

EXHIBIT #1
ENGINEERING STATEMENT

Concerning the Application of
Spokane Public Radio
To Make a Minor Modification
To NCE FM Construction Permit for
KSFC
BPED19961210MC

September 2002

CH 220A

0.45 kW H & V

This engineering statement supports the application of Spokane Public Radio to make a minor modification to NCE FM construction permit for KSFC, Spokane, Washington to move its transmitter, reduce power and increase antenna height above average terrain. The coordinates and elevation of the new site were confirmed by the use of a 7.5 minute topographic map. There are no further changes at this time.

A 60 dBu change area map is included as Page #3. A total of 36 evenly spaced radials were used to determine the antenna height above average terrain. The N.G.D.C. 30 arc second database was employed to determine the elevations along the radials that were averaged using the required four-point interpolation method. The resulting averaged radial antenna heights were employed using the Commission's own TVFMINT algorithm to project the distances to signal contours. The proposed 60 dBu contour is either at the same location or closer to the transmitter along each of 360 plotted radials than the 60 dBu contour of the construction permit. A tabular listing of the distance to the 60 dBu contour of the modified facility can be found on page #4 of this exhibit, and the distance to contour table for the authorized construction permit is on Page #5.

Since the 60 dBu contour of the new facility does not exceed the authorized 60 dBu contour, it was determined that the allocation and Television Channel Six Protection exhibits were not necessary.

Exhibit #14 is an FCC minimum spacings study, showing spacing relationships with adjacent commercial channels. Although the proposed facility is within 320 kilometers of Canada, there are no pertinent relationships.

Exhibit #22 is an R.F. hazard compliance statement.

KSFC is currently operating under a Special Temporary Authority that is due to expire on September 25, 2002. This STA has been extended twice. The applicant will be applying to extend the STA once more, unless the instant proposal can be granted before that date.

Page #6 of **Exhibit #1** is a statement of the qualifications of the preparer.

Kate Michler

KSFC 60 dBu Change Area

KSFC.C

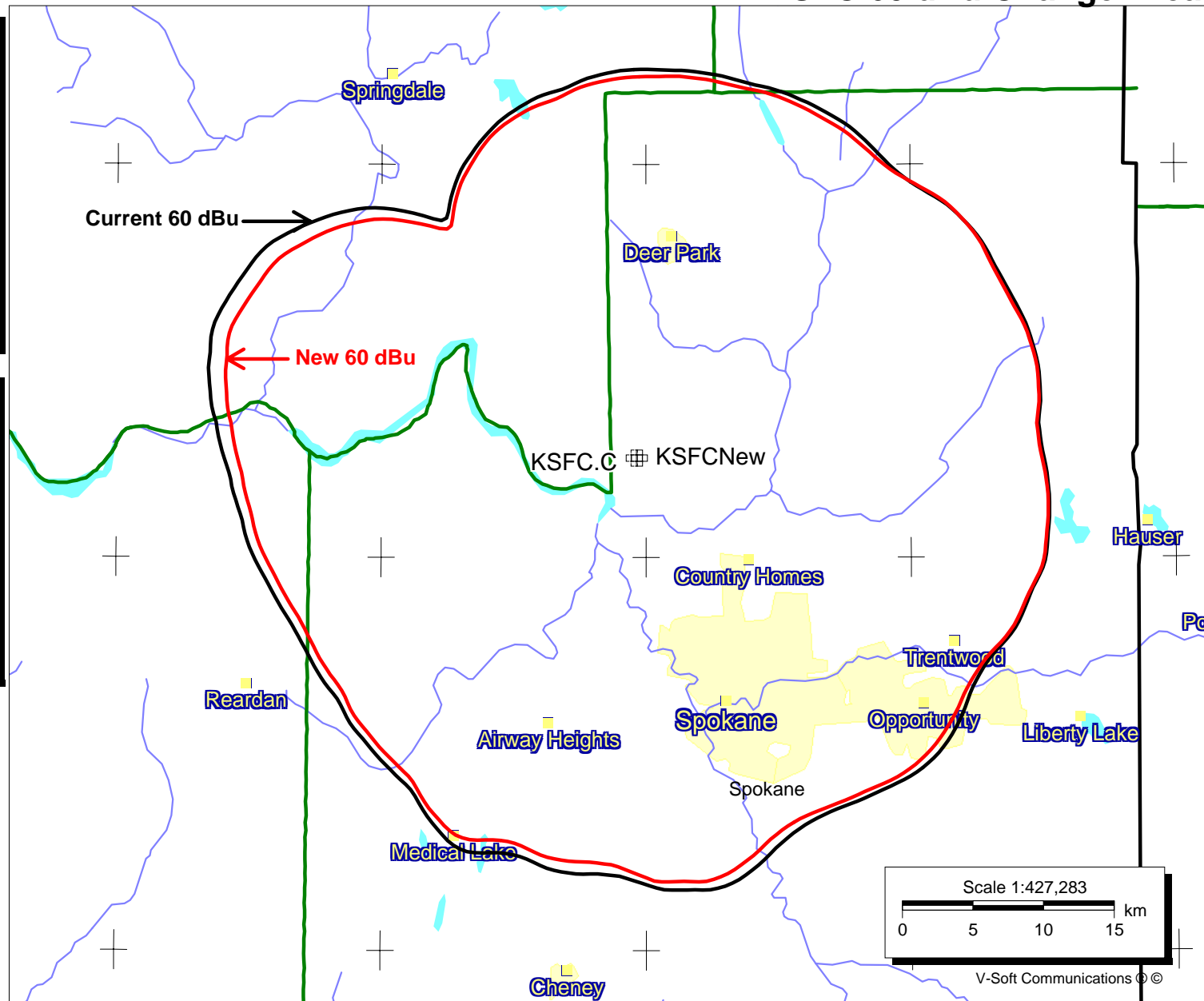
BPED19961210MC
Latitude: 47-48-48 N
Longitude: 117-30-41 W
ERP: 0.51 kW
Channel: 220
Frequency: 91.9 MHz
AMSL Height: 966.0 m
Elevation: 859.72 m
HAAT: 336.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Contour

