

[Exhibit 12]

Non-Interference Compliance

Regarding FCC File Number: BNPFT-20030317CVO

Channel: 247

Description of Exhibit 12 Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all the applicable rule sections and that this application for a construction permit is in full compliance with 47 CFR 74.1204.

Page 2 of this exhibit is an explanation of the tabulated data, which is included as evidence on page 4 of this exhibit.

Page 3 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference protection provisions based on 47 CFR 74.1204(d), which states:

"an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable."

In addition, page 3 includes a tabulation of the second and third adjacent stations which this application is required to protect and the field strengths of those stations in the vicinity of the proposed translator. The field strengths given were based on contours predicted using FCC contour algorithms and 3 arc second terrain data.

Let it be noted that should any actual real world interference occur, the applicant certifies that it will promptly suspend operation of this translator in accordance with 47 CFR 74.1203.

Page 4 of this exhibit is the tabulated data from the interference analysis, which shows all stations that this application had to consider for contour protection. These tabulated values were generated using high resolution 3 arc second terrain data for the best possible accuracy.

Page 5 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 min quadrangle at full scale with the calculated area of interference overlayed. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using a free-space calculation (see FCC 98-117, Appendix A, pg. 41 for reference to the equation used).

At the end of this exhibit are plots of the protected and interference contours of the proposed translator and any other stations from which the applicant is willing to accept interference. These contours were plotted using 3 arc second terrain data for the highest degree of accuracy possible.

Explanation of Frequency Finder Results

The interference analysis for this application was performed using the "Frequency Finder" module in RadioSoft's Comstudy, version 2.2.

Frequency Finder analyzes data taken directly from the FCC's FM database and looks for prohibited overlap with contours of adjacent stations and prohibited proximity to stations 53 or 54 channels from the proposed station (IF) using 3 arc second terrain data and the FCC's contour algorithms. The results tabulated are the stations returned from that analysis. (Note: Because Comstudy was looking at the FCC's FM database, it took into account the proposed translator when doing the analysis and returned it in the tabulated results. For the sake of simplicity, that record has been deleted from all tabulated results.)

The first several columns of the table are self-explanatory. They give various data on the stations in question. The column labeled "Clr" gives the proposed translator's "clearance" with respect to the tabulated station, either in dB or km. The values listed with no units are given in km and are for stations located on an IF to the proposed site's channel.

A negative value in the "Clr" column does NOT necessarily represent prohibited contour overlap, as explained below.

A negative value listed in the "Clr" column would indicate either overlap of interference and protected contours or prohibited proximity to an IF station except in the following situations:

- Since the proposed station's Effective Radiated Power (ERP) is 10 watts, a negative value in km (no units listed in the table) does not represent a violation of the CFR, according to 47 CFR 1204(g), which states that "FM translator stations and booster stations operating with less than 100 watts ERP will be treated as class D stations and will not be subject to intermediate frequency separation requirements."

- A second or third adjacent LP100 station cannot represent a violation of the CFR, as 47 CFR 74.1204(a)(4) requires protection of only co-channel and first adjacent LP100 stations.

- 47 CFR 74.1204(a) requires only the protection of "AUTHORIZED commercial or noncommercial educational FM broadcast stations, FM translators, ..." Any entry with a status listed as "RSV," "USE" or "APP" does not represent an authorized station and therefore is not protected under 47 CFR 74.1204. The one exception is the case of LP100 applications. The note to 47 CFR 74.1204(a)(4) states that "LPFM applications and permits that have not yet been licensed must be considered as operating with the maximum permitted facilities." Therefore, any first adjacent or co-channel LP100 station, no matter the status, is protected.

- Entries highlighted in red are those stations where there is overlap of predicted contours and lack of population has been demonstrated within the area of interference.

