

TECHNICAL EXHIBIT

APPLICATION FOR A CONSTRUCTION PERMIT
FOR A NON-RESERVED CHANNEL
TRANSLATOR STATION
K245BD

SPEARFISH, SD
CH 245D 27 WATTS 118 M

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MARIO HIEB, P.E.
CONSULTING ENGINEER
SALT LAKE CITY, UT

INTRODUCTION

This technical exhibit has been prepared on behalf of Phasor Physics, Inc., in support of an application for a construction permit for FM translator station K245BD, Spearfish, SD.

This proposal would not be subject to environmental processing in accordance with Section 1.1306. It is believed that this proposal conforms to all applicable rules and regulations of the FCC.

Proposed Station Data

Output Frequency: 96.9 MHz.

Input Frequency: 100.3 MHz.

Output Channel: 245

ERP: 27 watts

Class: D

Proposed Antenna Location

The geographic coordinates (NAD 27) of the proposed site are as follows:

North Latitude: 44-29-33.0 N

West Longitude: 103-50-05.0 W

Transmitting Antenna

MAKE: Scala

MODEL: FMV

TYPE: single bay

PATTERN: directional

AZUMITH: 270 degrees True

POLARIZATION: vertical

Required Overlap

The required overlap of the 60 dBu contour of the proposed station with K245BD and the proposed station is shown in Figure 1.

Interference

Overlap with the pertinent contours of the proposed station and any first, second, third adjacent and IF channel stations, is shown in Table 1.

Unattended Operation

The proposed station will comply with all rules and requirements regarding unattended operation.

Multiple Translators

The applicant certifies that it does not have any interest in an FM translator that serves substantially the same area and that rebroadcasts the same signal as the proposed translator.

Environmental Considerations

The station will operate with an effective radiated power of 27 watts from a single-bay, directional antenna.

As the ERP of the proposed station is less than 100 watts, it is in compliance with 47 CFR § 1.1307 (b) (4) (i).

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Clr
KPSD-FM	SD	FAITH	97.1	246	100000.0	C	LIC	15.35 dB
KAML-FM	WY	GILLETTE	97.3	247	100000.0	C0	LIC	18.22 dB
KFND-LP	SD	RAPID CITY	97.1	246	100.0	LP100	LIC	28.07 dB
KQWY	WY	LUSK	96.3	242	100000.0	C	CP	33.45 dB
K244EE	WY	NEWCASTLE	96.7	244	75.0	D	LIC	33.34 dB
K248BT	SD	RAPID CITY	97.5	248	180.0	D	LIC	34.76 dB
KQSK	NE	CHADRON	97.5	248	100000.0	C1	LIC	36.52 dB

TABLE 1: Pertinent first, second, third adjacent, and IF channel stations spaced with proposed station.

Site: PROPOSED
 Coordinates: 44-29-33.0 N, 103-50-05.0 W
 Freq: 96.90000 MHz
 ERP: 27 W

Bearing	ERP W	HAAT	Distance
0	17	352	13
30	11	278	10
60	8	261	9
90	8	210	8
120	8	137	6
150	11	-83	3
180	17	-217	4
210	23	-55	4
240	26	-83	4
270	27	133	8
300	26	282	12
330	23	315	13

TABLE 2: HAAT and ERP for proposed station.

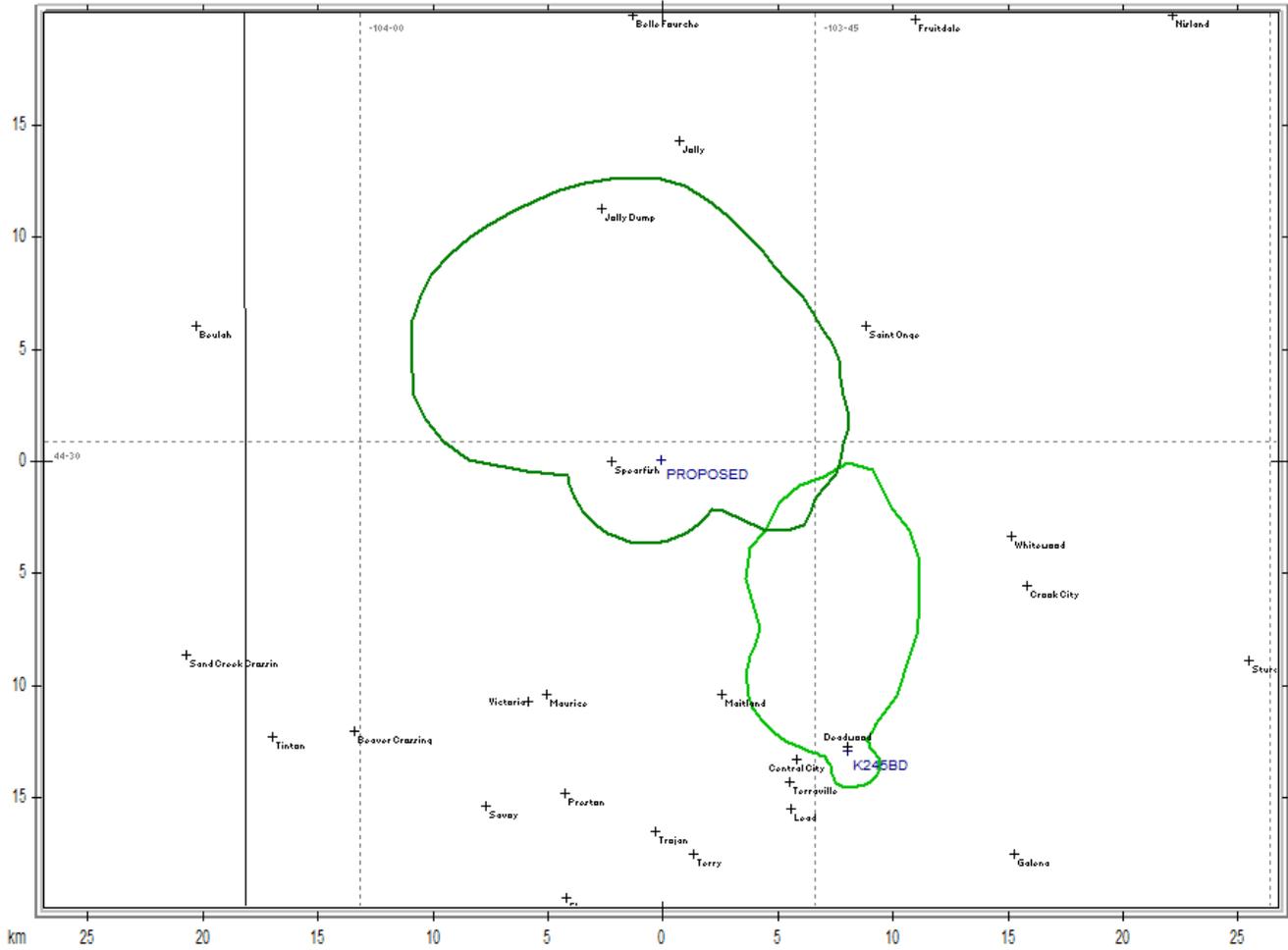


FIGURE 1: Pertinent contours of the proposed station and K245BD.

