

**Technical Report
Long Form Application for New Translator
BNPFT-20030313ATS**

This technical report has been developed in support of a long form application for the new translator, FCC file no. BNPFT-20030313ATS, at Buffalo, WY. A change to the intermediate frequency (IF) channel from 293 to channel 240, following CFR §74.1233(a)(1), and change in tower site is requested. The facility will serve as a fill-in for KLQQ 285C0 at Sheridan, WY, facility I.D. 165310.

The following exhibits are provided in support of the form 349 application:

- E-1 Channel Overlap Study
- E-2 60 dBu Coverage within KLQQ
- E-3 Enhanced Plot to Show Overlap to 652158.AP

Antenna System:

The translator will be located at an existing tower at a COR AGL of 18 meters, using a two bay Shively 6812B half wave-spaced nondirectional antenna, and operate at 0.250 kW ERP at coordinates:

44-36-09N 106-55-51W (NAD 27).

Exhibit E-2 shows the 60 dBu contour plot will be completely contained within the 60 Bu contour of KLQQ, and exhibit E-3 shows an enhanced plot showing overlap to the short form application facility's 60 dBu contour.

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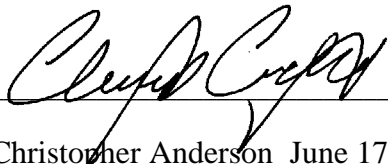
Broadcast Consultants
1519 Euclid Avenue
Bowling Green, KY 42103

RF Exposure Calculation:

The RF contribution from the 0.250 kW facility was evaluated using the Commission's FMMODEL program. The RF contribution from a height of 2 meters above ground was calculated to be $5.5 \mu\text{Watts/cm}^2$ at a distance of 29 meters from the tower, which is well below 5% of the $200 \mu\text{Watts/cm}^2$ permissible for general public exposure, allowing exclusion from consideration.

Conclusion:

It is concluded that the minor modification of the translator facility 652158 complies with all Commission policies and rules.



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E-1 Overlap Study

REFERENCE
44 36 09.0 N.
106 55 51.0 W.