- Entries highlighted in blue are those that were returned in the results because of interference caused to this proposed translator. Contours were plotted by RadioSoft's Comstudy, version 2.2, using the FCC's contour algorithms, and these are included at the end of this exhibit showing that interference is caused only to the proposed translator and not by it.

Compliance with 47 CFR 74.1204(d)

The proposed translator's Maximum Effective Radiated Power (ERP) is 0.01kW at 42 meters above ground level. According to 47 CFR, 74.1204(a), the desired to undesired ratio between 2nd/3rd adjacent stations is 40dB, making the proposed translator's interfering contour 102.6dBu F(50,10).

Using a free-space calculation (equation referenced in FCC 98-117, Appendix A, pg. 41), this proposed translator's F(50,10) interference contour was calculated and plotted on the pertinent portion of a USGS quadrangle (page 5 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the calculated area of interference (Note: FCC 02-244, II, A, 6 states that USGS quadrangles are sufficient for demonstrating lack of population). Hence, in accordance with 47 CFR 74.1204(d) and the clarification provided by the FCC in the decision Re: Living Way Ministries (FCC 02-244), a lack of population has been demonstrated within the area of interference and therefore this application is in full compliance with 47 CFR 74.1204.

CORAGL: 42m

Antenna Manufacturer: SWR

Maximum ERP: 0.01kW

Antenna Model: FM1

F(50,10) Interfering Contour: 102.6dBu

F(50,10) Max Distance: 164.4m

The F(50,50) signal strength of all relevant second and third adjacent stations have been examined, and are tabulated below. Column three shows the station's signal level at the proposed translator's tower site, and column four gives the minimum value within the entire proposed translator's standard F(50,10) contour (100 dBu for most classes, 94 dBu for class B's, 97 dBu for class B1's). For signal levels too great to determine, 999 was entered. The minimum F(50,50) contour within the proposed translator's standard F(50,10) contour was used to calculate the proposed translator's interference contour, thereby assuring a minimum undesired-to-desired ratio of 40dB for all relevant adjacent stations, as required in 47 CFR, 74.1204(a).

FCC File Number	Call Sign	F(50,50) Contour at Tower	Min. F(50,50) Contour
BPH20030109AFM	KDAG	62.8dBu	62.6dBu
BLH19780921AG	KISZ-FM	70.8dBu	70.6dBu
BLH20010525ABR	KDAG	63dBu	62.8dBu
Minimum F(50,50) Protected Contour of Adjacent Station Within Proposed Translator's standard F(50,10) Contour:			62.6dBu

