

## Potential Interference with AM Broadcast Service

A search of the FCC database for AM broadcast within 200km of the Digisonde location yields a total of six stations. Five of the six stations are on frequencies below 1 MHz.

The remaining station, KJNP, transmits with power levels of 21 KW or greater. The Digisonde has a peak power level of 0.3 kW. The bandwidth of Digisonde emissions are 42KHz, as compared with a bandwidth of 10KHz for the AM broadcast band. The Digisonde power level, within any 10KHz spectrum is about 75 watts peak. Because Digisonde power is less than 1% of broadcast power, interference is unlikely, except for those receivers located very near to the Digisonde itself. In that case, the user would be able to listen to the broadcast, with the exception of a loud "pop" occurring once every few minutes as the sounder sweeps through the frequency. The effects of radio interference are further ameliorated by the low population density near the Digisonde location.

Finally, if the Digisonde is found to cause harmful interference with KJNP, or any other licensed radio service, we are required (NTIA section 8.2.21.1b) to remove that frequency from the sounding schedule.

KIAM	AM 630 kHz ND1 Daytime	B B LIC NENANA	AK US BL	-19950508AB	10.0 kW	70450	106.27 km	66.03 mi	227.51°	
VOICE FOR CHRIST MINISTRIES, INC.										
KIAM	AM 630 kHz ND1 Nighttime	B B LIC NENANA	AK US BL	-19950508AB	3.1 kW	70450	106.27 km	66.03 mi	227.51°	
VOICE FOR CHRIST MINISTRIES, INC.										
KFAR	AM 660 kHz ND1 Unlimited	A A LIC FAIRBANKS	AK US BL	-19990428DC	10.0 kW	6438	36.22 km	22.51 mi	183.20°	
ROB INGSTAD LICENSES, LLC										
KCBF	AM 820 kHz ND1 Unlimited	A A LIC FAIRBANKS	AK US BL	-19980120AD	10.0 kW	49645	30.09 km	18.70 mi	200.03°	
TOR INGSTAD LICENSES, LLC										
KZPA	AM 900 kHz ND1 Unlimited	B B LIC FORT YUKON	AK US BL	-19931015AA	5.0 kW	25701	188.42 km	117.08 mi	31.86°	
GWANDAK PUBLIC BROADCASTING, INC.										
KFBX	AM 970 kHz ND1 Daytime	B B LIC FAIRBANKS	AK US BL	-20040602ACR	10.0 kW	12518	30.08 km	18.69 mi	200.65°	
CAPSTAR TX, LLC										
KFBX	AM 970 kHz ND1 Nighttime	B B LIC FAIRBANKS	AK US BL	-20040602ACR	10.0 kW	12518	30.08 km	18.69 mi	200.65°	
CAPSTAR TX, LLC										
KJNP	AM 1170 kHz ND1 Daytime	A A LIC NORTH POLE	AK US BML	-19970213AD	50.0 kW	19866	41.99 km	26.09 mi	171.81°	
EVANGELISTIC ALASKA MISSIONARY FELLOWSHIP, INC.										
KJNP	AM 1170 kHz ND1 Nighttime	A A LIC NORTH POLE	AK US BML	-19970213AD	21.0 kW	19866	41.99 km	26.09 mi	171.81°	
EVANGELISTIC ALASKA MISSIONARY FELLOWSHIP, INC										