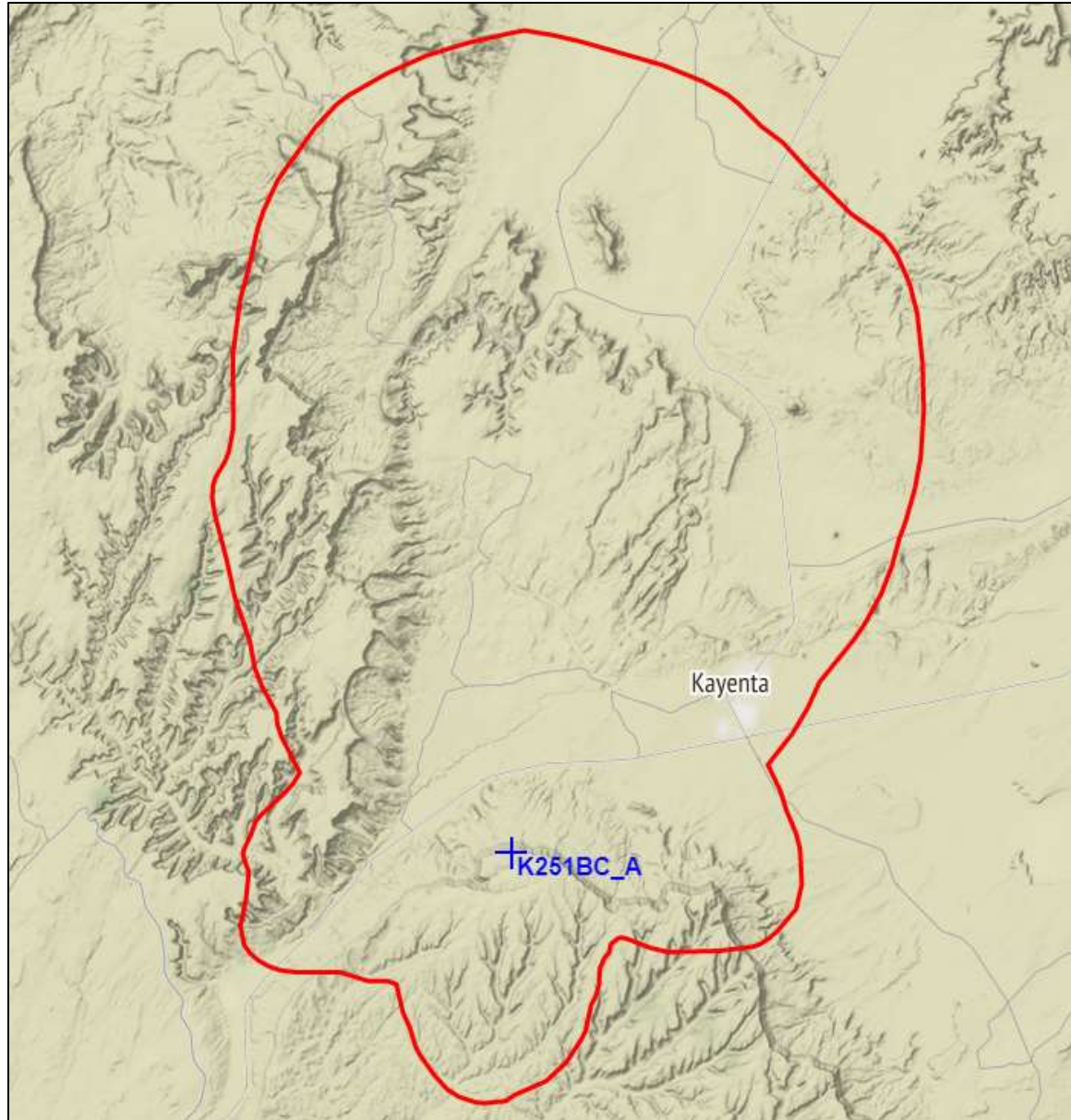




**REC Networks**  
11541 Riverton Wharf Rd.  
Mardela Springs, MD 21837  
844.REC.LPFM/202.621.2355  
recnet.com

Modify Minor Modify CP for K251BC  
**KAYENTA, AZ**  
**REDROCK RADIO GROUP, L.L.C.**  
**BPFT-20190214ABJ**