Frequency Finder

Callsign	State	City	Channel	ERP_w	Licensee	ARN	Class	Status	Distance_km	Clr	Facility_id
K249DE	CO	DURANGO	249	250	WINTON ROAD BROADCASTING CO, LL	BLFT19961120TF	D	LIC	3.81	-15.47 dB	76343
KISZ-FM	CO	CORTEZ	250	100000	WINTON ROAD BROADCASTING CO, LL	BLH19780921AG	C	LIC	31.55	-11.10 dB	54005
KDAG	NM	FARMINGTON	245	100000	CAPSTAR TX LIMITED PARTNERSHIP	BPH20030109AFM	C0	CP	61.5	-2.66 dB	29519
KDAG	NM	FARMINGTON	245	100000	CAPSTAR TX LIMITED PARTNERSHIP	BLH20010525ABR	C	LIC	61.5	-2.88 dB	29519
NEW	CO	CREEDE	247	10	CHARLENE K. GETZ	BNPFT20030313AUJ	D	APP	80.9	2.94 dB	143188
NEW	CO	CORTEZ	247	92	RADIO ASSIST MINISTRY INC.	BNPFT20030317CSS	D	APP	67.22	3.85 dB	151482
NEW	CO	SILVERTON	246	250	NATIVE AMERICAN CHRISTIAN VOICE,	BNPFT20030317JMZ	D	APP	51.11	11.02 dB	146590
K248AB	CO	TELLURIDE	248	83	CIMARRON COMMUNICATIONS CO. L.L	BLFT19940121TF	D	LIC	65.85	15.98 dB	756
NEW	CO	CORTEZ	248	92	RADIO ASSIST MINISTRY, INC.	BNPFT20030317FKC	D	APP	67.22	17.85 dB	147173
K248AF	CO	PAGOSA SPRING	248	36	ROBERT MELTZER	BLFT19940519TE	D	LIC	71.19	19.95 dB	22176
KKSS	NM	SANTA FE	247	94000	HBC LICENSE CORPORATION	BLH19850926KA	C	LIC	209.06	20.57 dB	63928
KISZ-FM	CO	CORTEZ	250	0	WINTON ROAD BROADCASTING CO, LLC		C	USE	31.6	23.34 dB	54005
NEW	CO	DELTA	247	250	RADIO ASSIST MINISTRY INC.	BNPFT20030317CUU	D	APP	154.45	25.89 dB	151494
NEW	CO	REDALE	246	10	PROFESSIONAL ANTENNA, TOWER AN	BNPFT20030317KGI	D	APP	111.5	27.70 dB	157066
KISZ-FM1	NM	FARMINGTON	250	5000	WINTON ROAD BROADCASTING CO, LL	BLFTB19990331TG	D	LIC	83.31	28.13 dB	85691
K248AE	CO	MONTROSE	248	10	CIMARRON COMMUNICATIONS CO., LL	BLFT20010409ABM	D	LIC	114.23	28.09 dB	58857
NEW	CO	ALAMOSA	247	250	RADIO ASSIST MINISTRY INC.	BNPFT20030317CPZ	D	APP	168.82	29.87 dB	151443
NEW	CO	GUNNISON	247	50	RADIO ASSIST MINISTRY INC.	BNPFT20030317CXE	D	APP	151.14	30.43 dB	151519
	CO	LAKE CITY	247	0		RMKS145	A	APP	85.23	30.72 dB	0
NEW	CO	CEDAREGE	246	500	MBC GRAND BROADCASTING, INC.	BNPFT20030317JPS	D	APP	179.16	30.83 dB	138633
	CO	LAKE CITY	247	0		RM9938	A	APP	85.23	30.72 dB	0
NEW	CO	MANCOS	300	200	VOCIE MINISTRIES OF FARMINGTON, I	BNPFT20030317JON	D	APP	31.3	31.3	155841
NEW	CO	OURAY	244	250	PROFESSIONAL ANTENNA, TOWER AN	BNPFT20030314BKO	D	APP	76.18	31.78 dB	147205
	CO	CREEDE	248	0		RMKS145	C	APP	98.63	33.25 dB	0
KDAG	NM	FARMINGTON	245	0	CAPSTAR TX LIMITED PARTNERSHIP		C	USE	61.5	33.46 dB	29519
K248AJ	UT	MONTICELLO	248	10	PROCLAIMING CHRIST'S LOVE MINIST	BLFT19980506TB	D	LIC	156.71	36.58 dB	53618
NEW	AZ	CHINLE	247	250	RADIO ASSIST MINISTRY INC.	BNPFT20030317CAA	D	APP	209.37	36.97 dB	150983
NEW	AZ	KAYENTA	247	250	RADIO ASSIST MINISTRY INC.	BNPFT20030317CEF	D	APP	229.59	38.24 dB	151106
NEW	CO	BATTLEMENT ME	247	10	RADIO ASSIST MINISTRY INC.	BNPFT20030317CQK	D	APP	231.58	38.80 dB	151457