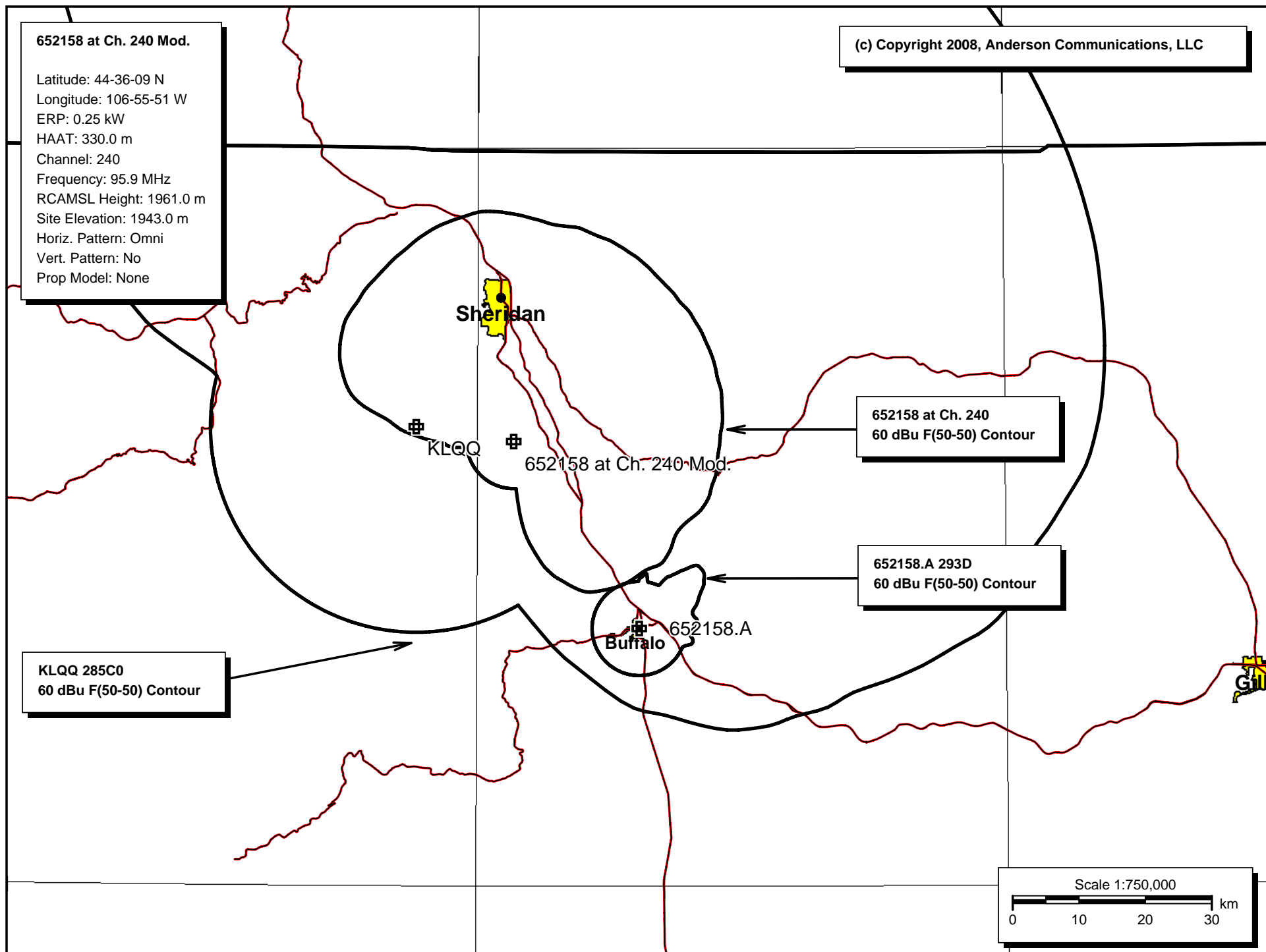
CH# 240D - 95.9 MHz, Pwr= 0.25 kW, HAAT= 330.0 M, COR= 1961 M
Average Protected F(50-50)= 23.62 km
Omni-directional

DISPLAY DATES
DATA 06-14-08
SEARCH 06-17-08

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
241C1 World	KKLX	CP	_CX	230.8 50.2	95.22 BPH20080116ABE	44 03 31.0 107 51 12.0	80.000 144	77.7 1460	49.8 Legend	10.43 Communications Of W	35.31
241C2 World	KKLX	LIC	_CN	231.7 51.1	95.31 BLH19860602KF	44 04 06.0 107 51 57.0	50.000 116	66.9 1433	42.1 Legend	21.34 Communications Of W	43.03
293D Buffalo	652158	APP	_C_	146.0 326.2	33.90 BNPFT20030313ATS	44 20 58.0 106 41 34.0	0.250	82.6 1449	25.0 Lovcom, Inc.	10.0R	23.9M

Terrain database is USGS 03 SEC Distance + R = 73.215 or FCC Spacings in KM, Distance + M = Margin in KM
Contour distances are on direct line to and from reference station. Reference zone = 2. With 3rd Adj Channels.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.

E-2 New Translator at Ch. 240 60 dBu Contour Plot



E-3 New Translator 60 dBu Overlap Enhanced Plot

652158 at Ch. 240 Mod.

Latitude: 44-36-09 N
Longitude: 106-55-51 W
ERP: 0.25 kW
HAAT: 330.0 m
Channel: 240
Frequency: 95.9 MHz
RCAMSL Height: 1961.0 m
Site Elevation: 1943.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

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652158 at Ch. 240
60 dBu F(50-50) Contour

652158.A 293D
60 dBu F(50-50) Contour

60 dBu F(50-50) Contour
Overlap of Current and Proposed Facilities

Scale 1:50,000

0 0.7 1.4 2.1 km

