



ENGINEERING STUDY

FCC 349 –LONG FORM APPLICATION

NEW 242DTranslator for KTBR (AM), Roseburg, OR

BNPFT-20180131AET

TECHNICAL STATEMENT

This technical statement and attached exhibits were prepared on behalf of Southern Oregon University licensee of KTBR (AM), 1440kHz, Roseburg, OR Facility ID #33247. This application seeks to allocate and license a new FM translator for use as a fill-in service for the above referenced station. This application is being filed pursuant to the Auction 100 FM translator window, (DA 18-986) allowing filing the Long-Form application for this facility. The Facility ID for this translator in Roseburg, OR has been assigned.203199.

Facilities Proposed

Location (NAD27)	43° 12' 22" N Latitude, 123° 21' 50" W Longitude
Channel	242D (96.3MHz)
Tower Overall AGL Height-	20m
Tower ASR	1236260
Proposed Antenna	ERI 100A
Antenna AGL Height-	12m
Site AMSL Height-	355m
ERP	190 Watts- (non-directional)

COMPLIANCE WITH 74.1204(a) [contour overlap]

The proposed translator on channel 242D will be fully compliant with 74.1204(a). A table showing the allocation is attached as Exhibit A and a map depicting the closest pertinent facilities is attached as Exhibit B.

COMPLIANCE WITH 74.1204(d)

The proposed translator on 242D will be fully compliant with 74.1204(d). There is no contour overlap to any 2nd or 3rd adjacent FM stations.

COMPLIANCE WITH 74.1201(g) [AM fill-in]

Exhibit C demonstrates that the proposed translator will be entirely contained within the 2mV/m contour from the licensed KTBR facility as well as within 25 miles from KTBR.

The proposed facility is not within 320km of the common border between the US and Canada or Mexico.

COMPLIANCE WITH 74.1233 [Minor Change]

Because the proposed translator is at the same location as the short-form application, this is considered a minor modification from the original proposal.

ENVIRONMENTAL EXHIBIT

The proposed translator facility will utilize a non-directional antenna located on an existing tower. The attachment of the proposed translator antenna will not alter the existing structure significantly for purposes of the Nationwide Programmatic Agreement and the NHPA Section 106.

The proposed 242D facility will utilize a 1 element EPA Type 2 antenna located at 12m AGL, Based upon the FCC “FM Model for Windows”¹ program, the proposed 242D operation will produce 28.2 $\mu\text{W}/\text{cm}^2$ at a distance of 10m from the base of the tower at ground level or 14% of the MPE level. There is one other non-excluded antenna on the tower, which is a combined operation with KSRS (FM) and KMPQ (FM). It is calculated that KSRS contributes 34 $\mu\text{W}/\text{cm}^2$ at a distance of 38.6m from the base of the tower at ground level or 17% of the MPE level. KMPQ operates with 950 watts from

¹ <https://www.fcc.gov/general/fm-model>

the same antenna. KMPQ contributes $16 \mu\text{W}/\text{cm}^2$ at a distance of 38.6m from the base of the tower at ground level or 8% of the MPE level. The total, therefore, of the proposed translator plus KSRS and KMPQ is 39% of the MPE. Access to the site is behind a locked gate and the tower base and surrounding area is fenced.

Based upon the information above, it is calculated that the facility will be in compliance with FCC guidelines and is excluded from further Environmental Assessment under 47CFR 1.1306 and 1.1307.

The proposed new FM translator along with other users at the site will maintain an occupational safety policy and agrees to reduce power or cease operation during periods of maintenance to avoid potentially harmful exposure of personnel to non-ionizing RF radiation.

Respectfully Submitted

A handwritten signature in cursive script that reads "Bert Goldman". The signature is written in black ink and is positioned above the printed name.