DUR

7.5 M

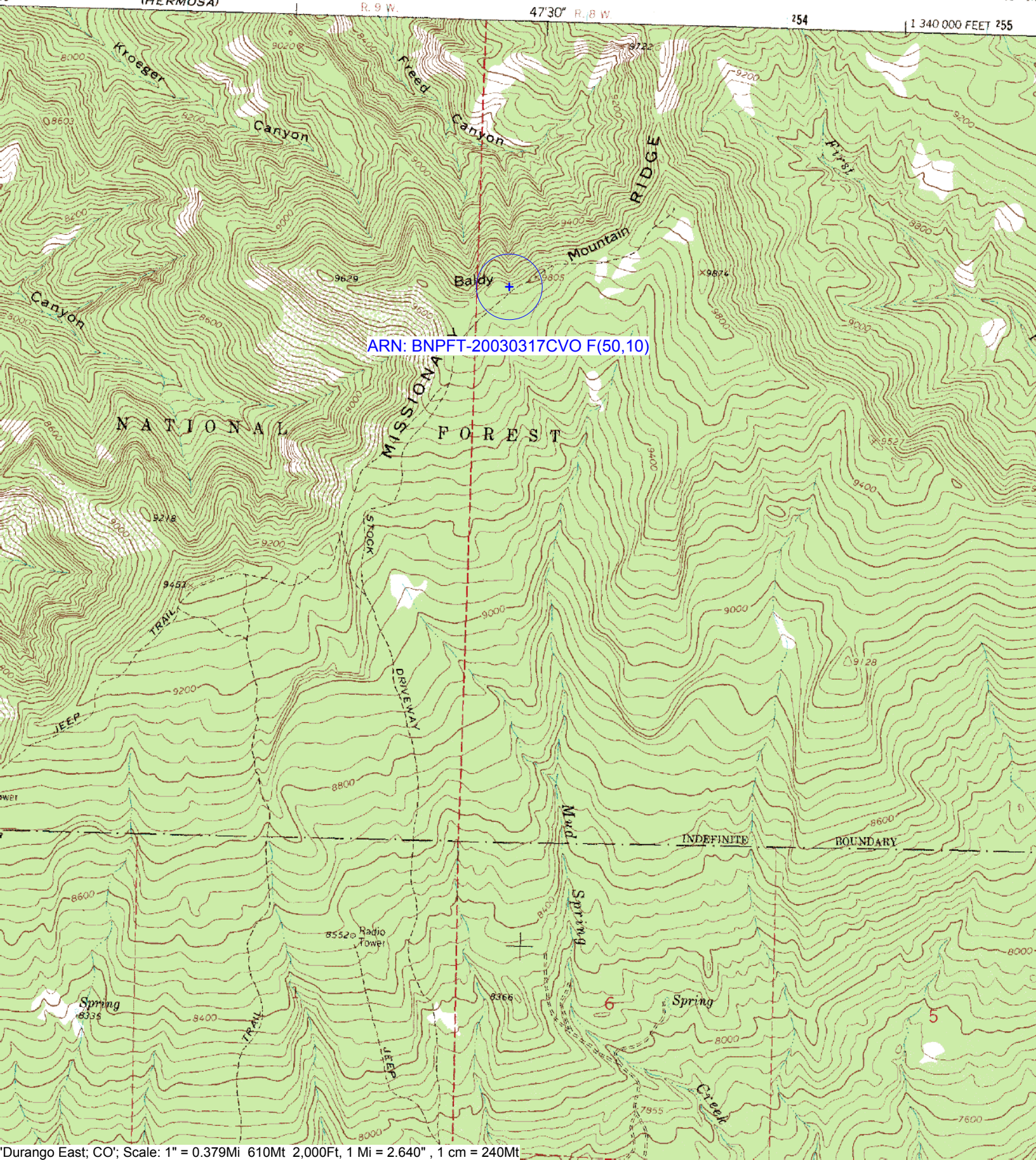
4458 IV NE
(HERMOSA)

R. 9 W.

47°30' R. 8 W.