**PROPOSED 60dBu F(50,50) SERVICE CONTOUR**



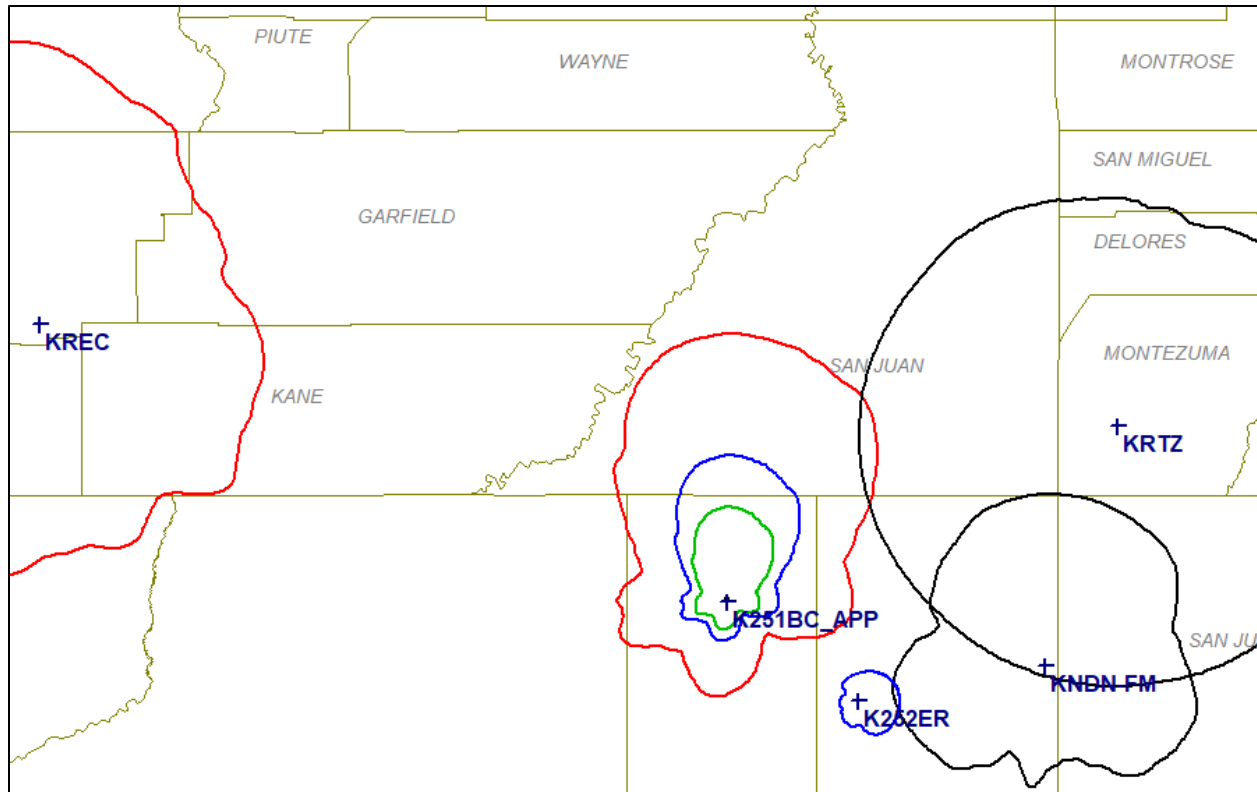
KAYNETA, AZ – Channel 251D (98.1 MHz) ~ ERP 0.250 kW ~ Directional  
Elev: 2,440 meters ~ RCAGL: 11 meters ~ RCAMSL: 2,451 meters ~ HAAT 415 meters  
Overall tower height: 36.6 meters – ASR: None  
NAD83 Latitude: 36° 39' 59.0" NL – Longitude: 110° 21' 12.4" WL  
NAD27 Latitude: 36° 39' 54.9" NL – Longitude: 110° 21' 09.9" WL

Site: K251BC\_APP  
 Coordinates: 36-39-54.9 N, 110-21-09.9 W  
 Freq: 98.10000 MHz  
 ERP: 250.00 W