Bert Goldman

Technical Consultant

EXHIBIT A- ALLOCATION STUDY

ComStudy 2.2 search of channel 242 (96.3 MHz Class D) at 43-12-22.0 N, 123-21-50.0 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
NEW	ROSEBURG	OR 242 D	0.00	0.00	90.0	-21.69 dB SHORT FORM
KZEL-FM	EUGENE	OR 241 C0	90.62	0.00	12.8	0.34 dB Exhibit B
KROG	GRANTS PASS	OR 245 C	91.81	0.00	175.5	4.37 dB Exhibit B
KBDN	BANDON	OR 243 C3	79.01	0.00	249.9	6.64 dB Exhibit B
KBOY-FM	MEDFORD	OR 239 C1	87.35	0.00	163.2	10.58 dB
K243AF	JACKSONVILLE	OR 243 D	105.88	0.00	153.4	16.87 dB
K241AG	GRANTS PASS	OR 241 D	88.60	0.00	175.6	18.85 dB
KDGW-LP	GRANTS PASS	OR 243 LP100	86.18	13.00	176.0	24.41 dB
KBOY-FM	MEDFORD	OR 239 C1	87.35	0.00	163.2	25.13 dB
KEPW-LP	EUGENE	OR 243 LP100	96.26	13.00	12.1	26.94 dB
KZEL-FM	EUGENE	OR 241 C	82.33	0.00	19.2	27.70 dB
KBDN	BANDON	OR 243 C3	89.17	0.00	256.0	28.38 dB
KFLS-FM	TULELAKE	CA 243 C	187.90	0.00	130.5	30.85 dB