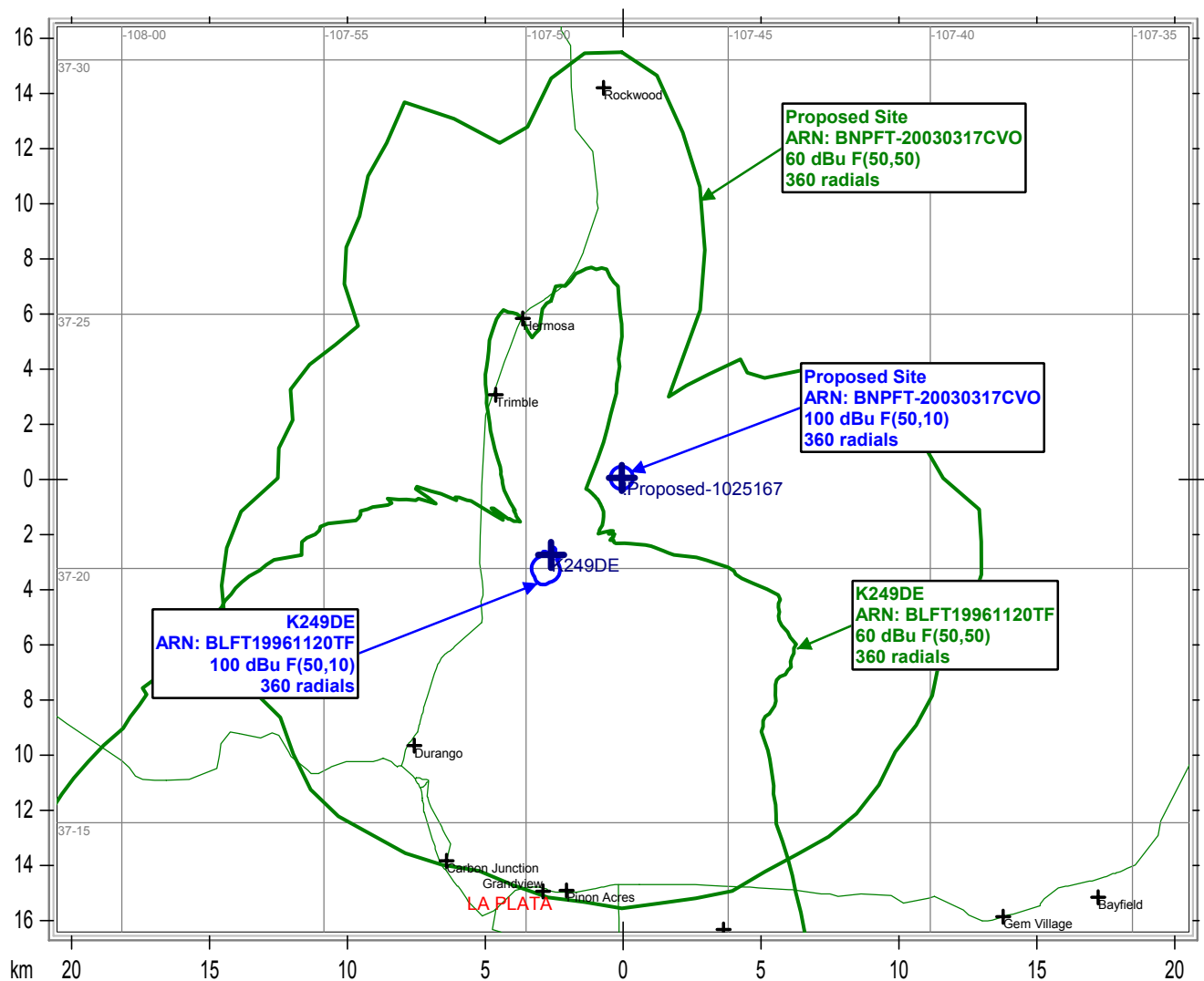
254

1 340 000 FEET 255



ARN: BNPFT-20030317CVO F(50,10)

World Radio Link



County Borders State Borders Highways Lat/Lon Grid