Bearing	ERP W	HAAT	DH	Distance	Lat	Lon
0	247.51	612	360	32.62	36.958657	-110.352750
5	240.10	613	430	32.40	36.955520	-110.320970
10	228.48	615	420	32.04	36.949037	-110.290133
15	210.22	623	420	31.57	36.939519	-110.260792
20	190.97	610	370	30.40	36.922150	-110.235764
25	162.41	616	310	29.33	36.904226	-110.213345
30	133.96	647	160	28.70	36.888666	-110.191396
35	103.04	681	280	27.65	36.868844	-110.174439
40	74.80	672	310	25.45	36.840490	-110.168868
45	50.18	672	370	23.11	36.812121	-110.169124
50	30.28	681	250	20.46	36.783399	-110.176751
55	18.63	690	90	17.97	36.757848	-110.187484
60	10.30	678	130	14.72	36.731377	-110.209655
65	6.97	668	170	12.79	36.713816	-110.222639
70	4.83	653	180	11.15	36.699487	-110.235233
75	4.69	642	150	10.97	36.690719	-110.233938
80	4.97	626	190	11.09	36.682507	-110.230270
85	5.48	607	190	11.33	36.674067	-110.226141
90	6.01	582	180	11.47	36.665181	-110.224091
95	6.89	538	170	11.57	36.656110	-110.223524
100	7.92	468	150	11.55	36.647141	-110.225226
105	8.37	402	140	11.05	36.639469	-110.233118
110	8.65	340	140	10.35	36.633349	-110.243697
115	8.10	259	160	8.90	36.631397	-110.262374
120	7.40	200	240	7.59	36.631080	-110.279049
125	6.24	135	520	5.99	36.634314	-110.297716
130	5.11	116	480	5.32	36.634472	-110.307054
135	4.42	133	270	5.46	36.630548	-110.309518
140	3.84	152	250	5.61	36.626576	-110.312321
145	4.03	177	180	6.11	36.620234	-110.313483
150	4.42	199	190	6.60	36.613834	-110.315772
155	5.26	219	210	7.25	36.606161	-110.318429
160	6.16	238	220	7.90	36.598475	-110.322479
165	7.06	252	160	8.45	36.591834	-110.328250
170	8.01	259	120	8.87	36.586671	-110.335495
175	8.65	267	120	9.20	36.582825	-110.343770
180	9.12	281	130	9.58	36.579092	-110.352750
185	8.84	301	200	9.82	36.577252	-110.362337
190	8.37	313	150	9.86	36.577911	-110.371927
195	7.48	316	220	9.61	36.581738	-110.380615
200	6.56	305	190	9.12	36.588171	-110.387687
205	5.62	296	210	8.61	36.595024	-110.393533
210	4.69	275	270	7.88	36.603900	-110.396866
215	4.22	261	320	7.45	36.610387	-110.400599
220	3.84	237	360	6.91	36.617656	-110.402495
225	4.16	232	270	6.99	36.620812	-110.408101
230	4.76	255	150	7.61	36.621212	-110.418115
235	5.78	258	240	8.08	36.623532	-110.426945
240	6.97	299	270	9.19	36.623896	-110.441925
245	7.83	367	210	10.46	36.625461	-110.458944
250	8.56	396	180	11.04	36.631219	-110.469067
255	8.46	398	190	11.04	36.639502	-110.472230
260	8.19	371	230	10.63	36.648587	-110.470131
265	7.31	382	310	10.43	36.657016	-110.469256
270	6.32	441	430	10.62	36.665191	-110.471799
275	5.70	445	530	10.34	36.673296	-110.468208
280	5.11	428	460	9.85	36.680588	-110.461565
285	4.76	385	520	9.23	36.686707	-110.452802
290	4.49	373	540	8.96	36.692761	-110.447141
295	6.08	369	570	9.76	36.702324	-110.452024
300	8.46	370	470	10.71	36.713388	-110.456857
305	15.01	360	330	12.26	36.728436	-110.465435
310	24.81	350	430	13.67	36.744220	-110.470283
315	41.62	362	460	15.79	36.765615	-110.478118
320	64.52	395	600	18.44	36.792216	-110.485864
325	91.20	373	730	19.56	36.809320	-110.478807
330	122.15	419	660	22.20	36.838094	-110.477484
335	150.93	483	660	25.14	36.870149	-110.472217
340	181.05	535	550	27.92	36.901198	-110.460163
345	202.50	576	560	29.90	36.925023	-110.439831
350	222.31	595	530	31.23	36.941907	-110.413788
355	235.71	607	470	32.07	36.952590	-110.384208

ComStudy 2.2 search of channel 251 (98.1 MHz Class D) at 36-39-54.9 N, 110-21-09.9 W.

