1 mV/m@1km  
 Q: 10.0 mV/m@1km

Standard Horizontal Plane Pattern

— Pattern (mV/m @ 1km)  
 — Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.2 mV/m@1km  
 @ 0.26 kW

FIGURE 8 NIGHTTIME DIRECTIONAL ANTENNA PATTERN RADIATION TABULATION  
AM Radiation Report

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----  
 Standard Horizontal Plane Pattern

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	196.54	120.0	171.21	240.0	101.11
5.0	198.10	125.0	166.45	245.0	103.10
10.0	199.37	130.0	161.42	250.0	105.56
15.0	200.39	135.0	156.19	255.0	108.49
20.0	201.17	140.0	150.82	260.0	111.88
25.0	201.75	145.0	145.38	265.0	115.71
30.0	202.15	150.0	139.96	270.0	119.95
35.0	202.38	155.0	134.63	275.0	124.56
40.0	202.46	160.0	129.47	280.0	129.47
45.0	202.38	165.0	124.56	285.0	134.63
50.0	202.15	170.0	119.95	290.0	139.96
55.0	201.75	175.0	115.71	295.0	145.38
60.0	201.17	180.0	111.88	300.0	150.82
65.0	200.39	185.0	108.49	305.0	156.19
70.0	199.37	190.0	105.56	310.0	161.42
75.0	198.10	195.0	103.10	315.0	166.45
80.0	196.54	200.0	101.11	320.0	171.21
85.0	194.66	205.0	99.58	325.0	175.67
90.0	192.44	210.0	98.50	330.0	179.78
95.0	189.85	215.0	97.86	335.0	183.52
100.0	186.88	220.0	97.64	340.0	186.88
105.0	183.52	225.0	97.86	345.0	189.85
110.0	179.78	230.0	98.50	350.0	192.44
115.0	175.67	235.0	99.58	355.0	194.66



Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----  
 Standard Pattern  
 Calculated at 5.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	195.52	120.0	170.37	240.0	100.85
5.0	197.07	125.0	165.64	245.0	102.82
10.0	198.34	130.0	160.66	250.0	105.26
15.0	199.36	135.0	155.47	255.0	108.17
20.0	200.14	140.0	150.14	260.0	111.53
25.0	200.72	145.0	144.76	265.0	115.34
30.0	201.12	150.0	139.38	270.0	119.54
35.0	201.35	155.0	134.10	275.0	124.11
40.0	201.42	160.0	128.99	280.0	128.99
45.0	201.35	165.0	124.11	285.0	134.10
50.0	201.12	170.0	119.54	290.0	139.38
55.0	200.72	175.0	115.34	295.0	144.76
60.0	200.14	180.0	111.53	300.0	150.14
65.0	199.36	185.0	108.17	305.0	155.47
70.0	198.34	190.0	105.26	310.0	160.66
75.0	197.07	195.0	102.82	315.0	165.64
80.0	195.52	200.0	100.85	320.0	170.37
85.0	193.65	205.0	99.32	325.0	174.79
90.0	191.44	210.0	98.25	330.0	178.87
95.0	188.86	215.0	97.61	335.0	182.58
100.0	185.91	220.0	97.39	340.0	185.91
105.0	182.58	225.0	97.61	345.0	188.86
110.0	178.87	230.0	98.25	350.0	191.44
115.0	174.79	235.0	99.32	355.0	193.65

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----  
 Standard Pattern  
 Calculated at 10.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	192.49	120.0	167.85	240.0	100.04
5.0	194.02	125.0	163.24	245.0	101.98
10.0	195.28	130.0	158.38	250.0	104.37
15.0	196.28	135.0	153.33	255.0	107.22
20.0	197.06	140.0	148.14	260.0	110.51
25.0	197.64	145.0	142.89	265.0	114.22
30.0	198.04	150.0	137.66	270.0	118.33
35.0	198.27	155.0	132.52	275.0	122.78
40.0	198.34	160.0	127.53	280.0	127.53
45.0	198.27	165.0	122.78	285.0	132.52
50.0	198.04	170.0	118.33	290.0	137.66
55.0	197.64	175.0	114.22	295.0	142.89
60.0	197.06	180.0	110.51	300.0	148.14
65.0	196.28	185.0	107.22	305.0	153.33
70.0	195.28	190.0	104.37	310.0	158.38
75.0	194.02	195.0	101.98	315.0	163.24
80.0	192.49	200.0	100.04	320.0	167.85
85.0	190.64	205.0	98.54	325.0	172.17
90.0	188.47	210.0	97.49	330.0	176.15
95.0	185.94	215.0	96.86	335.0	179.78
100.0	183.05	220.0	96.65	340.0	183.05
105.0	179.78	225.0	96.86	345.0	185.94
110.0	176.15	230.0	97.49	350.0	188.47
115.0	172.17	235.0	98.54	355.0	190.64