CDBS as of 11/2/2018

EXHIBIT B Pertinent Protection Contours, 74.1204(a) Compliance

PROP KTBR Translator From KSRS, 242D (96.3MHz), 190w- Non-D

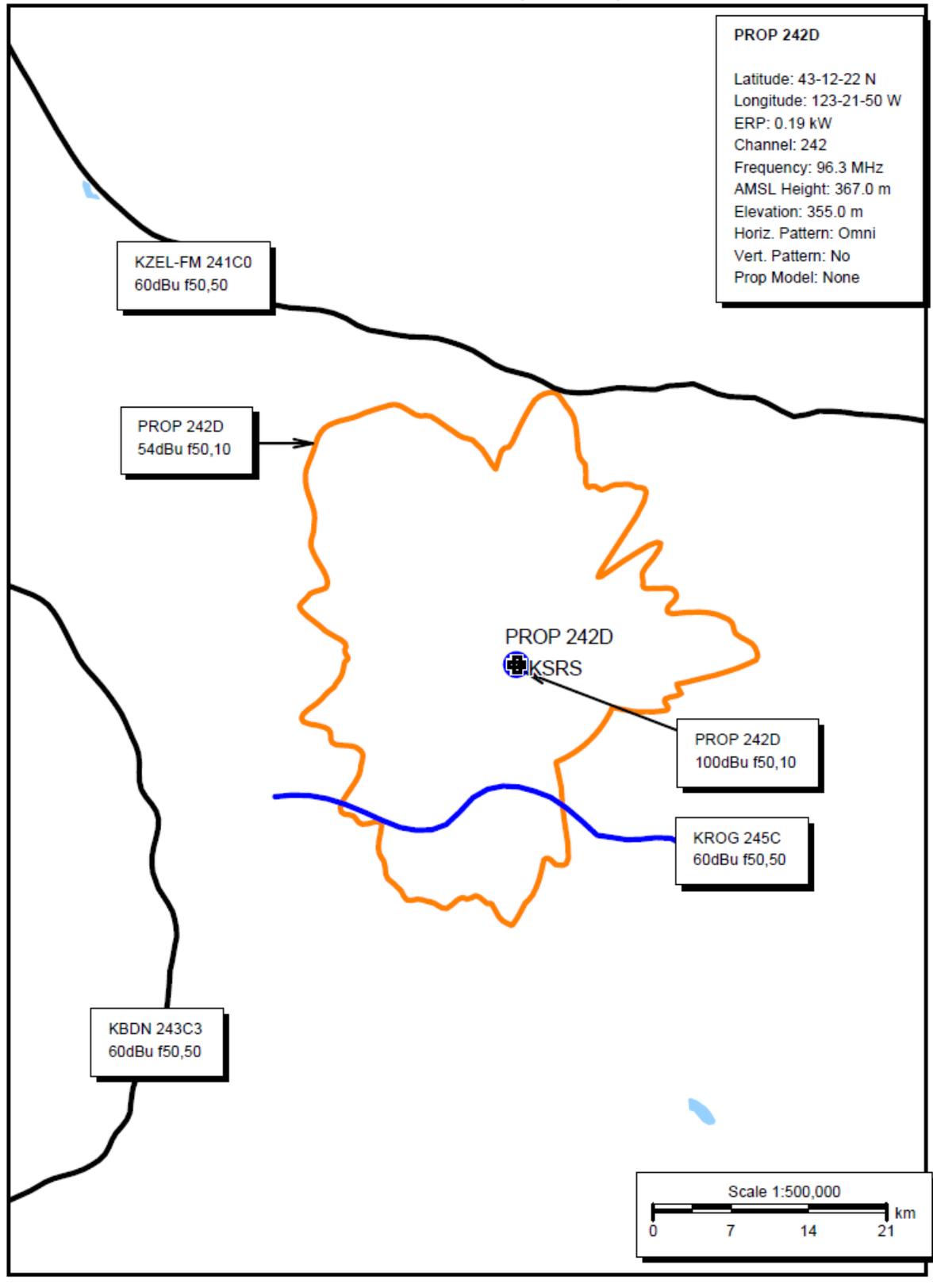


EXHIBIT C- 74.1233 COMPLIANCE

PROP KTBR Translator From KSRS, 242D (96.3MHz), 190w- Non-D

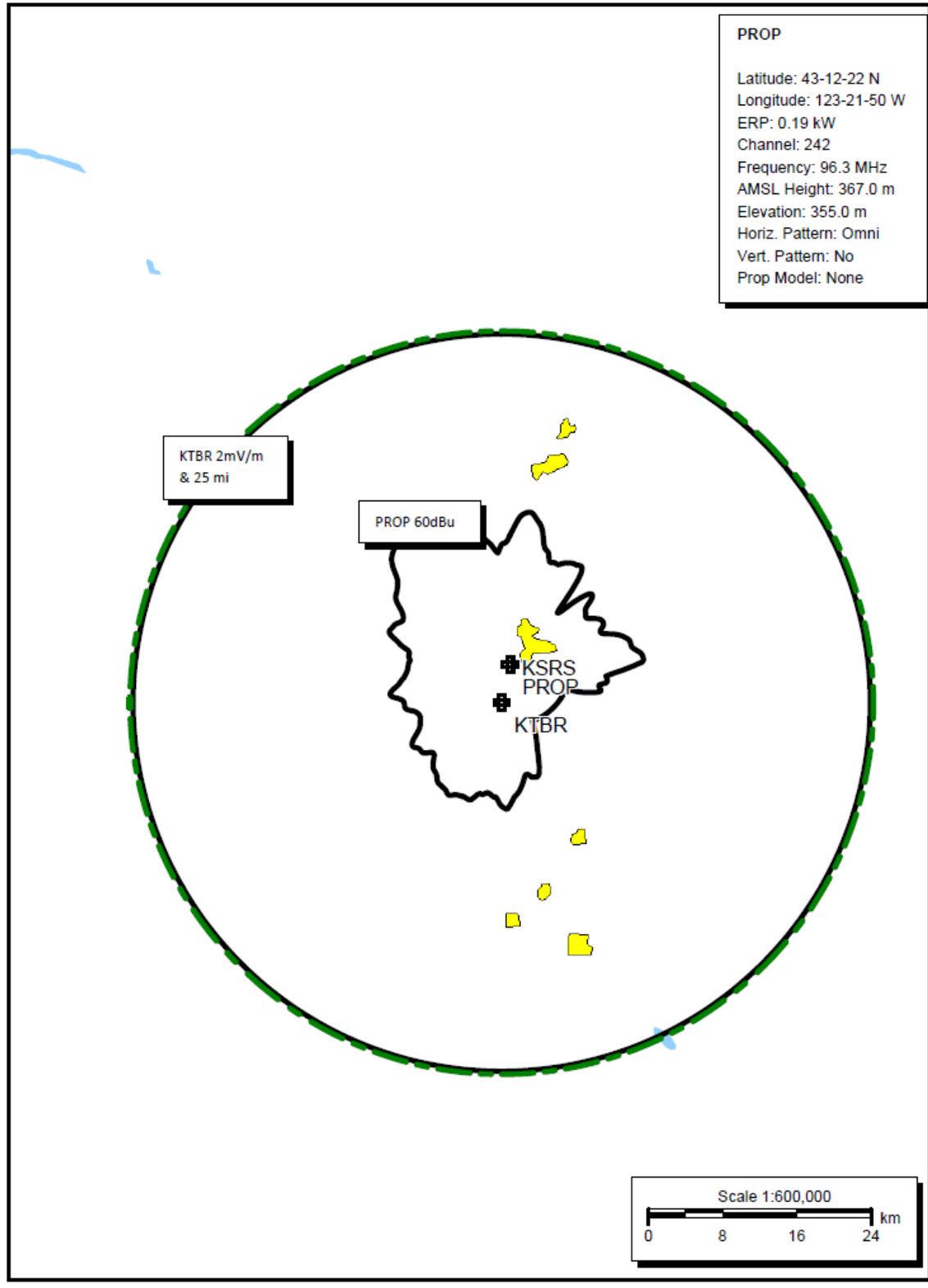


EXHIBIT E- ASR

Registration 1236260

[Map Registration](#)

Registration Detail

Reg Number	1236260	Status	Constructed
File Number	A0413802	Constructed	11/18/2004
EMI	No	Dismantled	
NEPA	No		

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Commu

Location (in NAD83 Coordinates)

Lat/Long	43-12-21.5 N 123-21-53.9 W	Address	MOUNT NEBO, 2.4 KM WSW OF ROSEBURG, DOUGLAS COUNTY, OREGON
City, State	ROSEBURG , OR		
Zip	97470	County	DOUGLAS
Center of AM Array		Position of Tower in Array	

Heights (meters)

Elevation of Site Above Mean Sea Level	355.0	Overall Height Above Ground (AGL)	20.0
Overall Height Above Mean Sea Level	375.0	Overall Height Above Ground w/o Appurtenances	15.2

Painting and Lighting Specifications

FCC Paragraphs 2

FAA Notification

FAA Study	2002-ANM-1750-OE	FAA Issue Date	09/24/2002
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Owner & Contact Information

FRN	0001559855	Owner Entity Type	
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Owner

LANE COMMUNITY COLLEGE
4000 E 30TH AV
EUGENE , OR 97405
P: (541)463-6000
F:
E: HECKC@LANECC.EDU

Contact

P:
F:
E:

Last Action Status

Status	Constructed	Received	11/19/2004
Purpose	Notification	Entered	11/19/2004
Mode	Interactive		

EXHIBIT F- NADCON Conversion

Output from NADCON for station

North American Datum Conversion

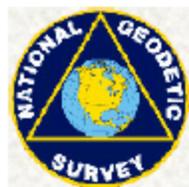
NAD 83 to NAD 27

NADCON Program Version 2.11

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Transformation #: 1 Region: Conus

	Latitude	Longitude
NAD 27 datum values:	43 12 22.08248	123 21 49.63955
NAD 83 datum values:	43 12 21.50000	123 21 53.90000
NAD 27 - NAD 83 shift values:	0.58248	-4.26045(secs.)
	17.976	-96.177 (meters)
Magnitude of total shift:		97.843(meters)



[NGS HOME PAGE](#)