CALL	CITY	ST	CHN	CL	DIST	SEP	BRNG	CLEARANCE
KNDN-FM	SHIPROCK	NM	248	C1	114.82	0.00	101.1	28.77 dB
KREC	BRIAN HEAD	UT	251	C	260.25	0.00	292.9	36.84 dB
K252ER	CHINLE	AZ	252	D	58.20	0.00	126.6	22.61 dB
KRTZ	CORTEZ	CO	254	C	150.79	0.00	65.4	20.37 dB



**RED** – 40 dBu interfering vs. 60 dBu protected (co-channel)

**BLUE** – 54 dBu interfering vs. 60 dBu protected (first-adjacent)

**BLACK** – 100 dBu interfering vs. 60 dBu protected (second/third-adjacent)

**REQUEST FOR WAIVERS OF §74.1232 and §74.1235**  
**OF THE COMMISSION’S RULES**  
**PROPOSED FACILITY ENTIRELY IN “WHITE AREA”**

K251BC  
Kayneta, AZ  
Channel 251D (98.1 MHz)

The instant translator application meets the technical and administrative requirements of the Commission’s Rules with the exception of §74.1232(d) and §74.1235(b)(2).

§74.1232(d) of the Commission’s Rules requires that an authorization for a FM translator whose coverage contour extends beyond the protected contour of the commercial primary station will not be granted to the licensee or permittee of a commercial FM broadcast station. In the instant application, Redrock Radio Group, LLC (RRG) is currently the licensee of primary station KBDX, Blanding, Utah (Facility ID #89048) as well as the licensee of the instant translator. The 60 dBu coverage contour of the proposed translator is fully outside of the 60 dBu protected contour of KBDX.

§74.1235(b)(2) of the Commission’s Rules set specific power limits for non-fill in translators based on the radial height above average terrain along 12 equally-spaced radials. The instant application does not meet the requirements of §74.1235(b)(2) along the 330, 0 and 30 degree radials as shown:

<b>Radial</b>	<b>HAAT along radial</b>	<b>§74.1235(b)(2) maximum ERP along radial</b>	<b>Proposed rounded ERP along radial</b>
0	621	10 watts	248 watts
30	647	10 watts	134 watts
60	678	10 watts	10 watts
90	582	10 watts	6 watts
120	200	62 watts	7 watts
150	199	62 watts	4 watts
180	281	34 watts	9 watts
210	285	34 watts	5 watts
240	299	28 watts	7 watts
270	441	13 watts	6 watts
300	370	19 watts	8 watts
330	419	15.5 watts	122 watts

Translator is proposed to serve a “white area” – Currently, there are significantly large areas of northern Arizona and southern Utah that are not in the 60 dBu protected service contour of any full-service FM broadcast station, either commercial or non-commercial. A lack of broadcast service can result in population not receiving EAS alerts and other critical information. To address the concerns of serving white areas, the Commission is favored towards waiving

§74.1235(b)(2) if it can be demonstrated that the service to a greater distance only reaches a “white area”.<sup>1</sup> Also in the *Translator Order*, the Commission stated that:

[w]ith respect to service issues, an FM translator may not be licensed to a commercial broadcast station if the translator’s coverage contour goes beyond the primary station’s coverage contour. However, in “white area” situations, beyond the protected service contour of any full-time aural service, we will be favorably disposed toward requests for waivers of our rules to permit commercial primary station ownership.<sup>2</sup>

In the instant application, the proposed translator’s (60 dBu) coverage contour is entirely in areas that does not receive any full-time FM broadcast service from any full-service commercial or noncommercial educational station. RRG will demonstrate this “white area” in the maps that follow in this exhibit.