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----

Standard Pattern  
 Calculated at 15.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	187.51	120.0	163.72	240.0	98.70
5.0	189.01	125.0	159.30	245.0	100.58
10.0	190.25	130.0	154.64	250.0	102.89
15.0	191.24	135.0	149.80	255.0	105.63
20.0	192.01	140.0	144.84	260.0	108.80
25.0	192.58	145.0	139.82	265.0	112.37
30.0	192.97	150.0	134.82	270.0	116.31
35.0	193.21	155.0	129.90	275.0	120.58
40.0	193.28	160.0	125.13	280.0	125.13
45.0	193.21	165.0	120.58	285.0	129.90
50.0	192.97	170.0	116.31	290.0	134.82
55.0	192.58	175.0	112.37	295.0	139.82
60.0	192.01	180.0	108.80	300.0	144.84
65.0	191.24	185.0	105.63	305.0	149.80
70.0	190.25	190.0	102.89	310.0	154.64
75.0	189.01	195.0	100.58	315.0	159.30
80.0	187.51	200.0	98.70	320.0	163.72
85.0	185.71	205.0	97.25	325.0	167.86
90.0	183.59	210.0	96.22	330.0	171.70
95.0	181.14	215.0	95.61	335.0	175.19
100.0	178.34	220.0	95.40	340.0	178.34
105.0	175.19	225.0	95.61	345.0	181.14
110.0	171.70	230.0	96.22	350.0	183.59
115.0	167.86	235.0	97.25	355.0	185.71

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----  
 Standard Pattern  
 Calculated at 20.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	180.70	120.0	158.07	240.0	96.81
5.0	182.16	125.0	153.90	245.0	98.61
10.0	183.36	130.0	149.52	250.0	100.81
15.0	184.33	135.0	144.97	255.0	103.41
20.0	185.08	140.0	140.31	260.0	106.41
25.0	185.65	145.0	135.60	265.0	109.78
30.0	186.04	150.0	130.90	270.0	113.49
35.0	186.27	155.0	126.28	275.0	117.52
40.0	186.34	160.0	121.79	280.0	121.79
45.0	186.27	165.0	117.52	285.0	126.28
50.0	186.04	170.0	113.49	290.0	130.90
55.0	185.65	175.0	109.78	295.0	135.60
60.0	185.08	180.0	106.41	300.0	140.31
65.0	184.33	185.0	103.41	305.0	144.97
70.0	183.36	190.0	100.81	310.0	149.52
75.0	182.16	195.0	98.61	315.0	153.90
80.0	180.70	200.0	96.81	320.0	158.07
85.0	178.96	205.0	95.43	325.0	161.98
90.0	176.93	210.0	94.44	330.0	165.61
95.0	174.59	215.0	93.86	335.0	168.92
100.0	171.92	220.0	93.66	340.0	171.92
105.0	168.92	225.0	93.86	345.0	174.59
110.0	165.61	230.0	94.44	350.0	176.93
115.0	161.98	235.0	95.43	355.0	178.96

