

Consolidated Engineering Statement

K247CV, Fac Id 202272

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Abstract

This application proposes an increase in height of antenna COR and Support Structure, and no other changes.

Interference

No broadcast stations on co-channel, first adjacent channel, second or third adjacent channels are within 400 km of the site. There is no possibility of prohibited contour overlap.

Exhibit 12

Arctic Broadcasting Association

Reference 247Tr ERP 0.025 kW HAAT 24 m COR 24 m AMSL

643707.40 N 97.3 MHz Average protected F(50,50) 3.9 km

1621546.2 W

Elim, AK

Chn	CI	Call	Stat	Azi	Dist	Facld	Lat	*OUT*	Sig	dBu
		Pwr	COR	HAAT		ARN	Lon	Req.	Margin	
		Owner		City		St				

247Tr	K247CV	CP	143	0.15	202272	643703.41				This facility
		0.025	20	20	BNPFT20180424AA	1621539.22				
		Arctic Broadcasting		Elim		AK				

246D	KHUU	LIC	67	405.50	199395	660248.01	390.10			
		0.087	96	-164	BLED20160729AHX	1541529.39				
		Big River Public Bro		Hughes		AK				

Feed – Alaska Waiver

The proposed site is not within the 2 mV/m contour of feed station KICY-AM. It has an Alaska waiver in the earlier permit, which would be grandfathered in this authorization. There are no other broadcast facilities audible in Elim.

FAA Clearance

TOWAIR Determination Results

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

PASS SLOPE(100:1)NO FAA REQ - 121.0 Meters (396.980 Feet)away & below slope by 10.0 Meters (32.8100 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	64-37-8.00N	162-15-55.00W	ELIM	NOME ELIM, AK	37.5	1036.5999999999999

Your Specifications

NAD83 Coordinates

Latitude 64-37-07.0 north

Longitude 162-15-46.2 west

Measurements (Meters)

Overall Structure Height (AGL) 9

Support Structure Height (AGL) 9

Site Elevation (AMSL) 19

Structure Type

MAST - Mast

RFR Hazard

Based upon FM MODEL calculations for single source this facility meets 47cfr1.1310(e)(1) for general population exposure.

FM MODEL RESULTS:

Channel Selection	Channel 247 (97.3 MHz)		
Antenna Type +	EPA Type 2: Opposed V Dipole		
Height (m)	8	Distance (m)	20
ERP-H (W)	25	ERP-V (W)	25
Num of Elements	1	Element Spacing (λ)	1
Num of Points	20		



Distance (m)	Power Density (μW/cm²)
0	3.2
1	4.4
2	6.9

3	9.6
4	11.4
5	12.0
6	12.8
7	12.6
8	11.9
9	11.0
10	10.0
11	9.1
12	8.3
13	7.6
14	6.9
15	6.2
16	5.7
17	5.2
18	4.7
19	4.3
20	3.9