KSFCNew

Mod BPED19961210MC
Latitude: 47-48-48 N
Longitude: 117-30-23 W
ERP: 0.45 kW
Channel: 220
Frequency: 91.9 MHz
AMSL Height: 972.0 m
Elevation: 930.9 m
HAAT: 348.2 m
Horiz. Pattern: Omni
Vert. Pattern: No

September 6, 2002

Doug Vernier
1600 Picturesque Drive
Cedar Falls, Iowa 50613
Telecommunication Consultants
dvernier@vcc.com (319) 266-8402



V-Soft Communications ©

Doug Vernier Telecommunications Consultants
 KSFC.C, Spokane Public Radio, Inc. Minor Modification of BPED19961210MC
 ERP = .45 kW
 Channel = 220

Azimuth Deg. T.	Ave. Elev. 3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	F(50-50) Distance to 60 dBu Contour km
0	646.4	325.6	-3.468	26.95
10	640.9	331.1	-3.468	27.18
20	636.8	335.2	-3.468	27.35
30	638.1	333.9	-3.468	27.30
40	644.9	327.1	-3.468	27.02
50	616.5	355.5	-3.468	28.19
60	609.5	362.5	-3.468	28.47
70	602.1	369.9	-3.468	28.75
80	604.3	367.7	-3.468	28.67
90	609.0	363.0	-3.468	28.49
100	587.3	384.7	-3.468	29.27
110	591.9	380.1	-3.468	29.12
120	613.6	358.4	-3.468	28.31
130	600.1	371.9	-3.468	28.82
140	593.1	378.9	-3.468	29.08
150	617.2	354.8	-3.468	28.16
160	612.9	359.1	-3.468	28.33
170	558.7	413.3	-3.468	30.26
180	580.7	391.3	-3.468	29.50
190	596.8	375.2	-3.468	28.94
200	601.7	370.3	-3.468	28.76
210	593.2	378.8	-3.468	29.07
220	631.4	340.6	-3.468	27.58
230	647.0	325.0	-3.468	26.93
240	654.8	317.2	-3.468	26.61
250	646.8	325.2	-3.468	26.94
260	628.8	343.2	-3.468	27.68
270	611.0	361.0	-3.468	28.41
280	575.6	396.4	-3.468	29.67
290	563.6	408.4	-3.468	30.09
300	597.9	374.1	-3.468	28.90
310	670.4	301.6	-3.468	25.96
320	777.4	194.6	-3.468	21.13
330	719.6	252.4	-3.468	23.88
340	678.1	293.9	-3.468	25.64
350	659.2	312.8	-3.468	26.43
Ave. =	623.8 M	348.2 M		