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----

Standard Pattern  
 Calculated at 25.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	172.21	120.0	151.02	240.0	94.38
5.0	173.60	125.0	147.17	245.0	96.06
10.0	174.76	130.0	143.12	250.0	98.12
15.0	175.70	135.0	138.92	255.0	100.55
20.0	176.43	140.0	134.63	260.0	103.34
25.0	176.99	145.0	130.28	265.0	106.46
30.0	177.37	150.0	125.96	270.0	109.90
35.0	177.59	155.0	121.70	275.0	113.62
40.0	177.67	160.0	117.57	280.0	117.57
45.0	177.59	165.0	113.62	285.0	121.70
50.0	177.37	170.0	109.90	290.0	125.96
55.0	176.99	175.0	106.46	295.0	130.28
60.0	176.43	180.0	103.34	300.0	134.63
65.0	175.70	185.0	100.55	305.0	138.92
70.0	174.76	190.0	98.12	310.0	143.12
75.0	173.60	195.0	96.06	315.0	147.17
80.0	172.21	200.0	94.38	320.0	151.02
85.0	170.56	205.0	93.08	325.0	154.65
90.0	168.63	210.0	92.15	330.0	158.02
95.0	166.42	215.0	91.60	335.0	161.11
100.0	163.92	220.0	91.41	340.0	163.92
105.0	161.11	225.0	91.60	345.0	166.42
110.0	158.02	230.0	92.15	350.0	168.63
115.0	154.65	235.0	93.08	355.0	170.56

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----

Standard Pattern  
 Calculated at 30.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	162.22	120.0	142.73	240.0	91.39
5.0	163.54	125.0	139.23	245.0	92.94
10.0	164.63	130.0	135.56	250.0	94.82
15.0	165.53	135.0	131.76	255.0	97.04
20.0	166.24	140.0	127.88	260.0	99.59
25.0	166.77	145.0	123.96	265.0	102.43
30.0	167.14	150.0	120.06	270.0	105.55
35.0	167.36	155.0	116.21	275.0	108.91
40.0	167.43	160.0	112.48	280.0	112.48
45.0	167.36	165.0	108.91	285.0	116.21
50.0	167.14	170.0	105.55	290.0	120.06
55.0	166.77	175.0	102.43	295.0	123.96
60.0	166.24	180.0	99.59	300.0	127.88
65.0	165.53	185.0	97.04	305.0	131.76
70.0	164.63	190.0	94.82	310.0	135.56
75.0	163.54	195.0	92.94	315.0	139.23
80.0	162.22	200.0	91.39	320.0	142.73
85.0	160.67	205.0	90.19	325.0	146.03
90.0	158.88	210.0	89.33	330.0	149.10
95.0	156.82	215.0	88.82	335.0	151.94
100.0	154.51	220.0	88.65	340.0	154.51
105.0	151.94	225.0	88.82	345.0	156.82
110.0	149.10	230.0	89.33	350.0	158.88
115.0	146.03	235.0	90.19	355.0	160.67

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----  
 Standard Pattern  
 Calculated at 35.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	150.94	120.0	133.34	240.0	87.82
5.0	152.16	125.0	130.23	245.0	89.21
10.0	153.18	130.0	126.98	250.0	90.90
15.0	154.02	135.0	123.62	255.0	92.89
20.0	154.69	140.0	120.18	260.0	95.15
25.0	155.20	145.0	116.72	265.0	97.68
30.0	155.55	150.0	113.27	270.0	100.45
35.0	155.76	155.0	109.88	275.0	103.43
40.0	155.83	160.0	106.59	280.0	106.59
45.0	155.76	165.0	103.43	285.0	109.88
50.0	155.55	170.0	100.45	290.0	113.27
55.0	155.20	175.0	97.68	295.0	116.72
60.0	154.69	180.0	95.15	300.0	120.18
65.0	154.02	185.0	92.89	305.0	123.62
70.0	153.18	190.0	90.90	310.0	126.98
75.0	152.16	195.0	89.21	315.0	130.23
80.0	150.94	200.0	87.82	320.0	133.34
85.0	149.51	205.0	86.73	325.0	136.28
90.0	147.86	210.0	85.96	330.0	139.03
95.0	146.00	215.0	85.49	335.0	141.58
100.0	143.90	220.0	85.34	340.0	143.90
105.0	141.58	225.0	85.49	345.0	146.00
110.0	139.03	230.0	85.96	350.0	147.86
115.0	136.28	235.0	86.73	355.0	149.51