The ability to provide Emergency Alert System and other vital information to all parts of America is in the public interest as it helps residents and visitors prepare for an impending emergency, encourage safety and improve the quality of life. Local radio stations like KBDX are offering to come to the plate to provide reliable full-time FM radio service in those remote parts of our country that would otherwise not be served. RRG recognizes that applicants seeking a rule waiver have the burden to plead with particularity the facts and circumstances that warrant such action.<sup>3</sup> RRG also recognizes that an application for waiver does face a “high hurdle even at the starting gate”<sup>4</sup> and must support its waiver request with a compelling showing.<sup>5</sup> In the *Translator Order*, the Commission already recognizes that providing some form of reliable full-time FM radio service into “white areas” without restrictions on outer limits on translator service areas and ownership of translators in these underserved areas is in the public interest.

In order to provide vital services into this underserved area of Navajo County, RRG requests a waiver of §74.1232(d) and §74.1235(b)(2) of the Commission’s Rules.

Prepared by:  
Michelle Bradley  
REC Networks  
202 621-2355

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<sup>1</sup> - See *Amendment of Part 74 of the FM Commission’s Rules Concerning Translator Stations*, Report and Order, 5 FCC Rcd 7212, 7213 (“Translator Order”) (November 8, 1990) at para. 7.

<sup>2</sup> - See *Id.* at para. 6.

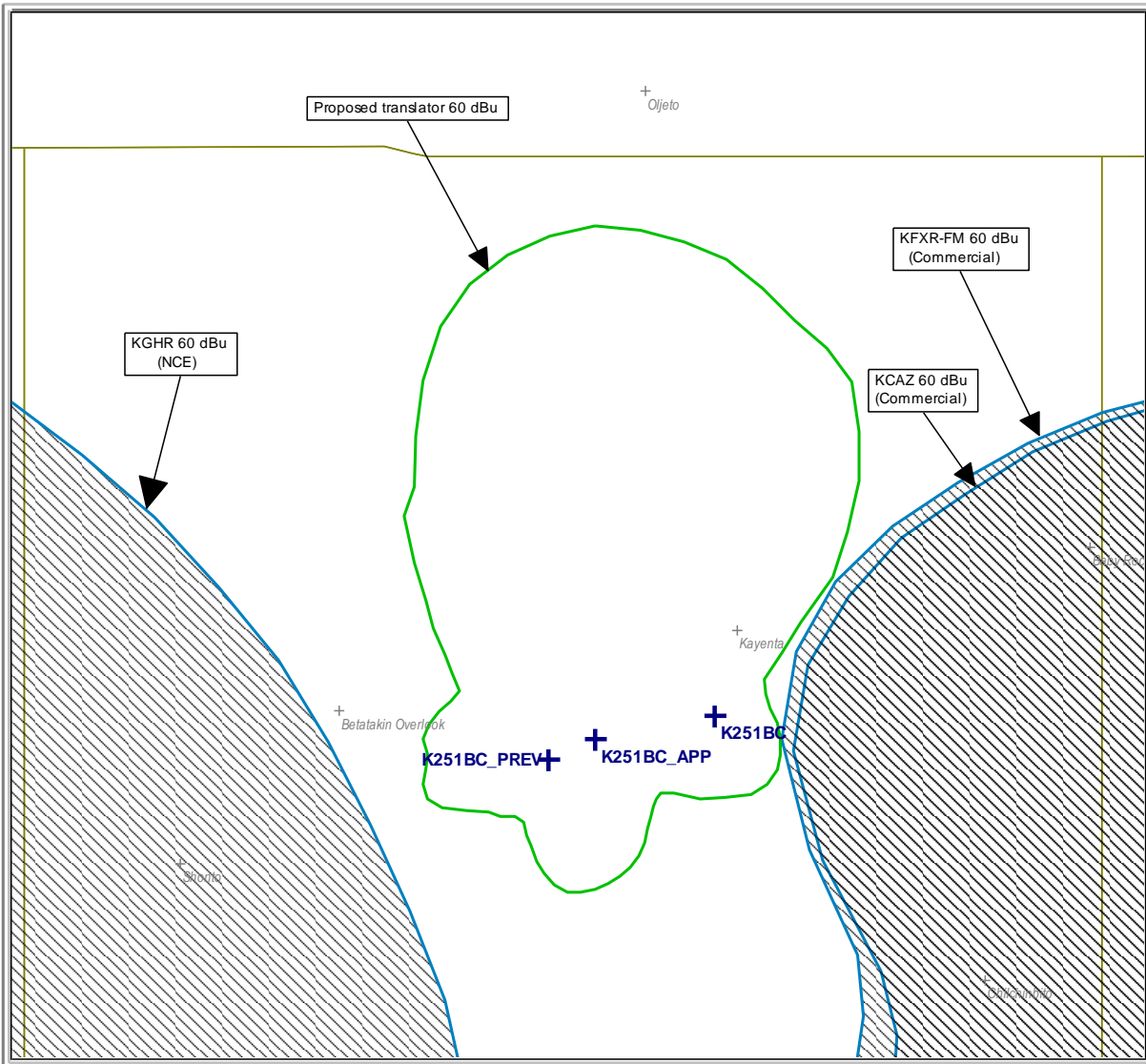
<sup>3</sup> - See *Columbia Communications Corp. v. FCC*, 832 F. 2d. 189, 192 (D.C. Cir, 1987) (citing *Rio Grande Family Fellowship v. FCC*, 406 F. 2d. 644, 666 (D.C. Cir. 1968)).