Antenna Radiation Center AMSL = 972 M
 NGDC 30 Arc Sec.

Geographic Coordinates:

N. Lat. 47 48 48
 W. Lng. 117 30 23

Doug Vernier Telecommunications Consultants
 KSFC.C, Spokane Public Radio, Inc., BPED19961210MC Current CP
 ERP = .51 kW
 Channel = 220

Azimuth Deg. T.	Ave. Elev. 3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	F(50-50) Distance to 60 dBu Contour km
0	647.6	318.4	-2.924	27.45
10	642.8	323.2	-2.924	27.65
20	638.5	327.5	-2.924	27.84
30	635.9	330.1	-2.924	27.95
40	645.8	320.2	-2.924	27.53
50	627.3	338.7	-2.924	28.33
60	612.9	353.1	-2.924	28.95
70	605.9	360.1	-2.924	29.24
80	608.1	357.9	-2.924	29.15
90	611.7	354.3	-2.924	29.00
100	593.3	372.7	-2.924	29.74
110	597.1	368.9	-2.924	29.60
120	616.0	350.0	-2.924	28.82
130	594.8	371.2	-2.924	29.69
140	594.6	371.4	-2.924	29.70
150	619.5	346.5	-2.924	28.67
160	603.3	362.7	-2.924	29.35
170	558.1	407.9	-2.924	31.01
180	589.1	376.9	-2.924	29.90
190	594.2	371.8	-2.924	29.71
200	594.4	371.6	-2.924	29.70
210	605.5	360.5	-2.924	29.26
220	637.8	328.2	-2.924	27.87
230	655.6	310.4	-2.924	27.11
240	660.8	305.2	-2.924	26.88
250	651.4	314.6	-2.924	27.28
260	634.0	332.0	-2.924	28.04
270	612.2	353.8	-2.924	28.98
280	572.9	393.1	-2.924	30.48
290	557.7	408.3	-2.924	31.02
300	586.8	379.2	-2.924	29.99
310	657.6	308.4	-2.924	27.02
320	764.9	201.1	-2.924	22.09
330	726.6	239.4	-2.924	23.99
340	684.3	281.7	-2.924	25.87
350	666.0	300.0	-2.924	26.66
Ave. =	625.1 M	340.9 M		

Antenna Radiation Center AMSL = 966 M
 NGDC 30 Arc Sec.

Geographic Coordinates:

N. Lat. 47 48 48
 W. Lng. 117 30 41

Declaration:

I, Katherine A. Michler, have received a Bachelor of Science degree from the University of Northern Iowa, and;

That, I declare that I have received training as a technical consultant as a member of the staff of Doug Vernier Telecommunications Consultants, and;

That, I have apprenticed under Douglas Vernier for over four years, and;

That, he has been active in broadcast consulting for over 25 years, and;

That, his qualifications are a matter of record with the Federal Communications Commission, and;

That, I am an Associate Member (#20792) of the Society of Broadcast Engineers, Indianapolis, Indiana, and;

That, the consulting firm of Doug Vernier Telecommunications Consultants has been retained by Spokane Public Radio, Spokane, Washington;

That, I have personally prepared these engineering showings, the technical information contained in same and the facts stated within are true to my knowledge, and;

That, under penalty of perjury, I declare that the foregoing is correct.

Katherine A. Michler Katherine A. Michler

Executed on September 6, 2002

Subscribed and sworn before me this 6th day of September, 2002.



James L. Byers
Notary Public in and for the State of Iowa