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----

Standard Pattern  
 Calculated at 40.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	138.58	120.0	123.03	240.0	83.63
5.0	139.69	125.0	120.33	245.0	84.85
10.0	140.62	130.0	117.51	250.0	86.33
15.0	141.40	135.0	114.61	255.0	88.06
20.0	142.01	140.0	111.64	260.0	90.03
25.0	142.48	145.0	108.66	265.0	92.23
30.0	142.82	150.0	105.69	270.0	94.62
35.0	143.01	155.0	102.76	275.0	97.20
40.0	143.08	160.0	99.92	280.0	99.92
45.0	143.01	165.0	97.20	285.0	102.76
50.0	142.82	170.0	94.62	290.0	105.69
55.0	142.48	175.0	92.23	295.0	108.66
60.0	142.01	180.0	90.03	300.0	111.64
65.0	141.40	185.0	88.06	305.0	114.61
70.0	140.62	190.0	86.33	310.0	117.51
75.0	139.69	195.0	84.85	315.0	120.33
80.0	138.58	200.0	83.63	320.0	123.03
85.0	137.29	205.0	82.67	325.0	125.60
90.0	135.81	210.0	81.99	330.0	128.00
95.0	134.15	215.0	81.58	335.0	130.24
100.0	132.29	220.0	81.44	340.0	132.29
105.0	130.24	225.0	81.58	345.0	134.15
110.0	128.00	230.0	81.99	350.0	135.81
115.0	125.60	235.0	82.67	355.0	137.29



Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----

Standard Pattern  
 Calculated at 45.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	125.37	120.0	111.97	240.0	78.78
5.0	126.35	125.0	109.68	245.0	79.82
10.0	127.19	130.0	107.31	250.0	81.08
15.0	127.88	135.0	104.86	255.0	82.55
20.0	128.44	140.0	102.37	260.0	84.22
25.0	128.86	145.0	99.87	265.0	86.07
30.0	129.16	150.0	97.37	270.0	88.09
35.0	129.34	155.0	94.92	275.0	90.25
40.0	129.40	160.0	92.54	280.0	92.54
45.0	129.34	165.0	90.25	285.0	94.92
50.0	129.16	170.0	88.09	290.0	97.37
55.0	128.86	175.0	86.07	295.0	99.87
60.0	128.44	180.0	84.22	300.0	102.37
65.0	127.88	185.0	82.55	305.0	104.86
70.0	127.19	190.0	81.08	310.0	107.31
75.0	126.35	195.0	79.82	315.0	109.68
80.0	125.37	200.0	78.78	320.0	111.97
85.0	124.23	205.0	77.97	325.0	114.15
90.0	122.94	210.0	77.39	330.0	116.20
95.0	121.49	215.0	77.04	335.0	118.12
100.0	119.88	220.0	76.92	340.0	119.88
105.0	118.12	225.0	77.04	345.0	121.49
110.0	116.20	230.0	77.39	350.0	122.94
115.0	114.15	235.0	77.97	355.0	124.23

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

-----  
 Standard Pattern  
 Calculated at 50.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	111.53	120.0	100.32	240.0	73.25
5.0	112.37	125.0	98.44	245.0	74.10
10.0	113.09	130.0	96.50	250.0	75.13
15.0	113.70	135.0	94.50	255.0	76.34
20.0	114.19	140.0	92.47	260.0	77.70
25.0	114.56	145.0	90.43	265.0	79.21
30.0	114.83	150.0	88.41	270.0	80.86
35.0	114.99	155.0	86.41	275.0	82.62
40.0	115.04	160.0	84.48	280.0	84.48
45.0	114.99	165.0	82.62	285.0	86.41
50.0	114.83	170.0	80.86	290.0	88.41
55.0	114.56	175.0	79.21	295.0	90.43
60.0	114.19	180.0	77.70	300.0	92.47
65.0	113.70	185.0	76.34	305.0	94.50
70.0	113.09	190.0	75.13	310.0	96.50
75.0	112.37	195.0	74.10	315.0	98.44
80.0	111.53	200.0	73.25	320.0	100.32
85.0	110.55	205.0	72.57	325.0	102.12
90.0	109.46	210.0	72.09	330.0	103.81
95.0	108.23	215.0	71.80	335.0	105.40
100.0	106.88	220.0	71.71	340.0	106.88
105.0	105.40	225.0	71.80	345.0	108.23
110.0	103.81	230.0	72.09	350.0	109.46
115.0	102.12	235.0	72.57	355.0	110.55