<sup>4</sup> - See *WAIT Radio v. FCC*, 418 F. 2d 1153, 1157 (D.C. Cir. 1969), *aff’d*, 459 F. 2d 1203 (1972), *cert. denied*, 93 S. Ct. 41 (1972) (“WAIT Radio”). See also *Thomas Radio v. FCC*, 716 F. 2d 921, 924 (D.C. Cir 1983).

<sup>5</sup> - See *Greater Media Radio Co., Inc.*, Memorandum Opinion and Order, 15 FCC Rcd. 7090 (1999) (citing *Stoner Broadcasting System, Inc.*, Memorandum Opinion and Order, 49 FCC 2d. 1011, 1012 (1974)).

Map Scale: 1:1274405    1 cm = 12.74 km    V/H Size: 236.05 x 233.20 km

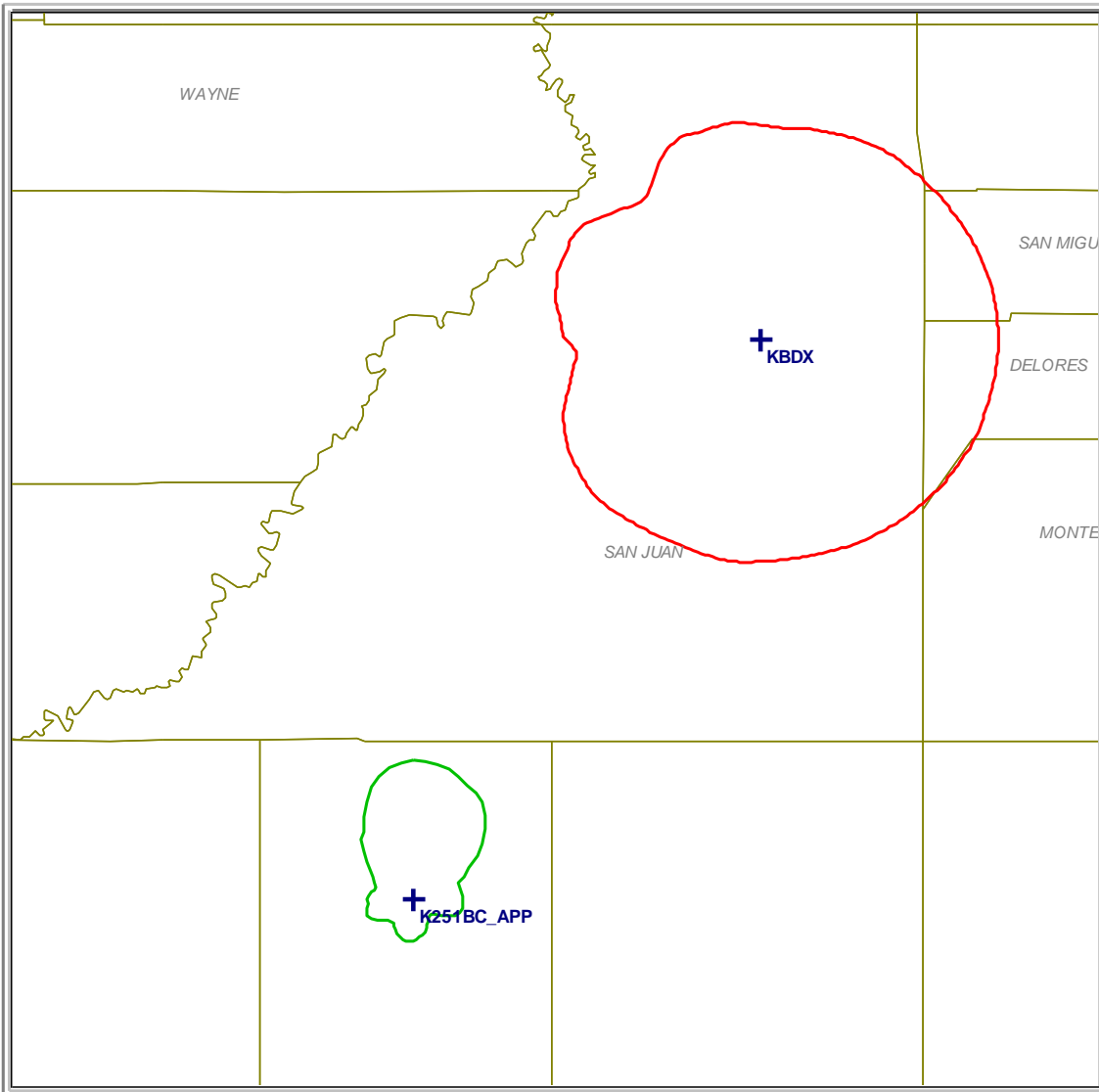
## K251BC - Regional "White Area"



Map Scale: 1:357647 1 cm = 3.58 km V/H Size: 66.24 x 70.05 km

Proposed translator is entirely in white area.

## K251BC &amp; primary station KBDX



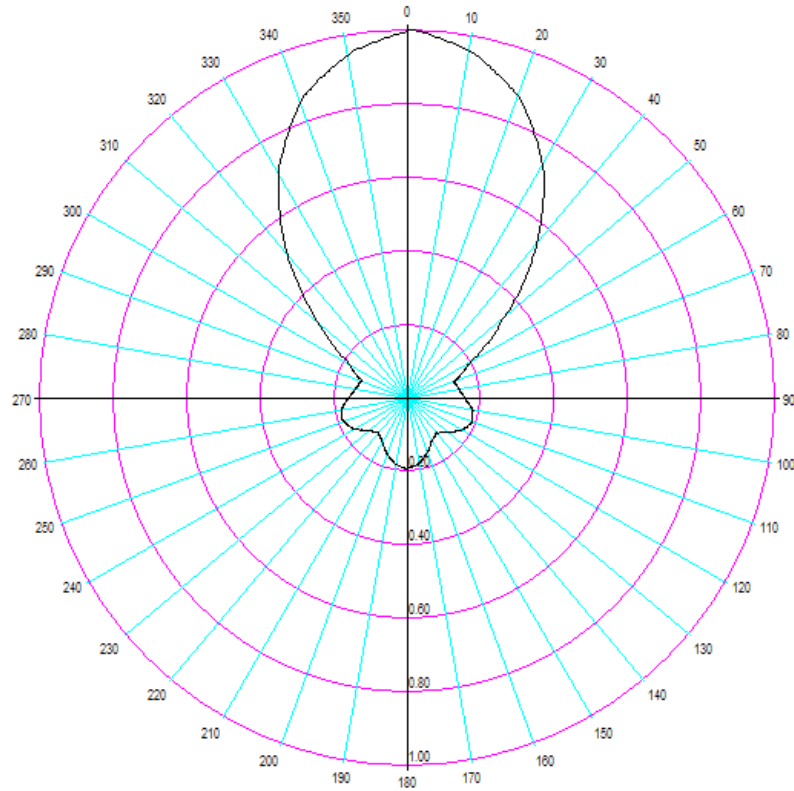
60 dBu coverage contours shown - waiver requested.



