

**April 2007
New FM – Channel 251A
Tubac, AZ
Allocation Study**

Channel 251A Transmitter Site

The attached spacing study shows that the proposed transmitter site meets the co-channel and adjacent channel spacing requirements for Class A stations as prescribed in §73.207 of the Commission's Rules, with the exception of a short-spacing to a vacant Mexican allotment.

Specifically, the proposed transmitter facility is short-spaced to a Mexican allotment on Channel 251A at Naco, Sonora, Mexico. An allocation study has been conducted in order to demonstrate equivalent protection to the Mexican allotment. Attached is an engineering study, conducted pursuant to the radial interpolation method set forth in the US-Mexico FM Agreement, which demonstrates that full protection is provided to the Mexican allotment.

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SEARCH PARAMETERS

FM Database Date: 070416

Channel: 251A 98.1 MHz
 Latitude: 31 42 17
 Longitude: 110 55 25
 Safety Zone: 32 km
 Job Title: TUBAC 251A TRANSMITTER SITE

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Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
XHNOSFM	NOGALES		248A	1.610	31-19-49	182.8	41.57	31
	SO -		97.5	36.0	110-56-42		10.57	CLEAR
XHNOSFM	NOGALES		248A	0.000	31-19-49	182.8	41.57	31
	SO -		97.5	0.0	110-56-42		10.57	CLEAR
NEW-T	GREEN VALLEY		250D	0.050	31-55-45	344.5	25.84	0
APP	AZ BNPFT-030317KTS		97.9	140.0	110-59-49		0.00	TRANS
NEW-T	GREEN VALLEY		250D	0.050	31-50-30	348.5	15.50	0
APP	AZ BNPFT-030312BCW		97.9	87.0	110-57-23		0.00	TRANS
NEW-T	NOGALES		250D	0.023	31-23-47	179.7	34.19	0
APP	AZ BNPFT-030317DSA		97.9	335.0	110-55-18		0.00	TRANS
K250AN	ORACLE		250D	0.010	32-26-26	8.9	82.61	0
CP MOD	AZ BMPFT-061006ADP		97.9	1706.0	110-47-12		0.00	TRANS
NEW-T	TUCSON		250D	0.010	32-13-20	3.9	57.52	0
APP	AZ BNPFT-030314BAJ		97.9	133.0	110-52-55		0.00	TRANS
	NACO		251A	0.000	31-19-53	114.0	101.20	111
	SO -		98.1	0.0	109-57-05		-9.80	SHORT
NEW-T	BENSON		251D	0.023	31-53-05	69.4	57.43	0
APP	AZ BNPFT-030317DFA		98.1	328.0	110-21-18		0.00	TRANS
NEW-T	BISBEE		251D	0.010	31-28-53	105.0	94.85	0
APP	AZ BNPFT-030317DFE		98.1	794.0	109-57-32		0.00	TRANS
NEW	PATAGONIA		251A	0.000	31-33-05	135.3	23.95	115
APP	AZ BSFH-061219AFJ		98.1	0.0	110-44-45		-91.05	SHORT
VAC	PATAGONIA		251A	0.000	31-33-05	135.3	23.95	115
	AZ RM-10095		98.1	0.0	110-44-45		-91.05	SHORT
NEW-T	BISBEE		252D	0.010	31-28-53	105.0	94.85	0
APP	AZ BNPFT-030317DFK		98.3	794.0	109-57-32		0.00	TRANS
KOHT	MARANA		252A	6.000	32-27-09	349.6	84.33	72
LIC	AZ BLH-980218KG		98.3	56.0	111-05-11	SS	12.33	CLEAR

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SEARCH PARAMETERS FM Database Date: 070416

Channel: 251A 98.1 MHz Page 2

Latitude: 31 42 17

Longitude: 110 55 25

Safety Zone: 32 km

Job Title: TUBAC 251A TRANSMITTER SITE

Call	City	Channel	ERP(kW)	Latitude	Bearing	Dist	Req
Status	St FCC File No.	Freq. HAAT(m)	Longitude	deg-True	(km)	(km)	
KOHTaux	MARANA	252A	3.700	32-27-10	349.6	84.36	0
LIC	AZ BXLH-050303ADR	98.3	34.0	111-05-11		0.00	AUX
ADD	CORONA DE TUCSON	253A	0.000	31-55-39	47.9	37.01	31
	AZ RM-rfs120*	98.5	0.0	110-37-57		6.01	CLOSE
RSV	VAIL	253A	0.000	31-55-39	47.9	37.01	31
	AZ RM-9815	98.5	0.0	110-37-57		6.01	CLOSE
DEL	VAIL	253A	0.000	31-55-39	47.9	37.01	31
	AZ RM-rfs120*	98.5	0.0	110-37-57		6.01	CLOSE
KRDX	VAIL	253A	3.900 DA	31-55-39	47.9	37.01	31
LIC	AZ BLH-051103ADD	98.5	125.0	110-37-57		6.01	CLOSE
KWXL-LP	TUCSON	254L1	0.050	32-10-59	354.6	53.28	29
LIC	AZ BLL-060227ADB	98.7	-12.3	110-58-39		24.28	CLEAR

44444 END OF FM SPACING STUDY FOR CHANNEL 251 44444

Tubac Channel 251A (New FM)
Contour Protection to Mexican Station/Allotment

PROPOSED FACILITY

COMMUNITY : TUBAC, ARIZONA
CHANNEL : 251
CALL : NEW FM
CLASS : A
INTERNATIONAL : AA
COORDINATES : 31-42-17 N 110-55-25 W
RADIATING CENTER : 1811 METERS AMSL
AZIMUTH TO PROTECTED FACILITY: 114.0 DEGREES
STANDARD RADIALS : 90.0 HAAT: -158.0 M
: 135.0 HAAT: 3.3 M

INTERPOLATED : 114.0 HAAT: **-72.0 M**
31 METERS ASSUMED

RESTRICTED POWER : 0.270 KW AT 31 M ON 114.0 DEGREE RADIAL
INTERFERING CONTOUR : 40 DBU (50,10)
DISTANCE TO INTERFERING CONTOUR: 24.4 KM

PROTECTED ALLOCATION AT NACO, SONORA, MEXICO

COMMUNITY : **NACO, SONORA**
CHANNEL : 251
CALL : VACANT CHANNEL
CLASS : A (3KW CLASS A)
COORDINATES : 31-19-53 N 109-57-05 W
MAXIMUM FACILITY : 100 M AT 3 KW
RELATIONSHIP : COCHANNEL
PROTECTED CONTOUR : 60 DBU (50,50)
DISTANCE TO PROTECTED CONTOUR : 24.0 KM
(MAXIMUM PROTECTION FOR CLASS)

SUMMARY

DISTANCE TO PROTECTED CONTOUR(NACO) : 24.0 KM
DISTANCE TO RESTRICTED CONTOUR(NEWFM) : 24.4 KM
TOTAL DISTANCE RESTRICTED PLUS PROTECTED : 48.4 KM
ACTUAL SPACING : 101.2 KM

CLEARANCE 52.8 KM
NO OVERLAP OF PROTECTED AND INTERFERING CONTOUR