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

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Standard Pattern  
 Calculated at 55.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	97.27	120.0	88.23	240.0	66.97
5.0	97.97	125.0	86.74	245.0	67.64
10.0	98.57	130.0	85.21	250.0	68.46
15.0	99.08	135.0	83.63	255.0	69.41
20.0	99.49	140.0	82.04	260.0	70.48
25.0	99.81	145.0	80.44	265.0	71.66
30.0	100.03	150.0	78.86	270.0	72.95
35.0	100.17	155.0	77.30	275.0	74.33
40.0	100.21	160.0	75.78	280.0	75.78
45.0	100.17	165.0	74.33	285.0	77.30
50.0	100.03	170.0	72.95	290.0	78.86
55.0	99.81	175.0	71.66	295.0	80.44
60.0	99.49	180.0	70.48	300.0	82.04
65.0	99.08	185.0	69.41	305.0	83.63
70.0	98.57	190.0	68.46	310.0	85.21
75.0	97.97	195.0	67.64	315.0	86.74
80.0	97.27	200.0	66.97	320.0	88.23
85.0	96.47	205.0	66.44	325.0	89.66
90.0	95.57	210.0	66.05	330.0	91.01
95.0	94.57	215.0	65.82	335.0	92.28
100.0	93.47	220.0	65.75	340.0	93.47
105.0	92.28	225.0	65.82	345.0	94.57
110.0	91.01	230.0	66.05	350.0	95.57
115.0	89.66	235.0	66.44	355.0	96.47

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	67.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-85.0	60.0	40.0	67.1	0	0	0.0	0.0	0.0	0.0

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Standard Pattern  
 Calculated at 60.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	82.79	120.0	75.83	240.0	59.91
5.0	83.35	125.0	74.70	245.0	60.41
10.0	83.83	130.0	73.54	250.0	61.03
15.0	84.23	135.0	72.36	255.0	61.73
20.0	84.56	140.0	71.17	260.0	62.54
25.0	84.82	145.0	69.97	265.0	63.42
30.0	85.00	150.0	68.79	270.0	64.38
35.0	85.11	155.0	67.63	275.0	65.41
40.0	85.14	160.0	66.50	280.0	66.50
45.0	85.11	165.0	65.41	285.0	67.63
50.0	85.00	170.0	64.38	290.0	68.79
55.0	84.82	175.0	63.42	295.0	69.97
60.0	84.56	180.0	62.54	300.0	71.17
65.0	84.23	185.0	61.73	305.0	72.36
70.0	83.83	190.0	61.03	310.0	73.54
75.0	83.35	195.0	60.41	315.0	74.70
80.0	82.79	200.0	59.91	320.0	75.83
85.0	82.16	205.0	59.51	325.0	76.91
90.0	81.46	210.0	59.22	330.0	77.94
95.0	80.68	215.0	59.05	335.0	78.92
100.0	79.83	220.0	58.99	340.0	79.83
105.0	78.92	225.0	59.05	345.0	80.68
110.0	77.94	230.0	59.22	350.0	81.46
115.0	76.91	235.0	59.51	355.0	82.16

FIGURE 8

NIGHTTIME INTERFERENCE FREE CALCULATIONS RSS VALUES

Call: KDIL CP MOD  
 Freq: 940 kHz  
 TWIN FALLS, ID, US  
 Hours: U  
 Lat: 42-31-56 N  
 Lng: 114-31-07 W  
 Power: 0.26 kW  
 Theo RMS: 152.20 mV/m @ 1km @ 0.26 kW

Standard: FCC Rules (1992 Skywave Propagation Model) [ 10% ]

Contributors:

Call	Freq (kHz)	City	St	Ct	Dist (km)	Azi (deg)	Theta		Max V-Rad (mV/m)	SW Mult (uV/m)	Limit (mV/m)	Limit (%)	RSS Limit (mV/m)
							Min (deg)	Max (deg)					
KDIL.C	0940	DILLON	MT	US	336.4	207.9	22.4	34.6	171.82	180.63	6.207	100.0	6.207
KPSZ.L	0940	DES MOINES	IA	US	1746.3	280.9	0.8	3.8	1979.64	12.88	5.101	82.2	8.034
KWRU.L	0940	FRESNO	CA	US	788.0	30.0	8.6	15.1	323.81	62.82	4.068	50.6	9.005 << 50% RSS
KSEI.L	0930	POCATELLO	ID	US	171.8	254.5	39.6	53.9	615.43	324.48	3.994	44.3	9.851
XEQ.O/A	0940	IZTAPALAPA	DF	MX	2960.9	334.0	0.0	0.0	2354.67	7.25	3.416	34.7	10.427
CJIB.P/A0940	0940	VERNON	BC	CA	938.5	155.6	6.6	12.2	443.64	38.01	3.373	32.3	10.959
KIXZ.L	0940	AMARILLO	TX	US	1373.6	310.5	2.9	6.8	659.65	24.53	3.237	29.5	11.427 << 25% RSS
CJGX.O/A0940	0940	YORKTON	SK	CA	1333.7	228.4	3.2	7.1	769.38	17.26	2.656	23.2	11.731
WMIX.L	0940	MOUNT VERNON	IL	US	2199.0	290.3	0.0	1.2	729.24	8.47	1.235	10.5	11.796