## ANTENNA PROPOSED

K251BC  
Kayneta, AZ  
Channel 251D (98.1 MHz)

Kathrein Scala CA-5-CP/RM (off the shelf) rotation 1 degree.



Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk
0.0	0.995	247.506	-6.064	90.0	0.155	6.006	-22.214	180.0	0.191	9.120	-20.400	270.0	0.159	6.320	-21.993
5.0	0.980	240.100	-6.196	95.0	0.166	6.889	-21.618	185.0	0.188	8.836	-20.537	275.0	0.151	5.700	-22.441
10.0	0.956	228.484	-6.411	100.0	0.178	7.921	-21.012	190.0	0.183	8.372	-20.772	280.0	0.143	5.112	-22.914
15.0	0.917	210.222	-6.773	105.0	0.183	8.372	-20.772	195.0	0.173	7.482	-21.260	285.0	0.138	4.761	-23.223
20.0	0.874	190.969	-7.190	110.0	0.186	8.649	-20.630	200.0	0.162	6.561	-21.830	290.0	0.134	4.489	-23.479
25.0	0.806	162.409	-7.894	115.0	0.180	8.100	-20.915	205.0	0.150	5.625	-22.499	295.0	0.156	6.084	-22.158
30.0	0.732	133.956	-8.730	120.0	0.172	7.396	-21.310	210.0	0.137	4.692	-23.286	300.0	0.184	8.464	-20.724
35.0	0.642	103.041	-9.870	125.0	0.158	6.241	-22.047	215.0	0.130	4.225	-23.742	305.0	0.245	15.006	-18.237
40.0	0.547	74.802	-11.261	130.0	0.143	5.112	-22.914	220.0	0.124	3.844	-24.152	310.0	0.315	24.806	-16.054
45.0	0.448	50.176	-12.995	135.0	0.133	4.422	-23.544	225.0	0.129	4.160	-23.809	315.0	0.408	41.616	-13.807
50.0	0.348	30.276	-15.189	140.0	0.124	3.844	-24.152	230.0	0.138	4.761	-23.223	320.0	0.508	64.516	-11.903
55.0	0.273	18.632	-17.297	145.0	0.127	4.032	-23.945	235.0	0.152	5.776	-22.384	325.0	0.604	91.204	-10.400
60.0	0.203	10.302	-19.871	150.0	0.133	4.422	-23.544	240.0	0.167	6.972	-21.566	330.0	0.699	122.150	-9.131
65.0	0.167	6.972	-21.566	155.0	0.145	5.256	-22.793	245.0	0.177	7.832	-21.061	335.0	0.777	150.932	-8.212
70.0	0.139	4.830	-23.160	160.0	0.157	6.162	-22.103	250.0	0.185	8.556	-20.677	340.0	0.851	181.050	-7.422
75.0	0.137	4.692	-23.286	165.0	0.168	7.056	-21.514	255.0	0.184	8.464	-20.724	345.0	0.900	202.500	-6.936
80.0	0.141	4.970	-23.036	170.0	0.179	8.010	-20.964	260.0	0.181	8.190	-20.867	350.0	0.943	222.312	-6.530
85.0	0.148	5.476	-22.615	175.0	0.186	8.649	-20.630	265.0	0.171	7.310	-21.361	355.0	0.971	235.710	-6.276

## **TOWAIR RESULT**

K251BC  
Kayneta, AZ  
Channel 251D (98.1 MHz)

### **DETERMINATION Results**

**Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.**

### **Your Specifications**

#### **NAD83 Coordinates**

Latitude	36-39-59.0 north
Longitude	110-21-12.4 west

#### **Measurements (Meters)**

Overall Structure Height (AGL)	36.6
Support Structure Height (AGL)	36.6
Site Elevation (AMSL)	2440

#### **Structure Type**

GTOWER - Guyed Structure Used for Communication Purposes