Non-Contributors:

Call	Freq (kHz)	City	St	Ct	Dist (km)	Azi (deg)	Theta		Max V-Rad (mV/m)	SW Mult (uV/m)	Limit (mV/m)
							Min (deg)	Max (deg)			
KMER.L	0940	KEMMERER	WY	US	337.4	285.3	22.3	34.5	104.82	184.11	3.859
KICE.C	0940	BEND	OR	US	573.2	106.3	12.8	21.3	107.49	93.49	2.010
KICE.L	0940	BEND	OR	US	573.5	105.1	12.8	21.3	106.90	93.54	2.000
KICE.C	0940	BEND	OR	US	573.3	106.3	12.8	21.3	105.77	93.48	1.978
KWBY.L	0940	WOODBURN	OR	US	729.3	110.8	9.5	16.5	124.12	64.56	1.603

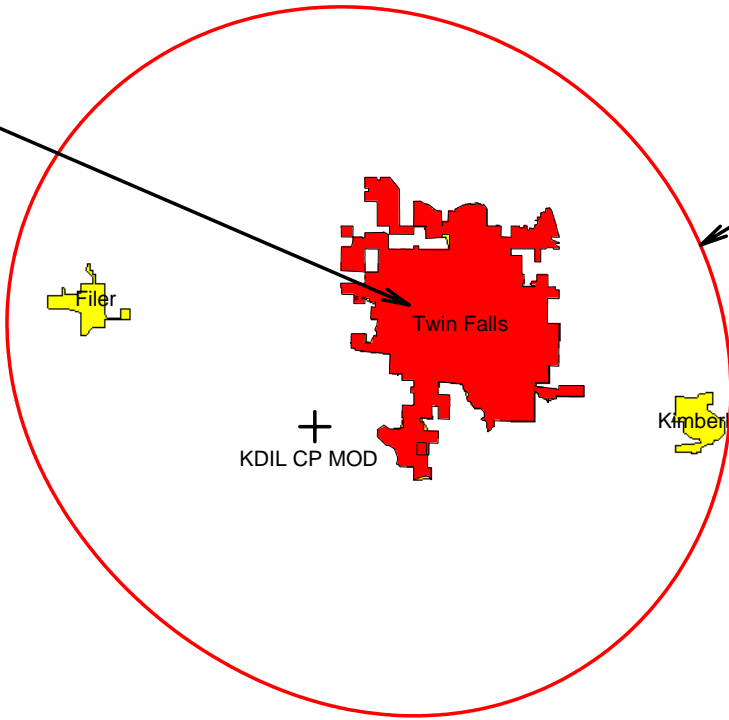
**KDIL CP MOD**  
PROPOSED  
Freq: 940 kHz  
Class: B  
Latitude: 42-31-56 N  
Longitude: 114-31-07 W  
Power: 0.26 kW  
RMS: 152.2 mV/m @1km  
2-Towers DA-1

**NIGHTTIME SERVICE TO COMMUNITY OF LICENSE 100%**

**PREDICTED NIGHTTIME SERVICE CONTOUR**  
KDIL CP MOD  
TWIN FALLS, IDAHO  
940 KHZ, 0.26 KW UNLIMITED DA-1  
FIGURE 8

**COMMUNITY OF LICENSE**  
TWIN FALLS, IDAHO

**NIGHTTIME 50% RSS CONTOUR**  
9.0 MV/M GW



**Population Database: 2000 US Census (SF1)**  
Contour: GW 9.0 mV/m    Total Population: 49,713    Coverage Area: 436 sq. km

